THE ROLE OF GENDER AND LANGUAGE LEARNING STRATEGIES IN LEARNING ENGLISH

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ABSTRACT

THE ROLE OF GENDER AND LANGUAGE LEARNING STRATEGIES IN LEARNING

ENGLISH

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M.A., Program of English Language Teaching

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This study intended to investigate the language learning strategies used by learners

of English as a foreign language, aiming to find the amount of strategies and the domain

differences of the strategies used; to reveal the link between strategy use and success

levels; and to find out the difference in strategy use between genders and its influence on

their achievement in English.

257 (153 male, 104 female) students from Atılım University English Preparatory

School participated in the study. At the time of the study all the participants were in the

same proficiency level, and were distributed to different classes of the same level.

The data were gathered through strategy inventory for language learning (SILL) of

Oxford (1990), which was translated to Turkish by Cesur and Fer (2007).

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The instrument, based on Oxford's (1990) classification of the language learning strategies, is composed of 50 items in six subscales. The participants responded to the inventory before the end of the level they were in.

The data were analyzed through SPSS (15.0) to find the relationship of language learning strategies, gender and achievement in learning the target language. To reveal the interconnections between these factors, independent *t*-tests and an ANOVA test, along with post hoc procedures were performed on the gathered data.

The findings of the study revealed that use of language learning strategies are positively effective in success in English, that females were significantly more successful than males in terms of achievement tests, and that they used more language learning strategies in learning English. Depending on the statistical results, it is discovered that there is a significant connection between gender, language learning strategies and achievement in English.

Keywords: language, language learning, gender, language learning strategies and learning skills.

ÖZ

İNGİLİZCE ÖĞRENMEDE CİNSİYET VE DİL ÖĞRENME STRATEJİLERİNİN ROLÜ

Aslan, Oktay

Yüksek Lisans, İngiliz Dili Öğretimi

Tez Yöneticisi: Doç. Dr. Gölge Seferoğlu

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Bu çalışma, İngilizceyi yabancı dil olarak öğrenenlerin kullandıkları dil öğrenme

stratejilerini bulmayı, kullandıkları bu stratejilerin alt gruplamalardaki dağılımlarını

belirlemeyi, dil öğrenme stratejilerinin kullanımı ile başarı düzeyleri arasındaki bağlantıyı

ortaya çıkartmayı ve dil öğrenme stratejilerini kullanmaları bakımından iki cinsiyet

arasındaki farkı tespit edip bu durumun İngilizce öğrenmedeki başarıları üzerindeki etkilerini

belirlemeyi amaçlamaktadır.

Çalışmaya Atılım Üniversitesi İngilizce Hazırlık Okulu'ndan 257 öğrenci (153 erkek,

104 Kız) katılmıştır. Çalışmanın yürütüldüğü sırada bütün katılımcılar aynı İngilizce yeterlik

düzeyindeki farklı sınıflarda dağılmış bulunmaktaydı.

Veriler, Cesur ve Fer'in (2007) Türkçeye çevirdiği, SILL (Dil Öğrenme Stratejileri

Envanteri) (Oxford, 1990) ile toplanmıştır.

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Oxford'un (1990) dil öğrenme stratejilerini sınıflandırmasını temel alan araç altı alt kategori içinde 50 madde içermektedir. Katılımcılar, çalışmaya bulundukları yeterlik seviyesi döneminin son haftasında katılmıştır.

Elde edilen veriler, dil öğrenme stratejileri, cinsiyet ve dil öğrenmedeki başarı arasındaki ilişkinin tespit edilmesi için SPSS (15.0) programında analiz edilmiştir. Bu faktörlerin birbiriyle olan bağlantısını bulmak için bir dizi t-test yöntemi ve bir ANOVA testi, ardından da post hoc prosedürü uygulanmıştır.

Çalışma sonunda, dil öğrenme stratejilerinin kullanılmasının İngilizce öğrenmedeki başarı üzerinde olumlu bir etkisinin bulunduğu, sınav sonuçlarına bakıldığında kızların erkeklerden daha başarılı oldukları ve kızların İngilizce öğrenirken erkeklere oranla daha fazla dil öğrenme stratejisi kullandığı ortaya çıkarılmıştır. İstatistikî verilere dayanılarak; cinsiyet, dil öğrenme stratejileri ve İngilizce öğrenme başarısı arasında anlamlı ilişkiler tespit edilmiştir.

Anahtar sözcükler: dil, dil öğrenme, cinsiyet, dil öğrenme stratejileri ve öğrenme becerileri.

to my dear wife, Elif Hicran...

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CHAPTER 1

INTRODUCTION

1.0 Presentation

This chapter presents the background to the study, the setting that the research was conducted at, followed by the purpose, the research questions, and the significance of the study.

1.1 Background to the Study

Since the time when mankind first appeared on the face of Earth, languages have been spoken. People have spoken at first to meet their basic needs through communication and then express themselves, and they even found a system called *writing* to be able to transmit their experiences to the following generations. In different parts of the world, different people spoke different languages, and for centuries they did not need to learn other people's languages as they lived, more or less, in enclosed communities. Only a few people learned other people's languages and as for commoners there was no way of learning a second language, if it was not a neighboring community's language.

However, as the time passed, communities started to interact more and more and the need for other languages increased. With the introduction of more advanced transportation means it was accelerated even more, but it was not until the beginning of modern times that the knowledge of foreign languages became indispensible. Some of the

world languages, like English, French and Spanish, were distinguished among the others due to their leadership in geographical explorations, technology and economic growth.

Due to the military, economic, scientific, political, and cultural dominance of the British Empire around the world in the 18th, 19th, and early 20th centuries and of the United States, who took over the power from the British Empire, since the mid 20th century, English has become the *lingua franca* in many parts of the world. Consequently, English is currently the dominant communication means in every area of life, including science, business, aviation, entertainment, TV, internet and diplomacy in the world. All kinds of published materials written in English are available in many countries around the world. English is also the language which is most commonly used in sciences. Montgomery (2004) points out "English has become the dominant language of science, with an estimated 80 to 90 percent of papers in scientific journals written in English" (p. 1334), even though only half of them came from authors in English-speaking countries. The Internet, the immense source of information that has grown in the past few decades, is also dominated by English. According to statistics, 80 percent of the world's electronically stored information is in English (Graddol, 1999).

Crystal (2003) states that about 400 million people have English as their mother tongue, the third widely spoken native tongue, more than 430 million have it as a second language, and approximately 750 million people use it as a foreign language. The total number reaches up to one and a half billion people worldwide.

As result of all these facts, English is the language studied most as a foreign language around the world. In all parts of the world it has been intensively taught and even at this very moment millions of people are trying to learn English. As a result of this

increasing interest, researchers have been investigating how English is learnt looking from different angles. The developments in Second Language Acquisition (SLA) research over the years have been of several kinds. As far as fields of inquiry are concerned, whereas much of the earlier work focused on the linguistic properties of learner language and was psycholinguistic in orientation, later work has attended to the pragmatic aspects of learner language and has adopted a sociolinguistic perspective (Vidal, 2002).

Another area which has been gaining ground in the comprehensive field of the SLA research is the study of learners themselves. It was inevitable to conduct research on the learners themselves because many studies showed that there are many learner-related factors that influence language learning; even if the same instruction was given to a group of learners the outcome turned out to be quite different and varied. The most significant studies were done in the areas of language learning and strategy use. Over the past few decades, the relationship of the use of language learning strategies with success in learning a second or foreign language has been investigated in many research studies. The studies showed certain factors' significant interaction with mastering a target language; yet, there were not any sole indicators of language learning. Going deeper in the investigation of the learner, several scholars in the fields of language education, SLA, and bilingualism have addressed the influence of gender on access to linguistic and interactional resources, on the dynamics of classroom interaction, and on language learning outcomes.

In this respect, along with language learning strategies and other variables, the impact of gender on ESL and EFL learning has been sought. Yet the nature of the connection between gender and learning a foreign or second language still remains elusive, or, rather, different researchers approach it from many different perspectives. Some researches still adhere to variationist and interactional sociolinguistics methodology and they treat gender

as a variable, whereas others, taking critical, poststructuralist and feminist theories as a base, see gender as a system of social relations and discursive practices.

Much of the quantitative strategy research shows prominent features of the language learning strategies but only gives hints as to what the main components in the picture would look like up close. This is because most quantitative studies comparing strategy use by different groups of students have tended to pay more attention to overall strategy use or to the use of broad categories of strategies than to differences in the use of individual strategies (Green & Oxford, 1995, p.261).

It is therefore clear that to be able to fully understand the nature of SLA, scholars need to have a deeper understanding of the bilateral interrelation of language learning strategies, gender and other essential variables.

1.2 Setting

The current study is conducted in the English Preparatory School of Atılım University. Atılım University is a private university located in Ankara having a large variety of undergraduate and graduate programs. The students of the university come from all over Turkey, not only Ankara and the neighboring region. The medium of instruction is English; therefore all the students (except for two departments) are obliged to get a sufficient score in the English proficiency exam. Students who have not received any English education before or those who cannot pass the proficiency exam are enrolled in the English Preparatory program and here take English at least for two semesters. If they fail, they repeat at least for one semester. The fact that the medium is 100% English and any kind of failure during preparatory school education results in repeating the same program is an important motive for conducting the current study. Because, English is truly necessary for their education in departments and the students have to pay attention to the English instruction they receive and try hard to learn English.

1.3 Purpose of the Study

The author of the current research has been teaching in the above mentioned institution. The profile of students is almost stable over the years. Even though the students change every year, characteristics of the students to a great extent remain the same. Most of the students do not have a successful educational history and many of them are unaware of basic studying skills. Another thing that does not change much in the setting is that, on average, males are less successful then female students. At the beginning of the term, (about the) same number of students are placed in each class but in any repeat class of the next term the number of males surpasses the females (usually 1/3).

One purpose of the study is to investigate the language learning strategies used by the learners, with specific stress on the amount of strategies and the domain differences, and to reveal the link between strategy use and success levels. The other is to find out the difference in strategy use between genders and its effect on students' achievement in English.

1.4 Significance of the Study

Based on the results of this study, teachers of EFL can understand the link between strategy use and success in target language better and, in their instruction, stress on the specific strategies that more successful learners use while learning English. Moreover, seeing the difference between males and females in terms of strategy use, they can develop strategy instruction accordingly and give strategy training in order to help them learn English better.

CHAPTER 2

REVIEW OF THE LITERATURE

2.0 Presentation

This chapter provides the background information about the topics discussed in the current work along with the relevant research studies done before. It begins with the definition of the term "gender" and continues with the discussion of language and gender. After that, a brief overview about the gender studies conducted in the areas of First Language Acquisition and Second Language Acquisition (SLA) is presented. Then, Language Learning Strategies are discussed in detail and lastly the research studies that incorporate gender and achievement in the target language and Language Learning Strategies are cited.

2.1 The Definition of Gender

In the general sense, the notions "sex" and "gender" are perceived to be synonymous and in some studies they are used interchangeably. The definition of sex and gender in *Collins Cobuild English Dictionary* (1995) is as follows:

sex: (excluding other meanings) *1*- The two *sexes* are the two groups, male and female, into which people and animals are divided according to the function of they have in producing young. 2- The *sex* of a person or animal is their characteristics of being either a male or female.

gender: 1- A person's *gender* is the fact that they are male or female. 2- You can refer to all male and female people as a particular *gender*. 3- In grammar, the gender of a noun, pronoun or adjective is whether it is masculine, feminine or neuter.

The dictionary definitions mentioned above do not give a clear distinction between the two terms. However, (especially postmodernist) scholars believe that *gender* is a completely different notion and it is not a biological fact at all. According to Butler (1990), there are brute facts of biology and gender is a phenomenon which is brought into being when it is performed. In her own words, "Gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a 'natural' kind of being" (Butler, 1990, p.32). Gender is therefore not something you acquire once and for all at an early stage of life, but an ongoing accomplishment produced by your repeated actions (Cameron, 2004). As the authors indicated, one's *gender* is not equivalent to his/her *sex*; though, most of the time, building on the biological base he/she has from birth, he/she constructs it through his/her life with the experiences which take place first in the family then in society. One's social context and culture he/she lives in shapes his/her gender identity accompanied with unique individual experiences. As a consequence, every society has a distinct gender identity and any individual living in them may or may not comply with the presumed gender identity.

In this study, the term *gender* is used following this conceptualization of gender which is composed of culturally constructed male identity and female identity, not the biological differences between males and females.

2.2 Gender and Language Overview

As the rise in the number of publications in recent years indicates, language and gender is a growing area of study among researchers. Block (2002) states that in two survey articles, Jane Sunderland (2000) and Aneta Pavlenko and Ingrid Piller (2002) cite over

twenty collections of articles which were published during the period 1991-2001, and over 10 monographs devoted to this topic. Among the outstanding studies we may mention the research studies such as the relationship between gender and language or discourse (Goddard & Patterson, 2000; Litosseliti & Sunderland, 2002); the special concerns and issues of immigrant women (Frye, 1999; Goldstein, 1995, 2001; Kouritzin, 2000; Norton, 2000; Rivera, 1999); and women's needs and voices in EFL situations (Lin et al.,; McMahill, 1997, 2001; Saft & Ohara, 2004).

Though there are no existing journals devoted solely to language and gender, journals such as *Gender and Education, Discourse and Society* and *TESOL Quarterly* have been publishing increasingly more articles that focus on gender and language interrelation.

In addition, there has been an increase in the number of conferences held on the concepts of language and gender, like the *International Gender and Language Association Conference* that was held at Lancaster University in April, 2002 and a close look of applied linguistics and language teaching conferences shows that there are progressively more colloquia and individual papers that focus on language and gender (Block, 2002).

From the two studies cited above, Sunderland's article has an English language bias, centering as it does around four key countries-Australia, Canada, the UK and the US. Nevertheless, Aneta Pavlenko, Adrian Blackledge, Ingrid Piller and Marya Teutsch-Dwyer's (2002) edited collection, *Multilingualism, Second Language Learning, and Gender*, is a move in the direction of including greater diversity (Block, 2002), in terms of contexts and languages by examining other contexts and a wide variety of languages other than English.

A closer look at the historical development of the gender concept in language studies will reveal that the perspectives and the philosophies underlying the research have

changed over time. Research on language and gender and theoretical shifts in the field result from real-world changes brought about by political movements and therefore represent not only differences in academic perspectives on gender and language, but also changes across time in how gender and language are perceived to work in the world (Cameron, 2004). According to Cameron (1995), "a crude historical-typological account of feminist linguistic approaches since 1973 would probably distinguish between three models of language and gender (p. 33)": the deficit model, the cultural difference model and the dominance model.

2.2.1 Deficit Model

In the deficit model, females are seen as disadvantaged speakers and communicators, particularly in the professional world, due to their upbringing and socialization as females (Block, 2002). The deficit theory is well-reflected in Lakoff's (1973) work on language and women's place. In these studies the speech of men is accepted as the norm while the women's speech is perceived to be deficient. In her analysis of verbal hygiene, Cameron (1995) points out the pressure imposed to female members of the society to monitor both the men's and their own language and clean up their faulty language production accordingly.

Though being followed by different models, it is interesting to find recent studies making use of the deficit model. Career orientation recommendations are the typical lay public face of the framework. The book by Ellig and Morin entitled *What Every Successful Woman Knows* (2001) makes a good example of this fact. The aim of the book is to provide professional women with effective strategies that will let them to get ahead in the male-

dominated business world (Block, 2002). In the section of communication strategies, the advice given to women who feel inferior among men dominated society is as follows:

... The lesson for successful women seeking the breakthrough to power? Grab the magic marker, move right up to the flipchart, and say what you have to say. Don't wait for acceptance... and don't wait, much less ask, for permission to speak. Just say it (Ellig & Morin, 2001, p.109).

Here, it is clearly seen that women need to change their language and alter to a male tone in order to achieve something. The necessity of this imitation is reflected by the authors with the following words:

... women have been trained since childhood to be less direct... Young girls were traditionally taught to believe that they would get more through coyness than through directness. Women simply gather and process information differently from men. In fact, they approach the whole process of communication in a different way (Ellig & Morin, 2001, p.110).

The authors very clearly adhere to the deficit model, showing women as deficient members of the world of business which needs confident and assertive players. According to the authors, men acquire these abilities in a natural way early in their lives and if women want to challenge men and become successful in the world of business, they have to adopt, or even imitate the characteristics of men in communication. Block (2002) states that

...the view of gender is essentialized in that it is about having certain characteristics which are determined by the environment and which are stable throughout one's lifetime. It is also imminently conservative in that it requires that women follow modes of behavior laid down by men, as opposed to challenging them (p. 51-52).

2.2.2 Dominance Model

In the mid 1970s, the dominance framework was adopted by most researchers and they linked negative evaluations of women's language to their social domination by men

(Bergvall, 1999). Studies of gendered language structures and language use suggested that men gain and maintain power over women in social interaction by means of interrupting and overlapping women's speech, using a high volume of words, or denigrating women (Davis & Skilton-Sylvester, 2004). Because of such studies, most scholars called for nonsexist English language usage (Cooper, 1989; Nichols, 1999).

This call resulted in a model which has traditionally existed in feminist linguistics, and the dominance model found a start-off. "In this model women are perceived to perform their 'woman-ness' in an ethnomethodological frame as they continually negotiate their position of relative powerlessness vis a vis men" (Block, 2002, p.53). The deficit model was more conservative; nevertheless, dominance model was rather radical. Cameron (1995) points out that the dominance model challenges the foundations of socio-economic hierarchies in different societies around the world: what is proposed is not just the adjustment of individuals' ways of speaking, but the dismantling of the entire social structure edified over centuries which has given men the upper hand over women (Block, 2002). However, the dominance model shares with the deficit model and cultural difference model, which will be further explained, a tendency towards modern structuralist approaches to social phenomena where concepts of clear boundaries, social stability and determinism are manifest (Block, 2002). As Giddens (1991) states, dominance model is not powerful enough to represent and explain the increasing complexity of language and gender in late modernity.

2.2.3 Cultural Difference Model

With the turn of the 1980s, the difference framework (dual culture model) was raised as an alternative to the dominance model. According to the cultural difference

model, men and women belong to separate but equal cultures which predate the development of individuals who are socialized into them (Block, 2002). That is, girls and boys are socialized into different ways of relating to one another in their predominately same-sex interactions and, thus, acquire different communicative styles within the community they live (Davis & Skilton-Sylvester, 2004). Unlike the deficit model, the cultural difference model does not perceive the differences negatively. It adopts the socially liberal position that men and women are different but equal: women's speech and communication styles are not inferior to men's; rather the relationship between the two are problematic at least in part because of culture clash (Block, 2002). This model assumes that, if communication breaks down between men and women, it's caused by misinterpreting the other party's form of interaction (Tannen, 1993, 1996), not because of the men's dominating power in the communication between men and women. What is needed to enhance an intact communication for individuals is to learn how to be bi-cultural and thoroughly understand the opposite gender's understanding. In this era, besides bringing the two genders on the same grounds, the difference model valued the positive aspects of women's unique communicative styles. SLA studies specifically focused on gender differences in conversational style, quantity of talk and learning styles and strategies (Davis & Skilton-Sylvester, 2004).

2.2.4 Post-structuralism and De-essentializing Gender

Like everything in the life is influenced and changed by real life events like political instabilities and differing perspectives, there has been a move in language and gender away from a stable and conservative concept of gender to a more detailed and unstable one. All

of these post-stucturalist approaches to gender advocate the belief that "gender is a social phenomenon; it is about doing as opposed to having or being; it is the outcome of engagement, in particular, social practices as opposed to preceding and causing such engagement; and it is imminently unstable across different contexts (Block, 2002, p. 54)". Davis and Skilton-Sylvester (2004) too recite the claims of numerous scholars (e.g., Cameron, 1990; Holmes, 1991; Freed, 1995) who believe that gender behaviors are neither predictable nor universal.

As a result of this understanding, studies began shifting from perceiving gender as an individual and generalizable concept to perceiving gender as a social construction within specific cultural and situational contexts (Davis & Skilton-Sylvester, 2004). Second language research, therefore, shifted from the positivistic conceptualization of gender as an individual variable to a constructivist view of gender as social relations operating within complex systems has led to richer understandings of the relations between gender and language learning across societies, communities, and classrooms (Norton & Pavlenko, 2004).

Taking a post-structuralist stance to gender also means "understanding that gender cannot be studied in isolation from other traditional sociological variables such as ethnicity, social class and nationality -variables that cluster together to form an individual's self identity at a given point in time" (Block, 2002, p. 54), and that gendered activity is an outcome of "communities of practice":

During the course of our lives, people move into, out of, and through communities of practice continually transforming identities, understandings, and worldviews. Progressing through the life span brings ever-changing kinds of participation and nonparticipation, contexts for "belonging" and not belonging" in communities. A single individual participates in a variety of communities of practice at any given time, and over time: the family, a friendship ground, an athletic team, a church group. These groups may be all-female or all-male; they may be dominated by

women or men; they may offer different forms of participation to men and women; they may be organized on the presumption that all members want (or will want) heterosexual love relations. Whatever the nature of one's participation into communities of practice, one's experience of gender emerges in participation as a gendered community member with others in a variety of communities of practice (Eckert & McConnell-Ginet, 1995, p.469).

Accepting that gender is a practiced attainment, gender should no more be studied as natural sex differences, yet it should be studied as contextualized social, psychological and linguistic behavior.

2.2.5 Current State of Gender and Language Interaction

In spite of the changing research philosophies and practices, traditional gender perspectives, the superiority of female language learners being the first, persist among TESOL educators (Sunderland, 2000). SLA research and practice still continue to hold the belief that gender differences can be reified, and are uniform across language learning contexts (Davis & Skilton-Sylvester, 2004). For instance, a number of researchers (i.e. Ehrman & Oxford, 1990; Ellis, 1994; Oxford, 1993) continue to assume female superiority in language development. Many other scholars concluded their research studies with the claim that females have an advantage over males in language acquisition both in L1 and L2. However, the biological and dualistic conceptions of gender that underlie much (past) work in SLA exaggerate and overgeneralize differences between males and females, and ignore the social, cultural, and situational forces that shape gender categories, relations, and learner outcomes (Ehrlich, 1997).

Most assumptions about who uses which forms have little to do with gender. However, the number of scholars that still keep the same track is not small. "The persistence of essentializing and dichotomizing gender research, despite theoretical

critiques and evidence to the contrary, is most likely due to scholars' underlying ontological and epistemological positions" (Davis & Skilton-Sylvester, 2004, p. 384). Theorists like Freed (1995) and Kitetu and Sunderland (2002) state, the theory of language in the western world focused basically on adult, middle class and white populations which have dominated SLA literature are biased in failing to represent other social and cultural contexts. Yet many researchers and theorists are gradually moving away from traditional frameworks towards richer understandings of the relationships between gender and language learning across societies, communities and classrooms (Davis & Skilton-Sylvester, 2004). Non-Western SLA scholars (e.g., Canagarajah 1999; Lin et al, 2004) along with those interested in immigrant, refugee, indigenous and K–12 populations (e.g., Duff, 2002; Duff, Wong, & Early, 2002; Harklau, 1994; McKay & Wong, 1996; Valdés, 1998) are criticizing studies that ignore situated values and practices and change their perspectives and turn to investigate traditionally ignored aspects (Davis & Skilton-Sylvester, 2004).

Social relationships in gender theorizing and research has become more evident in recent years as Connell (2002) suggests:

The key is to move from a focus on difference to a focus on relations. Gender is, above all, a matter of the social relations within which groups and individuals act... Gender must be understood as a social structure. It is not an expression of biology, nor a fixed dichotomy in human life or character. It is a pattern in our social arrangements and in everyday activities or practices which those arrangements govern (p. 9).

Eckert & McConnell-Ginet (in Davis & Skilton-Sylvester, 2004) argue that research on language and gender should:

- explain how social practices relate to linguistic structures and systems
- describe the social construction of gender categories
- examine how gender relations and privilege are constructed

- consider theories and approaches from other communities of scholarly practice, especially those specifically concerned with gender
- focus on the particular rather than (over) generalize. (p.387)

They also specifically call for research that takes into account the complexity of the intersection of identity, power relations and linguistic practices. Therefore, the recognition of the complex nature of language and gender requires language studies conducted within authentic communicative contexts and increased cooperation among linguists, sociologists, psychologists, anthropologists, philosophers, communication specialists, educators and feminists (Freed, 1995).

The focus of feminist-critical and poststructuralist scholars on the effects of power relations contributed a lot to gender and language education. Research on power relations can reveal real or perceived strategic appeals to differences and document ways in which gender differences are constructed in interaction. According to many scholars, "analysis of power and identity dynamics can create conscious awareness of these dynamics and help teachers move toward curricular and pedagogical choices that transform unjust practices" (Davis & Skilton-Sylvester, 2004, p.387). This, in turn, can help the educators conduct their instruction under the light of relevant research.

2.3 Gender and First Language Acquisition

General acceptance about children's way of learning their mother tongue is quite straightforward; it is natural and without striking a blow. There is always difference in talent when children study other knowledge, for example, some children are good at mathematics, while others have a talent for physics. However, there is little difference in mother tongue acquisition. Although children's living environments differ in thousands of

ways and experiences in physics and intelligence are totally different, these differences don't influence their acquisition of mother tongue at all. Five or six-year-olds, regardless of their gender, have the same language ability roughly despite their different language environments. It's easy for children to learn their mother tongue and acquire language ability unconsciously (Li & Bu, 2006).

However, there are also several studies of first language acquisition (Douglas, 1964; Morris, 1966 etc.) that have shown girls to be better learners than boys. Trudgill (1974) showed that women used the prestige variants more frequently than men and related this phenomenon to female social insecurity. Differences between male and female L1 learners appear more in studies conducted in bilingual settings; and such studies favor female learners in acquiring the languages they are exposed to. In a study of Punjabi migrant children in England, Agnihotri (1979) showed that girls assimilated the prestige variants faster than the boys; they were also better at resisting the stigmatised variants. Satyanath (1982) too found that Kannadiga women in Delhi showed a higher percentage of assimilation of linguistic features associated with Hindi and also a higher degree of usage than men. He found that younger women assimilated the host society's language and culture maximally. Unlike Trudgill (1974), who holds social insecurity to be responsible for greater use of prestige variants, Satyanath attributes it to the sociocultural aspects of the Kannadiga community which provides women a greater opportunity of interaction with the host society and this seems to be the underlying reason in female learners outscoring their counterparts.

2.4 Gender and Second Language Acquisition (SLA)

SLA, which is a subarea of applied linguistics, has become a genuine field of research for the last three decades. Previously, the research of gender and SLA basically focused on the topics valued in the area of SLA; nevertheless, with the change of perspectives it started to investigate the teachers and the learners more. In the previous period, only such studies that were based on positivist or postpositivist assumptions were respected by many scholars. As (Davis & Skilton-Sylvester, 2004) states, real science meant only experimental or quasiexperimental design, surveys, and postpositivist qualitative studies to such scholars; and assuming only this hierarchy as the real track to follow neglects the wide range of contributions made through other paradigms (including gender) and excludes research participants' diverse experiences, "thereby creating conditions for inaccurate, inequitable and discriminatory outcomes" (p.388).

Such a hierarchy of predetermined research approaches, topics and participants, also, has the potential to cause discriminatory results against the teachers (Davis & Skilton-Sylvester, 2004). Lin et al. (2004) explains the way that educators face "systematic, institutional suppression of research and teaching on minority and diversity issues" (p.497). They state that "senior staff identified research by minority scholars on marginalized groups—as opposed to the adult, middle-class, and white populations that have dominated SLA literature—as 'repetitive' and 'trivial'" (p.497).

Even though some significant SLA theorists (i.e. Long, 1998, Gass, 2000) believe that SLA researchers began to ask the right question, investigating these questions in a scientific way and accumulating results that allow them to further refine and make adjustments to existing theories, if we look closer how questions are related to gender have been explored,

we cannot say that it is definitely the case (Block, 2002). As Jiménéz-Catalán (2000) utters, individual differences such as age, aptitude, learning style and motivation are very-well focused on in most SLA research studies, but gender is often ignored. Besides, as Ehrlich (1997) and Sunderland (2000) points out, even in studies where gender was included into research, it was perceived in an oversimplified way.

2.4.1 Research Studies Conducted on Gender in SLA

In his prominent work *The Study of Second Language Acquisition*, Rod Ellis (1994) devotes only a few pages to gender in a section entitled "sex", that is included in the section of "Social factors and second language acquisition". He shortly discusses the difference between the terms "sex" and "gender" and mentions the two principles Labov (1991) suggested:

- 1. In stable sociolinguistic stratification, men use a higher frequency of non-standard forms than women
- 2. In the majority of linguistic changes, women use a higher frequency of the incoming forms than men (p.206-207).

Then he turns Labov's generalizations into an hypothesis that follows as "women might be better at L2 learning than men as they are likely to be more open to new linguistic forms in the L2 input and they will be more likely to rid themselves of interlanguage forms that deviate from target-language norms" (Ellis, 1994, p. 202).

Ellis then cites two studies, Burstall's (1975) research in England on primary school students of French and Boyle's (1987) research in Hong Kong on university students of English. Either of these studies reveals that female students were more successful than

male students in the exams applied. However, Ellis does not reach conclusive results on these findings; he states that such generalizations might be misleading as Boyle's study also indicated higher achievement of male students in listening tests and the study by Bacon (1992) of university students of Spanish in the US found no such significant difference between boys and girls.

Achievement is not the only aspect that Ellis cites. He discusses attitudes towards language learning and learning strategies which are directly related to gender. About the attitudes issue, Ellis cites studies that resolve that both boys and girls can be more instrumentally motivated than the other group for the reasons that affect their instrumental motivations. Similarly, Ludwig (1983) found that male university students of German, French and Spanish in the US were more instrumentally motivated than female students, and according to Gardner and Lambert (1972)'s study, female students of L2 French in Canada were more motivated than the male students and also had more positive attitudes towards the speakers of the target language (Block, 2002). Bacon and Finnemann (1992) found that female university students of Spanish in the US were more instrumentally motivated than male students. About the learning strategies, Gass and Varonis's (1986) study of university students of English as a second language is cited to support the notion that "men use the opportunities to interact to produce more output, whereas women use it to obtain more input" (Ellis, 1994: 203 in Block, 2002). However, Teresa Pica et al's (1991) study of adult learners of English in the US indicated no significant differences in interaction strategies (Block, 2002).

According to Ellis' review, there was nothing conclusive in studies of gender differences in SLA in achievement, attitudes and strategy use at that time. As a result, Ellis concluded the section about gender as follows:

Sex is, of course, likely to interact with other variables in determining L2 proficiency. It will not always be the case, therefore, that females outperform males. Asian men in Britain generally attain higher levels of proficiency in L2 English than do Asian women for the simple reason that their jobs bring them into contact with the majority English speaking group, while women are often "enclosed" in the home. Sex interacts with such factors as age, ethnicity, and, in particular social class (Ellis, 1994, p. 204).

Several other SLA texts published at about the same time (i.e. Cook, 1993; Gass & Selinker, 1994; Towell & Hawkins, 1994, Mitchell & Myles, 1998; Lightbown & Spada, 1999; and Gass & Selinker, 2001) reveal that gender is neither listed in the index nor discussed in anything but a passing manner by any of these authors (Block, 2002).

Looking at articles published in specialized SLA and general applied linguistics journals, we find that gender in SLA has been dealt within two very distinct ways in research:

2.4.1.1 Mainstream SLA Research and Gender

In mainstream SLA, that is research exploring issues such as how interaction relates to SLA or the role of Universal Grammar in SLA or the role of general cognitive mechanisms in SLA, gender is usually perceived to be the synonym for biological sex, and despite being mentioned during the discussion of research methodology, it is seldom returned to during the data analysis stage (Block, 2002).

The research done by Mackey et al (2000) is fairly typical of research published in specialist SLA journals. It has a general interest in the potential contribution to SLA of interactional feedback provided by a more competent interlocutor to a less competent interlocutor in the course of a conversational interaction (Block, 2002). According to the

authors, to investigate the relationship, it is first necessary to examine the extent to which such feedback is actually perceived as such by those to whom it is provided. One source of evidence of this influence is to be found in the exchanges themselves: the researchers examine a stretch of discourse and reach an agreement as to whether or not it contains an example of interactional feedback and if it does, what type of interactional feedback it is and, more importantly, the effect it has on the linguistic structure of the exchange (Block, 2002). Another source of evidence for the perception of interactional feedback as interactional feedback is to be found in post-task accounts of what happened provided by the learner.

So as to investigate these issues, the researchers video recorded two groups of language students as they were on a spot-the-differences tasks. One of the groups consisted of 10 learners of English from diverse L1 backgrounds and the other had 7 American students of Italian. The students, then, were asked to generate stimulated recalls as they watched the records of their interactions. During these stimulated recalls, learners were asked to comment on those points in the activity when they were exposed to interactional feedback.

At the beginning of the study Mackey et al present a table containing "participant biodata" in the research methodology section. Here, they show three easily identifiable identities that these learners bring to the classroom "(in the case of the first group) and learning Italian (in the case of the second group): gender (column 2), L1 (column 3) and foreign exchange student (column 5)" (Block, 2002, p. 61).

However, the authors only mention the gender of the participants under the column of "gender"; and in the rest of the article they do not make any explanations or point out any findings related to this factor.

As Gass (2000) suggests, even though they put "gender" in the biodata table, Mackey et al do not go on to investigate further relations of gender as they do not think it is relevant to their research interests. "In this case, the researchers are interested in a focus on negotiation devices as determinants of behavior, as opposed to gender as either an influence on behavior or a part of identity enacted in the exchanges examined" (Block, 2002, p.63).

2.4.1.2 Social-Psychological Research and Gender

The concept of gender has been dealt with a significantly different approach in social-psychological research. However, most of the studies have traditionally over generalized the notions and the results found in the studies. Nevertheless,

...it is in research which is more sociolinguistically oriented (and as a result, at the fringes of mainstream SLA), where gender has been dealt with more robustly, as an aspect of identity inextricably interwoven with other aspects of identity such as nationality and ethnicity, and as an important factor in the process of SLA" (Block, 2002, p.60).

Talburt and Stewart's (1999) study is the first example where gender and identity issues were more important than SLA issues. In that study, the researcher focused on an African American university student on a five-week study abroad program in Spain. The program combined language and culture classes with informal socializing. The subject of the study had a middle class background and had been raised in a white setting. She

accepted that she had already experienced racism in her life in the United States, and she had an expectation of not encountering a similar racist discrimination in Spain. Nevertheless, at the end of her first week in her new setting, she stated that she was already disappointed to be in Spain. The reason why she was so disappointed was the comments of males in the streets of the city. As she walked by them, they made negative comments on her appearance and sexuality. The study indicated that the issues relating to socialization, ethnicity and gender are very important in SLA research and further investigation of the concepts is necessary.

A relatively new research study was conducted by Hruska (2004), who investigated second language development among minority students while practicing as an ESL kindergarten teacher. The study was a year-long ethnographic study conducted in an English dominant kindergarten in the United States. The classroom was composed of 6 Spanish-bilingual English language learners and 17 native English speakers. The base for the study was a theoretical framework that views language as the site for constructing social meaning and negotiating power. According to Fairclough (1989), such theory provides the foundation for asking questions about the interaction which moves beyond a strictly linguistic focus. Data collection followed standard ethnographic procedures, including prolonged engagement, persistent observation and triangulation to ensure the credibility of interpretations. The researcher conducted one to three 20- to 45-minute observations daily and videotaped at least two observations per week. The study demonstrated how relationships and interaction mediated through local gender constructions support and constrained English language learners' classroom participation. Based on these results, the author concludes that "local gender ideologies operating in second language (L2) learning contexts affect students' access to the interactions that they need to develop a second language" (Hruska, 2004, p.459). Consequently, gender cannot be perceived as a fixed independent variable which always results in generalizable outcomes.

In other words, her ethnographic study described how gender ideologies, gender constructions, and behaviors related to it interacted with bilingualism, ethnicity and friendships in ways that emphasized unequal power relations or shaped participation in classroom events, which, affected the students' second language development (Davis & Skilton-Sylvester, 2004).

2.5 Language Learning Strategies

Since the pioneering studies carried out in the mid-seventies (Rubin, 1975; Stern, 1975) there has been an awareness that language learning strategies have the potential to be "an extremely powerful learning tool" (O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo, 1985, p.43), "which results in better proficiency and better self confidence" (Oxford, 1990, p.9).

Awareness has slowly grown of the importance of the strategies used by learners in the language learning process, since ultimately, like the proverbial horse led to water but which must do the drinking itself, even with the best teachers and methods, students are the only ones who can actually do the learning (Griffiths, 2004). As Nyikos and Oxford (1993) put it: "learning begins with the learner" (p.11).

Even though scholars have been working on the subject for quite a long time now, defining and classifying language learning strategies is not an easy and completed task.

There is currently no consensus among scholars on what a learning strategy really means in

second language learning or how these strategies differ from other types of learner activities inside or outside of the class. Griffiths (2004) states that learning, teaching and communication strategies are often interlaced in discussions of language learning and are often applied to the same behavior; further, even within the group of activities most often referred to as learning strategies, there is considerable confusion about definitions of specific strategies and about the hierarchic relationship among strategies. Rubin (1975), who was one of the earliest researchers in this field, provided a very broad definition of learning strategies as "the techniques or devices which a learner may use to acquire knowledge", (p.43). Ellis (1986), on the other hand, views strategies for learning and strategies for using, including communication strategies or "devices for compensating for inadequate resources" (p.165), as quite different manifestations of a more general phenomenon which he calls learner strategies.

Rigney (in O'Malley et al, 1985) defined learning strategies as being "operations or steps used by a learner that will facilitate the acquisition, storage, retrieval or use of information" (p.23). Then, Rubin (1981) went on to identify two kinds of learning strategies: those which contribute directly to learning, and those which contribute indirectly to learning. She divided direct learning strategies into six types (clarification/verification, monitoring, memorization, guessing/inductive inferencing, deductive reasoning, practice), and the indirect learning strategies into two types (creating opportunities for practice, production tricks) (Griffiths, 2004).

Expanding the perspective, Oxford (1990) took the process one step further. She used Rigney's definition of language learning strategies as "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information" (Oxford, 1990, p.8) as a base. Attempting to redress the perceived problem that many strategy inventories

appeared to emphasize cognitive and metacognitive strategies and to ascribe much less importance to affective and social strategies, she classified learning strategies into six groups: memory strategies (which relate to how students remember language), cognitive strategies (which relate to how students think about their learning), compensation strategies (which enable students to make up for limited knowledge), metacognitive strategies (relating to how students manage their own learning), affective strategies (relating to students' feelings) and social strategies (which involve learning by interaction with others). Oxford's grouping of the language learning strategies also complies with the characteristics of good language learners in employing learning strategies, "such as taking advantage of practice opportunities, willingly and accurately guessing, handling emotional issues in language learning, consciously developing the L2 as a meaning system and a structure system, and monitoring one's own speech" (Naiman, Fröhlich, & Todesco, 1975; Naiman, Fröhlich, Stern, & Todesco, 1978; Rubin, 1975; Stern, 1983 in Green & Oxford, 1995, p. 262).

As for today, Oxford's classification is the one which is, more or less, the most widely accepted taxonomy. She made various additions (1992, 1995) in her classification in later years to better identify language learning strategies. However, it is still impossible to accept it as complete as many more strategies may be identified in the future. Oxford's classification will be explained in detail in a further section, it being the most cited one in the SLA literature.

2.5.1 Main Features of Language Learning Strategies

Oxford (1990) lists the main features of language learning strategies, which are "specific actions taken by the learner to make learning easier, faster, more self-directed and more effective", as follows:

- 1. All language learning strategies serve the main goal of communicative competence. In order to develop communicative competence, learners must interact with language using meaningful, contextualized language. Learning strategies help learners participate actively in such authentic interaction and aid the development of the communicative competence.
- 2. Language learning strategies encourage learners for greater self-direction. Self-direction is essential for the active development of ability in a new language.
- 3. Language learning strategies assign new roles for the teacher. Thanks to language learning strategies, teachers get rid of their traditional roles as the authority figures and controllers in the classroom. New roles of teachers include identifying students' learning strategies, conducting training on learning strategies and helping learners become more independent. These changes strengthen teachers' roles making them more varied and more creative.
- 4. Language learning strategies are problem-oriented. They are tools used because there is a problem to solve, a task to accomplish, an objective to meet or a goal to attain.
- 5. Language learning strategies have an action basis. They are specific actions or behaviors accomplished by students to enhance their learning.
- 6. Language learning strategies are not restricted to cognitive functions, such as those dealing with mental processing and manipulation of the new language. They also include metacognitive functions like planning, evaluation and arranging one's own learning; and emotional and social and other functions as well.
- 7. Language learning strategies offer direct and indirect support of learning. Some learning strategies involve direct learning and use of the subject matter. These are known as direct strategies. Other strategies, including metacognitive, affective and social strategies contribute indirectly to learning. These are known as indirect strategies. Direct and indirect strategies are equally important.
- 8. Language learning strategies have some degree of observability. They are not always readily observable. For example, the act of making mental associations, which is an important memory strategy, cannot be observed. However, cooperating, a strategy in which the learner works with someone else, can be observed.
- 9. Language learning strategies have some levels of consciousness. They usually reflect conscious efforts by learners to take control of their learning. However, after a certain amount of practice and use, learning strategies can become automatic. In fact, making appropriate learning strategies automatic is a desirable thing.

- 10. Language learning strategies can be taught and modified. This can be done through strategy training, which is an essential part of language education. Strategy training helps learners to become more conscious of strategy use and more skilled at employing appropriate strategies.
- 11. Language learning strategies are flexible; that is, they are not always in the same sequences or certain patterns. There is a variety and individuality in the way that learners choose and utilize strategies (p. 9-10).

2.5.2 Factors Influencing Strategy Choice

Although the research into language learning strategies used by successful and unsuccessful language learners has produced some interesting insights, it is not clear what causes the difference between strategy uses and preferences. An alternative approach used by researchers has been to study some of the various factors which influence individual students in their choice of learning strategies.

According to recent research studies there are several factors that influence strategy choice; such as awareness, personality traits, stage of learning, task requirements, teacher expectations, age, general learning style, purpose for learning language, motivation level, nationality, gender, etc.

One factor influencing the strategy choice is the degree of awareness. Learners who are more aware of themselves and the process they are in, seem to use strategies more efficiently (Oxford, 1990).

Also, task requirements help determine the strategy choice. To illustrate, different strategies are used when rehearing a grammar rule and trying to communicate with other parties.

Teacher expectation related to instructions and testing greatly influences the strategy choice as well. For example, if the teacher emphasizes grammar learning, students will develop learning strategies, such as analysis and reasoning rather than strategies for communication; and if the teacher emphasizes communication in the class the result will be vice versa.

Another factor that can be mentioned is age. Older and younger learners use different strategies. Their cognitive level, which is interdependent to biological development and social experiences, plays an immense role in their preference of strategy choice (Oxford, 1990).

Here are some example studies seeking such factors.

2.5.2.1 Psychological Type

The effects of psychological type were the focus of a study by Ehrman and Oxford (1989) who reported on an investigation into the effects of learner variables on adult language learning strategies at the Foreign Service Institute, USA. They concluded that the relationship between language learning strategy use and personality type (as measured by the Myers-Briggs Type Indicator MBTI) is far from straightforward. In a later study in the same setting, Ehrman and Oxford (1990) concluded that psychological type appears to have a strong influence on the way learners use language learning strategies.

2.5.2.2 Motivation

The effects of motivation on language learning strategy use were highlighted when Oxford and Nyikos (1989) surveyed 1,200 students studying various languages in a Midwestern American university in order to examine the kinds of language learning strategies the students reported using. On this occasion, the degree of expressed motivation was discovered to be the most influential of the variables affecting strategy choice examined. In their study at the Foreign Service Institute, Ehrman and Oxford (1989) discovered that career choice had a major effect on reported language learning strategy use, a finding which they suggest may be the result of underlying motivation.

2.5.2.3 Nationality

Studies which have investigated nationality as a factor in language learning strategy use are numerous. Griffiths and Parr (2000) reported finding that European students reported using language learning strategies significantly more frequently than students of other nationalities, especially strategies relating to vocabulary, to reading, to interaction with others and to the tolerance of ambiguity. 15 European students were also working at a significantly higher level than students of other nationalities.

In a study involving a questionnaire and group interviews in Taiwan, Yang (1998) made some interesting discoveries about her students' language learning strategy use, including strategies for using dictionaries. In a follow-up study, Yang (1999) found that, although her students were aware of many different language learning strategies, only a small number of the students actually reported using them.

Using a journal writing method, Usuki (2000) discussed the psychological barriers to the adoption of effective language learning strategies by Japanese students, who are typically regarded as passive learners, and recommended more co-operation between students and teachers.

Two studies which produced findings on nationality-related differences in language learning strategies incidental to the main research thrust were those reported by Politzer and McGroarty (1985) and by O'Malley (1987). Politzer and McGroarty found that Asian students displayed fewer of the strategies that were expected from good language learners than did Hispanic students while O'Malley reported the lack of success of Asian students to the persistence of familiar strategies.

2.5.2.4 Gender

Another key factor influencing strategy choice is gender. It has been found by many researchers that males and females employ different strategies in relation to their gender characteristics. However, looking from a broader perspective, studies which have examined the relationship between gender and strategy use have come to mixed conclusions. Ehrman and Oxford (1989) and Oxford and Nyikos (1989) discovered distinct gender differences in strategy use favoring female learners in terms of the number of strategies used in learning a foreign language. The study by Green and Oxford (1995) came to the same conclusion. Ehrman and Oxford's (1990) study, however, failed to discover any evidence of differing language learning strategy use between the genders.

Since a similar question is discussed in the current study, I will go into more detail on some recent studies on language learning strategies and gender interrelationship (see. 2.5.4).

Various scholars investigated the above mentioned factors and found significant distinctions. Nevertheless, there are a few studies that contrast the findings of all of the previous studies in this section. Willing (1988) administered questionnaires on learning style preference and strategy use to a large number of adult immigrant speakers of other languages in Australia. The results were examined for style preference and strategy use compared with various biographical variables such as ethnic origin, age, gender, proficiency and length of residence in Australia. Willing concluded that style preference and strategy use remained virtually constant across all of these variables. Such conflicting research findings do nothing but underscore the difficulties of reaching any kind of consensus in the area of language learning strategies (Griffiths, 2004).

2.5.3 The Classification of Language Learning Strategies

According to Oxford's (1990) taxonomy, language learning strategies are divided into two major classes: *Direct Strategies* and *Indirect Strategies*. These two classes are subdivided into a total of six groups. Memory strategies, cognitive strategies and compensation strategies are under the direct strategies while metacognitive strategies, affective strategies and social strategies are under the indirect strategies. Figure 2.1 shows Direct Strategies, Indirect Strategies and their subcategories.

DIRECT STRATEGIES

- I. Memory Strategies
- A. Creating mental linkages
- B. Applying images and sounds
- C. Reviewing well
- D. Employing action
- II. Cognitive Strategies
- A. Practicing
- B. Receiving and sending messages strategies
- C. Analyzing and reasoning
- D. Creating structure for input and output
- III. Compensation strategies
- A. Guessing intelligently
- B. Overcoming limitations in speaking and writing

INDIRECT STRATEGIES

- I. Metacognitive Strategies
- A. Centering your learning
- B. Arranging and planning your learning
- C. Evaluating your learning
- II. Affective Strategies
- A. Lowering your anxiety
- B. Encouraging yourself
- C. Taking your emotional temperature
- III. Social Strategies
- A. Asking questions
- B. Cooperating with others
- C. Empathizing with others

Figure 2.1: Direct and Indirect strategies (Oxford, 1990)

As Oxford (1999) states, though existing different groups, all these strategies are related to each other. Direct and indirect strategies support each other and the all the subgroups listed in six categories interact with and help one another. The first major class, direct strategies, is directly related with the language itself. The direct class is composed of memory strategies for remembering and retrieving new information; cognitive strategies for understanding and producing the language; and compensation strategies for using the language despite knowledge gaps (Oxford, 1989).

The other major class, indirect strategies, consists of metacognitive strategies for coordinating the learning process, affective strategies for regulating emotions and social strategies for learning with others. The functions that indirect strategies serve involve focusing, organizing, guiding, checking, correcting, coaching and encouraging (Oxford, 1989).

2.5.3.1 Direct Strategies

According to Oxford (1990), direct strategies are specific language learning strategies which directly involve the target language. The main feature of all direct strategies is that they require mental processing of the language while each of the three subgroups of direct strategies does this process in its own way.

Direct strategies are further classified into three groups: Memory strategies, Cognitive Strategies and Compensation Strategies.

2.5.3.1.1 Memory Strategies

Memory Strategies are the ones that are used for entering information into memory and retrieving it. Memory-related strategies help learners to link one L2 item or concept with another but do not necessarily involve deep understanding. Many memory-related strategies help learners learn and retrieve information in an orderly string (e.g., acronyms), while other techniques create learning and retrieval via sounds (e.g., rhyming), images (e.g., a mental picture of the word itself or the meaning of the word), a combination of sounds and images (e.g., the keyword method), body movement (e.g., total physical

response), mechanical means (e.g., flashcards), or location (e.g., on a page or blackboard) (Oxford, 2003). She also underlines that memory strategies are often used for memorizing vocabulary and structures in initial stages of language learning, but that learners need such strategies much less when their lexicon and structures have become larger. Memory strategies can contribute powerfully to language learning. Nevertheless, various research studies revealed that language students rarely report using memory strategies (Oxford, 1990).

Oxford (1990) classifies memory strategies in another set of four: Creating mental linkages, applying images and sounds, reviewing well and employing actions. Below is the diagram that shows the clusters of the memory strategies.

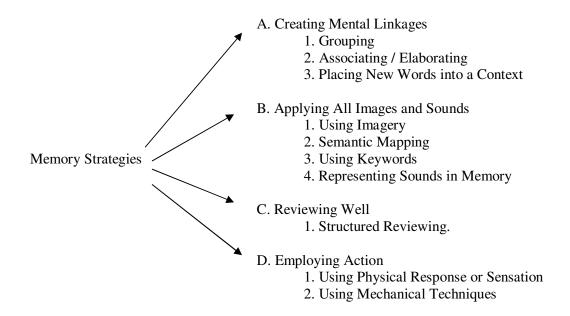


Figure 2.2: Diagram of the Memory Strategies (Oxford, 1990, p. 18)

Creating Mental Linkages

This set involves three strategies: grouping, associating-elaborating and using context. They are related to classifying language material into meaning units, mentally or in writing; relating new information to existing ones or relating one piece of information to another in order to create associations in memory as word-based or as a semantic map; and, finally placing a word or phrase in a meaningful sentence, conversation or story in order to remember it by linking with a context.

Applying Images and Sounds

This set involves four strategies: using imagery, using key words, semantic mapping and representing sounds in memory. These strategies are about relating new language information to concepts that are already in memory by using visual imagery in the mind or in actual drawing; making an arrangement or turn the words into visual image which has a key concept and a center and the related concepts around; remembering a new bit of

information using auditory and visual connections and remembering new language information making use of the sounds.

Reviewing Well

This set consists of only a single strategy; structured reviewing. Structured reviewing is about reviewing the new language material in carefully divided intervals. At first, reviewing is done together, and then more widely spaced apart.

Employing Action

There are two strategies in this set: using physical response or sensation and using mechanical techniques. They both involve a sort of meaningful movement or action. The first one is related to physically acting out a new expression or meaningfully relating a new expression to a physical feeling or sensation, like the bitter taste. The second one is connected with using creative techniques, especially by moving or changing something to remember new target information.

2.5.3.1.2 Cognitive Strategies

Cognitive strategies involve strategies like practicing, analyzing expressions, summarizing, etc. The common feature they all have is that they enable the learner to manipulate or transform the target language. For this reason, cognitive strategies are seen as essential for learning a new language. According to Oxford (1989, 1990), cognitive strategies are the most popular strategies among language learners, and in the studies she conducted or supervised, these strategies were the most frequently used ones by the learners.

Oxford (1990) states that there are four sets of cognitive strategies: Practicing, Receiving and Sending Messages, Analyzing and Reasoning and Creating Structure for Input and Output. Below is the diagram that shows the clusters of the cognitive strategies.

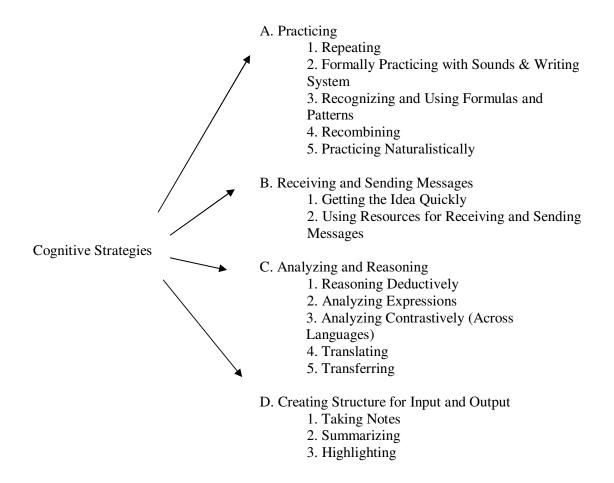


Figure 2.3: Diagram of the Cognitive Strategies (Oxford, 1990, p. 18-19)

Practicing

As the famous saying (though questionable) "Practice makes perfect!" suggests, strategies for practicing are commonly accepted among the most important cognitive strategies. More practice is usually needed to become proficient in the target language and, if done properly, the more you practice the more proficient you will be.

Practicing strategies involve repeating, formally practicing with sounds and writing systems, recognizing and using formulas and patterns, recombining and practicing naturalistically (Oxford, 1990). They refer to saying or doing something repeatedly; rehearsing; practicing sounds and written versions of the target language in a variety of ways; being aware of and using routine structures and patterns, like "Good morning, See you later, etc."; combining known elements in new ways to produce longer sentences; and practicing the new language in natural realistic settings.

Receiving and Sending Messages

Strategies for receiving and sending messages are also required elements for language learning. They have two strategies: getting the idea quickly and using resources for receiving and sending messages.

The first one refers to using skimming to determine the main ideas and scanning to find specific details. These strategies help learners pick up what they have heard or read instantly.

The second strategy includes using print or non-print resources in order to understand received messages or produce response messages.

Analyzing and Reasoning

Analyzing and reasoning are among the strategies that are usually reported to be used by language learners around the world. A lot of learners tend to 'reason out' the new language (Oxford, 1990), which means that the learners construct a formal model in their minds that based on analysis and comparison, then reach general rules and revise the internalized rules when new information is available.

Analyzing and reasoning strategies consist of skills like reasoning deductively, analyzing expression, analyzing contrastively, translating and transferring.

The learners apply these strategies in order to use general rules and apply them into new target language situations; determine the meaning of a new expression by breaking it down into parts; compare elements of the target language with elements of the native language; convert an expression in the target language into the native language or convert native language into target language; and directly apply the knowledge of words, concepts or structures from one language into the other (Oxford, 1990).

Creating Structure for Input and Output

Taking notes, summarizing and highlighting are included in strategies for creating structure. They are about writing down the main idea or specific points during instructions as small pieces of disorganized notes or in more systematic ways; making a summary or abstract of a longer unit and using a variety of emphasis techniques like underlining to focus on important information (Oxford, 1990).

2.5.3.1.3 Compensation Strategies

Compensation strategies are the strategies that enable learners to use the new language for either comprehension or production despite possible limitations in information. As Oxford (1990) indicates that compensation strategies are intended to make up for an inadequate repertoire of grammar and vocabulary, they serve as auto fillers in learning a language where information gaps occur.

As compensation is present both in comprehension and in production, these strategies let learners produce spoken and written expressions in the target language though they lacked the required complete knowledge. Compensation strategies for production serve as helper in carrying on using language. Besides, some of these strategies help learners become more fluent in their prior knowledge. Oxford (1990) states that learners who reported to use more compensation strategies sometimes communicated better than learners who are not.

There are ten compensation strategies listed under two sets of strategies. They are: Guessing Intelligently and Overcoming Limitation in Speaking and Writing. Below is the diagram that shows the clusters of the compensation strategies.

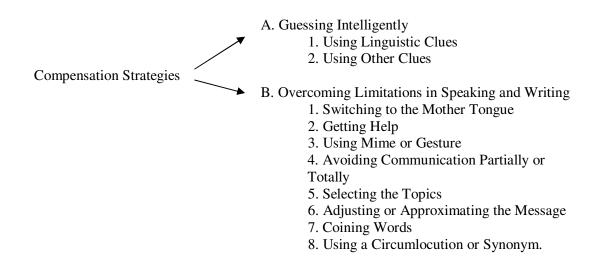


Figure 2.4: Diagram of the Compensation Strategies (Oxford, 1990, p. 19)

Guessing Intelligently

These strategies are about using linguistic and non-linguistic clues to compensate for the missing information. They are related to seeking and using language based and nonlanguage based clues so as to guess the meaning of what is ready or heard in the target language, in the absence of the complete knowledge of grammar, vocabulary and other language elements (Oxford, 1990).

The nature of other words in the sentence, type of the word, parts of speech or previous knowledge of certain words can be used as linguistic clues, and context, situation, text structure, or visual clues accompanying the text are among the non-linguistic clues.

Overcoming Limitation in Speaking and Writing

There are eight strategies of overcoming difficulties in speaking and writing: Switching to the Mother Tongue, Getting Help, Using Mime or Gesture, Avoiding Communication Partially or Totally, Selecting the Topics, Adjusting or Approximating the Message, Coining Words, and Using Circumlocution or Synonym.

They are respectively related to using mother tongue for an expression without translating it; asking someone for help to provide the missing expression; using physical motion, such as mime and gesture; avoiding conversation when difficulties are anticipated; choosing the topic of conversation in order to direct communication; altering the message by omitting some items of information; making up new words to communicate the desired idea; getting the meaning across by describing the concept or using a word that means the same thing (Oxford, 1990).

2.5.3.2 Indirect Strategies

Other language learning strategies are called indirect strategies because they support and manage language learning, in many instances, directly involving the target language (Oxford, 1990). However, they are interconnected with the direct strategies and they are

useful in all language learning situations and the four skills of language (reading, writing, listening and speaking).

Indirect strategies are further separated into three subgroups: Metacognitive Strategies, Affective Strategies and Social Strategies.

2.5.3.2.1 Metacognitive Strategies

Metacognitive strategies are the special strategies that go beyond cognitive devices and enable learners to coordinate their own learning process.

Oxford (1990) believes that metacognitive strategies are very important for successful language learning. Skills such as paying attention and linking with already existing knowledge are involved in them. Students who sometimes get overwhelmed by the novelty of the target language, like unfamiliar vocabulary, confusing and overlapping rules etc. need these strategies. Consciously using metacognitive strategies, students can regain their focus.

Nevertheless, (Oxford, 1990; Green & Oxford, 1995) reported that despite the importance of metacognitive strategies, learners rarely or unconsciously use these strategies. They seem to utilize these strategies more infrequently than cognitive strategies.

Eleven skills are listed under three sets of metacognitive strategies. They are:

Centering Your Learning, Arranging and Planning Your Learning and Evaluating Your

Learning. Below is the diagram that shows the clusters of the metacognitive strategies.

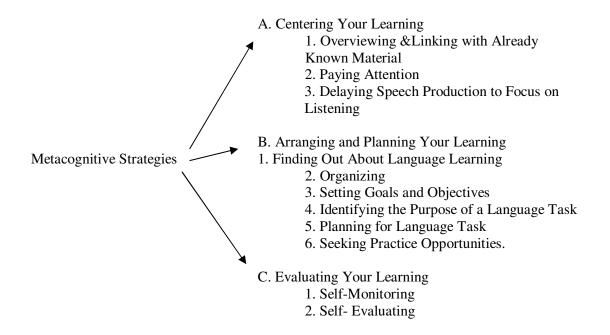


Figure 2.5: Diagram of the Metacognitive Strategies (Oxford, 1990, p. 20)

Centering Your Learning

Strategies about centering your learning help learners to direct and center their conscious attention on certain language tasks, activities or materials. Using such strategies provides the learners with a focus for language learning.

Overviewing and linking with already known material, paying attention and delaying speech production to focus on listening are the skills of centering your learning. They are related to overviewing a concept or principle thoroughly and associating it with already known material; making up your mind to pay attention to language material or instruction and ignoring distracters; and deciding to delay speech production partially or totally until listening skills are better developed (Oxford, 1990).

Arranging and Planning Your Learning

This set of strategies help learners to organize and plan to be able to make the best of language learning. These strategies are interrelated with finding out about language learning, organizing, setting goals and objectives, identifying the purpose of a language task, planning for a language task and seeking practice opportunities.

Respectively, they are related to making efforts to find out how language learning works by reading books or talking to other people; understanding and using every possible circumstance to get the maximum benefit out of language learning and organizing one's own schedule; setting aims for oneself about language learning; deciding the purpose of a certain language task involving any skill; planning for the language elements and functions coming across in a language task or situation; and looking for and creating opportunities for practicing the target language in natural situations (Oxford, 1990).

Evaluating Your Learning

There are two skills here; they are self-monitoring and self-evaluating. They help learners to check their language performance.

Self-monitoring is about identifying one's own errors in both understanding and producing the new language while self-evaluating is about evaluating one's own progress in the target language.

2.5.3.2.2 Affective Strategies

Oxford (1990) refers the term "affective" to emotions, attitudes, motivation and values. Affective factors are always deep into language learning, as they are in all kinds of

learning. Positive feelings will result in better performance in language learning. Thus, while learning a new language, learners can gain control over factors related to emotions, attitudes, motivations and values through the use of affective strategies.

Affective strategies have been shown to be significantly related to L2 proficiency in research by Dreyer and Oxford (1996) among South African EFL learners and by Oxford and Ehrman (1995) among native English speakers learning foreign languages. However, in other studies, such as that of Mullins (1992) with EFL learners in Thailand, affective strategies showed a negative link with some measures of L2 proficiency. One reason might be that as some students progress toward proficiency, they no longer need affective strategies as much as before. Perhaps because learners' use of cognitive, metacognitive and social strategies is related to greater L2 proficiency and self-efficacy, over time there might be less need for affective strategies as learners progress to higher proficiency (Oxford, 2003).

There are ten skills listed under three sets of affective strategies. They are Lowering Your Anxiety, Encouraging Yourself and Taking Your Emotional Temperature. Below is the diagram that shows the clusters of the affective strategies.

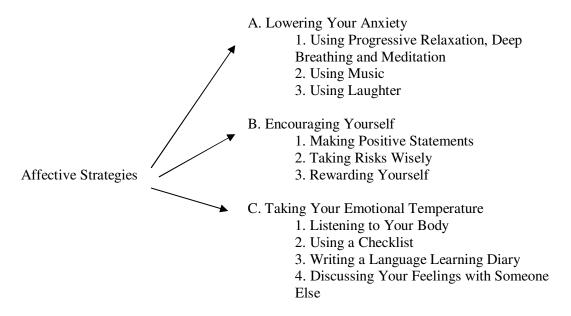


Figure 2.6: Diagram of the Affective Strategies (Oxford, 1990, p. 20)

Lowering Your Anxiety

These strategies serve as anxiety reduction elements in learning a new language.

The skills involved in this group have physical and mental components.

The skills of this strategy are using progressive relaxation, deep breathing or meditation, using music and using laughter. They are help the learners become relaxed tensing and relaxing the muscle groups in their body; listening to soothing music and using laughter through watching funny films or reading funny books as means for relaxation while learning a new language (Oxford, 1990).

Encouraging Yourself

The skills in this cluster are useful for the language learners in self-encouragement. Oxford (1990) stresses that self-encouragement is very important and better than expecting appreciation from others as the most important motivation is the kind that comes from inside (intrinsic motivation).

Using these skills, learners can encourage themselves, by making positive statements to themselves in order to feel more confident in learning the target language for instance; taking risks wisely in language situations despite the possibility of making mistakes that must be tolerated with good judgment; and rewarding themselves when they succeed in their goals.

Taking Your Emotional Temperature

This strategy is related with the skills that help learners assess their feelings, motivation and attitudes and relate them to language tasks. According to Oxford (1990), unless learners know how they are feeling and why they are feeling that way, they are less able to control their feelings and their affective side.

Listening to your body, using a checklist, writing a language learning diary, and discussing your feelings with someone else are the skills of this affective strategy. They respectively refer to paying attention to signals given by the body, such as stress, tension, worry, fear or anger; using a checklist to discover feelings and attitudes related to language learning; writing a diary or journal to keep track of events and feelings in the process of language learning; and talking with another person like a friend or a teacher to discover and express feelings about language learning (Oxford, 1990).

2.5.3.2.3 Social Strategies

Social strategies help the learner to work with others and understand the target culture as well as the language and, as Oxford (1990) states "language is a form of social behavior." It is, therefore, impossible to discriminate language from social interaction.

There are six skills listed under three sets of social strategies. They are Asking Questions, Cooperating with Others and Empathizing with Others. Below is the diagram that shows the clusters of the social strategies.

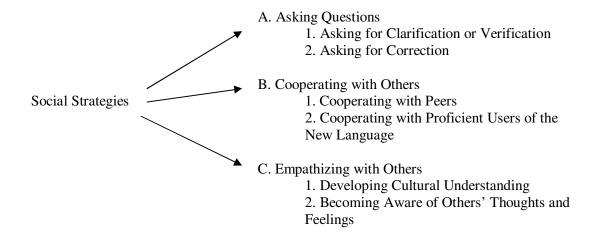


Figure 2.7: Diagram of the Social Strategies (Oxford, 1990, p. 21)

Asking Questions

While learning a new language one has to get help from more proficient users of the target language. Thus, it is an important strategy to ask teachers, native speakers or more proficient peers for clarification, verification or correction (Oxford, 1990).

As they provide the learner with valuable feedback, asking the speaker to repeat, paraphrase, explain or slow down, or asking if a specific expression is correct are very important during language learning. Moreover, asking someone for correction is important for immediate feedback. As you get the feedback when you are puzzled, you can immediately turn to that information and correct your language production.

Cooperating with Others

This skill underlines the importance of cooperating with others in language learning.

These skills not only increase learners' language performance but also provide them with self-worth and social acceptance.

Cooperating with others is possible in two ways: Cooperating with Peers and Cooperating with Proficient Users of the New Language. As it diminishes competitiveness and rivalry, it is good to work with other language learners to improve language skills (Oxford, 1990). Working with teachers or native speakers of the target language outside the classroom is of great help for language learners since it provides social interaction and the chance of authentic communication.

Empathizing with Others

Empathy is defined to be the capability of understanding other people's emotions and feelings. It is often characterized as the ability to "put oneself into another's shoes", so as to understand that person better. Empathy is indispensible for successful communication and social strategies can help learners to increase their ability to empathize.

Empathy can be developed better when language learners use strategies like developing cultural understanding and the relation of the other person in the conversation to that culture as well as becoming aware of others' thoughts and feelings (Oxford, 1990).

2.5.4 Research Studies Conducted on Interrelation of Gender and Language Learning Strategies and Success in the Target Language

Numerous research studies have been done about Interrelation of "gender", "Language Learning Strategies" and "proficiency in the target language" by SLA scholars. Below some significant ones will be mentioned due to their close relationship with the current study.

2.5.4.1 Language Learning Strategies and Achievement in the Target Language

Research studies relating the subject shows that the conscious use of such strategies has a positive correlation with language achievement and proficiency (i.e., Thompson & Rubin, 1993). Chamot and Kupper (1989) point out that successful language learners select strategies which are consistent with one another and with the requirements of the language task. These learners can identify the strategies they use and state the reason why they use them (O'Malley & Chamot, 1990).

Studies conducted around the world, showed that students who were better in their learning the target language usually reported higher levels of overall strategy use. Besides, those successful learners employed many strategy categories together. Language performance of the learners was tested in many different ways in relation to strategy use in several studies as "self-ratings of proficiency (Oxford & Nyikos, 1989; Watanabe, 1990), language proficiency and achievement tests (O'Mara & Lett, 1990; Oxford, Park-Oh, Ito, & Sumrall, 1993; Phillips, 1990, 1991; Rossi-Le, 1989; Wen & Johnson, 1991), entrance and placement examinations (Mullins, 1992), language course grades (Mullins, 1992), years of language study (Watanabe, 1990), and career status reflecting expertise in language

learning (Ehrman & Oxford, 1989)" (Green & Oxford, 1995, p.265). Using such a wide variety of means, scholars sought the link between success in target language and strategy use.

O'Malley et al (1985) found that learners at all levels reported the use of a great variety of learning strategies. High-achieving students reported greater use of metacognitive strategies. They concluded that the more successful students are probably able to use greater metacognitive control over their learning. Ehrman and Oxford (1995) indicated that successful students preferred to use cognitive strategies more frequently in their study. Green and Oxford (1995) discovered that high-achieving students used all kinds of language learning strategies more frequently than low-achieving students.

On the other hand, researchers have also investigated what unsuccessful language learners do. Vann and Abraham (1990), for instance, observed that, although their unsuccessful students appeared to be active strategy users, they "failed to apply strategies appropriately to the task at hand" (p.191).

2.5.4.2 Language Learning Strategies and Gender

The first study which will be mentioned in this section was done by Green and Oxford (1995), which builds on previous research using the Strategy Inventory for Language Learning (SILL) (Oxford, 1990). It is a large scale study including 374 participants conducted to find out language learning strategy use by students at three different course levels at the University of Puerto Rico. It relates strategy use to gender as well as to L2 proficiency level and includes analysis of variation in the use of individual strategies on the SILL. They found greater use of learning strategies among more successful learners and that females used

much more strategies than men. What they also found was that with both proficiency level and gender, only some items showed significant variation and significant variation by proficiency level did not invariably mean more frequent strategy use by more successful students.

The strategies used frequently or moderately frequently by successful and unsuccessful learners alike are not necessarily unproductive. According to the authors, a more likely interpretation is that these are "bedrock strategies", which contribute significantly to the learning process of the more successful students, although not being in themselves sufficient to move the less successful students to higher proficiency levels.

Another study by Kaylani (1996), conducted in Jordan, investigated the influence of gender and motivation on EFL learning strategy use. Kaylani's starting point was that there is evidence from a number of studies conducted across different cultures around the world that there are differences between male and female students of foreign and second languages as regards what strategies they use and how they use them when engaging in language learning tasks. What she wanted to know was why these differences existed, what their effect on teaching is, what similarities exist between successful male and female students and the role of socialization in gender differences. She was also interested in the relationship between motivation and strategy use, and as regards gender, what social factors affecting motivation exist which are distinct to male and female students. A sample of 255 students from two boys' and two girls' secondary schools were administered a version of Oxford's SILL (Oxford, 1990) translated into Arabic. A statistical analysis of questionnaire data revealed, among other things, that although there was a higher incidence of memory, cognitive compensation and affective strategies among female students, the relatively proficient/relatively non-proficient and successful/unsuccessful

distinctions correlated more to strategy use than the male/female distinction. Kaylani goes beyond such a limited analysis and proceeds to discuss her findings "in terms of the sociocultural context of Jordan" (Kaylani, 1996, p.85). She cites an interesting finding from her interviews, namely that female students showed a far stronger tendency to use strategies sanctioned by their teachers than male students did. At first, she relates this finding to a suggestion made by Niyikos (1990) that female students seek social approval more than male students, a generalization not dissimilar to Labov's (1991) on the higher use among women of socially desirable linguistic forms. Far more interesting is Kaylani's subsequent attempt to relate the finding to "the socialization of girls to exhibit obedience in both private and public domains" (Kaylani, 1996, p. 86). According to the author, the socially prescribed role for women is to find a marriage partner and education may be seen as a way to better one's prospects in the context of the study, Jordan. Above all, going to university is desired by a girl because it "exposes her to more people who might consider her for marriage, it gives her status as being educated which is prized in Jordanian society, and it makes her employable upon graduation" (Kaylani, 1996, p. 87).

In another study, Oxford and Nyikos (1989) found that females taking the SILL reported using strategies far more often than did males in three of the five factors: formal rule-related practice, general study strategies and conversational input elicitation strategies.

Ehrman and Oxford (1989), who looked at the strategies used by 1200 university students, found that gender differences made a "profound influence" (p.296) on strategy use, and discovered significant gender differences in the SILL (favoring women again) in the following strategy classifications: general study strategies, strategies for authentic language

use, strategies for searching for and communicating meaning and metacognitive or self-management strategies (in Tercanlıoğlu, 2004).

In Japan, Watanabe (1990) encountered a considerably contrasting strategy use between a major metropolitan university with both male and female students and a rural, all-female college (though location and prestige might have influenced the differences just as much as gender).

Sy (1994) discovered that students of English in the Republic of China showed significant gender differences on the SILL. In that study, females significantly surpassed males in their use of cognitive, compensation, metacognitive, and social strategies.

Even though most of the studies in this area reported a greater use of language learning strategies by women, Tran (1988) found that Vietnamese women use much fewer language learning strategies.

The final study that will be cited here is one study conducted in Turkey by Leyla Tercanlıoğlu (2004). The aim of the study was to discover gender differences in language learning strategies used by foreign language learners using Oxford's (1990) SILL. A total of 184 pre-service teachers, 44 male (23.9%) and 140 female (76.1%), with ages ranging from 19 to 23, participated in the study. They were enrolled in the third year of their 4 year undergraduate teacher education program at Atatürk University.

The results of the descriptive statistics procedure to determine gender-related differences, interestingly, indicated male students reported higher use in five of the six scales than female students. Female students reported a higher score on only one of the scales.

The results show gender differences, favoring males, in students' strategy use. Therefore, the results of the mentioned study are not consistent with several other studies that have reported that female learners use strategies with greater frequency than male learners.

In conclusion, the discussion of the role of gender in SLA has been in the agenda of many scholars for a long time; yet the results they reached are still far from being conclusive. Because gender itself is not a stable factor; it depends on many variables such as biological factors, cultural and social elements etc. Besides, along with gender, there are various other factors that also affect the process of language acquisition; namely, motivation, attitude, nationality (...) and language learning strategies, one of the leading indicators of learning a foreign language. In this study, it is intended to reveal the interdependency of gender, language learning strategies and achievement in second language learning.

CHAPTER 3

METHOD

3.0 Presentation

This chapter presents the overall design of the study. It also includes the research questions, a detailed description of the participants that took part in the study, the data collection instrument and data collection procedure.

3.1 Overall Design of the Study

The purpose of the study is to investigate the language learning strategies used by the learners and to reveal the link between strategy use and success levels and to find out the difference in strategy use across genders and its effect on students' achievement in English. The study basically depends on quantitative data collection methods. An adapted Turkish version of Oxford's (1990) *Strategy Inventory for Language Learning* (SILL) was used as the data collection instrument. The data obtained were analyzed using SPSS 15.0 (Statistical Package of Social Sciences) and interpreted using descriptive and inferential statistics.

3.2 Research Questions

The current study intended to answer the following questions:

1. Is there a relation between gender and achievement in English?

- 2. Is there a relation between achievement in English and overall language learning strategy use?
- 3. Do males and females use the same amount of language learning strategies?
- 4. Are the amount of strategies in the subscales (direct and indirect) used by males and females in the SILL similar, or is there a significant difference between the strategies they use?

3.3 Hypotheses

In respect to the research questions the following hypotheses were tested:

- $H(_0)_1$ There is a significant relation between gender and achievement in English favoring females.
- H $(_0)_2$ There is a significant positive correlation between overall language learning strategy use and achievement in English.
- $H(_0)_3$ Female students use more language learning strategies than male students.
- $H(_0)_4$ The amount of strategies in the subscales used by female students are significantly more than the strategies that male students used.

3.4 The Setting

The study was conducted at the English Preparatory School of Atılım University. An informed group of learners participated in the study.

To make the way of participant selection clearer, a summary of the system applied in the institution is necessary. At Atılım University, students are placed into three different courses at the beginning of the year according to their levels, namely C (elementary) B (Intermediate) and A (Upper-Intermediate) according to the scores they get in the *Placement Exam*. (There is also a supplementary Pro level, which aims to prepare those students who accomplished all three courses but failed to pass the proficiency exam they took at the end of the year; yet, it has a different procedure and is out of the scope of this study.)

Every course lasts for three months (12 weeks). At the end of three months they pass to the next level if they get the required points from the midterm examinations, weekly quizzes, reading examinations, writing papers and presentations. If they cannot accumulate the satisfactory points, they fail the course and repeat the same course for another three months.

The participants of the study were all chosen from the B-course (Intermediate). Due to the course system used in the institution, their proficiency levels were close to one another. Within the period of the course, students received 27 hours of instruction per week. Of the total hours, 4 hours were allocated for *writing*, and the remaining 23 hours for the main course, which included *reading*, *listening* and *speaking* skills. As the main course books, "face2face" pre-intermediate and intermediate were used. Along with the books, supplementary materials including extra reading texts, grammar and vocabulary exercises were provided to students for every unit by the institution. Besides, two story books were assigned to the students to read during the course. As a consequence, the materials and the topics covered in all the classes of the course were standard. In addition to this

standardization in the instruction, assessment of all the students was done through uniform testing devices.

Testing of students' achievement was done basically through pencil and paper tests. The students were given two midterm exams; one in the 6th week of the course and one at the end. A typical midterm exam included a listening section, a reading section, a structure section, a vocabulary section and a writing section. The students took weekly quizzes on a fixed day, on the units covered in the previous week. They needed to submit a writing homework to their writing teachers every week. In addition, they were assigned a project to prepare (e.g. advertising a product, introducing famous people, solutions for certain problems etc.) as a group and present it to the class. Every item of testing had a fixed percentage and if the students could get 60 in total out of all these assessments, they passed to the next level.

3.5 The Participants

The participants were enrolled in 14 different classes of B-course. All of them were fresh B's; that is, there were no repeating students. The participants consisted of 257 students. Ratio of gender was: 153 male participants (59%), and 104 female participants (41%).

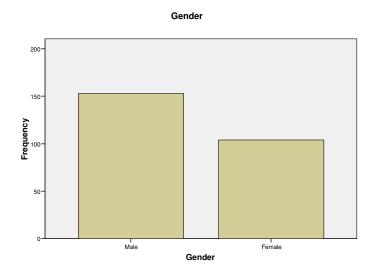


Figure 3.1: The Ratio of Male and Female Participants

The number of the males was higher than the females in the study, because there were slightly more male students in the institution and the questionnaires were distributed to the whole class without considering the male/female ratio.

They were mostly young adults who had graduated from high school and their ages ranged between 18 and 20. The participants of the study did not receive any explicit language learning strategy instruction in their classes.

Except for the 25 (50% and full) scholarship students, the participants annually pay a large tuition fee as it is a private university. Taking into consideration the tuition they pay, it can be inferred that most of the participants are economically in good situation.

3.6 Data Collection Instrument

As the data collection instrument, a Turkish adaptation of Oxford's (1990) Strategy Inventory for Language Learning (SILL) by Cesur and Fer (2007) was used. The original version of SILL was not used as the participants were not proficient enough in English to understand the statements, and such an attempt would have jeopardized the results and misled the study.

SILL was designed in 1985 and revised later by Oxford. It was designed to identify the strategies that help students be more effective language learners. In the broadest sense, the survey provides information about the strategies that the individual learner employs to learn a second language (Tercanlioğlu, 2004).

SILL is a self-scoring, paper-and-pencil survey that has been "(as of 1995) the key instrument in more than 40 studies, including 12 dissertations and theses. These studies have involved approximately 8,000 students around the world" (Green & Oxford, 1995, p.264). From that date on, many more studies have appeared using SILL as the main research instrument and according to Cesur and Fer (2007) this figure has become far larger. Of the numerous studies employed SILL, some recent ones are El-Dip (2004), Gan, Humpreys and Hamp-Lyons (2004) Ian and Oxford (2003), Lafford (2004), Oxford, Cho, Leung and Kim (2004) and Wherton (2000).

The inventory includes 50 statements in the style of "I do such-and-such"; students give their responses on a 5-point Likert scale that ranges from 1 ("Never or almost never true of me") to 5 ("Always or almost always true of me") (Green & Oxford, 1995). Sample items from the inventory are shown below. (The full form of the questionnaire is presented in Appendix A).

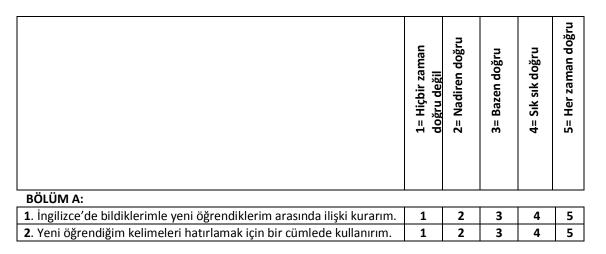


Figure 3.2: Sample items from the inventory.

The SILL is based on Oxford's (1990) system for classifying strategies into six groups (and the 50 statements are distributed into those six categories):

- 1. *memory* related strategies, such as grouping, imagery, rhyming, moving physically and reviewing in a structured way
- 2. general *cognitive* strategies, such as reasoning, analyzing, summarizing and practicing (including but not limited to "active use of the language)
- 3. *compensatory* strategies (to make up for limited knowledge), such as guessing meanings from context and using synonyms and gestures to convey meaning
- 4. *metacognitive* strategies for evaluating one's progress, planning for language tasks, consciously searching for practice opportunities, paying attention and monitoring errors
- 5. *affective* strategies for anxiety reduction, self-encouragement and self-reward
- 6. *social* strategies such as asking questions, cooperating with native speakers, and becoming culturally aware (Green & Oxford, 1995, p. 264-265).

According to Green and Oxford (1995), the SILL can be used to measure a student's strategy use in three different ways: across the entire survey, in terms of the six broad strategy categories listed above, and in terms of individual strategies. Within the scope of the current study, all of these ways were used along with other variables related to them.

Reliability (Cronbach alpha for internal consistency) of various forms of the SILL is .93-.98, depending on whether the participants take the inventory in their mother tongue or in the L2 (Oxford & Burry, 1993; Oxford & Burry-Stock, 1995).

The subscales of the original version, the number of items within each category and the alpha value of each scale and learning strategy preferences of the subjects are given in Table 3.1.

Table 3.1. The scales, the number of items within each category and the alpha value of each scale and sample items (Tercanlıoğlu, 2004)

	Scales	Nr. of Items	alpha value	Sample item
Α	Memory Strategies	9	.8069	(8). I review English lessons often
В	Cognitive Strategies	14	.7848	(11). I try to talk like native English speakers
С	Compensation Strategies	6	.7531	(27). I read English without looking up every new word
D	Metacognitive Strategies	8	.8636	(35). I look for people I can talk to in English
E	Affective Strategies	6	.7889	(39). I try to relax whenever I feel afraid of using English
F	Social Strategies	6	.7229	(49). I ask questions in English

In their study of the validity and reliability of the Turkish version of SILL, Cesur and Fer (2007) discovered that "Pearson's correlations between the Turkish and English versions of the survey (except for items 5., 12. and 29., .38 to .91 among the 6 subscales) indicated acceptable reliability; the correlations were significant at the .00 and .01 level; the results of factor analysis for construct validity of the inventory addressed six dimensional

constructs with 47 items; the total internal reliability of scale was .92 reliability coefficients; findings demonstrated that the subscales had internal consistency reliabilities, item total correlation, ranged from .27 to .62, and (that) test re-test reliability for external reliability of subscales was between .67-.82" (p. 49).

The SILL was chosen for this study because it is "perhaps the most comprehensive classification of learning strategies to date" (Ellis, 1994, p.539), has been widely used and its Cronbach alpha reliability coefficients are within the acceptable limits. Reliability of the SILL is high across many cultural groups, as verified by Cesur and Fer., Moreover, "its validity rests on its predictive and correlative link with language performance as well as its confirmed relationship to sensory preferences" (Tercanlioğlu, 2004, p. 4).

The other means of data collection was the midterm examinations that were applied to the whole group as a uniform test twice in a term. The exams are prepared by the testing unit of the institution. Besides, the examinations are kept confidential until the date of the exam and their further duplication is not allowed.

The students took the first exam in the 6th week of the term and took the second one at the end of the term. The exams included a *Listening* section, a *Reading Section*, where the students needed to answer reading comprehension, inference questions and reference questions, *Use of English* section, which had questions testing their grammar knowledge, a *Vocabulary* section and finally a *Writing* section. The exams made use of a variety of question styles including multiple choice items, True/False items (in *Listening* section), matching questions, short answer items, gap filling items, cloze tests and a final writing task on a given subject. Of all language skills, only speaking ability was not included in the test

In the current study, the results that the students received in the above mentioned tests and their responses to the SILL were used to make inferences about their achievement in English and use of language learning strategies.

3.7 Data Collection Procedure

Before conducting the study, the researcher first informed the administration of the institution about the study and received the required permission and then applied to METU Human Subjects Ethics Committee with the necessary documents and was granted permission to conduct the study. The data collection procedure started in the eleventh week of the level, just before the second midterm, after which the students would be transferred to their new classes. The researcher gave packs of inventories to the main course teachers of the classes, who were also the academic advisors of those classes and taught the participants most during the week. The researcher explained the teachers the goal of the study and demanded extra emphasis on persuading the students to take the study seriously and respond frankly. It was important to choose the mentioned week and those teachers, because the students are not usually willing to participate in such studies. As they had known their teachers for a long time they definitely responded more positively to their requests.

When the main course teachers went into their classes, before starting their lecture, they spared 10-15 minutes for the inventory. They first explained the purpose of the study telling the students that it just aimed at finding the language learning strategies used by the students as a whole.

After the students completed the inventory, the papers were collected and the packs of every class were kept separately. As they had already indicated their first midterm results on the inventory, the researcher got the second midterm results from the testing department and looking at the separate packs of classes, gender and the first midterm points, the results of the second midterm were also identified for every individual student. This process enabled the researcher to determine which inventory belonged to which student, and with the help of this, the researcher identified the scholarship students to further analyze their responses and achievement results.

3.8 Data Analyses

The quantitative data collected through Strategy Inventory for Language Learning (SILL) were analyzed using Statistical Package of Social Sciences (SPSS for Windows 15.0).

The data of SILL were analyzed through a factor analysis to find the factors that have been found in the previous studies. Green and Oxford (1994) found 9 factors in a previous study which together explained 51.6% of the variability among 50 SILL items. Similarly, in the current study, 9 factors explained 50.1% of the variability. The similar result of the factor analysis indicated a parallelism with the current study and the precedents, and provided a sound basis for applying this inventory.

First, a *t*-test was applied on gender and achievement results; then, an analysis of variance (ANOVA) was used to identify the relationship between overall strategy use and achievement. They were followed by two other *t*-test analyses conducted to find the relationship between strategy use and gender.

CHAPTER 4

FINDINGS AND RESULTS

4.0 Presentation

In this chapter, the findings and the results are presented in the following sections within the framework of the research questions, supported by tables and figures to illustrate the results clearly.

The analyses were done in the order of the research questions. First, a *t*-test was applied on gender and achievement results; then, an analysis of variance (ANOVA) was used to identify the relationship between overall strategy use and achievement. They were followed by two other *t*-test analyses conducted to find the relationship between strategy use and gender.

The results were explained and presented in tables, and the results were illustrated in figures.

4.1 Results of the Data Analyses Concerning Research Question 1

The first research question of the current study sought the answer as to whether there is a relation between gender and achievement in English.

In order to answer this question, an independent samples t-test was applied to the data set containing the midterm exam averages and genders of the students. In this particular analysis, along with all other statistical analyses carried out throughout the study, the statistical significance level was accepted to be α < .05 for all the independent sample findings.

As it is seen in Table 4.1, the mean values of females (M=58, 73) is higher than the scores of males (M=50, 85).

Table 4. 1. Group Statistics of the Male and Female Participants for Midterm Averages

Group Statistics

	O a va al a v	NI	Mana	Otal Daviation	Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Midterm_Average	Male	153	50,8578	14,67725	1,18659
	Female	104	58,7332	14,00512	1,37332

Figure 4.1 below shows the graphic of the midterm averages of males and females.

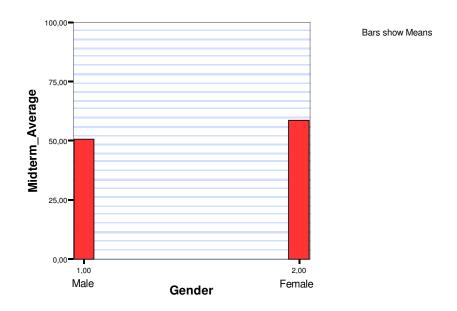


Figure 4.1: Midterm averages of males and females

However, only this does not indicate that there is a statistically significant difference between Midterm Averages of males and females. *Levene's Test for Equality of Variances* is needed to be executed to reveal whether the variances are different enough to

cause concern. As Field (2005) states, "Levene's Test for Equality of Variances is similar to a t-test in that it tests the hypotheses that the variances into two groups are equal. Therefore, if Levene's Test is significant at $p \le .05$ than it can be concluded that the null hypothesis is incorrect and that the variances are significantly different —therefore, the assumption of homogeneity of variances has been violated. If, however, Levene's test is non-significant (i.e. p > .05) then we must accept the null hypothesis that the difference between the variances zero —the variances are roughly equal and the assumption is tenable" (p.301). To examine the difference between two groups and see the significance level, it is necessary to consult the results of Independent Samples Tests, which are presented below in Table 4.2.

Table 4.2. Independent Samples Test of the Male and Female Participants for Midterm

Averages

Independent Samples Test

			Test for Variances	t-test for Equality of Means							
							Mean	Std. Error	95% Cor Interval Differ	of the	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Midterm_Average	Equal variances assumed	,137	,711	-4,300	255	,000	-7,87533	1,83128	-11,48168	-4,26897	
	Equal variances not assumed			-4,339	228,063	,000	-7,87533	1,81493	-11,45151	-4,29915	

The interpretation of the independent t-test is done in two steps. Initially, the homogeneity of the variance between the male and female participants was determined using Levene's Test for Equality of Variances. In the current analysis, the Sig. value was .711, which was greater than .05. Therefore, variances were assumed to be equal. As a result, it was possible to test the hypothesis using the t-test row of results "Equal Variances Assumed" in Table 3. This provided the t value (t=-4, 30) and the degrees of freedom (t=-255). From the table above, it is also observed that significance was .00, which was

lower than .05. Consequently, it can be concluded that the difference in midterm averages of males and females was significant; which indicated the findings showing that females were more successful (M=58, 73) than males (M=50, 85) according to their midterm averages was significant.

Then, the null hypothesis "H $(_0)_1$ There is a significant relation between gender and achievement in English favoring females" was confirmed.

4.2 Results of the Data Analyses Concerning Research Question 2

The second research question of the current study sought an answer as to whether there is a relation between achievement in English and overall language learning strategy use.

First of all, to be able to proceed, the average points that the students got in the tests were divided into four groups from the lowest to the highest. This process needed an equal division of the groups; however, following the generally accepted procedure (Oxford, 1990; Green & Oxford, 1995) the lowest and the highest group were assigned higher score gaps than the equally distributed second and third group. The ranges of the first, second, third and the fourth group were consecutively 30 points, 20 points, 20 points and 30 points. Group no 1 consisted of the students whose averages ranged between 0 and 30; the averages of Group no 2 were between 31 and 50; the averages of Group no 3 were between 51 and 70; and finally the averages of Group no 4 were between 71 and 100. Table 4.3 below shows the distribution of scores in each group and their percentages. There were 11 scores in the first group, 95 in the second, 107 in the third and 44 in the fourth. As the

table reflects, the great majority of the scores were loaded in the second and the third group (total of 78, 6%), very few in the first group (4, 3%), and 17, 1 % in the fourth group.

Table 4.3. Distribution of the Scores Loaded in the Four Groups

Average_group

		F	D	Wallal Danasant	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1,00	11	4,3	4,3	4,3
	2,00	95	37,0	37,0	41,2
	3,00	107	41,6	41,6	82,9
	4,00	44	17,1	17,1	100,0
	Total	257	100,0	100,0	

Average_group

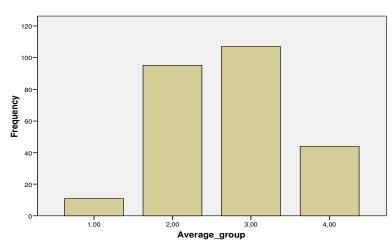


Figure 4.2. Distribution of Scores Loaded in the four Groups

After determining the groups, to find the relation between overall strategy use and achievement, a one way analysis of variance (ANOVA) was carried out. As Table 4.4 below shows, the average strategy use of the whole set was 2, 94 out of 5; which means the average strategy use of the students was very near to "3- Sometimes True of Me".

The use of strategies consistently increased from the first group to the fourth. The average strategy use in the first group was 2, 72; in the second group it was 2, 85; in the third 2, 94, and in the fourth 3, 20.

Table 4.4. Descriptive Statistics of the Four Groups and overall Strategy Use

Descriptives

Mean_all

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1,00	11	2,7288	,61334	,18493	2,3168	3,1409	1,52	3,56
2,00	95	2,8502	,47199	,04843	2,7540	2,9463	1,67	4,10
3,00	107	2,9409	,45811	,04429	2,8531	3,0287	1,64	4,05
4,00	44	3,2005	,54747	,08253	3,0341	3,3670	1,76	4,47
Total	257	2,9427	,50031	,03121	2,8813	3,0042	1,52	4,47

As the Table 4.5 shows, the ANOVA was significant, \underline{F} (2, 25) =5, 97, \underline{p} = .001, \underline{n}^2 = .06 Because the p-value was < .05, the null hypothesis that there are no differences among the groups was rejected. The F-value, p-value and the η^2 value of the analysis conducted indicated a mediocre and significant relationship between overall strategy use and achievement in the given target language.

Table 4.5 ANOVA results of Overall Strategy Use and

Achievement

Tests of Between-Subjects Effects

Dependent Variable: Mean_all

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4,242 ^a	3	1,414	5,979	,001	,066
Intercept	1028,910	1	1028,910	4350,408	,000	,945
Average_group	4,242	3	1,414	5,979	,001	,066
Error	59,837	253	,237			
Total	2289,600	257				
Corrected Total	64,079	256				

a. R Squared = ,066 (Adjusted R Squared = ,055)

Because the overall F test was significant, follow-up tests were conducted to evaluate pair-wise differences among the means. A decision needs to be taken whether to use a post hoc procedure that assumes equal variances or one that does not assume equal variances to control Type I error across the multiple pair-wise comparisons (Green, Salkind & Akey, 1997). In the current set, the standard deviations ranged from .45 to .51, indicating that the variances were slightly different from each other. The test of homogeneity of variance (Table 4.6) was non-significant as p= .371.

Table 4.6. Homogeneity of Variance

Levene's Test of Equality of Error Variances a

 Dependent Variable: Mean_all

 F
 df1
 df2
 Sig.

 1,051
 3
 253
 ,371

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Average_group

"Because there may be a lack of power associated with the test due to the sample size, the results of homogeneity test does not necessarily mean that there are no difference in the population variances" (Green, Salkind & Akey, 1997, p. 162). Consequently, the results of Scheffe (equal variances assumed) were ignored, and the results of Dunnett C (equal variances not assumed) were used for the post hoc procedure. According to the Dunnett C test shown in Table 4.7 below, Group 4 (M= 3, 20) significantly differed from Group 1 (M= 2, 72), Group 2 (M= 2, 85) and Group 3 (M=2, 94). On the other hand, though being in an ascending nature, Groups 1, 2 and 3 were very close to one another.

Table 4.7 Post Hoc Test results of Overall Strategy Use and

Achievement

Multiple Comparisons

Dependent Variable: Mean all

Dependent	variable: Mean_all						
			Mean Difference			95% Confide	ence Interval
	(I) Average_group	(J) Average_group	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Scheffe	1,00	2,00	-,12134	,15489	,893	-,5573	,3146
		3,00	-,21202	,15398	,595	-,6454	,2213
		4,00	-,47171*	,16394	,043	-,9331	-,0103
	2,00	1,00	,12134	,15489	,893	-,3146	,5573
		3,00	-,09069	,06856	,626	-,2836	,1023
		4,00	-,35037*	,08868	,002	-,6000	-,1008
	3,00	1,00	,21202	,15398	,595	-,2213	,6454
		2,00	,09069	,06856	,626	-,1023	,2836
		4,00	-,25969*	,08710	,033	-,5048	-,0146
	4,00	1,00	,47171*	,16394	,043	,0103	,9331
		2,00	,35037*	,08868	,002	,1008	,6000
		3,00	,25969*	,08710	,033	,0146	,5048
Dunnett C	1,00	2,00	-,12134	,19116		-,7007	,4581
		3,00	-,21202	,19016		-,7892	,3651
		4,00	-,47171	,20251		-1,0783	,1348
	2,00	1,00	,12134	,19116		-,4581	,7007
		3,00	-,09069	,06562		-,2622	,0808
		4,00	-,35037*	,09569		-,6047	-,0960
	3,00	1,00	,21202	,19016		-,3651	,7892
		2,00	,09069	,06562		-,0808	,2622
		4,00	-,25969*	,09367		-,5087	-,0107
	4,00	1,00	,47171	,20251		-,1348	1,0783
		2,00	,35037*	,09569		,0960	,6047
		3,00	,25969*	,09367		,0107	,5087

 $[\]ensuremath{^*}\cdot$ The mean difference is significant at the .05 level.

Figure 4. 3 below shows the distribution of strategy use for the four achievement groups.

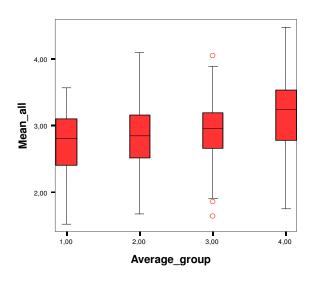


Figure 4. 3. Distribution of Strategy Use

As a consequence of all the findings, the null hypothesis "H $(_0)_2$ There is a significant positive correlation between overall language learning strategy use and achievement in English" is confirmed.

4.3 Results of the Data Analyses Concerning Research Question 3

The third research question of the current study sought an answer as to whether males and females use the same amount of language learning strategies.

To answer this question, an independent samples *t*-test was applied to the data set containing the overall strategy use averages and genders of the students.

As Table 4.8 reflects, the mean values of females (M=3, 04) was higher than the scores of males (M=2, 87).

Table 4. 8. Group Statistics of the Male and Female Participants for Overall Strategy Use

Group Statistics

					Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Mean_all	Male	153	2,8750	,51362	,04152
	Female	104	3,0424	,46472	,04557

Figure 4.4 below shows the graphic of the overall strategy use averages of males and females.

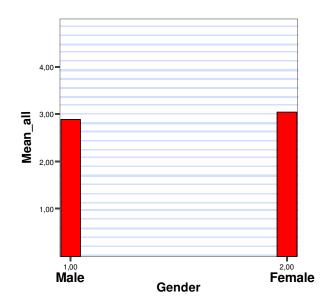


Figure 4. 4: Overall Strategy Use Averages of Males and Females.

To examine the difference between males and females in terms of overall strategy use and see the significance level, an independent Samples t-test, results of which is presented below in Table 4.9 was conducted.

Table 4. 9. . Results of the Independent Samples Test for the Male and Female Participants'

Overall Strategy Use

Independent Samples Test

		Levene's Equality of	Test for Variances		t-test for Equality of Means						
							Mean	Std. Error	95% Cor Interva Differ	l of the	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Mean_all	Equal variances assumed	1,347	,247	-2,665	255	,008	-,16745	,06284	-,29120	-,04371	
	Equal variances not assumed			-2,716	235,185	,007	-,16745	,06165	-,28891	-,04600	

According to *Levene's Test for Equality of Variances*, the Sig. value was .247, which was greater than .05. Therefore, it can be assumed that variances were equal. As a result, it

was possible to test the hypothesis using the *Equal Variances Assumed* row of the t-test in Table 4.9. This provided the t-value (t=-2, 66), and the degrees of freedom (df=255). From the table above, it was observed that sig. (2-tailed)' was .008, which was lower than .05. Consequently, it can be concluded that the difference in overall strategy use of males and females was significant; which indicates the fact that females (M=3, 07), on average, employed more language learning strategies than males (M=2, 87) was significant.

Then, the null hypothesis "H $(_0)_3$ Female students use more language learning strategies than male students" is confirmed.

4.4 Results of the Data Analyses Concerning Research Question 4

The fourth research question of the current study sought answer as to whether the amount of strategies in the subscales (direct and indirect) used by males and females in SILL are similar, or if there is a significant difference between the amount of strategies they use.

So as to find the results concerning gender difference and specific strategy use, the data were analyzed according to two main domains as "direct strategies and indirect strategies", and under those domains subscales of "memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies" were analyzed in detail.

4.4.1 Gender and Direct Strategies

To find the possible relationship between gender and direct strategies, an independent samples *t*-test was applied to the data set. As Table 4.10 below shows, the

average of males using direct strategies was 2, 82, while the average of females using direct strategies was 2, 98, which indicates the female superiority in this domain.

Table 4. 10. Group Statistics of the Male and Female Participants for Direct Strategies

Group Statistics

	0 1	N.I	N4	Old De latie	Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Direct	Male	153	2,8202	,49529	,04004
	Female	104	2,9862	,44743	,04387

Figure 4. 5 below shows the gender difference in the use of direct strategies

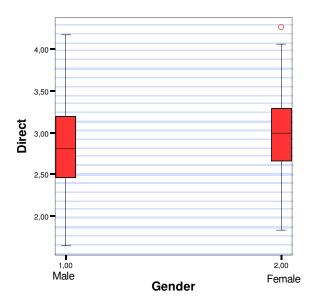


Figure 4. 5. Gender Difference in the Use of Direct Strategies

To examine the difference between males and females in terms of use of direct strategies and see the significance level, an independent samples t-test, results of which is presented below in Table 4.11, was consulted.

Table 4. 11. Results of the Independent Samples Test for the Male and Female Participants'

Use of Direct Strategies

Independent Samples Test

		Levene's Equality of	Test for Variances		t-test for Equality of Means						
							Mean	Std. Error	95% Cor Interva Differ	l of the	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Direct	Equal variances assumed	1,742	,188	-2,742	255	,007	-,16606	,06056	-,28533	-,04680	
	Equal variances not assumed			-2,796	235,385	,006	-,16606	,05940	-,28309	-,04904	

According to Levene's Test for Equality of Variances, the Sig. value was .188, which was greater than .05. Therefore, it can be assumed that the variances were equal. As a result, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.11. This provided the t-value (t=-2, 74), the degrees of freedom (df=255), and sig.(2-tailed)= .007, which is lower than .05.

As a result, it can be concluded that the difference in the use of direct strategies of males and females was significant; which indicates the fact that females (M=2, 98), on average, employed more direct strategies than males (M=2, 82) was significant.

4.4.1.1 Gender and Memory Strategies

After analyzing the direct strategies as a whole, subscales of this set were further analyzed to investigate the gender difference in the use of direct language learning strategies.

To investigate the relationship between gender and memory strategies, an independent samples *t*-test was applied to the data set. As Table 4. 12 below shows, the average of males using memory strategies was 2, 71, while the average of females using

memory strategies was 2, 97, which indicates that females used more memory strategies than males.

Table 4. 12. Group Statistics of the Male and Female Participants for Memory Strategies

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Memory	Male	153	2,7145	,57491	,04648
	Female	104	2,9787	,56675	,05557

Figure 4.6 below shows the gender difference in the use of memory strategies

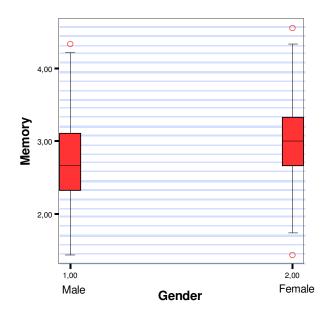


Figure 4.6 Gender Difference in the Use of Memory Strategies

To examine the difference between males and females in terms of use of memory strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4.13, was consulted.

Table 4. 13 Results of the Independent Samples Test of the Male and Female Participants

for Memory Strategies

Independent Samples Test

		Levene's Equality of	Test for Variances		t-test for Equality of Means							
							Mean	Std. Error	95% Confidence Interval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper		
Memory	Equal variances assumed	,044	,835	-3,637	255	,000	-,26424	,07265	-,40731	-,12118		
	Equal variances not assumed			-3,647	223,412	,000	-,26424	,07245	-,40701	-,12147		

According to Levene's Test for Equality of Variances, the Sig. value was .835, which was greater than .05. Therefore, it can be assumed that variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.13. This provided t=-3, 63, (df=255), and sig.(2-tailed)= .000, which is lower than .05.

As a result, it can be concluded that the difference in the use of memory strategies of males and females was significant; which indicates the fact that females (M=2, 97), on average, employed more memory strategies than males (M=2, 71) was significant.

4.4.1.2 Gender and Cognitive Strategies

To find the relationship between gender and cognitive strategies, an independent samples *t*-test was applied to the data. As Table 4. 14 below shows, the average of males using cognitive strategies was 2, 70, while the average of females using cognitive strategies was 2, 78, which indicates that females used more cognitive strategies than males.

Table 4. 14. Group Statistics of the Male and Female Participants for Memory Strategies

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Cognitive	Male	153	2,7092	,56830	,04594
	Female	104	2,7813	,53200	,05217

Figure 4.7 below shows the gender difference in the use of cognitive strategies.

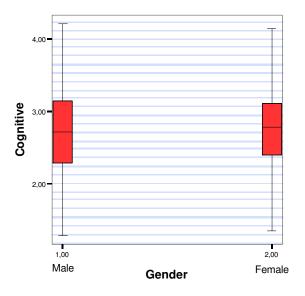


Figure 4. 7: Gender Difference in the Use of Cognitive Strategies

To examine the difference between males and females in terms of use of cognitive strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4.15, was consulted.

Table 4. 15 Results of the Independent Samples Test of the Male and Female Participants

for Cognitive Strategies

Independent Samples Test

		Levene's Equality of	Test for Variances		t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Cognitive	Equal variances assumed	,817	,367	-1,023	255	,307	-,07205	,07040	-,21068	,06659	
	Equal variances not assumed			-1,036	230,701	,301	-,07205	,06951	-,20901	,06492	

According to Levene's Test for Equality of Variances, the Sig. value was .367, which is greater than .05. Therefore, it can be assumed that the variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.15. This provided t=-1, 02, (df=255), and sig.(2-tailed)= .30, which is greater than .05.

As a result, it can be concluded that the difference in the use of cognitive strategies of males and females was not significant. This implies that the use of cognitive strategies did not significantly differ between males and females.

4.4.1.3 Gender and Compensation Strategies

To investigate the relationship between gender and compensation strategies, an independent samples *t*-test was applied to the data. As Table 4. 16 below shows, the average of males using indirect strategies was 3, 03, while the average of females using direct strategies was 3, 19, which indicates that the females were slightly superior to males in their use of compensation strategies.

Table 4. 16. Group Statistics of the Male and Female Participants for Compensation Strategies

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Compensation	Male	153	3,0368	,69177	,05593
	Female	104	3,1987	,64990	,06373

Figure 4.8 below shows the gender difference in the use of compensation strategies

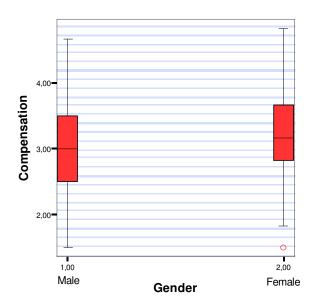


Figure 4. 8. Gender Difference in the Use of Compensation Strategies

To examine the difference between males and females in terms of use of indirect strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4.17, was consulted.

Table 4. 17. Results of the Independent Samples Test of the Male and Female Participants

for Compensation Strategies

Independent Samples Test

Levene's Test for Equality of Variances				t-test for Equality of Means						
							Mean	Std. Error	95% Cor Interva Differ	of the
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Compensation	Equal variances assumed	1,967	,162	-1,887	255	,060	-,16190	,08581	-,33088	,00708
	Equal variances not assumed			-1,909	230,213	,057	-,16190	,08479	-,32896	,00516

According to Levene's Test for Equality of Variances, the Sig. value was .162, which is greater than .05. Therefore, it can be assumed that the variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.17. This provided t=-1, 887, (df=255), and sig.(2-tailed)= .06, which is greater than .05.

As a result, it can be concluded that the difference in the use of compensation strategies of males and females was not significant. This implies that the use of compensation strategies is not a significant indicator of the difference in strategy use between males and females.

4.4.2 Gender and Indirect Strategies

To find the relationship between gender and indirect strategies, an independent samples *t*-test was applied to the data set. As Table 4.18 below shows, the average of males using indirect strategies was 2, 92, while the average of females using direct strategies was 3, 09, which indicated the female superiority in this domain. As it was the case in the direct strategies, females surpassed the males in using indirect strategies as well.

Table 4. 18. Group Statistics of the Male and Female Participants for Indirect Strategies

Group Statistics

					Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Indirect	Male	153	2,9297	,62371	,05042
	Female	104	3,0986	,56226	,05513

Figure 4. 9 below shows the gender difference in the use of indirect strategies

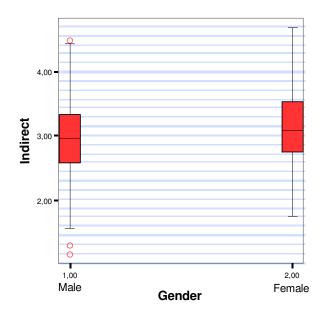


Figure 4. 9: Gender Difference in the Use of Indirect Strategies

To examine the difference between males and females in terms of use of indirect strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4.19, was consulted.

Table 4. 19. Results of the Independent Samples Test of the Male and Female Participants

for Indirect Strategies

Independent Samples Test

			Test for Variances		t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Indirect	Equal variances assumed	,422	,517	-2,216	255	,028	-,16885	,07621	-,31892	-,01877	
	Equal variances not assumed			-2,260	235,649	,025	-,16885	,07472	-,31604	-,02165	

According to Levene's Test for Equality of Variances, the Sig. value was .517, which is greater than .05. Therefore, it can be assumed that the variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.19. This provided t=-2, 21, (df=255), and sig.(2-tailed)= .028, which is lower than .05.

As a result, it can be concluded that the difference in the use of indirect strategies of males and females was significant; which indicates the fact that females (M=3, 09), on average, employed more indirect strategies than males (M=2, 92) was significant.

4.4.2.1 Gender and Metacognitive Strategies

To investigate the relationship between gender and metacognitive strategies, an independent samples *t*-test was applied to the data set. As Table 4. 20 below shows, the average of males using metacognitive strategies was 3,41, while the average of females using metacognitive strategies was 2,63, which indicates that females used more metacognitive strategies than males.

Table 4. 20. Group Statistics of the Male and Female Participants for Metacognitive Strategies

Group Statistics

					Std. Error
	Gender	N	Mean	Std. Deviation	Mean
Metacognitive	Male	153	3,4193	,87157	,07046
	Female	104	3,6310	,80453	,07889

Figure 4.10 below shows the gender difference in the use of metacognitive strategies

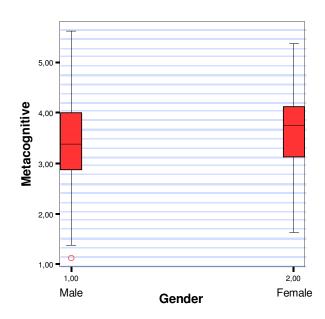


Figure 4.10: Gender Difference in the Use of Metacognitive Strategies

To examine the difference between males and females in terms of use of metacognitive strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4. 21, was consulted.

Table 4. 21 Results of the Independent Samples Test of the Male and Female Participants

for Metacognitive Strategies

Independent Samples Test

		Levene's Test for Equality of Variances			t-test for Equality of Means							
							Mean	Std. Error	95% Confidence Interval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper		
Metacognitive	Equal variances assumed	,214	,644	-1,971	255	,050	-,21173	,10741	-,42324	-,00021		
	Equal variances not assumed			-2,002	232,584	,046	-,21173	,10578	-,42013	-,00333		

According to Levene's Test for Equality of Variances, the Sig. value was .644, which is greater than .05. Therefore, it can be assumed that variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4. 21. This provided t=-1, 97, (df=255), and sig.(2-tailed)= .050, which is equal to the limit significant level of .05.

As a result, it can be concluded that the difference in the use of metacognitive strategies of males and females was significant; which indicates the fact that females (M=3, 63), on average, employed more metacognitive strategies than males (M=3, 41) was significant.

4.4.2.2 Gender and Affective Strategies

To investigate the relationship between gender and affective strategies, an independent samples *t*-test was applied to the data set. As Table 4. 22 below shows, the average of males using indirect strategies was 2, 52, while the average of females using direct strategies was 2, 57, which indicates that the females were slightly superior to males in their use of affective strategies.

Table 4. 22. Group Statistics of the Male and Female Participants for Affective Strategies

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Affective	Male	153	2,5246	,63454	,05130
	Female	104	2,5718	,63631	,06240

Figure 4.11 below shows the gender difference in the use of affective strategies

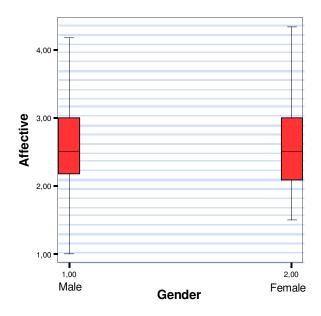


Figure 4. 11. Gender Difference in the Use of Affective Strategies

To examine the difference between males and females in terms of use of affective strategies and see the significance level, an independent samples tests, results of which are presented below in Table 4.23, was consulted.

Table 4. 23. Results of the Independent Samples Test of the Male and Female

Participants for Affective Strategies

Independent Samples Test

		Levene's Equality of	Test for Variances		t-test for Equality of Means						
						Mean	Std. Error	95% Confidence Interval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Affective	Equal variances assumed	,051	,822	-,584	255	,560	-,04718	,08073	-,20617	,11181	
	Equal variances not assumed			-,584	220,911	,560	-,04718	,08078	-,20637	,11202	

According to Levene's Test for Equality of Variances, the Sig. value was .822, which is greater than .05. Therefore, it can be assumed that the variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4.23. This provided t=-.58, (df=255), and sig.(2-tailed)= .56, which is greater than .05.

As a result, it can be concluded that, even though females were superior, the difference in the use of affective strategies of males and females was not significant. This implies that the use of affective strategies was not a significant indicator of the difference in strategy use between males and females.

4.4.2.3 Gender and Social Strategies

To investigate the relationship between gender and social strategies, an independent samples *t*-test was applied to the data set. As Table 4. 24 below shows, the average of males using social strategies was 2, 84, while the average of females using social strategies was 3, 09, which indicates that females used more social strategies than males.

Table 4. 24. Group Statistics of the Male and Female Participants for Social Strategies

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Social	Male	153	2,8453	,67188	,05432
	Female	104	3,0929	,62999	,06178

Figure 4.12 below shows the gender difference in the use of social strategies

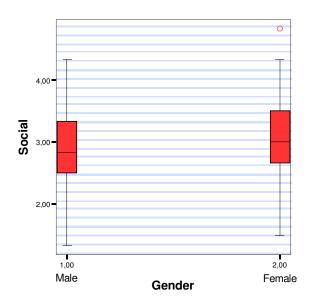


Figure 4.12 Gender Difference in the Use of Social Strategies

To examine the difference between males and females in terms of use of social strategies and see the significance level, an independent samples t-test, results of which are presented below in Table 4. 24, was consulted.

Table 4. 25 Results of the Independent Samples Test of the Male and Female Participants for Social Strategies

Independent Samples Test

		Levene's Test for Equality of Variances			t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
Social	Equal variances assumed	,206	,651	-2,974	255	,003	-,24763	,08328	-,41163	-,08363	
	Equal variances not assumed			-3,010	230,480	,003	-,24763	,08226	-,40971	-,08555	

According to Levene's Test for Equality of Variances, the Sig. value was .651, which is greater than .05. Therefore, it can be assumed that the variances were equal. Then, it is possible to test the hypothesis using the Equal Variances Assumed row of the t-test in Table 4. 24. This provided t=-2, 97, (df=255), and sig.(2-tailed)= .003, which is lower than .05.

As a result, it can be concluded that the difference in the use of social strategies of males and females was significant; which indicates the fact that females (M=3, 09), on average, employed more social strategies than males (M=2, 84) was significant.

To sum up this section, it was found on the whole that the strategies that are included in the subscales of the inventory, direct: memory, cognitive, compensation; indirect: metacognitive, affective and social, indicated a difference between male and female participants. Analyses of both the direct and indirect strategies showed a significant female superiority in the use of language learning strategies. The further analysis of the strategy domains, also, presented parallel results with the previous analyses. In all of these domains, females were superior to males; and except for cognitive, compensation and affective domains, all of these latter analyses gave statistically significant differences between males and females.

Therefore, it is possible to state that the null hypothesis "H $(_0)_4$ The amount of strategies in the subscales used by female students is significantly more than the strategies that male students used" is confirmed.

4.5 The Use of Language Learning Strategies, Achievement and Gender in Scholarship Students

There were 25 students, who either had either 50% or full scholarship granted by the university due to their scores in the university entrance examination. 17 (68%) of them were females while 8 (32%) were males. As a matter of fact, sampling size was very small. However, it may give insights about the findings of the overall study. Therefore, the analyses performed on the larger data set were also applied to the scores of scholarship students.

In terms of achievement, as expected from them, they had a higher average (M=65, 03), and most of them were in the highest two groups (Group 3=11 and Group 4=10). Only a few of them were in the less successful groups (Group 1= 2 and Group 2= 2).

Their language learning strategy use average, on the other hand, did not differ from the rest of the participants. Their average of strategy use was M=2, 91. However, it needs to be noted that the ANOVA applied on this small set was not significant (p=.06). Though it was not significant, the ANOVA showed that the use of strategy increased with the success level (Group 1=2, 67; Group 2=2, 69; Group 3=2, 77; and Group 4=3, 20). This shows a similarity in the relationship of overall strategy use and achievement of the entire group, of which the result was found significant.

In terms of gender, analysis of the results showed that females (M=65, 5) were slightly more successful than males (M=64) in the achievement tests. Besides, female participants (M=2, 97) used more language learning strategies than males (M=2, 79), which again indicated similar results with the findings of the whole set of participants.

4.6 Summary of the Findings of the Analyses

The study was conducted to seek answers to several research questions and test the null hypotheses attached to them.

The first research question was "Is there a relation between gender and achievement in English?", and the null hypothesis was "There is a significant relation between gender and achievement in English favoring females". The analysis performed on the data, confirming the null hypothesis, showed a significant difference in the relation between gender and achievement. The achievement test results average of the female students were higher than of the male students, which was also supported by the significance tests. In addition to the averages, the distribution of the scores indicated that female students were more successful than male students as their scores were loaded relatively in a higher position on the scale; similarly, even though there were some higher ranking scores of males, the great majority of the male scores were lower than the female scores.

The second research question was "Is there a relation between achievement in English and overall language learning strategy use?", and the null hypothesis was "There is a significant positive correlation between overall language learning strategy use and achievement in English". The statistical analysis showed that the average strategy use of

the whole students was 2, 94 out of 5. According to Griffiths (2003), to be able to claim that the language learning strategies were used at a high frequency level, the mean should be 3, 50 or more. Thus, the overall evaluation of the current study indicated a medium frequency level of language learning strategy use by all the participants.

In relation to the research question, the data were further analyzed to figure out whether there is a positive correlation between strategy use and achievement. The findings revealed that higher achieving students employed more language learning strategies. Moreover, a consistent and steady increase in the use of strategies within the achievement level was observed. While the low achieving students used an average of 2, 72 language learning strategies, high achievers employed an average of 3, 20. Further analyses confirmed the null hypothesis by revealing satisfactory significant results for the findings.

The third research question was "Do males and females use the same amount of language learning strategies?", and the null hypothesis was "Female students use more language learning strategies than male students". It was interpreted that female students used more language learning strategies than the male students. Females employed an average of 3, 04 language learning strategies while males used 2, 87. Through follow up tests, it was found that the difference between males and females in the amount of strategies they used were significant.

The last research question was "Are the amount of strategies in the subscales (direct and indirect) used by males and females in SILL similar, or is there a significant difference between the strategies they use?", and the null hypothesis was "The amount of strategies in the subscales used by female students is significantly more than the strategies that male students used". After analyzing all the strategies as a whole, this time the responses of the participants were analyzed according to the subscales of the language

learning strategies. They were direct strategies and indirect strategies. According to the analyses, taking all the participants into account, more indirect strategies (2, 99) than direct strategies (2, 88) were used by the students while learning English.

The analyses also showed that females, with their higher averages in direct and indirect subscales, were significantly superior to males in using both direct and indirect strategies.

Going one step further, the domains listed under direct strategies - memory strategies including items like "I remember a new English word by making a mental picture of a situation in which the word might be used", cognitive strategies such as "I look for words in my own language that are similar to new words in English", compensation strategies like "If I can't think of an English word, I use a word or phrase that means the same thing"; and indirect strategies –metacognitive strategies with items like "I notice my English mistakes and use that information to help me do better", affective strategies like "I encourage myself to speak English even when I am afraid of making a mistake" and social strategies such as "I practice my English with other students" were analyzed. The analyses showed that in all the listed domains, females employed more of the strategies of that domain than male students. The superiority of the females over males ranged from .05 to .26 across the above mentioned subscales and domains; and except for three domains, differences between males and females were significant, which overall confirmed the null hypothesis.

CHAPTER 5

CONCLUSION

5.0 Presentation

This chapter presents the overview of the study, discussion of the findings, their pedagogical implications and recommendations for further research.

5.1 Overview of the Study

This study intended to investigate the language learning strategies used by L2 learners, aiming to find the amount of strategies and the domain differences of the strategies used; to reveal the link between strategy use and success levels; and to find out the difference in strategy use across genders and its influence on their achievement in English. 257 students from Atılım University English Preparatory School participated in the study. All of the participants were at the same proficiency level at the time of the study, and were distributed among different classes of the same level. The researcher taught two of these classes.

The data were gathered through Strategy Inventory for Language Learning (SILL) of Oxford (1990), which was translated to Turkish by Cesur and Fer (2007). The underlying reason for using the Turkish version of the instrument was that the students were not proficient enough to understand the original statements on the inventory and respond accordingly.

The instrument is based on Oxford's (1990) classification of the language learning strategies, which is composed of 50 items in six subscales. The participants responded to the inventory before the end of the level they were in.

The data, then, were analyzed through SPSS (15.0) to find the relationship of language learning strategies, gender and achievement in learning the target language. To reveal the interconnections between these factors independent *t*-tests and an ANOVA test, along with post hoc procedures, were performed on the gathered data.

5.2 Discussion

The initial question the study answered questioned the existence of a relation between gender and achievement in second language learning. The findings of the study showed that there was a connection between gender and achievement. The achievement test results average of the female students were higher than the average scores of the male students, and the difference was proved to be significant with the follow up statistical procedures. The average of the students may be misleading without looking at the actual distribution of the scores on the scale. The distribution of the scores also showed that female students were more successful than male students as their scores were located higher on the scale; and despite a few high scores, the great majority of the male scores were located lower than the female scores.

This finding supported the general belief that females are superior language learners. Depending on scientific evidence or not, most people believe that females are more successful learners of language. Several scholars such as Burstall (1975) Boyle (1987) came up with findings in their studies that females outscored males. However, the findings

relating to female superiority in learning languages of both such studies and the current study can neither be generalized to other settings nor be evaluated on their own. Because there are other studies (Nyikos, 1990; Bacon, 1992 etc.) that found contrastive results indicating that males scored better in overall language ability or specific language skills.

Therefore, a skeptical stance should be taken in that the test scores solely reveal the truth. Considering this, the researcher further analyzed the possible underlying reason of female superiority in the current study.

The second research question was "Is there a relation between achievement in second language learning and overall language learning strategy use?". According to the statistical analyses, the overall evaluation of the current study indicated a medium frequency level of language learning strategy use by all the students, regardless of their gender.

The data were further analyzed to see whether there is a positive correlation between strategy use and achievement. The findings revealed that higher achieving students employed more language learning strategies. Scholarship students, whose averages in achievement tests were higher than the rest of the students, employed more language learning strategies as well. This too can be accepted as a proof in that more successful students use more language learning strategies. In the study, the students were not just listed according to their scores; yet, they were put into four groups according to their results and these groups were compared to one another. This comparison showed that there was a steady increase in the use of language learning strategies across the achievement groups.

The findings of this study showed a significant parallel with many precedent studies. As Rubin (1975) defined the good language learner as someone who finds strategies for overcoming inhibitions in target language interaction and Lavine & Oxford (1995) stated that successful L2 learners are aware of the strategies they use and know the reason for using them, many scholars tested the idea that good language learners use more strategies. In most studies conducted in various geographical and cultural settings, high achieving students generally reported higher levels of overall strategy use and they used a wide variety of strategies from different categories. In their studies, Green and Oxford (1995); O'Malley et al (1985), Ehrman and Oxford (1995) etc. found that more successful students used more language learning strategies.

The third research question asked whether males and females used the same amount of language learning strategies, seeking to prove that female students used more language learning strategies than male students. It was interpreted that female students used more language learning strategies than the male students. Females employed an average of 3, 04 language learning strategies while males used 2, 87. Follow up tests indicated that the difference between males and females in the amount of strategies they used was significant. Most studies, including Green and Oxford (1995), Sy (1994), Watanable (1990) etc., found similar results to the current study in that females surpassed males in the amount of language learning strategies they employed.

However, there are some other research studies that found the opposite. In his study, Tran (1988) discovered that Vietnamese women use fewer language learning strategies than men. Tercanlıoğlu (2004) also found that male students used more language learning strategies, and she concluded "A possible explanation for this result may be that in the male-dominated Turkish society female students may have lower self-esteem in

reporting the strategies they use" (p. 190). Even though her study statistically proved that females are not superior to males, we can assume it as true only in its own context. What she proposed as the possible explanation was debatable. The Turkish society is known to be male dominant, and maybe it really is. Nevertheless, relating the female students' low strategy use scores to their perceived inferiority in society does not sound plausible. Her subjects were university students who came from all parts of Turkey; besides they were going to be teachers of English within a few years. Those findings can be better evaluated bearing in mind other factors like motivation, learning styles, culture, personality, aptitude, language learning background and attitude towards English as a language and English as a profession.

In the setting of the current study, none of the students were going to adopt English as a profession; they needed English as a medium of instruction in their relevant departments. Being so, most students reported that they were not willing to learn English and they learned it just because of necessity. This fact gives an insight into the overall low language learning strategies by the whole group. If they do not have specific purposes or sources of motivation, males seem to spend less effort in language learning as Griffiths (2008), also, states "Due to generally lower motivation, male students also need continuous and concrete reminders regarding the advantages of foreign language study for their future careers. Due to the lower relative importance they place on language studies, males are immediately disadvantaged in their opportunity for social study, whereas are more likely to form study groups and use social strategies to practice and share information" (p.79).

The fourth research question was "Are the amount of strategies in the subscales (direct and indirect) used by males and females in second language learning similar, or is there a significant difference between the strategies they use?" To answer this question, a

data set was further analyzed according to the subscales of the language learning strategies; namely direct and indirect strategies. According to the analyses, taking all the participants into account, more indirect strategies than direct strategies were used by the students while learning English. Most of the studies conducted on this topic generally do not comment on this difference; after mentioning the overall strategy use, they go on to analyze the domains of the subscales. From the rare researchers underlining this point, Özseven (1993) also found that the participants of his study employed more indirect strategies.

It is worth mentioning here that, the result of the current study was quite interesting as the participants reported that they used more indirect strategies. Direct strategies are more linked to production of concrete details of the target language such as practice of language form and the reworking of the learning materials, while indirect strategies involve being aware of your feelings while learning the target language, reflecting metacognitively on what is to be done and using the target language in various ways and situations (Xiaoguo & Yongbing, 2005). In other words, direct strategies literally include language itself whereas indirect strategies —though equally important— are the supplementary means for direct strategies.

What makes the findings significant is that the instruction the students receive is basically exam oriented and the important part of the test means they receive is pencil and paper based examinations. In every class hour, they are exposed to grammar structures and new vocabulary items, and these are frequently retrieved by means of extra materials, assignments, weekly quizzes and sample examinations. This fact indicates that, whatever the nature of instruction is, learners may well choose their own way of learning, which is another question mark about the nature of language learning in that it involves other

factors like learning styles, personality etc. along with gender and the formal instruction the students received.

Further analyses investigated the domains listed under direct strategies- (MEM) memory strategies, (COG) cognitive strategies and (COM) compensation strategies; and indirect strategies –(MET) metacognitive strategies, (AFF) affective strategies and (SOC)social strategies. Looking at the subscales of direct and indirect strategies showed that the most frequently used strategies by the whole group were metacognitive strategies (3, 50), compensation strategies (3, 10) and social strategies (2, 89); and the individual items used most by the whole group were (SOC) 45- "If I do not understand something in English, I ask the other person to slow down or say it again." (MET) 32- "I pay attention when someone is speaking English." (SOC) 48- "I ask for help from English speakers." As the frequencies reflect, there is no domain other than compensation strategies and again no single item from the direct strategies that the students employed.

The findings revealed that in all the domains of the subscales, females were superior to male students in using language learning strategies, which indicated a different result according to the previous studies. The precedents generally stated the female superiority; yet they found male superiority in some of the domains of the subscales, each time a different one though. Green and Oxford (1995), for example, found that females used more strategies in most of the domains but males were slightly better in cognitive strategies. Tercanlıoğlu (2004) on the other hand found a male superiority in her study; but she also indicated female superiority in the affective domain.

The superiority of the females over males ranged from .05 to .26 across the above mentioned subscales and domains; and except for three domains, differences between

males and females were significant, which overall confirmed the hypothesis that females are superior to males in using different strategies across subscales.

Another outstanding finding of the study is that males and females had a tendency to give similar responses to the same items. The top rated item by females was (SOC) 45-" If I do not understand something in English, I ask the other person to slow down or say it again" with a mean value of 4, 08; similarly the same item was the second most rated item of males. While item (MET) 32- "I pay attention when someone is speaking English" was the most frequently used strategy by males with an average of 3, 71, it was the second most frequently used strategy by females. Looking at the least frequently used strategies gives the same result. Item (AFF) 43- "I write down my feelings in a language learning diary" was the least used strategy by both males and females.

As a result, it is quite difficult to discriminate males and females in terms of their language learning strategy use in different domains. The gap between males and females was the highest in memory strategies and social strategies. The compensation strategies on the other hand was the domain where the difference was very small, which supported Alptekin's (2007) finding that compensation strategies were the most frequently used ones, irrespective of the learning environment.

As Alptekin states, compensation strategies are employed as a crucial means of communication embodying all four skills. They are also reported to be most frequently used in formal language learning settings where learners encounter communication breakdowns due to inadequate or missing knowledge, the learning context and the type of indirect strategy preferred (Bremmer, 1999, in Alptekin, 2007).

Lastly, males responded to the affective strategies far less than females. Items that were the least reported by males were (AFF) 43- "I write down my feelings in a language learning diary" (1,37) and (AFF) 44- "I talk to someone else about how I feel when I am learning English" (1,84). This may imply that males prefer not to share their feelings and keep them inside. This case may be explained through gender, in that females are more emotional and welcome to express their feelings; and/or cultural tenets, which teaches males of the Turkish society to be tacit about their emotions.

To sum up, the study indicated that females were significantly more successful than males in terms of achievement tests and they used more language learning strategies, which are found to be positively effective in success in the target language. Therefore, depending on the findings of the study, it can be stated that females are more successful language learners because they employ more language learning strategies than men. It should be noted, though, that why females use more strategies and what other factors effect achievement or use of language learning strategies, need to be further investigated.

5.2.1. Comparison of the Study with the Recent Studies Conducted in Turkey

In the previous sections, along with the ones conducted around the world, some studies (i.e. Tercanlıoğlu, 2004; Alptekin, 2007) that were done in Turkey were cited relating their findings to the current study. In this section more related research studies, all of which conducted within the scope of master's and doctoral theses in various parts of Turkey on diverse participants, are presented.

Özseven (1993) designed a study to investigate relationship between language learning strategies and oral performance of Turkish EFL learners, who graduated from science department of high school, at the English Preparatory School at Dokuz Eylül University. His analysis and interpretation indicated that most of the participants preferred more indirect strategies than direct strategies. Similar to the findings of the current study, those who preferred indirect strategies employed metacognitive strategies most. He could not find a positive correlation between language learning strategy use and oral performance but those who used more direct strategies were more successful in oral production of the language.

Tüz (1995) tried to determine the correlation between the use of language learning strategies by 'more successful' and 'less successful' language learners using strategy inventories and exam averages of the participants at the METU Development Foundation School. She found that most participants used more social strategies than any other subset. This is followed by cognitive, compensation and affective strategies. On the other hand, metacognitive and memory strategies were the least preferred strategies. The findings revealed that low achieving participants used metacognitive strategies more than higher achieving participants, which was found to be just the opposite in the current study.

Bozatlı (1998), who studied vocabulary language learning strategies employed by a small group of successful participants attending freshman English courses at METU, stated that successful English learners are 'active strategy' employers who use several strategies more frequently than others.

Yalçın (2006) sought answer to the question whether there was a difference in students' use of language learning strategies based on their gender. 334 prep-class

students participated in the study at Gazi University. These students were in three different proficiency levels. In parallel with the findings of the current study, the findings in this study indicated that more successful students used more language learning strategies and females used language learning strategies more than males. He, also, found that there were statistically significant differences between males and females in their use of language learning strategies, all favoring females, in memory, cognitive, metacognitive, affective and social strategies. However, as it is the case in this study as well, there was no statistically significant difference related to compensation strategies.

Another study by Acunsal (2005) aimed to explore the relationship between language learning strategies in relation to the participants' nationality, academic achievement and gender. Her subject group composed of 8th grade participants at private schools in Amman, Jordan and Adana, Turkey. She concluded that the participants, as the whole group regardless of their gender or nationality used metacognitive, compensation and cognitive strategies; and the least preferred strategies among these participants were the affective strategies, which indicated very similar results with the current study.

Karatay (2006) conducted a detailed analysis of responses to the single items of SILL in his study at Uludağ University. The results of the study reflected that the language learning strategies that were most frequently used by the adult Turkish students that participated in the study were item 33 (metacognitive): *I try to find out how to be a better learner of English*, item 45 (affective): *If I do not understand something in English*, *I ask the other person to slow down or say it again*, and item 32 (metacognitive): *I pay attention when someone is speaking English*. Similarly, in the current study 45 and 32 were the items that were rated the highest by the participants regardless of their gender.

Yilmaz (2001) studied learner factors (age, aptitude, intelligence, language learning strategies) and strategy use in foreign language learning. She investigated the relationship between language learning strategies and proficiency level of participants. She used the SILL on postgraduate preparatory school participants at Dokuz Eylül University. She found that cognitive strategies were the most widely preferred strategies. Then, she found that there was a positive correlation between the participants' level of English and the amount of strategies they employed. The correlation between cognitive strategies and participants' success was high whereas there was a low correlation between participants' success and their use of metacognitive strategies. The findings of the current study, on the other hand, showed that cognitive strategies were among the least preferred ones while metacognitive strategies were the most preferred ones. Though the findings of her study and the current one about strategy choice contradict, the success levels tied to strategy choice indicate similar results. In the current setting, the least successful students used the least amount of cognitive and memory strategies, which resulted in better achievement in Yılmaz's (2001) study.

In his research study on high school students, Aydın (2003) revealed that there was a positive correlation between strategy use and achievement, yet he found no significant difference between males and females in terms of language learning strategy use. His findings also showed that the least preferred strategies were the affective strategies and he attributed this to the fact that students learned the target language in Turkish setting, where they had no opportunity to practice the target language and therefore did not need to use such strategies.

Another study that did not indicate a significant difference between strategy choice between males and females was done by Tabanlıoğlu (2003) who sought to discover the

relationship between learning styles and language learning strategies of pre-intermediate students EAP (English for Academic Purposes) participants at the University of Bahçeşehir. Another point that did not comply with the findings of the current study is that cognitive strategies preceded metacognitive strategies in strategy choice of the participants, which indicated that they employed more direct strategies than indirect strategies. However Tabanlıoğlu did not comment on whether using more direct strategies resulted in better achievement in the tests.

In a final study, Cesur (2008) found that females were superior to males in terms of language learning strategy use and they were more successful in learning English. In all the subscales female participants employed more language learning strategies. In his work, the researcher also found that there was a significant difference in learning styles between males and females. Males tended to use more visual learning styles while females preferred auditory learning styles.

To conclude this section, there are very divergent results found in the studies conducted in Turkey on the relationship of language learning strategies, gender difference and achievement. Most studies, including the current one, showed more successful learners, consciously or unconsciously, employed more language learning strategies while learning English, and those students who used more language learning strategies were more successful.

Different studies found different results about the preference of the strategies in the subscales. However, the majority of the studies indicated that the most frequently employed strategies were in the subscales of *compensation* and *metacognitive strategies*. An interesting point to make is the fact that *memory* and *cognitive strategies* were

frequently rated low as opposed to their being direct strategies, which are directly related to the language and as Oxford (1990) stated they were key to learn a language. In terms of gender difference, the studies does not say much about their success levels, yet almost all of them reflect a significant female superiority in terms of language learning strategy use.

5. 3. Pedagogical Implications

Good learners can control their own learning process being aware of their strengths and weaknesses. It is obvious that success in learning a second language comes with the combination of nature, that is to say, the features that a human being possesses from birth, and the nurture he/she is exposed to. Therefore, explaining the success of either gender in any area by their natural assets is unable to show the greater picture. Maybe it is easy to claim that men are better at athletics due to their muscular physique and females make better babysitters, but it is not that straightforward in language, because learning a language is a much more complex skill than running or ball dancing. Besides, what constitutes gender is a vague area of discussion, as it is impossible to attach standardized identities to males and females across the world, as every culture, every social setting has its own features that make up the identity of male or female.

Nevertheless, research on gender and other factors interconnected with it provides the teachers with valuable information about the learners they are teaching.

The findings of the current study suggest a number of implications for the classroom. The study indicated that language learning strategies, the thoughts and actions that students use, consciously or unconsciously, to learn new information, play a crucial role in learning. The active use of language learning strategies resulted in higher success for all the students. Therefore, students should be made aware of this fact. The first thing that

can be done is sharing research findings of this study and similar ones as it would be useful in persuading students to use such strategies as much as possible. It should be noted that language learning strategies are the glue that holds the numerous elements of language learning together.

Once the indispensability of the language learning strategies are made sure, students should be aided by the instruction of language learning strategies. The explicit teaching of learning strategies can help students attain the goals of improving their mastery of the target language and, especially with the help of indirect strategies involved, learning about the target culture. As stated by Chamot, Barnhardt, El-Dinary, & Robbins (1999), the purpose of teaching those strategies is to help students to consciously control the way they learn in order to be efficient, motivated and independent language learners.

If the students can understand their own learning processes and attain some control over these processes, they will take more responsibility for their own learning; and those students who have that self-knowledge and skill in regulating their own learning are usually successful learners. Moreover, as Chamot (n.d.) states "Students who think and work strategically are more motivated to learn and have a higher sense of self-efficacy or confidence in their own learning ability" (p.1). This means, such students see themselves as more able to succeed academically than those who do not know how to use strategies effectively.

O'Malley, Chamot, and Küpper (1989) investigated the differences between more and less effective language learners. They found three major differences between effective and less effective listeners. The characteristics of effective listeners involved monitoring their comprehension by continually asking themselves whether the thing they heard made

sense; relating new information to their prior knowledge by recalling relevant personal experiences or things they had studied and making inferences about unknown words or information.

It is also important while teaching language learning strategies explicitly that not every student need the same strategies or in the same amount. Green and Oxford (1995) found that some strategies used by effective language learners of the lower levels are used less often by the same learners when they reach higher levels, as they needed to develop new strategies to meet the requirements of more challenging language tasks. The need for strategies also differs with the language tasks. If a task is easy, students can perform it as they would in their native language, without conscious attention to strategies. On the other hand, if the task is too difficult, even effective learning strategies cannot compensate for the learner's lack of knowledge (Chamot, n.d.). As a result, students should know their needs and learn to employ the required language learning strategies.

In addition to task requirements, there are definitely other factors that influence the strategy choice. Students with different degrees and types of motivation, would choose strategies appropriate to their motivation and students with different learning styles - visual, auditory, and hands-on; reflective and impulsive; analytic and global; extroverted and introverted, (Green & Oxford, 1995) would choose strategies that reflect their style preferences.

As the study indicated, gender factor is an important one in strategy preference. Males and females showed different amounts of strategy use and this reflected a significant correlation with achievement. Students should be informed about that and they should examine their results to better understand their own strategy use. Those students who used more strategies and became successful would be positively reinforced and they would

keep using more strategies. On the other hand, those who used a relatively low number of strategies would be persuaded to employ more language learning strategies in the future and increase the variety of their strategies.

Although findings did not show a great difference in the preference of strategy subsets across genders, along with the findings of previous studies, careful examination of the individual items showed that males used less Affective Strategies indicating reluctance in sharing their feelings. Therefore, this finding should be stressed to the male students and they should be encouraged to reflect their emotions more. Teachers should help males participate in more group activities, define clear goals and activities that will help them discover and improve their language learning strategies.

However, not only these would not make much difference unless the activities of the instruction are changed accordingly. Therefore, teachers too should be aware of all the language learning strategies and factors affecting them and prepare their lessons plans in accordance with them.

As Green and Oxford (1995) state "The more that teachers know about such factors, the more readily the teacher can come to grips with the nature of individual differences in the classroom. Such knowledge is power —the power to plan lessons so that students with many different characteristics, including varied strategies, can receive what they need" (p. 292).

Lastly, students should be informed of the broad range of strategy options available. Language learning strategies are not limited to the ones cited in SILL. There are many more strategies proposed by other scholars and still there may be more that have not been explored yet.

5.4 Suggestions for Further Research

This study came up with answers relating to gender, language learning strategies and achievement. However, further research is needed to better understand their interconnection and test their accuracy.

First of all, the study was conducted at a private university on subjects who were at the same proficiency level. A possible study can be done at a state university on students from different course levels. Besides, a comparison of preparatory school students and those who learn English in other settings for different purposes is needed to have insights about motivation.

Age factor was not included in the study as all the participants were young adults of the same class level. Further study should compare other age groups in terms of the findings of the current study.

Other factors such as motivation, attitude, learning styles, economic situation and social background, that create a difference between genders should be involved in further research. Graham (1990), for example, found that females had a significantly more positive attitude towards English and English speaking societies, and they were considerably more successful.

Speaking another foreign language should be investigated as well. Inal, Evin and Saracoğlu (n.d.) found that students who already spoke a foreign language have a more favorable attitude towards the new foreign language they were learning.

All in all, the factors investigated in this study should be reinvestigated with a larger number of participants from different settings, bearing in mind other possible factors that were found to be effective in language learning in previous research, and with different

forms of research means, so as to be able to better understand the effect of gender and language learning strategies on achievement in the target language.

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APPENDICES

APPENDIX A: THE DATA COLLECTION INSTRUMENT: THE STRATEGY INVENTORY OF LANGUAGE LEARNING

DİL ÖĞRENME STRATEJİLERİ ENVANTERİ Oxford (1990)							
Yaşınız: -18 18-19 +20 Cinsiyetiniz: E K 1. Sınav Puanınız:	Sınıfını	z: [3				
Dil Öğrenme Stratejileri Envanteri İngilizce'yi Yabancı Dil olarak öğrenenler için hazırlanmıştır. Bu envanterde İngilizce öğrenmeye ilişkin ifadeler okuyacaksınız. Her ifadenin sizin için ne kadar doğru ya da geçerli olduğunu, derecelendirmeye bakarak, 1, 2, 3, 4, 5' ten birini yazınız. <u>Verilen ifadenin, nasıl yapmanız gerektiği ya da başkalarının neler yaptığı değil, sadece sizin yaptıklarınızı ne kadar tasvir ettiğini işaretleyiniz.</u> Maddeler üzerinde çok fazla düşünmeyiniz. Maddeleri yapabildiğiniz kadar hızlı şekilde, çok zaman harcamadan ve dikkatlice işaretleyip bir sonraki maddeye geçiniz. Anketi cevaplandırmak yaklaşık 10-15 dk. alır.	1= Hiçbir zaman doğru değil	2= Nadiren doğru	3= Bazen doğru	4= Sık sık doğru	5= Her zaman doğru		
BÖLÜM A:							
1. İngilizce'de bildiklerimle yeni öğrendiklerim arasında ilişki kurarım.	1	2	3	4	5		
2. Yeni öğrendiğim kelimeleri hatırlamak için bir cümlede kullanırım.	1	2	3	4	5		
3 . Yeni öğrendiğim kelimeleri akılda tutmak için kelimenin telaffuzuyla aklıma getirdiği bir resim ya da şekil arasında bağlantı kurarım.	1	2	3	4	5		
 Yeni bir kelimeyi o sözcüğün kullanılabileceği bir sahneyi ya da durumu aklımda canlandırarak, hatırlarım. 	1	2	3	4	5		
5. Yeni kelimeleri aklımda tutmak için, onları ses benzerliği olan kelimelerle ilişkilendiririm.	1	2	3	4	5		
6. Yeni öğrendiğim kelimeleri aklımda tutmak için küçük kartlara yazarım	1	2	3	4	5		
7. Yeni kelimeleri vücut dili kullanarak zihnimde canlandırırım.	1	2	3	4	5		
8. İngilizce derslerinde öğrendiklerimi sık sık tekrar ederim.	1	2	3	4	5		
9 . Yeni kelime ve kelime gruplarını ilk karşılaştığım yerleri (kitap, tahta ya da herhangi bir işaret levhasını) aklıma getirerek, hatırlarım.	1	2	3	4	5		
BÖLÜM B:							
10. Yeni sözcükleri birkaç kez yazarak, ya da söyleyerek, tekrarlarım.	1	2	3	4	5		
11. Anadili İngilizce olan kişiler gibi konuşmaya çalışırım.	1	2	3	4	5		
12. Anadilimde bulunmayan İngilizce'deki "th /0 / hw" gibi sesleri çıkararak, telaffuz alıştırması yaparım.	1	2	3	4	5		
13. Bildiğim kelimeleri cümlelerde farklı şekillerde kullanırım.	1	2	3	4	5		
14. İngilizce sohbetleri ben başlatırım.	1	2	3	4	5		
15. T.V. 'de İngilizce programlar ya da İngilizce filmler izlerim.	1	2	3	4	5		
16. İngilizce okumaktan hoşlanırım.	1	2	3	4	5		
17. İngilizce mesaj, mektup veya rapor yazarım.	1	2	3	4	5		
18 . İngilizce bir metne ilk başta bir göz atarım, daha sonra metnin tamamını dikkatlice okurum.	1	2	3	4	5		
19. Yeni öğrendiğim İngilizce kelimelerin benzerlerini Türkçe'de ararım.	1	2	3	4	5		

20. İngilizce'de tekrarlanan kalıplar bulmaya çalışırım.	1	2	3	4	5
21. İngilizce bir kelimenin, bildiğim kök ve eklerine ayırarak anlamını	1	2	3	4	5
çıkarırım.					
22. Kelimesi kelimesine çeviri <u>yapmamaya</u> çalışırım.	1	2	3	4	5
23. Dinlediğim ya da okuduğum metnin özetini çıkarırım.	1	2	3	4	5
BÖLÜM C:					
24 . Bilmediğim İngilizce kelimelerin anlamını, tahmin ederek bulmaya çalışırım.	1	2	3	4	5
25. İngilizce konuşurken bir sözcük aklıma gelmediğinde, el kol hareketleriyle anlatmaya çalışırım.	1	2	3	4	5
26 . Uygun ve doğru kelimeyi bilmediğim durumlarda kafamdan yeni sözcükler uydururum	1	2	3	4	5
27 . Okurken her bilmediğim kelimeye sözlükten bakmadan, okumayı sürdürürüm.	1	2	3	4	5
28 . Konuşma sırasında karşımdakinin söyleyeceği bir sonraki cümleyi tahmin etmeye çalışırım.	1	2	3	4	5
29 . Herhangi bir kelimeyi hatırlayamadığımda, aynı anlamı taşıyan başka bir kelime ya da ifade kullanırım.	1	2	3	4	5
BÖLÜM D: 30. İngilizce'mi kullanmak için her fırsatı değerlendiririm. 31. Yaptığım yanlışların farkına varır ve bunlardan daha doğru İngilizce	1 1	2 2	3	4 4	5 5
kullanmak için faydalanırım. 32. İngilizce konuşan bir kişi duyduğumda dikkatimi ona veririm.	1	2	2	1	г
		2	3	4	5
33. "İngilizce'yi daha iyi nasıl öğrenirim? " sorusunun yanıtını araştırırım.	1	2	3	4	5
34. İngilizce çalışmaya yeterli zaman ayırmak için zamanımı planlarım.	1			4	5
35. İngilizce konuşabileceğim kişilerle tanışmak için fırsat kollarım.	1	2	3	4	5
36. İngilizce okumak için, elimden geldiği kadar fırsat yaratırım.	1			4	5
37. İngilizce'de becerilerimi nasıl geliştireceğim konusunda hedeflerim var.38. İngilizce'mi ne kadar ilerlettiğimi değerlendiririm.	1	2	3	4	5 5
				-	
BÖLÜM E:	-	_	_		_
39. İngilizce'mi kullanırken tedirgin ve kaygılı olduğum anlar rahatlamaya çalışırım.	1	2	3	4	5
40 . Yanlış yaparım diye kaygılandığımda bile İngilizce konuşmaya gayret ederim.	1	2	3	4	5
41. İngilizce'de başarılı olduğum zamanlar kendimi ödüllendiririm.	1	2	3	4	5
42 . İngilizce çalışırken ya da kullanırken gergin ve kaygılı isem, bunun farkına varırım.	1	2	3	4	5
43. Dil öğrenirken yaşadığım duyguları bir yere yazarım.	1	2	3	4	5
44. İngilizce çalışırken nasıl ya da neler hissettiğimi başka birine anlatırım.	1	2	3	4	5
BÖLÜM F:					
45 . Herhangi bir şeyi anlamadığımda, karşımdaki kişiden daha yavaş konuşmasını ya da söylediklerini tekrar etmesini isterim.	1	2	3	4	5

46. Konuşurken karşımdakinin yanlışlarımı düzeltmesini isterim.	1	2	3	4	5
47. Okulda arkadaşlarımla İngilizce konuşurum.	1	2	3	4	5
48. İhtiyaç duyduğumda İngilizce konuşan kişilerden yardım isterim.	1	2	3	4	5
49 . Derste İngilizce sorular sormaya gayret ederim.	1	2	3	4	5
50. İngilizce konuşanların kültürü hakkında bilgi edinmeye çalışırım.	1	2	3	4	5

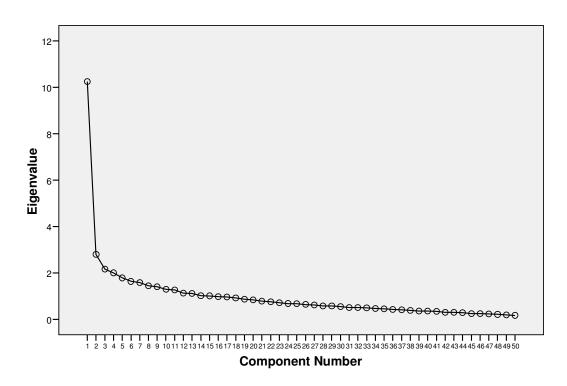
APPENIX B: FACTOR ANALYSIS OF THE INSTRUMENT

Total Variance Explained

		Initial Eigenvalu	es	Extraction	n Sums of Squar	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10,255	20,510	20,510	10,255	20,510	20,510
2	2,799	5,599	26,109	2,799	5,599	26,109
3	2,164	4,329	30,438	2,164	4,329	30,438
4	2,005	4,009	34,447	2,005	4,009	34,447
5	1,786	3,572	38,019	1,786	3,572	38,019
6	1,634	3,268	41,288	1,634	3,268	41,288
7	1,579	3,159	44,446	1,579	3,159	44,446
8	1,447	2,893	47,339	1,447	2,893	47,339
9	1,408	2,816	50,155	1,408	2,816	50,155
10	1,297	2,593	52,748	1,297	2,593	52,748
11	1,269	2,537	55,285	1,269	2,537	55,285
12	1,129	2,257	57,543	1,129	2,257	57,543
13	1,114	2,227	59,770	1,114	2,227	59,770
14	1,022	2,043	61,813	1,022	2,043	61,813
15	1,012	2,023	63,837	1,012	2,023	63,837
16	,982	1,964	65,800			
17	,966	1,933	67,733			
18	,926	1,852	69,585			
19	,873	1,747	71,332			
20	,843	1,687	73,019			
21	,788	1,577	74,596			
22	,753	1,507	76,102			
23	,709	1,417	77,520			
24	,682	1,363	78,883			
25	,677	1,354	80,237			
26	,640	1,280	81,517			
27	,623	1,246	82,763			
28	,580	1,161	83,924			
29	,575	1,150	85,074			
30	,552	1,104	86,178			
31	,511	1,022	87,200			
32	,505	1,010	88,210			
33	,494	,987	89,197			
34	,466	,931	90,128			
35	,456	,911	91,040			
36	,424	,847	91,887			
37	,415	,829	92,716			
38	,386	,772	93,488			
39	,362	,723	94,211			
40	,357	,714	94,924			
41	,342	,684	95,609			
42	,306	,612	96,221			
43	,301	,602	96,823			
44	,287	,574	97,396			
45	,246	,493	97,889			
46	,245	,489	98,378			
47	,236	,471	98,849			
48	,213	,426	99,275			
49	,213	,384	99,659			
50	,171	,341	100,000			
	,171	,541	100,000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Q30	,675	-,311	-,162	-,123	-,218	-,130	-,011	-,055	,026	-,142	-,007	,032	,042	-,042	-,050
Q36	,663	,119	-,148	-,203	,109	-,125	,173	,141	,033	,155	,169	,173	-,086	-,034	-,108
Q31	,650	,025	-,094	-,115	-,173	-,339	-,106	-,040	-,017	-,109	-,219	-,096	,117	-,089	,079
Q35	,624	-,174	-,093	-,298	-,171	,066	,195	,107	-,096	-,096	,078	,051	,061	,041	-,031
Q32	,624	-,009	-,224	-,078	-,138	,202	,002	,006	-,129	-,072	,148	-,106	,069	,125	,087
Q37	,595	,184	-,111	-,260	-,043	-,230	,054	,176	-,035	-,085	-,182	,078	,127	-,191	-,019
Q38	,593	,210	-,057	-,062	-,030	-,364	-,064	,024	,037	,009	-,109	,045	,012	-,105	,109
Q33	,580	,194	-,072	-,232	-,092	-,086	,211	,108	-,310	,012	-,032	-,123	,072	-,018	,012
Q8	,575	,334	-,133	,096	,300	-,091	-,083	-,157	,021	-,156	,202	,120	,080	,088	,147
Q16	,558	-,024	-,262	,242	,163	-,025	,300	-,035	-,010	,048	,161	,124	-,123	-,170	-,138
Q49	,553	-,245	-,070	,000	,121	,151	-,065	-,229	,170	,035	,098	-,144	-,116	-,090	,018
Q40	,547	-,271	-,154	,133	-,182	-,135	-,279	-,059	,234	-,007	,065	,172	-,009	,041	,062
Q2	,514	-,009	,101	,032	,029	-,341	,037	-,123	,127	-,072	-,109	-,099	-,348	-,059	,100
Q17	,514	-,200	-,020	,109	,165	,066	,079	,154	,085	-,150	,106	,126	-,130	-,438	-,273
Q34	,494	,468	-,004	-,188	,129	-,119	-,135	,031	-,094	,064	,097	-,006	,231	,085	,163
Q20	,485	-,024	,094	-,051	,218	,096	-,069	-,277	-,338	,171	-,265	,078	,086	-,011	-,282
Q29	,462	-,025	-,013	,275	-,246	-,071	-,100	,010	-,163	,190	,054	-,001	,096	-,105	-,267
Q41	,461	,162	,088	-,107	-,167	,192	-,228	-,199	,014	-,164	,144	,104	-,008	,061	-,306
Q18	,455	,335	-,288	,286	,193	-,005	-,050	,191	-,077	,043	-,106	-,151	-,028	,055	-,246
Q13	,451	-,252	-,103	-,244	,291	,118	-,279	-,193	,015	-,009	-,254	-,006	-,148	,117	,015
Q1	,448	-,165	,182	,017	-,013	-,220	-,228	-,444	-,194	-,041	,300	,024	,067	,041	,029
Q48	,448	,142	-,267	,162	-,147	,276	,205	,131	,137	,130	,051	-,269	-,168	,161	,022
Q23	,441	,094	,179	-,034	,287	-,079	-,266	,281	,212	-,053	-,064	-,416	,081	-,014	-,081
Q39	,439	-,021	-,150	-,036	-,263	-,175	-,240	.000	,184	-,082	-,111	-,148	,170	,309	-,101
Q46	,433	,269	-,192	-,048	-,271	,341	,064	-,288	,008	,097	-,024	-,102	-,063	-,193	,022
Q45	,428	,165	-,237	,308	-,248	,155	,085	-,115	-,143	-,047	,065	-,215	-,137	-,078	,216
Q9	,396	,136	,294	,282	-,035	,172	-,095	-,155	,131	-,264	-,016	,274	,070	-,198	,105
Q12	,367	-,360	-,032	-,032	,164	,315	,219	.005	,211	-,133	-,255	,092	,253	,025	,098
Q28	,364	-,087	,193	-,059	,043	,019	-,183	,234	-,336	,223	,074	,068	-,248	,094	,138
Q15	,345	-,297	-,122	,223	,264	-,047	,222	-,241	,061	-,098	,220	-,094	,117	,161	,053
Q14	,425	-,556	,038	-,114	-,031	,115	-,043	,167	-,001	,067	-,110	,121	,036	,146	,170
Q6	,183	,524	,038	-,091	,181	,163	,129	,233	,178	-,175	,063	,291	,053	,120	-,035
Q10	,412	,493	-,022	-,026	,274	,095	,028	,051	,082	-,126	,081	,191	-,105	,272	,076
Q11	,432	-,479	-,075	,054	-,004	,102	,282	,102	-,004	-,236	-,257	,130	,074	,083	,014
Q5	,240	,126	,534	,198	-,204	-,183	,136	-,128	,082	,055	-,154	,150	-,121	,232	-,153
Q4	,357	-,003	,450	,054	-,225	-,103	,301	-,097	,043	-,185	,051	-,197	-,074	,206	-,068
Q3	,319	,292	,425	.097	-,200	-,087	,332	-,011	,134	-,053	-,218	-,092	-,164	-,051	-,020
Q27	,281	-,227	,113	,482	.085	-,056	,134	,089	-,043	,275	,229	-,072	,312	,102	-,168
Q24	,418	-,036	,040	,439	,119	-,082	-,120	,207	-,166	-,007	-,091	-,013	,029	-,229	,322
Q43	,242	-,191	,290	-,405	.052	,036	-,099	,201	,163	,071	,220	-,247	-,033	-,234	,007
Q44	,300	,152	,289	-,326	-,204	,293	,033	-,091	-,073	,212	,249	,060	,245	-,083	,082
Q42	,346	,138	-,159	,025	-,442	,301	-,136	,116	,084	,310	-,266	,177	-,033	,039	-,001
Q19	,379	,028	,124	,031	,417	,214	-,048	-,092	-,261	,071	-,322	-,173	-,008	,098	-,180
Q25	,303	,053	,265	,318	-,026	,361	-,227	,104	-,170	-,219	-5,8E-005	-,120	-,097	,021	,255
Q50	,392	-,169	,218	-,274	,149	-,057	,461	,002	-,103	,171	,085	-,100	-,004	,069	,176
Q26	,273	-,204	,374	,184	-,147	-,010	-,129	,429	-,325	-,155	,096	,162	,050	,050	-,056
Q7	,334	,080	,400	-,027	.062	,245	-,128	,028	,415	,040	,025	-,170	,238	-,139	-,077
Q21	,366	,040	,270	-,001	,192	-,015	,034	-,222	,077	,449	-,167	,191	-,092	-,099	,190
Q22	,194	-,024	-,091	,302	-,011	-,165	-,004	,105	,356	,434	-,002	,076	,191	,092	,120
Q47	,444	-,249	,006	-,124	,024	,035	-,208	,178	,178	,108	,223	,089	-,466	,165	-,105
	,	,0	,000	,	,0_7	,000	,_30	,	,	,.50	,	,550	,.50	,	,

Extraction Method: Principal Component Analysis.

a. 15 components extracted.

APPENDIX C: AVERAGES OF THE STRATEGY SUBSCALES

Statistics

		Memory	Cognitive	Compens ation	Metacognitive	Affective	Social	Direct	Indirect	Mean all
N	Valid	257	257	257	257	257	257	257	257	257
	Missing	0	0	0	0	0	0	0	0	0
Mean		2,8214	2,7384	3,1023	3,5050	2,5437	2,9455	2,8874	2,9981	2,9427
Median		2,7778	2,7143	3,1667	3,5000	2,5000	3,0000	2,8915	2,9861	2,9415
Std. Deviation		,58512	,55398	,67854	,84988	,63444	,66524	,48257	,60421	,50031
Skewness		,154	,100	-,050	-,199	,178	-,150	,066	-,177	-,096
Std. Error of Skev	wness	,152	,152	,152	,152	,152	,152	,152	,152	,152
Kurtosis		,061	-,142	-,244	-,096	-,326	-,114	-,089	,252	,264
Std. Error of Kurte	osis	,303	,303	,303	,303	,303	,303	,303	,303	,303
Percentiles	25	2,4444	2,3571	2,6667	3,0000	2,1667	2,5000	2,5635	2,6597	2,6488
	50	2,7778	2,7143	3,1667	3,5000	2,5000	3,0000	2,8915	2,9861	2,9415
	75	3,2222	3,1429	3,6667	4,1250	3,0000	3,5000	3,2302	3,3819	3,2650

APPENDIX D: FREQUENCIES OF THE ITEMS

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	3	1,2	1,2	1,2
	Nadiren Doðru	32	12,5	12,5	13,6
	Bazen Doðru	90	35,0	35,0	48,6
	Sýk Sýk Doðru	85	33,1	33,1	81,7
	Her Zaman Doðru	47	18,3	18,3	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	20	7,8	7,8	7,8
	Nadiren Doðru	117	45,5	45,5	53,3
	Bazen Doðru	76	29,6	29,6	82,9
	Sýk Sýk Doðru	34	13,2	13,2	96,1
	Her Zaman Doðru	10	3,9	3,9	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	22	8,6	8,6	8,6
	Nadiren Doðru	40	15,6	15,6	24,1
	Bazen Doðru	85	33,1	33,1	57,2
	Sýk Sýk Doðru	82	31,9	31,9	89,1
	Her Zaman Doðru	28	10,9	10,9	100,0
	Total	257	100,0	100,0	

Q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	57	22,2	22,2	22,2
	Nadiren Doðru	82	31,9	31,9	54,1
	Bazen Doðru	46	17,9	17,9	72,0
	Sýk Sýk Doðru	51	19,8	19,8	91,8
	Her Zaman Doðru	21	8,2	8,2	100,0
	Total	257	100,0	100,0	

Q6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	114	44,4	44,5	44,5
	Nadiren Doðru	56	21,8	21,9	66,4
	Bazen Doðru	43	16,7	16,8	83,2
	Sýk Sýk Doðru	26	10,1	10,2	93,4
	Her Zaman Doðru	17	6,6	6,6	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	83	32,3	32,3	32,3
	Nadiren Doðru	78	30,4	30,4	62,6
	Bazen Doðru	59	23,0	23,0	85,6
	Sýk Sýk Doðru	28	10,9	10,9	96,5
	Her Zaman Doðru	9	3,5	3,5	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	18	7,0	7,1	7,1
	Nadiren Doðru	56	21,8	22,2	29,4
	Bazen Doðru	106	41,2	42,1	71,4
	Sýk Sýk Doðru	62	24,1	24,6	96,0
	Her Zaman Doðru	10	3,9	4,0	100,0
	Total	252	98,1	100,0	
Missing	System	5	1,9		
Total		257	100,0		

Q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	16	6,2	6,3	6,3
	Nadiren Doðru	56	21,8	22,0	28,2
	Bazen Doðru	82	31,9	32,2	60,4
	Sýk Sýk Doðru	68	26,5	26,7	87,1
	Her Zaman Doðru	33	12,8	12,9	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	22	8,6	8,6	8,6
	Nadiren Doðru	55	21,4	21,4	30,0
	Bazen Doðru	81	31,5	31,5	61,5
	Sýk Sýk Doðru	65	25,3	25,3	86,8
	Her Zaman Doðru	34	13,2	13,2	100,0
	Total	257	100,0	100,0	

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	37	14,4	14,4	14,4
	Nadiren Doðru	61	23,7	23,7	38,1
	Bazen Doðru	92	35,8	35,8	73,9
	Sýk Sýk Doðru	40	15,6	15,6	89,5
	Her Zaman Doðru	27	10,5	10,5	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	87	33,9	33,9	33,9
	Nadiren Doðru	84	32,7	32,7	66,5
	Bazen Doðru	54	21,0	21,0	87,5
	Sýk Sýk Doðru	16	6,2	6,2	93,8
	Her Zaman Doðru	16	6,2	6,2	100,0
	Total	257	100,0	100,0	

Q13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	24	9,3	9,4	9,4
	Nadiren Doðru	105	40,9	41,0	50,4
	Bazen Doðru	92	35,8	35,9	86,3
	Sýk Sýk Doðru	27	10,5	10,5	96,9
	Her Zaman Doðru	8	3,1	3,1	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

Q14

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	85	33,1	33,5	33,5
	Nadiren Doðru	88	34,2	34,6	68,1
	Bazen Doðru	53	20,6	20,9	89,0
	Sýk Sýk Doðru	17	6,6	6,7	95,7
	Her Zaman Doðru	11	4,3	4,3	100,0
	Total	254	98,8	100,0	
Missing	System	3	1,2		
Total		257	100,0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	12	4,7	4,7	4,7
	Nadiren Doðru	33	12,8	12,9	17,6
	Bazen Doðru	74	28,8	29,0	46,7
	Sýk Sýk Doðru	66	25,7	25,9	72,5
	Her Zaman Doðru	70	27,2	27,5	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	35	13,6	13,7	13,7
	Nadiren Doðru	55	21,4	21,6	35,3
	Bazen Doðru	85	33,1	33,3	68,6
	Sýk Sýk Doðru	52	20,2	20,4	89,0
	Her Zaman Doðru	28	10,9	11,0	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

Q17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	65	25,3	25,4	25,4
	Nadiren Doðru	74	28,8	28,9	54,3
	Bazen Doðru	70	27,2	27,3	81,6
	Sýk Sýk Doðru	33	12,8	12,9	94,5
	Her Zaman Doðru	14	5,4	5,5	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

Q18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	14	5,4	5,5	5,5
	Nadiren Doðru	45	17,5	17,7	23,2
	Bazen Doðru	65	25,3	25,6	48,8
	Sýk Sýk Doðru	78	30,4	30,7	79,5
	Her Zaman Doðru	52	20,2	20,5	100,0
	Total	254	98,8	100,0	
Missing	System	3	1,2		
Total		257	100,0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	41	16,0	16,0	16,0
	Nadiren Doðru	58	22,6	22,6	38,5
	Bazen Doðru	61	23,7	23,7	62,3
	Sýk Sýk Doðru	60	23,3	23,3	85,6
	Her Zaman Doðru	37	14,4	14,4	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	30	11,7	11,8	11,8
	Nadiren Doðru	79	30,7	31,0	42,7
	Bazen Doðru	76	29,6	29,8	72,5
	Sýk Sýk Doðru	46	17,9	18,0	90,6
	Her Zaman Doðru	24	9,3	9,4	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

Q21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	84	32,7	33,2	33,2
	Nadiren Doðru	83	32,3	32,8	66,0
	Bazen Doðru	53	20,6	20,9	87,0
	Sýk Sýk Doðru	27	10,5	10,7	97,6
	Her Zaman Doðru	6	2,3	2,4	100,0
	Total	253	98,4	100,0	
Missing	System	4	1,6		
Total		257	100,0		

Q22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	22	8,6	8,6	8,6
	Nadiren Doðru	62	24,1	24,1	32,7
	Bazen Doðru	91	35,4	35,4	68,1
	Sýk Sýk Doðru	52	20,2	20,2	88,3
	Her Zaman Doðru	30	11,7	11,7	100,0
	Total	257	100,0	100,0	

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	86	33,5	33,5	33,5
	Nadiren Doðru	81	31,5	31,5	65,0
	Bazen Doðru	67	26,1	26,1	91,1
	Sýk Sýk Doðru	18	7,0	7,0	98,1
	Her Zaman Doðru	5	1,9	1,9	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	11	4,3	4,3	4,3
	Nadiren Doðru	50	19,5	19,5	23,7
	Bazen Doðru	89	34,6	34,6	58,4
	Sýk Sýk Doðru	81	31,5	31,5	89,9
	Her Zaman Doðru	26	10,1	10,1	100,0
	Total	257	100,0	100,0	

Q25

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	26	10,1	10,1	10,1
	Nadiren Doðru	58	22,6	22,6	32,7
	Bazen Doðru	64	24,9	24,9	57,6
	Sýk Sýk Doðru	65	25,3	25,3	82,9
	Her Zaman Doðru	44	17,1	17,1	100,0
	Total	257	100,0	100,0	

Q26

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	51	19,8	19,8	19,8
	Nadiren Doðru	61	23,7	23,7	43,6
	Bazen Doðru	71	27,6	27,6	71,2
	Sýk Sýk Doðru	49	19,1	19,1	90,3
	Her Zaman Doðru	25	9,7	9,7	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	26	10,1	10,1	10,1
	Nadiren Doðru	51	19,8	19,8	30,0
	Bazen Doðru	79	30,7	30,7	60,7
	Sýk Sýk Doðru	65	25,3	25,3	86,0
	Her Zaman Doðru	36	14,0	14,0	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	41	16,0	16,0	16,0
	Nadiren Doðru	79	30,7	30,7	46,7
	Bazen Doðru	70	27,2	27,2	73,9
	Sýk Sýk Doðru	55	21,4	21,4	95,3
	Her Zaman Doðru	12	4,7	4,7	100,0
	Total	257	100,0	100,0	

Q29

			_		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	7	2,7	2,7	2,7
	Nadiren Doðru	23	8,9	9,0	11,7
	Bazen Doðru	80	31,1	31,3	43,0
	Sýk Sýk Doðru	90	35,0	35,2	78,1
	Her Zaman Doðru	56	21,8	21,9	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

Q30

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	19	7,4	7,4	7,4
	Nadiren Doðru	64	24,9	24,9	32,3
	Bazen Doðru	97	37,7	37,7	70,0
	Sýk Sýk Doðru	54	21,0	21,0	91,1
	Her Zaman Doðru	23	8,9	8,9	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	12	4,7	4,7	4,7
	Nadiren Doðru	44	17,1	17,2	21,9
	Bazen Doðru	82	31,9	32,0	53,9
	Sýk Sýk Doðru	82	31,9	32,0	85,9
	Her Zaman Doðru	36	14,0	14,1	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	6	2,3	2,3	2,3
	Nadiren Doðru	25	9,7	9,7	12,1
	Bazen Doðru	56	21,8	21,8	33,9
	Sýk Sýk Doðru	87	33,9	33,9	67,7
	Her Zaman Doðru	83	32,3	32,3	100,0
	Total	257	100,0	100,0	

Q33

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	16	6,2	6,3	6,3
	Nadiren Doðru	53	20,6	20,7	27,0
	Bazen Doðru	74	28,8	28,9	55,9
	Sýk Sýk Doðru	62	24,1	24,2	80,1
	Her Zaman Doðru	51	19,8	19,9	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

Q34

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	47	18,3	18,3	18,3
	Nadiren Doðru	68	26,5	26,5	44,7
	Bazen Doðru	76	29,6	29,6	74,3
	Sýk Sýk Doðru	45	17,5	17,5	91,8
	Her Zaman Doðru	21	8,2	8,2	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	25	9,7	9,7	9,7
	Nadiren Doðru	60	23,3	23,3	33,1
	Bazen Doðru	86	33,5	33,5	66,5
	Sýk Sýk Doðru	50	19,5	19,5	86,0
	Her Zaman Doðru	36	14,0	14,0	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	42	16,3	16,3	16,3
	Nadiren Doðru	92	35,8	35,8	52,1
	Bazen Doðru	82	31,9	31,9	84,0
	Sýk Sýk Doðru	33	12,8	12,8	96,9
	Her Zaman Doðru	8	3,1	3,1	100,0
	Total	257	100,0	100,0	

Q37

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	29	11,3	11,4	11,4
	Nadiren Doðru	67	26,1	26,3	37,6
	Bazen Doðru	68	26,5	26,7	64,3
	Sýk Sýk Doðru	57	22,2	22,4	86,7
	Her Zaman Doðru	34	13,2	13,3	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

Q39

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	28	10,9	10,9	10,9
	Nadiren Doðru	43	16,7	16,7	27,6
	Bazen Doðru	97	37,7	37,7	65,4
	Sýk Sýk Doðru	63	24,5	24,5	89,9
	Her Zaman Doðru	26	10,1	10,1	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	36	14,0	14,0	14,0
	Nadiren Doðru	69	26,8	26,8	40,9
	Bazen Doðru	66	25,7	25,7	66,5
	Sýk Sýk Doðru	59	23,0	23,0	89,5
	Her Zaman Doðru	27	10,5	10,5	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	71	27,6	27,6	27,6
	Nadiren Doðru	61	23,7	23,7	51,4
	Bazen Doðru	63	24,5	24,5	75,9
	Sýk Sýk Doðru	42	16,3	16,3	92,2
	Her Zaman Doðru	20	7,8	7,8	100,0
	Total	257	100,0	100,0	

Q42

		Fraguanay	Doroont	Valid Dargant	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	20	7,8	7,8	7,8
	Nadiren Doðru	29	11,3	11,4	19,2
	Bazen Doðru	69	26,8	27,1	46,3
	Sýk Sýk Doðru	75	29,2	29,4	75,7
	Her Zaman Doðru	62	24,1	24,3	100,0
	Total	255	99,2	100,0	
Missing	System	2	,8		
Total		257	100,0		

Q43

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	203	79,0	79,3	79,3
	Nadiren Doðru	34	13,2	13,3	92,6
	Bazen Doðru	12	4,7	4,7	97,3
	Sýk Sýk Doðru	4	1,6	1,6	98,8
	Her Zaman Doðru	3	1,2	1,2	100,0
	Total	256	99,6	100,0	
Missing	System	1	,4		
Total		257	100,0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Hiçbir zaman Doðru deðil	125	48,6	48,6	48,6
	Nadiren Doðru	62	24,1	24,1	72,8
	Bazen Doðru	40	15,6	15,6	88,3
	Sýk Sýk Doðru	16	6,2	6,2	94,6
	Her Zaman Doðru	14	5,4	5,4	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	6	2,3	2,3	2,3
	Nadiren Doðru	21	8,2	8,2	10,5
	Bazen Doðru	66	25,7	25,7	36,2
	Sýk Sýk Doðru	77	30,0	30,0	66,1
	Her Zaman Doðru	87	33,9	33,9	100,0
	Total	257	100,0	100,0	

Q46

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	35	13,6	13,6	13,6
	Nadiren Doðru	47	18,3	18,3	31,9
	Bazen Doðru	65	25,3	25,3	57,2
	Sýk Sýk Doðru	66	25,7	25,7	82,9
	Her Zaman Doðru	44	17,1	17,1	100,0
	Total	257	100,0	100,0	

Q47

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	102	39,7	39,7	39,7
	Nadiren Doðru	103	40,1	40,1	79,8
	Bazen Doðru	42	16,3	16,3	96,1
	Sýk Sýk Doðru	8	3,1	3,1	99,2
	Her Zaman Doðru	2	,8	,8	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	13	5,1	5,1	5,1
	Nadiren Doðru	25	9,7	9,7	14,8
	Bazen Doðru	61	23,7	23,7	38,5
	Sýk Sýk Doðru	83	32,3	32,3	70,8
	Her Zaman Doðru	75	29,2	29,2	100,0
	Total	257	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	39	15,2	15,2	15,2
	Nadiren Doðru	67	26,1	26,1	41,2
	Bazen Doðru	93	36,2	36,2	77,4
	Sýk Sýk Doðru	38	14,8	14,8	92,2
	Her Zaman Doðru	20	7,8	7,8	100,0
	Total	257	100,0	100,0	

Q50

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiçbir zaman Doðru deðil	87	33,9	33,9	33,9
	Nadiren Doðru	63	24,5	24,5	58,4
	Bazen Doðru	56	21,8	21,8	80,2
	Sýk Sýk Doðru	24	9,3	9,3	89,5
	Her Zaman Doðru	27	10,5	10,5	100,0
	Total	257	100,0	100,0	

APPENDIX E: T-TEST FOR GENDER AND 50 ITEMS

Frequencies

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Q1	Male	153	3,5229	,96030	,07764
	Female	104	3,5865	,98148	,09624
Q2	Male	153	2,6275	,90961	,07354
	Female	104	2,5577	1,00317	,09837
Q3	Male	153	2,7582	1,23024	,09946
	Female	104	3,2500	1,12991	,11080
Q4	Male	153	3,1307	1,10437	,08928
	Female	104	3,3269	1,09227	,10711
Q5	Male	153	2,5033	1,19827	,09687
	Female	104	2,7404	1,32925	,13034
Q6	Male	152	1,9474	1,28047	,10386
	Female	104	2,3846	1,20925	,11858
Q7	Male	153	2,2288	1,06682	,08625
	Female	104	2,2308	1,20057	,11773
Q8	Male	150	2,7600	,93894	,07666
	Female	102	3,2549	,90855	,08996
Q9	Male	151	2,9801	1,06126	,08636
	Female	104	3,4712	1,11440	,10928
Q10	Male	153	2,9869	1,15842	,09365
	Female	104	3,3462	1,11276	,10912

Q11	Male	153	2,9412	1,16549	,09422
	Female	104	2,6923	1,16650	,11438
Q12	Male	153	2,1765	1,17606	,09508
	Female	104	2,1923	1,12411	,11023
Q13	Male	153	2,6144	,90411	,07309
	Female	103	2,5049	,92751	,09139
Q14	Male	150	2,2733	1,06750	,08716
	Female	104	1,9423	1,09568	,10744
Q15	Male	153	3,5686	1,16847	,09447
	Female	102	3,6078	1,14457	,11333
Q16	Male	152	2,7368	1,17218	,09508
	Female	103	3,2233	1,15412	,11372
Q17	Male	153	2,4052	1,11472	,09012
	Female	103	2,4951	1,22773	,12097
Q18	Male	151	3,2185	1,14830	,09345
	Female	103	3,7379	1,11110	,10948
Q19	Male	153	2,9216	1,26974	,10265
	Female	104	3,0577	1,33531	,13094
Q20	Male	153	2,7320	1,13559	,09181
	Female	102	2,9608	1,15116	,11398
Q21	Male	151	2,1921	1,00476	,08177
	Female	102	2,1176	1,17981	,11682
Q22	Male	153	3,0980	1,09883	,08884
	Female	104	2,9135	1,15002	,11277
Q23	Male	153	2,0915	,99578	,08050
	Female	104	2,1731	1,05612	,10356
Q24	Male	153	3,1895	1,04347	,08436
	Female	104	3,3077	,97619	,09572
Q25	Male	153	3,0000	1,28247	,10368
	Female	104	3,4135	1,14579	,11235
Q26	Male	153	2,8105	1,23944	,10020
	Female	104	2,6635	1,25884	,12344
Q27	Male	153	3,0458	1,21579	,09829
	Female	104	3,2596	1,13202	,11100
Q28	Male	153	2,6667	1,11213	,08991
	Female	104	2,7019	1,13103	,11091
Q29	Male	152	3,5066	,99666	,08084
	Female	104	3,8462	,99288	,09736
Q30	Male	153	2,9935	1,07909	,08724
	Female	104	2,9904	1,02867	,10087
Q31	Male	152	3,3026	1,07370	,08709
	Female	104	3,3846	1,05488	,10344
Q32	Male	153	3,7124	1,11020	,08975
	Female	104	4,0288	,94977	,09313
Q33	Male	152	3,1776	1,17424	,09524
	Female	104	3,5000	1,18240	,11594
Q34	Male	153	2,5359	1,19222	,09639
	Female	104	2,9615	1,14843	,11261
			·		=

Q35	Male	450	0.0005	1 10010	00004
QSS	Female	153	3,0065	1,13842	,09204
000		104	3,1058	1,23003	,12061
Q36	Male	153	2,4248	1,06186	,08585
007	Female	104	2,6250	,92629	,09083
Q37	Male	151 2,9603		1,19377	,09715
	Female	104	3,0577	1,25278	,12285
Q38	Male	152	3,3092	1,06872	,08668
	Female	104	3,3942	1,16100	,11385
Q39	Male	153	3,0065	1,11507	,09015
	Female	104	3,1442	1,12706	,11052
Q40	Male	153	3,0196	1,16681	,09433
	Female	104	2,7019	1,26091	,12364
Q41	Male	153	2,5098	1,24138	,10036
	Female	104	2,5577	1,30590	,12805
Q42	Male	151	3,4040	1,23924	,10085
	Female	104	3,6635	1,12871	,11068
Q43	Male	153	1,3791	,81116	,06558
	Female	103	1,2330	,61363	,06046
Q44	Male	153	1,8431	1,10690	,08949
	Female	104	2,1250	1,25943	,12350
Q45	Male	153	3,6863	1,12665	,09108
	Female	104	4,0865	,89346	,08761
Q46	Male	153	2,9020	1,23951	,10021
	Female	104	3,5000	1,27713	,12523
Q47	Male	153	1,9346	,87112	,07043
	Female	104	1,7308	,82710	,08110
Q48	Male	153	3,5033	1,19276	,09643
	Female	104	4,0096	,98034	,09613
Q49	Male	153	2,7974	1,08434	,08766
	Female	104	2,6538	1,18050	,11576
Q50	Male	153	2,2484	1,24224	,10043
	Female	104	2,5769	1,40521	,13779

Independent Samples Test

		Levene's Equality of				t-test for	r Equality of Mea	quality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Con Interval Differe Upper	of the	
Q1	Equal variances assumed	,002	,963	-,517	255	,606	-,06366	,12314	-,30616	,17883	
	Equal variances not assumed			-,515	218,085	,607	-,06366	,12365	-,30737	,18004	
Q2	Equal variances assumed	1,081	,299	,579	255	,563	,06976	,12054	-,16763	,30715	
	Equal variances not assumed			,568	206,576	,571	,06976	,12282	-,17238	,31190	
Q3	Equal variances assumed	1,698	,194	-3,250	255	,001	-,49183	,15133	-,78984	-,19382	
	Equal variances			-3,303	233,248	,001	-,49183	,14889	-,78517	-,19849	

Color Color Assumed Color Color Assumed Color Color Assumed Colo					1		1	1	i.	1	
Assumed Automatics County and property	04	not assumed									
March Marc	Q.		,055	,815	-1,404	255	,161	-,19620	,13973	-,47138	,07897
Column					-1 407	222 936	161	- 19620	13944	- 47099	07858
Sessured September Septe	05				.,		,	,.0020	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
Color	QJ		3,391	,067	-1,489	255	,138	-,23712	,15922	-,55067	,07643
Color					-1,460	205,689	,146	-,23712	,16240	-,55730	.08307
assumed Sol Sol C-44 229,516 0,006 -4,9725 1,1578 7,17818 1,1286	Q6				•						
not assumed	<u> </u>	assumed	,331	,566	-2,744	254	,006	-,43725	,15934	-,75103	-,12346
Equal variances 3,400		•			-2,774	229,516	,006	-,43725	,15763	-,74783	-,12666
assumed Figure Variances assumed susum	Q7		0.400	000	014	055	000	00001	1.1000	00004	07000
No.		assumed	3,400	,066	-,014	255	,989	-,00201	,14269	-,28301	,27899
Equal variances 1,78 7,780 -4,161 250 .000 .4,9490 .11894 .7,2916 .26665 Equal variances .4,187 .221,707 .000 .4,9490 .11820 .7,2733 .2,2157 .2,25157					-,014	203,510	,989	-,00201	,14594	-,28976	,28573
Result designoses not assumed 2,648 1,105 3,3557 253 0,000 -,49102 1,13803 -,76286 -,21919 1,15805 -,76286 -,21919 -,000 -,49102 1,13803 -,76286 -,21919 -,000 -,49102 1,13803 -,76286 -,21919 -,000 -,49102 1,13803 -,76286 -,21919 -,000 -,49102 1,13803 -,76286 -,21919 -,000 -,49102 1,13828 -,76556 -,21648 -,2478	Q8	Equal variances	078	780	-4 161	250	000	- 49490	11894	- 72916	- 26065
not assumed			,5.5	,,,,,,	•			,	,		
assumed 2,646 1,05 -3,957 2,23 1,00 -3,9102 1,3908 -7,6256 -2,1648		•			-4,187	221,707	,000	-,49490	,11820	-,72783	-,26197
Equal variances	Q9		2,648	,105	-3,557	253	,000	-,49102	,13803	-,76286	-,21919
Dr. Bestumber Dr. Bestumbe					0.505	014 415	001	40100	12020	70550	01040
Sesumed 1,000 1,940 2-2,479 225 1,014 3-39423 1,14491 3-64425 7.07588 1,14491 3-64425 7.07588 1,14491 3-64425 3-64255 3-64	010				-3,525	214,415	,001	-,49102	,13928	-,/6556	-,21648
not assumed -2-498 -221,126 -0,13 -3,396.3 -1,4379 -0,4629 -3,066 -2,4887 -1,4817 -0,4293 -5,466 -2,4887 -1,4817 -0,4293 -5,466 -2,4887 -1,4817 -0,4293 -5,466 -2,4887 -1,4817 -0,4293 -5,466 -2,4887 -1,4818 -2,2887 -1,4820 -0,4319 -5,466 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -0,4319 -5,468 -2,4887 -1,4820 -2,3232 -2,3232 -2,325 -3,913 -0,1584 -1,4557 -3,30267 -2,7100 -2,7101 -2,71214 -2,7121	QIU		,005	,945	-2,479	255	,014	-,35923	,14491	-,64459	-,07386
Old Sculpture Old Sculptur					-2.498	227.126	.013	35923	.14379	64257	07588
assumed 1/66 3.95 1.690 255 3.94 2.4867 1.4817 -3.493 3.4068 1.690 1.6	Q11				•				,		
1.6.79 221,194 .995 .2496 .1492 .14930 .3493 .		assumed	,726	,395	1,680	255	,094	,24887	,14817	-,04293	,54066
Color					1,679	221,194	,095	,24887	,14820	-,04319	,54093
Sestment Sestment	Q12		340	560	- 108	255	914	- 01584	14683	- 30500	27332
Oral Equal variances assumed Company C			,540	,500	-,100	255	,514	-,01304	,14003	-,50500	,27002
assumed Equal variances not assumed Captal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances not assumed Equal varianc					-,109	227,825	,913	-,01584	,14557	-,30267	,27100
Equal variances not assumed 0.54	Q13		,022	,883	,941	254	,348	,10952	,11644	-,11979	,33884
Part					026	015 150	350	10050	11700	10114	24010
assumed Equal variances not assumed Q15 Equal variances not assumed Equal variances not assumed Equal variances not assumed Q16 Equal variances not assumed Q17 Equal variances not assumed Q18 Equal variances not assumed Q19 Equal variances not assumed Q19 Equal variances not assumed Q19 Equal variances not assumed Equal variances not assumed Q19 Equal variances not assumed D19 Equal variances not assumed Equal variances not assumed Equal variances not assumed D20 Equal variances not assumed Equal vari	014				,300	213,133	,550	,10932	,11702	-,12114	,54013
Note assumed Note	Q14		,054	,816	2,404	252	,017	,33103	,13770	,05985	,60221
Other Columbia C					2,393	217,934	,018	,33103	,13835	,05835	,60370
assumed	Q15		070	707	005		704	2222	1 1015	00000	05055
Note Note			,073	,/8/	-,265	253	,/91	-,03922	,14815	-,33098	,25255
Q16					-,266	219,650	,791	-,03922	,14754	-,32999	,25155
Comparison Com	Q16	Equal variances	568	452	-3 272	253	001	- 48646	14867	- 77925	- 19367
Not assumed Captal variances			,,,,,	,				•			
assumed Equal variances cont assumed Equal variances and assumed Equal variances assumed Equal variances and assumed Equal variances assumed Equal var		not assumed			-3,282	221,370	,001	-,48646	,14823	-,77858	-,19434
Equal variances not assumed Capal variances Capal variances Capal variances Capal variances Capal variances Capal variances Capal variances Capal variances Capal variances Capal	Q17	•	2,177	,141	-,607	254	,544	-,08992	,14803	-,38144	,20160
Q18 Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances Equa		Equal variances			- 596	204 387	552	- 08002	15085	- 38734	20751
assumed Equal variances control assumed Equal variances assumed Equal variance	010				-,530	204,307	,552	-,00992	,13003	-,50754	
Other Column Co	QIO		,409	,523	-3,585	252	,000	-,51932	,14484	-,80457	-,23407
Q19					-3,608	223,939	,000	-,51932	,14394	-,80297	-,23568
Equal variances not assumed Q20 Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Q22 Equal variances assumed Barbara	Q19		070	004	000	055	440	10010	10470	40004	10000
Not assumed Not assumed			,270	,604	-,826	255	,410	-,13612	,16478	-,46064	,18839
Q20 Equal variances assumed Equal variances assumed ,461 ,498 -1,567 253 ,118 -,22876 ,14596 -,51620 ,05869 C21 Equal variances assumed Equal variances assumed Equal variances not assumed 3,307 ,070 ,538 251 ,591 ,07441 ,13824 -,19786 ,34667 Q22 Equal variances assumed Equal variances not assumed Equal variances not assumed ,180 ,672 1,297 255 ,196 ,18458 ,14231 -,09568 ,46483 Q23 Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances ,953 ,330 -,629 255 ,530 -,08157 ,12970 -,33700 ,17385 Equal variances ,953 ,330 -,629 255 ,530 -,08157 ,12970 -,33700 ,17385		•			-,818	213,794	,414	-,13612	,16638	-,46408	,19183
Assumed Equal variances not assumed	Q20	Equal variances	461	498	-1 567	253	118	- 22876	14596	- 51620	05869
Not assumed Color			, 101	, 100							
assumed Equal variances not assumed Q22 Equal variances assumed Equal variances not assumed Q24 Equal variances assumed Equal variances assumed Equal variances not assumed Equal variances assumed Equal variances not assumed Equal variances not assumed Equal variances not assumed Equal variances not assumed Equal variances not assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances Equal variances assumed Equal variances Equal variance		not assumed			-1,563	214,553	,120	-,22876	,14636	-,51724	,05972
Equal variances not assumed Q22 Equal variances assumed Equal variances assumed C23 Equal variances assumed Equal variances assumed Equal variances assumed Equal variances assumed Equal variances Republic variances assumed Equal variances Republic variance	Q21		3,307	,070	,538	251	,591	,07441	,13824	-,19786	,34667
Column					500	102 011	602	07441	1/250	- 20603	35564
assumed	000				,522	193,011	,002	,0/441	,14209	-,∠∪083	,30004
Equal variances not assumed Q23 Equal variances assumed Q24 Equal variances assumed Equal variances A possible control of the control of	Q22		,180	,672	1,297	255	,196	,18458	,14231	-,09568	,46483
Q23 Equal variances assumed		Equal variances			1,286	214,523	,200	,18458	,14356	-,09838	,46754
assumed ,953 ,350 -,029 255 ,350 -,08157 ,12970 -,35700 ,17365 Equal variances -622 212 510 535 -,08157 13117 -,34014 17699	Q23		2=2	000							
		assumed	,953	,330	-,629	255	,530	-,08157	,12970	-,33700	,1/385
	1				-,622	212,510	,535	-,08157	,13117	-,34014	,17699

Q24	Equal variances	,336	,563	-,914	255	,361	-,11815	,12923	-,37264	,13634
	assumed Equal variances			-,926	230.788	,355	-,11815	,12759	-,36954	,13324
Q25	not assumed Equal variances	,287	,592	-2,647	255	,009	-,41346	,15620	-,72107	-,10585
	assumed Equal variances	,207	,552							
Q26	not assumed Equal variances			-2,704	236,770	,007	-,41346	,15288	-,71465	-,11228
Q_0	assumed Equal variances	,256	,614	,927	255	,355	,14700	,15852	-,16518	,45917
007	not assumed			,925	219,023	,356	,14700	,15899	-,16635	,46034
Q27	Equal variances assumed	,314	,575	-1,423	255	,156	-,21386	,15030	-,50986	,08213
	Equal variances not assumed			-1,442	231,430	,151	-,21386	,14827	-,50599	,07826
Q28	Equal variances assumed	,024	,876	-,248	255	,805	-,03526	,14231	-,31552	,24500
	Equal variances not assumed			-,247	218,827	,805	-,03526	,14277	-,31664	,24613
Q29	Equal variances assumed	,013	,911	-2,681	254	,008	-,33957	,12664	-,58897	-,09018
	Equal variances not assumed			-2,683	222,002	,008	-,33957	,12655	-,58896	-,09019
Q30	Equal variances	,703	,403	,023	255	,982	,00308	,13459	-,26197	,26812
	assumed Equal variances			,023	228,199	,982	,00308	,13336	-,25970	,26586
Q31	not assumed Equal variances	,075	,785	-,604	254	,546	-,08198	,13567	-,34917	,18520
	assumed Equal variances	,075	,700	-,606	224,002	,545	-,08198	,13522	-,34845	,18448
Q32	not assumed Equal variances	0.700	010		•					
	assumed Equal variances	6,789	,010	-2,375	255	,018	-,31643	,13323	-,57881	-,05405
Q33	not assumed Equal variances			-2,446	241,822	,015	-,31643	,12934	-,57121	-,06165
QJJ	assumed	,414	,521	-2,151	254	,032	-,32237	,14985	-,61748	-,02726
004	Equal variances not assumed			-2,148	220,440	,033	-,32237	,15005	-,61808	-,02666
Q34	Equal variances assumed	1,850	,175	-2,851	255	,005	-,42559	,14929	-,71960	-,13158
	Equal variances not assumed			-2,871	226,732	,004	-,42559	,14823	-,71767	-,13351
Q35	Equal variances assumed	,753	,386	-,664	255	,507	-,09923	,14949	-,39363	,19516
	Equal variances not assumed			-,654	209,692	,514	-,09923	,15172	-,39832	,19986
Q36	Equal variances assumed	2,680	,103	-1,561	255	,120	-,20016	,12827	-,45276	,05244
	Equal variances not assumed			-1,602	239,631	,111	-,20016	,12498	-,44636	,04603
Q37	Equal variances	,200	,655	-,628	253	,531	-,09743	,15522	-,40312	,20827
	assumed Equal variances			-,622	214,505	,535	-,09743	,15662	-,40613	,21128
Q38	not assumed Equal variances	1,750	,187	-,603	254	,547	-,08502	,14088	-,36247	,19243
	assumed Equal variances	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,	-,594	209,109	,553	-,08502	,14309	-,36711	,19707
Q39	not assumed Equal variances	,022	,882	-,967	255	,334	-,13769	,14233	-,41799	,14260
	assumed Egual variances	,022	,002							
Q40	not assumed Equal variances			-,965	219,742	,335	-,13769	,14262	-,41877	,14338
Q 10	assumed Equal variances	3,733	,054	2,073	255	,039	,31768	,15323	,01593	,61944
041	not assumed			2,043	209,667	,042	,31768	,15552	,01111	,62426
Q41	Equal variances assumed	,172	,679	-,297	255	,767	-,04789	,16113	-,36520	,26942
	Equal variances not assumed			-,294	213,746	,769	-,04789	,16270	-,36858	,27281
Q42	Equal variances assumed	2,136	,145	-1,703	253	,090	-,25949	,15234	-,55950	,04052
	Equal variances not assumed			-1,733	234,183	,084	-,25949	,14973	-,55449	,03551
Q43	Equal variances assumed	7,139	,008	1,553	254	,122	,14608	,09409	-,03922	,33137
	Equal variances not assumed			1,638	250,504	,103	,14608	,08920	-,02960	,32175
Q44	Equal variances	1,279	,259	-1,894	255	,059	-,28186	,14881	-,57491	,01119

	assumed Equal variances			-1,848	201,850	.066	-,28186	,15251	-,58258	,01886
Q45	not assumed Equal variances assumed	11,060	,001	-3,032	255	,003	-,40026	,13202	-,66025	-,14028
	Equal variances not assumed			-3,167	248,927	,002	-,40026	,12638	-,64918	-,15135
Q46	Equal variances assumed	,576	,448	-3,750	255	,000	-,59804	,15948	-,91210	-,28398
	Equal variances not assumed			-3,729	216,875	,000	-,59804	,16039	-,91416	-,28192
Q47	Equal variances assumed	,985	,322	1,879	255	,061	,20387	,10848	-,00977	,41751
	Equal variances not assumed			1,898	228,757	,059	,20387	,10741	-,00778	,41552
Q48	Equal variances assumed	11,021	,001	-3,583	255	,000	-,50635	,14130	-,78462	-,22808
	Equal variances not assumed			-3,719	245,875	,000	-,50635	,13616	-,77454	-,23816
Q49	Equal variances assumed	1,415	,235	1,005	255	,316	,14354	,14287	-,13781	,42489
	Equal variances not assumed			,989,	208,541	,324	,14354	,14521	-,14272	,42980
Q50	Equal variances assumed	4,303	,039	-1,973	255	,050	-,32856	,16655	-,65655	-,00057
	Equal variances not assumed			-1,927	202,731	,055	-,32856	,17051	-,66475	,00764