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DOKUZ EYLÜL UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
DEPARTMENT OF FOREIGN LANGUAGES EDUCATION
PROGRAMME OF ENGLISH LANGUAGE EDUCATION
MASTER THESIS

AN EXPLORATORY STUDY ON AGE AND LANGUAGE
DIFFERENCES IN THE UTILIZATION OF LEARNING
STRATEGIES

MURAT BAYALAŞ

İzmir
2020

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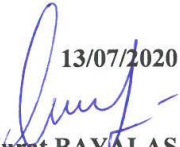
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**İzmir
2020**

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Yüksek lisans tezi olarak sunduğum “An Exploratory Study on Age and Language Differences in the Utilization of Learning Strategies” adlı çalışmanın içerdiği fikri izinsiz başka bir yerden almadığımı; çalışmamın hazırlık, veri toplama, analiz ve bilgilerin sunumu olmak üzere tüm aşamalarında ve bölümlerinin yazımında bilimsel etik ilke ve kurallara uygun davrandığımı, tez yazım kurallarına uygun olarak hazırlanan bu çalışmada kullanılan her türlü kaynağa eksiksiz atıf yaptığımı ve bu kaynaklara kaynakçada yer verdiğimi, ayrıca bu çalışmanın Dokuz Eylül Üniversitesi tarafından kullanılan bilimsel intihal tespit programıyla tarandığını ve intihal içermediğini beyan ederim. Herhangi bir zamanda aksinin ortaya çıkması durumunda her türlü yasal sonuca razı olduğumu bildiririm.

13/07/2020

Murat BAYALAŞ



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ABSTRACT

AN EXPLORATORY STUDY ON AGE AND LANGUAGE DIFFERENCES IN THE UTILIZATION OF LEARNING STRATEGIES

Learning can be defined as changes in behavior due to experience. In order to ease the process of learning, whether they are aware or not, learners try various ways. The projection of these ‘ways’ in education is learning strategies. The learning strategies are special actions taken by the learner to make the learning process easier, faster, more fun, more personalized, more effective and transferrable to new situations.

Since the 1960s, learning strategies have been the subject of many studies in the field of cognitive psychology and second language acquisition. What role various strategies play in the learning process, how learners who vary in age and foreign language proficiency choose and use learning strategies have been the main topics of the studies in the field. However, in most studies, the influence of age on the use of learning strategies is an issue that is considered trivial.

This work examines how language difference, age, and proficiency affect the use of learning strategies in a reading comprehension task. The aim of the study is to discover the learning strategy use of two groups of different ages and with different foreign language proficiency levels. The study which was conducted using the survey study method was carried out with the participation of 94 university students and 105 secondary school students. Participants were given the reading comprehension task in Turkish and English, and then the learning strategies they used in two languages were determined with the help of the scale.

After determining the strategy use of the two groups, it was seen that language difference, age and proficiency were effective factors in the use of learning strategies. It was found that the learners who are as almost proficient in the foreign language as in their mother tongue display similarities in their learning strategy use in both languages. This case is quite the opposite for the learners who have lower levels of proficiency in the foreign language. It was observed that the effect of age on learning strategies does not follow a transition from concrete to abstract. Strong evidence has been obtained that the relationship between the frequency of learning strategy use and proficiency is not directly proportional, and this relationship may have a curvilinear nature.

As a result, it was found that the frequency of learning strategy use does not entail the effectiveness of learning strategies.

Keywords: Learning, learning strategies, age, proficiency, language difference



ÖZET

ÖĞRENME STRATEJİLERİNİN KULLANIMINDA YAŞ VE DİL FARKLILIKLARI ÜZERİNE BİR ARAŞTIRMA

Öğrenme, yaşantı sonucunda ortaya çıkan davranış değişiklikleri olarak tanımlanabilir. Öğrenmenin kolayca gerçekleşebilmesi için öğrenen kişiler farkında olarak veya olmayarak çeşitli yollar denerler. Eğitim alanında bu yollar karşımıza öğrenme stratejileri olarak çıkar. Öğrenme stratejileri, öğrenen için daha kolay, daha hızlı, daha eğlenceli, daha kişiye yönelik, daha etkili ve yeni durumlara daha kolay aktarılabilir kılan özel eylemlerdir.

1960'lerden bu yana, öğrenme stratejileri bilişsel psikoloji ve ikinci dil edinimi alanlarında birçok çalışmaya konu olmuştur. Farklı stratejilerin öğrenme sürecinde nasıl rol oynadıkları, farklı yeterlik seviyelerine sahip olan ve farklı yaşlarda olan kişilerin öğrenme stratejileri seçimi ve kullanımı alandaki ana başlıklardandır. Ancak, öğrenme stratejileri üzerine yapılan çoğu araştırmada yaş faktörünün öğrenme stratejilerinin seçimine olan etkisi önem verilmeyen bir konudur.

Bu çalışma; dil farklılığı, yaş ve yeterlik faktörlerinin bir okuma-anlama görevinde kişilerin öğrenme stratejileri seçimine ve kullanımına nasıl etki ettiğini inceliyor. Araştırmanın amacı, farklı yaşlarda olan ve farklı yabancı dil yeterlik seviyesine sahip olan iki grubun strateji kullanma tercihlerini ve sıklıklarını keşfetmektir. Nicel araştırmalardan, anket çalışması metodu kullanılarak yapılan çalışma, 94 üniversite öğrencisi ve 105 ortaokul öğrencisinin katılımıyla gerçekleştirilmiştir. Katılımcılara Türkçe ve İngilizce okuma-anlama görevi verilip ayrı ayrı iki dilde kullandıkları öğrenme stratejileri, ölçek yardımıyla belirlenmiştir.

İki grubun strateji seçimi ve kullanımı saptandıktan sonra verilerden yola çıkılarak dil farklılığının, yaşın ve yeterliğin öğrenme stratejileri kullanımında etkili faktörler olduğu görülmüştür. Yabancı dilde ve anadilde yeterlik seviyeleri yakın olan kişilerin strateji seçiminin ve kullanımının benzer olduğu belirlenmiştir. Bu durum, anadil ve yabancı dilde yeterlik seviyeleri farklı olan bireylerde tam tersidir. Yaşın öğrenme stratejileri üzerine olan etkisinin somuttan soyuta ilkesini takip etmediği görülmüştür. Yeterlik ve öğrenme stratejileri kullanım sıklığı

arasındaki ilişkinin doğru orantılı olmadığı ve bu ilişkinin eğrisel bir doğası olabileceği konusunda güçlü bulgular elde edilmiştir. Bir diğer sonuç olarak, öğrenme stratejilerinin kullanım sıklığının öğrenme stratejilerinin kullanım etkililiği ile bağlantılı olmadığı bulunmuştur.

Anahtar Sözcükler: Öğrenme, öğrenme stratejileri, öğrenme stratejileri kullanımında yaş, öğrenme stratejileri kullanımında dil



CHAPTER 1

INTRODUCTION

1.1 Purpose of the Study

The boundaries of conventional education have always been there for both the instructors and the students. Limited time and not being able to tutor students one-to-one have created huge gaps in the achievement levels of the students (Bloom, 1984). To boost the achievement in the learning process and to make the learning process more effective, hundreds of studies have investigated the utility of using a learning tactic or a set of learning tactics over the past 25 years (Gagne, 1970; Brown & Campione, 1982; Bloom, 1984; Derry & Murphy, 1986). Through using such learning tactics or as defined by Derry and Murphy (1986, p. 2) “learning strategies” which are “the collection of mental tactics employed by an individual in a particular learning situation to facilitate acquisition of knowledge or skill”, it is aimed that the average student will be able to achieve above what he was able to achieve before (Bloom, 1984).

What makes the learning strategies important should be rather easy to see however the use of such strategies in real situations by the students raises multiple questions. Especially in the matter of choosing the appropriate learning strategies for a particular learning task and group of learners. This obligatory choice constitutes the main research question for most of the learning strategies research. Researchers look into variables such as proficiency, learning environment, ethnicity, age, gender, learning styles, motivation and beliefs about what learning is (Nambiar, 2009).

Some researchers whom this study grounds its base on (Brown, 1980; Brown, Campione, & Day, 1981; Flavell, 1979) have focused on the age variable in their studies. In the studies that they conducted on young learners, they found a deficiency in the variety of learning tactics and in the knowledge of learning strategies. Other studies which focused on adults found out that utilizing such strategies depended heavily on the capacity and the proficiency of the students (Hock & Mellard, 2011; Gunišová, 2016). It is safe to state that age has an important effect on both the utilization and the knowledge of the learning strategies. Another issue is the language. Young learners lack not only the variety of the learning strategies but also, they are less efficient in the

foreign language (Gunišová, 2016). Not being as efficient in the foreign language as adult learners, young learners are naturally rendered less successful users of learning strategies.

Many of the studies (Brown, 1980; Brown, Campione, & Day, 1981; Flavell, 1979; Hock & Mellard, 2011; Gunišová, 2016) focus on the age and the language factor in the use of learning strategies in isolation and only in terms of efficiency and variety. However, there is one fresh aspect that always seems to be left out in the literature: the difference in the use of learning strategies in the mother tongue and in the foreign language being taught and the difference in use of learning strategies that would appear according to the age factor.

The purpose of the study is thus revealed. This study aims to investigate the effect of age and language differences, combined and not in isolation, on the use of learning strategies. By doing so it aims to reveal not only how various the utilized learning strategies are but also what those learning strategies are and how language strategies are chosen according to both the age factor (university and secondary school students) and the languages (Turkish as the mother tongue and English as a foreign language).

1.2 Place of the Study in Literature

Learning strategies are a set of mental tactics which the learner employ in order to facilitate the acquisition of the skill or the knowledge when a learning situation arises (Derry & Murphy, 1986). Other researchers and linguists (Anderson, 1985; Dillon & Schmeck, 1983; Kirby, 1984) broadly define learning strategies as learning to learn. However, highlighting the aspect of encoding and memory when defining learning strategies is also necessary. Weinstein (1988, p. 291) defines learning strategies as “any behaviours or thoughts that facilitate encoding in such a way that knowledge integration and retrieval are enhanced”. Some examples to the learning strategies are “actively rehearsing, summarizing, paraphrasing, imaging, elaborating, and outlining” (Weinstein, 1988, p. 291).

Unfortunately, the field of learning strategies, being relatively new, lacks an organizational scheme of learning strategies which is widely accepted (Weinstein, 1988). There are several scholars who created their own versions of classification. This study will take a look at the following strategy taxonomies to find out common themes which these classifications

revolve around: Stern (1975), Rubin (1981), Weinstein and Mayer (1986), Oxford (1990), O'Malley and Chamot (1990).

The study takes Weinstein and Mayer's (1986) classification as primary taxonomy since this taxonomy is relatively comprehensive and follows a general approach to the learning strategies. Other taxonomies such as Oxford's (1990) and O'Malley and Chamot's (1990) are not taken as basis since they are most commonly used for language learning, a more specific type of learning with its own features.

Weinstein and Mayer (1986, p. 315) claim that the aim of learning strategies is "to influence the learner's encoding process". They define six categories for classification of learning strategies which are rehearsal strategies, elaboration strategies, organizational strategies, comprehension monitoring strategies and affective strategies (Weinstein & Mayer, 1988). They also divide the first three categories into two according to the complexity of the learning tasks. Rehearsal strategies are mostly about repetition while elaboration strategies involve "adding some sort of symbolic construction to what one is trying to learn as a way to make it more meaningful" (Weinstein & Mayer, 1988, p. 293). Organizational strategies, on the other hand, require the learner to transform the information into another form to make the learning process more straightforward. Comprehension monitoring strategies ensure that the learner is in charge of the learning process since the learner who uses such strategies sets aims for his own learning and assesses them in the end. Finally, affective strategies cater for the creation of convenient learning climates and maintaining them.

Learning strategies as a field has been on the rise since 1980s. Even though there are some problems with the definition and the typology researchers did not let the popularity of the subject decrease since learning strategies carry great importance in the learning process. Many of the researchers sought for how learning strategies affected other variables (Baykan, Naçar & Mazıcıoğlu, 2007; Chen, 2014; Ghafournia 2014; Loranger, 1994). Loranger (1994) in her study, examined high school students in terms of achievement and learning strategies that they used. As a result, she found out that students who differed in achievement also differed in their use of learning strategies. Students who had higher achievement were using learning strategies such as planning, activating schemata, summarizing and note taking amply while students who achieved lower were not. Baykan, Naçar and Mazıcıoğlu (2007) assessed the relationship between learning

strategies and achievement. Participants of the study were 155 college students majoring in medicine. The study concluded that there was a significant relationship between the GPAs of the students and the learning strategies that they used. Note taking, highlighting and summarizing, again, were some of the learning strategies which the students were using. Ghafournia (2014) is also one of the researchers who seeks a correlation between learning strategies and achievement. In his study, he looked at 307 university students' tendency to use learning strategies in relation to their reading achievement. The results showed a positive correlation between the tendency to use learning strategies and the reading achievement.

Chen (2014) focuses on the age factor as a determinant in the use of learning strategies. It is found that students at different grades actually preferred different learning strategies. The study concludes that social and functional strategies tended to be more amply used as the students got older.

As a last word, there are many studies which focus on achievement and age variables in utilization of learning strategies. However, there is not a single study that combines age and language as determinants of choosing learning strategies in Turkish context. This study aims to fill in this gap in the literature.

1.3 Significance of the Study

The findings of the study will be able to highlight which learning strategies the Turkish students on both ends of the spectrum of the education system in Turkey utilize in order to learn. These findings will serve as a source on further instruction on learning strategies in Turkey since learning ability is trainable and learning strategies are teachable (Gagne, 1970; Gagne & Briggs, 1974). Being able to see which learning strategies the university students use, it will be easier to pinpoint where the primary school students lack or vice versa.

Another contribution of the study will be determining the limitations in the use of learning strategies due to the age and proficiency factor. This finding will be useful especially in the field of applied linguistics since any limitations caused by lack of maturity or proficiency which will be revealed by this study should prove useful to both the teachers and the researchers.

1.4 Statement of the Problem

The aim of this study is to determine if age, language difference and language proficiency affect the learners' use of learning strategies.

1.5 Research Questions

The current study seeks to find answers to the following questions:

1. What are the learning strategies adopted by the freshman students in the Department of English Language Teaching?
2. Do the learning strategies employed by the freshman students in the Department of English Language Teaching change when the students use their mother tongue, Turkish or English as a foreign language?
3. What are the learning strategies used by the 6th, 7th and 8th graders in Secondary School?
4. Do the learning strategies utilized by the 6th, 7th and 8th graders in Secondary School change when the students use their mother tongue, Turkish or English as a foreign language?
5. Does age play a role in the use of the learning strategy?
6. Does proficiency play a role in the use of the learning strategy?
7. Does frequency of learning strategy use have an effect on reading comprehension?

1.6 Assumptions of the Study

This study assumes that age, language differences and language proficiency will have an effect on the learners' use of learning strategies. Other assumptions include that advanced level learners in English language or adult learners in current case will benefit from a wider range of learning strategies and be more successful at learning via these strategies and that intermediate level learners in English language will use a relatively limited variety of strategies compared to the adult group and achieve lower levels of learning.

In terms of language difference, the learners are assumed to achieve higher at learning tasks given in their mother tongue compared to the foreign language. This effect is expected to diminish when the proficiency levels in both languages reach similar levels, thus it will be less drastic in advanced learners of English language in this study.

Age, another factor that cannot be overlooked, will probably have an influence on the use of learning strategies in combination with language proficiency and language differences. Age factor is expected to manifest itself in how efficient the participants are in the learning task. Adult learners are supposed to be better able to determine which particular learning strategies work best for them, resulting in a more successful learning outcome.

1.7 Limitations of the Study

This study is conducted with two age groups. One of the age groups consists of freshman undergraduate students and the other one consists of 6th, 7th and 8th graders studying in a secondary school. The total number of subjects is limited to 200. The proficiency levels for English, though are expected to be in uniformity thanks to the defined standards by Turkish Ministry of Education, may vary student-to-student. The reliability of this study relies on the fact that each selected group meets the standard levels of proficiency in foreign language specified for their type of education and that subjects answer the questions correctly. Any generalization of the study should be done with these limitations in mind.

CHAPTER 2

LEARNING STRATEGIES

2.1 Learning & Learning Strategies

Learning has been defined either functionally or mechanistically over the years and there has not been a consensus on the explicit definition of learning even in those books which take learning as their subject matter (De Houwer, Barnes-Holmes & Moors, 2013). What is meant by a “functional” definition and a “mechanistic” definition is explained by De Houwer et al. (2013, p. 631) as follows: if defined functionally, learning is the “changes in behavior that result from experience”, mechanistic definition, on the other hand, holds that learning is “changes in the organism that result from experience”. However, Marton (1988) criticizes this situation by stating that the researchers make some assumptions in the definition of learning to be able to observe meaningful differences in their studies on learning. To him, “recall does not necessarily reflect understanding” which does not seem to fit into the literature of learning well (Marton, 1988, p. 54). The claims that learning is recall and that recall is a circumstantial evidence of learning are some of the most frequently made assumptions in the field. To be able to see the similarities in the definition of learning, which are referred to as “unwarranted assumptions” by Marton (1988, p. 54), we need to take a look at two comprehensive definitions of learning.

Gagne (1970, p. 3) provides one of the most acknowledged definition with references to behavior and change:

“Learning is a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth. The kind of change called learning exhibits itself as a change in behavior, and the inference of learning is made by comparing what behavior was possible before the individual was placed in a “learning situation” and what behavior can be exhibited after such treatment”.

A different definition by Wittrock (1977, p. IX) holds that learning is “the term we use to describe the processes involved in changing through experience”. He stresses some of its characteristics by stating that learning “is the process of acquiring relatively permanent change in understanding, attitude, knowledge, information, ability, and skill through experience”.

Thus, a broad definition of learning should include long lasting changes in behavior which are brought about by behavior in the first place and the elusive nature of learning which means that learning cannot always be observed immediately and subsequently to the time which learning takes place (Mahmud, 2004; Cizek, 1977). These, however still assumptions called out by Marton (1988), are acknowledged characteristics of learning in educational psychology.

‘Learning strategies’ has been a controversial subject among researchers for almost 50 years now (Macaro, 2001, p. 18). Not only has there not been a concurrence on defining what learning strategies are and what the correct term is to address these strategies but also there still has not been an agreement on a taxonomy (Macaro, 2001, p. 19). The shift towards cognitive theories from behaviorist theories in 1900s did not help untangle this ambiguity either, thus the origins of the term “learning strategy” still remain a topic of assumptions (McCombs, 2017, p. 2). To address this issue of ambiguity in learning strategies, it is essential to review what several researchers consider how learning strategies should be defined, what their characteristics are, what they are used for and how they are classified.

A universal definition of ‘learning strategies’ is very hard to come up with. Various researchers’ definitions should be taken into consideration to achieve such an end. Table 1 exhibits some definitions of learning strategies crucial to the field:

Table 1

Definition of 'Learning Strategies'

Scholars	Definition
Rubin (1975, p. 43)	"the techniques or devices which a learner may use to acquire knowledge"
Bialystok (1978, p. 71)	"optimal methods for exploiting available information and may be consciously employed by language learners to improve competence in a second language"
Weinstein & Mayer (1986, p. 315)	"the behaviors and thoughts that a learner engages in during learning that are intended to influence the learner's encoding process"
Chamot (1989, p. 71)	"techniques, approaches or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information"
Oxford (1989, p. 235)	"behaviors or actions used consciously by learners to make language learning more successful, self-directed and enjoyable"
Oxford (1990, p. 8)	"specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations"
O'Malley & Chamot (1990, p. 1)	"the special thoughts or behaviors that learners consciously employ to help them comprehend, learn, or retain new information"
Weinstein & Hume (1998, p. 12)	"any thoughts, behaviors, beliefs, or emotions a learner involved in during learning to facilitate the acquisition, integration, storage in memory, or availability for future use of new knowledge and skills"
Cohen (2011, p. 682)	"thoughts and actions, consciously selected by learners to assist them in learning and using language in general, and in the completion of specific language tasks"
Griffiths (2008, p. 87)	"activities consciously chosen by learners for the purpose of regulating their own language learning"

Therefore, learning strategies are any thoughts, actions, behaviors, beliefs, techniques, approaches or devices which are consciously employed by the learner to help facilitate the learning process and to make the most of the learning situation. It should also be added that the definition of

learning strategy varies depending on whether the learning strategy actualizes on the cognitive level or metacognitive level. In short, cognitive learning strategy is a “plan for orchestrating cognitive resources, such as attention and long-term memory to help reach a learning goal” (Weinstein & Meyer, 1991, p. 17). Metacognitive strategies, on the other hand, are applicable in the learning process generally and they are not as situation specific as cognitive strategies. The metacognitive strategies “involve generic skills essential for adult, more sophisticated forms of thinking and problem solving” (Cornford, 2002, p. 359).

2.2 Historical Overview of Learning Strategies

It is hard to pinpoint when the term ‘learning strategy’ entered the lexicon of pedagogy. McCombs (2017, p. 2) addresses this issue of ambiguity by stating that “some researchers trace the origins of the term ‘learning strategies’ to Dewey or Thorndike” but drawing on her own experiences, she claims that the origin of the term stems from the researches on “study skills and memory strategies” which were conducted in the 1960s and Ausubel’s cognitive theories of ‘advanced organizers’. This assumption still stands to be correct. However, we cannot overlook where the term “strategy” actually originates. The roots of the word “strategy” originates from Greek word “strategia” and this term was actually used for military tactics and the meaning seems to still apply to what a strategy is today (Oxford, 1990, p. 7). Similar to the case of strategy, how a learning strategy perceived by the researchers did not change much either since it was first defined by Weinstein and Mayer (1986, p. 315) which read as follows: “behaviors and thoughts that a learner engages in during learning” which are “intended to influence the learner’s encoding process”.

The learning strategy research emerged in the second half of the 19th century as a strategical resource for only military and government. When the exclusive reports began to be publicized, the field attracted attention from many independent researchers. Studies done in the 1970s and the 1980s proved that learning strategies mattered for the learning and the learner. Until these years, the learning strategy research remained closely linked to cognitive psychology. However, in the 1990s, the field moved towards independence. From the 1990s to the current day, interaction between learning strategies and other variables have been studied. The field have captured researchers’ attention to this date. Figure 1 summarizes the progression of learning strategy research through a timeline:

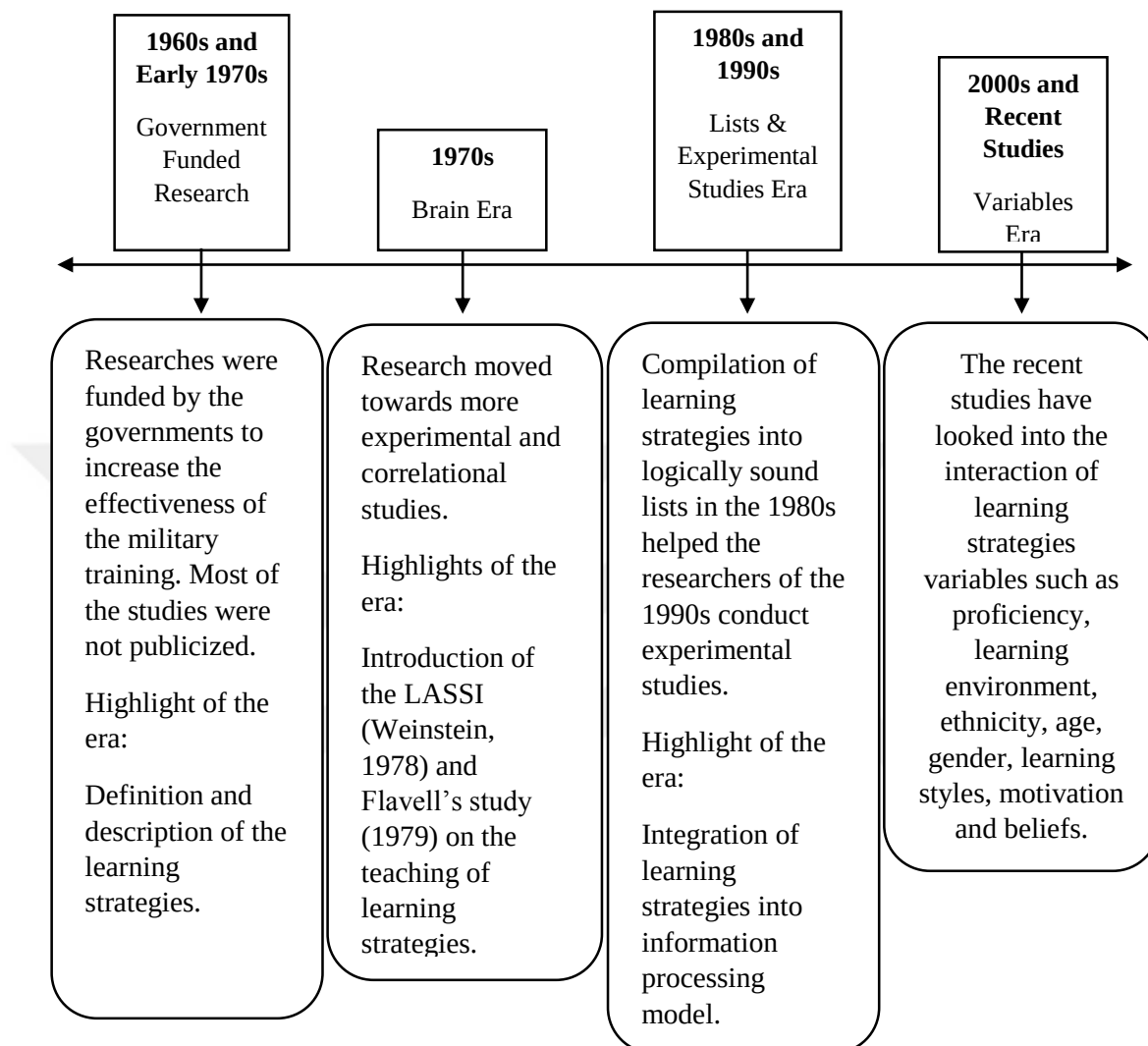


Figure 1. Historical Stages of Learning Strategy Research

Since its beginning, the research in the field of learning strategies focused on two main themes: metacognitive strategies and the whole learner (McCombs, 2017). Metacognitive strategies research involved ‘general learning strategies’ and ‘task-specific strategies’ while the latter sought for the implementations of convenient interventions which catered for the “cognitive, metacognitive, affective, physical, cultural, and social” needs of the whole learner (McCombs, 2017, p. 13). So, the researchers not only came up with what learning strategies are and how they can be classified but also sought out for ways to make these learning strategies available to more learners in various fields.

Alongside maths, science and many other subjects, one of the most frequently studied field was language. Language, second language acquisition specifically, was a popular field amongst researchers in the 1970s as was cognitive psychology which studied learning strategies (Nambiar, 2009). To put forward an accurate description of second language acquisition and its interaction with cognitive psychology, this section will also take a look at the relationship between cognitive psychology and second language acquisition along with how the idea of learning strategies appeared and evolved.

Early research on learning strategies was initiated and funded by governments for military training to increase effectiveness of the teaching in the late 1960s and the early 1970s. Most of this early research had to remain classified due to the fact that military and government were involved. Nonetheless, little fractions of the work done got out in the form of technical military reports which were not easy to access at all (McCombs, 2017). This early research largely depended on “computer-managed instructional systems” and all research was funded by military (McCombs, 2017, p. 2). The highlight of this era was the division of comprehension strategies into four categories: cognitive strategies, compensation strategies, memory strategies and test-taking strategies (Zhang, 1993).

The era in learning strategies research which spans ten years after the beginning can be named the brain era. The previous work on learning strategies was mostly on the description and definition of the learning strategies but with the advance of cognitive psychology in the 1970s, learning strategies research and cognitive psychology interacted in multiple ways. Thus, the field of learning strategies moved towards more ‘experimental’ and ‘co-relational’ studies (Nambiar, 2009, p. 132). To do such studies, an important step was taken by Weinstein (1978) with her LASSI, learning and study strategies inventory. Another cognitive psychologist, Botkin (1980), in his definitive experimental study, looked for a link between brain functions and learning strategies. What he found was learners could be taught learning strategies to perform better at given tasks. This study provided a broader perspective to the field. Another important contributor is Flavell (1979) with his theory of metacognitive knowledge. With his theory, he claimed that metacognitive knowledge, his way of talking about learning strategies, played an important role on cognitive processes. He also advocated that metacognitive knowledge can be acquired and should be taught by teachers.

Studies conducted in the 1970s and 1980s relied heavily on intuitive opinions of the researchers of the time and immensely helped pioneer the research in later decades with prolifically produced lists and classifications of learning strategies rather than being empiric like the studies conducted in the 1990s (Nambiar, 2009). The most renowned ones of these studies, put precisely classifications or compiled lists, are O'Malley & Chamot (1990), Oxford (1990) and Weinstein & Mayer (1986).

There were other trends in this era of learning strategies research too. Some researchers of the era such as Dansereau (1978), Weinstein (1978), Slavin (1980) and Rigney (1978) studied developing training programs for learning strategies to make them available to the majority while researchers such as Wesche (1975), Rubin (1975), Stern (1975), Wong-Fillmore (1976), Naiman, Frolich, Stern, and Todesco (1978), Hosenfeld, Arnold and Kirchofer (1981), Cohen and Aphek (1981), Brown and Palinscar (1982) and Sarig (1987) looked into the characteristics of the successful learners and tried to find out what made them stand out in the classroom.

Another breakthrough in this era was Weinstein and Mayer's (1986) implementation of learning strategies into the information processing theory. This work helped our understanding of the effect of the learning strategies on learning through every step of information processing stages which were defined in detail by Weinstein and Mayer (1986, p. 315) as stages "in which learner selects, acquires, organizes or integrates new knowledge" consecutively. These stages are selection, acquisition, construction and integration. Selection and acquisition stages involve accumulation of the knowledge while construction and integration are about how the knowledge is gained and organized. Overall, the claim in this theory is that the learning strategies are intentionally used by the learners and that learning strategies had an important role in facilitating the learning process and that they affected motivation and affective status of the learner profoundly. Information processing theory also helped as a framework for later studies and it provided a solid ground for intuitive lists and classifications (Nambiar, 2009).

The 1980s and the 1990s saw a merge between cognitive and metacognitive strategies. Livingston (1992) defines former as learners' self-questioning to see if the task is completed successfully or not. The latter, on the other hand, is learners' evaluating their own learning processes when the learning task fails. Livingston (1992) also adds that these learning strategies, both metacognitive and cognitive, are equally essential in a learning process. The trend in the

1980s and the 1990s learning strategies research consisted of two main topics: the effectiveness of learning strategies and the effects of strategy training (McCombs, 2017; Nambiar, 2009). However, what the researchers of the 1980s did for the field was rather significant. Much of the work in the 1980s aimed to “identify good learning strategies” and “compile a list of such strategies” (McCombs, 2017, p. 6). Researchers of the 1990s, using such lists, investigated “the factors that impacted the use of learning strategies” (Nambiar, 2009, p. 144).

The period after the new century in learning strategies research can be named as the variables era. The research on learning strategies has followed a similar trend to that of the 1990s to the current day. The interaction of learning strategies with various variables such as “proficiency, learning environment, ethnicity, age, gender, learning styles, motivation and beliefs” has been studied (Nambiar, 2009, p. 144). Another important trend, in this era, is the formulation of a theory of applied learning strategies research based on whole-person approach to prove that ‘learning to learn’ is more beneficial in a learner’s lifespan which covers both childhood and the adulthood (McCombs, 2017).

One of the factors that has an effect on the implementation and selection of learning strategies is age which is also an issue for the current study as it was for the variables era. Adults, adolescents and children usually tend to behave in different ways as each age group necessitates a particular psychological and social need and this also has an impact on how learners approach to the learning task which affects selection and implementation of learning strategies (Nambiar, 2009). In learning strategy research, though being seemingly vital for the learning strategies research, age is often overlooked (Nambiar, 2009). Most of the literature involves adults and adolescents (Oxford, 1996). Since adults and adolescents are able to describe their ways of thinking and learning way better than children, these studies base their ways of data collection on self-reports and questionnaires while studies which choose children as participants rely heavily on data gathered from observation (Nambiar, 2009). Thus, age factor poses a limitation for strategy research. Cognitive and metacognitive strategy studies tend to employ adults or adolescents while social strategy studies employ children since these strategies are far easier to observe.

From a scientific perspective, there is consensus that age is highly correlated with the morphological changes in every brain region (Schultz et al., 1994). Thus, it can be considered that age affects learning and learning strategies which naturally materialize in the brain. General

opinion on how age affects learning strategy choice and usage is that adult learners are more capable of abstract processes and this capability decreases as the age of the learner lowers (Gunning, 1997). In this case, children would be inclined towards concrete strategies such as affective and social ones rather than cognitive and metacognitive strategies. Adolescents, not completely different from children, would be able to use abstract strategies such as cognitive and metacognitive ones more frequently than children but not as frequently as adults. Again, there should be a drop in adolescents' use of affective and social strategies. Adults, on the other hand, are expected to use metacognitive and cognitive strategies more frequently while affective and social strategies fall out of favor for them gradually.

The researches focusing on how age affects the use of learning strategies can be categorized under three groups. There are those which back up the general opinion about age, and there is the opposing view which argues age is not relevant in learning strategy research. Also, there is the third category advocating that even if different age groups report using the same strategy, the mental processes underlying may not be the same.

As one of the studies confirming the move from concrete strategies to abstract ones, O'Malley et al. (1985a) reveal that adolescents employed cognitive strategies the most and these were followed by metacognitive strategies. Expectedly, the participants employed socio-affective strategies the least. Another study by Griffiths (2003) set out to find the differences between adults, adolescents and children in terms of strategy use. With a total number of 348 participants from different age groups, the study concludes that there is a direct proportion between the frequency of strategy use and age.

Contradictory to the previously mentioned belief about the relationship between age and learning strategies, Purdie and Oliver (1999) discover that their participants who were primary school children aged from 9 to 12 years old used social strategies the least while they frequently used cognitive and metacognitive strategies. Similarly, a case study which revolves around an adult woman, Julie and learning a new language, points out that Julie used cognitive strategies such as note-taking and repetition the most although we cannot claim that she did not frequently use other strategies such as socio-affective strategies which a learner would definitely not be able to avoid using in such a learning environment (Ioup, Boustagui, El Tigi & Moselle, 1994).

Representing the third view, Rubin (1975) focuses on the use of guessing as a learning strategy in young and adult learners. She states that adult learners' guessing ability is sharper than of younger learners because adult learners constantly look for cues that could give away the answer while younger learners' ability to guess is rather fluid; she concludes that these two groups employ separate mental processes for guessing, a cognitive strategy (Mosher & Hornsby, 1966; Bruner & Mackworth, 1970; Rubin, 1975). Therefore, even if two individuals from two different age groups report using the same learning strategy, the mental processes lying underneath may be entirely separate.

As a final word, with the studies on age taken into consideration, the question whether the age factor has an effect on learning strategies can be justifiably eluded. At this point, it is known that age affects learning strategy use; however, how it does so is not clear. Though, it cannot be claimed that a particular group has the upper hand at being more successful users of learning strategies (Ehrman & Oxford, 1990). To sum up, age is a factor which definitely has an effect on learning strategies, at least in a way that concerns underlying mental processes (Mosher & Hornsby, 1966; Bruner & Mackworth, 1970; Rubin, 1975).

Another factor that affects the strategy use is proficiency. In learning strategies research, it is well established that learners' strategy choice and frequency of learning strategy use are correlated to their proficiency (Green & Oxford, 1995; Griffiths, 2003). What the literature cannot assert is whether proficiency determines the learning strategy use. So to say, the case of proficiency and learning strategies is a chicken and egg situation. Green and Oxford (1995, p. 288) maintain that the relationship between the proficiency and learning strategies is not "one-way arrow leading from cause to effect". Rather, it is an "ascending spiral" in which higher levels of proficiency result in a rise of learning strategy use and this sets off a reaction that leads to higher levels of proficiency (Green & Oxford, 1995, p. 288).

There are many studies which support the fact that learning strategies and proficiency levels go hand in hand (Chamot & Kupper, 1989; Phillips, 1991; Chamot, 1995; Green & Oxford, 1995; Dreyer & Oxford, 1996; Gunning, 1997; Park, 1997; Sheorey, 1999; Bremner, 1999; Kayad, 1999; Nambiar, 1996; Sarjit Kaur & Salasiah, 1998; Bruen, 2001; Griffiths, 2003; Peacock & Ho, 2003; Gan, Humphreys & Hamp-Lyons, 2004; Lai, 2005). As one of the significant studies, Chamot and Kupper (1989) observe 67 high school students who are at different proficiency levels

of Spanish language. The study concludes that the participants' Spanish language proficiency is proportionate to how appropriately, how often and how variously the participants used learning strategies. Another important finding in this study is about the reading task. It is found out that the successful students exhibited similar behavior in both English reading tasks and Spanish reading tasks. This may be due to the transference of learning strategies from mother tongue to a foreign language.

Griffiths (2003) conducts a study on 348 students, varying in age and proficiency. In accordance with the literature, she asserts that "the most proficient students report frequent use of a large number of language learning strategies" (Griffiths, 2003, p. 216). Dreyer and Oxford (1996, p. 65) acquire the same opinion about the proficiency through the questionnaires they administered to their 305 Afrikaans undergraduate participants and they add that proficient learners tend to use cognitive, metacognitive and compensation strategies more frequently than less proficient counterparts who prefer social ones mostly. Similarly, Bremner's study (1999) on undergraduates in China arrives at practically same conclusion about proficiency and learning strategies. However, in this study, it is pointed out that less proficient learners use affective strategies frequently. Another researcher who studies on undergraduates, Kayad (1999), in a Malaysian context, encounters similar results. More proficient participants, in this study, report using cognitive strategies more frequently in various learning tasks while less proficient counterparts lean towards simpler strategies that does not require such sophistication. Green and Oxford (1995), in their study with 374 Puerto Rican university students who are divided into groups of pre-basic, basic and intermediate according to their English language proficiency, find that cognitive strategies are employed by intermediate level students the most. The frequency of employing cognitive strategies decreases in correlation with the proficiency level. Park (1997) also investigates the connection between learning strategies and second language proficiency. A group of 332 Korean students who took English language classes for at least six years are given the SILL and through self-report, participants' learning strategies are revealed. The study declares a strong correlation between proficiency and learning strategies. Sheorey (1999) is another researcher to find high proficiency levels in English language result in more frequent use of learning strategies. Relatively contemporary researchers such as Peacock and Ho (2003), Gan, Humphreys and Hamp-Lyons (2004), Lan and Oxford (2003), Lai (2005) and Bruen (2001) also accumulate similar results through self-report inventories.

Although most of the studies point to an inevitable conclusion about the relationship between proficiency and learning strategies, a few stand out. There are researchers who find the implementation of questionnaires such as Oxford's (1990) SILL and LASSI by Weinstein et al. (1987) problematic since these inventories try to measure the frequency of learning strategies instead of learners' efficiency at employing such strategies (Jiang & Cohen, 2012; Hajar, 2019). The rationale behind this criticism is that even if the learners report a plethora of learning strategies which they think they employ while learning, this does not necessarily mean that they are successful learners or proficient learners in our case (Yamamori, Isoda, Hiromori & Oxford, 2003; Phillips, 1991). Regarding this, Phillips (1991) conducts a study on 141 university-level Asian students and encounters an interesting fact about proficiency and learning strategies. She divides the participants into three groups according to their TOEFL scores: lower proficiency, midrange proficiency and higher proficiency. Although she maintains that frequency of strategy use varies "according to ESL proficiency level", midrange proficiency level group is reported to be employing learning strategies significantly more than lower proficiency and higher proficiency groups (Phillips, 1991, p. 65). Another study which shows this curvilinear relationship is by Hong-Nam and Leavell (2006). The participants in the study are "55 ESL students with differing cultural and linguistic backgrounds enrolled in a college" (Hong-Nam & Leavell, 2006, p. 399). In their study, participants who are rated to have intermediate level proficiency in English report using learning strategies more frequently than advanced and beginner level students.

It is clear from the literature that proficiency and learning strategies are correlated. The uncertainty is the nature of this correlation. We cannot tell whether proficiency is related to learning strategy use or it is vice versa. However, some researchers maintain that using learning strategies frequently and effectively result in higher proficiency which, in turn, gives a rise to the increased frequency of learning strategy use (Green & Oxford, 1995). On the subject of which proficiency level employs learning strategies more frequently, most of the studies advocate that learning strategy use is directly proportionate to language proficiency, which means the more proficient the learners are, the more frequently they will employ learning strategies (Chamot & Kupper, 1989; Chamot, 1995; Green & Oxford, 1995; Dreyer & Oxford, 1996; Gunning, 1997; Park, 1997; Sheorey, 1999; Bremner, 1999; Kayad, 1999; Nambiar, 1996; Sarjit Kaur & Salasiah, 1998; Bruen, :2001; Griffiths, 2003; Peacock & Ho, 2003; Gan, Humphreys & Hamp-Lyons, 2004; Lai, 2005). However, there are few studies which claim a curvilinear relationship between proficiency and language strategies (Phillips, 1991; Hong-Nam & Leavell, 2006). In these studies,

it is concluded that medium-level proficiency learners use learning strategies more frequently than lower-level proficiency and higher-level proficiency learners.

2.3 The Strategic Learner and the Role of Learning Strategies

Learning strategies carry a considerable amount of importance in current pedagogy (Dansereau, 1978; Weinstein, 1978; Wegner, Minnaert & Strehlke, 2013; Weinstein & Hume, 1998; Wenden, 1985). Researchers in psychological and pedagogical field recently have turned to looking for the characteristics of the ‘strategic learner’ along with the ongoing research on how learning strategies affect the learning (Weinstein & Hume, 1998, p. 10). This chapter covers the characteristics of strategic learner as well as the importance of learning strategies in the learning process.

Weinstein and Hume (1998, p. 10) list the characteristics of strategic learners as:

- They know a lot about how to study
- They use study and learning strategies.
- They use thinking skills.
- They must value the skills and processes.
- They must be interested enough to be motivated to want to use them.
- They must believe that they can use these skills and processes.
- They must be self-regulated in order to be able to manage their own learning.
- They can complete activities in a reasonable amount of time.
- They plan how to meet their goals.
- They monitor themselves to see how they are progressing.
- They evaluate the results based on their goals and the feedback they receive from the teacher or instructional materials.
- They take a systematic approach to learning and studying.

These characteristics enable the learner to do well on the learning task. Therefore, the learning process and its outcomes are vastly and positively improved. Knowing a set of learning strategies is considered a must; however, if the learner cannot maintain a balance between which strategies to know and how to use them, the process of learning might still fail (Weinstein & Hume, 1998). Thus, the correct implementation of learning strategies is equally indispensable. Pintrich and Schrauben (1992) and Zimmerman (1986) also add that learners who do not implement learning strategies in the learning process cannot be self-regulated thus can be academically unsuccessful.

Another proven point is that ‘successful learners’ use learning strategies more often and more varyingly than others (Rubin, 1975, 1981; Wesche, 1975; Sarig, 1987; Naiman, Frohlich, Stern & Todesco, 1996; Reiss, 1983; Nambiar, 1996; Mah, 1999). Rubin (1975, p. 43) focuses on the differences between successful learners and unsuccessful learners and conveys that underachievers at learning could not even grasp what they are doing wrong when they compare themselves to high achieving learners. Successful learners, on the other hand, were using strategies such as guessing, paying attention to meaning and practicing. Sarig (1987), for instance, conducted a study on Hebrew students and looked for the patterns of strategy use in a reading task which is performed in both Hebrew and English. This study revealed that the successful students used combinations of cognitive strategies or metacognitive strategies. The participants also combined these two main strategy groups. Similarly, Nambiar (1996) and Mah (1999) found out that some learners who perform better at acquiring knowledge, retention and recall not only tended to use more strategies but also combined them in a logical way to help them get through the learning task easier.

Regarding the learning strategies used in the learning process, Wenden (1985) offers a comprehensive explanation. From a general perspective, he points out that the use of learning strategies not only leads to learner autonomy but also provides an insight into why some learners fail at particular tasks. There are also some empirical studies which reveal the role of learning strategies. According to Oxford (1986), when underachieving students adopt suitable strategies to their need, they perform better at given tasks. Another way to showcase that learning strategy use is of utmost importance is through strategy training. It is proven that teaching the learning strategies to the learners yields increased retention and learning efficiency (Weinstein, 1978; Mayer, 1980). Also, focusing on a particular strategy such as elaboration, Wood, Needham, Williams, Roberts and Willoughby (1994, p. 680) state that implementation of this strategy encourages “the learner to relate seemingly arbitrary relations within facts and, hence, make them more memorable”.

2.4 Learning Strategy Instruction

In the 1970s, learning strategy research became a compelling subject since it seemed possible that the strategies employed by good learners could be taught to those who lacked them. The main focus of the studies revolved around pinpointing and deciphering what the

characteristics of a good learner were and which learning strategies were adopted by successful learners while they attacked a learning task. This era of learning strategy studies depended mostly on instincts and remained inconclusive for the most part. Nevertheless, it helped the field by providing ground for later studies to base their theories on and by revealing learning strategies could be taught (Nambiar, 2009).

Two central themes go hand in hand in learning strategy training research: identification of strategies and producing effective strategy training programs. Researchers inquiring the former theme pioneered the field with their intuitive lists of learning strategies and classroom observations to find out recurring patterns in behaviors of successful learners (Rubin, 1975; Stern, 1975; Wesche, 1975; Naiman, Frolich, Stern & Todesco, 1978; Cohen & Aphek, 1981). Building on the former theme, the latter theme construed by Wong-Fillmore (1976), Dansereau (1978), Weinstein (1978), Rigney (1978) and Hosenfeld, Arnold and Kirchofer (1981) corroborated that training programs for learning strategies were beneficial for the learners.

Stern (1975), Wesche (1975) and Naiman et al. (1978) also produced lists of learning strategies through observing the learners and relying partly on their own intuitions. What we conceive from these studies is that successful learners use a variety of learning strategies and that learning strategies are empirically proven to be beneficial for the learners (Rubin, 1975; Stern, 1975; Wesche, 1975; Naiman et al., 1978; Nambiar, 2009). On the other end of the spectrum, Cohen and Aphek (1981) portray that when learning strategies lack quality, they are detrimental rather than being beneficial for the learning process.

The proof of learners actually benefiting from learning strategies necessitates new training programs. This need is met by Wong-Fillmore (1976), Dansereau (1978), Weinstein (1978), Rigney (1978) and Hosenfeld, Arnold & Kirchofer (1981). Dansereau (1978, p. 9), drawing on his previous studies, devises a training program for teaching three strategies: “paraphrasing”, “question-answering” and “the use of visual imagery”. The results of this study indicate that control group and training group do not differ in the immediate test; however, training group surpasses the control group in terms of visual imagery and paraphrase in the delayed test (Dansereau, 1978, p. 10). Wong-Fillmore (1976) also finds out that a learning strategies program was beneficial through her observation of social strategies employed by children. In addition, Weinstein (1978) and Rigney (1978) invent learning strategy training programs which were

proved to be effective for the learning process. Take-away from these researches is that strategy training helps learners effectively.

The 1980s brought to the fore the progression from intuitive lists of learning strategies to theoretically grounded classifications and groups of strategies (Nambiar, 2009). The main theme of learning strategies research, in this decade, was exploring the effects of strategy training on individuals and on various learning tasks such as “reading comprehension” and “problem solving” (Nambiar, 2009, p. 136). Highlights of the decade were Brown and Palinscar’s (1982) assertion that learners could complete the learning task successfully provided they use both metacognitive and cognitive strategies. Some empirical studies also helped by proving that training for cooperative learning strategies is indeed beneficial for reading comprehension tasks (Slavin, 1980; Dansereau, Larson & Spurlin, 1983).

To sum up, the 1970s and 1980s research proved that successful learners employ plethora of learning strategies rather than a few. Strategy training, thus, learning strategies are indeed beneficial for the learners (Rubin, 1975; Stern, 1975; Wesche, 1975; Wong-Fillmore, 1976; Naiman et al., 1978; Dansereau, 1978; Weinstein, 1978; Rigney, 1978; Slavin, 1980; Hosenfeld, Arnold & Kirchofer, 1981; Brown and Palinscar, 1982; Dansereau, Larson, & Spurlin, 1983; Nambiar, 2009). The clear advantage that learning strategies provide is also crosschecked when poor memory techniques are proved to be harmful in a learning task (Cohen & Aphek, 1981).

2.5 Classifications of Learning Strategies

Similar to the case of prolificacy with the definition of learning strategies, there have been different taxonomies of learning strategies proposed by various researchers. This study will cover various taxonomies which are put forward by Stern (1975), Dansereau (1978), Rubin (1981), Weinstein and Mayer (1986), O’Malley and Chamot (1990) and Oxford (1990).

Before reviewing the taxonomies individually, some considerable details must be clarified. Naturally, every researcher has their own novel approach to the learning strategies, otherwise there would not be multiple classifications of learning strategies by different researchers. Briefly put, O’Malley and Chamot (1990) and Weinstein and Mayer (1986, p. 315) include learning strategies in what they call ‘information processing’ process which involves

selection, acquisition, construction and integration of the knowledge. Learning strategies help ease this four-step process according to these researchers. Oxford (1990) does not favor this hypothesis. She presumes that learning strategies are progressive stages which are transferrable and enhance learning as a process (Enciso, 2010).

Thus, Weinstein and Mayer (1986) have a general view of learning strategies. Their classification can be implemented in any learning situation with the exception of strategies employed in social interaction. LASSI - Learning and Study Strategies Inventory by Weinstein, Palmer and Schulte (1987), based on Weinstein and Mayer's (1986) taxonomy, reflects this fact. Oxford (1990) focuses on a specific type of learning, language learning. By doing so, she includes social strategies in her taxonomy. This can be observed from her inventory, SILL - Strategy Inventory for Language Learning (Oxford, 1990). Similarly, O'Malley and Chamot (1990) mention socio-affective strategies which involve learning strategies for social situations.

2.5.1 Stern (1975)

Stern (1975) is one of the pioneers in the learning strategies research who relies on intuition to find out what made good learners good and bad learners bad (Shi, 2017). Through observations and interviews, Stern (1975, p. 309) compiles some strategies used by successful learners. The compilation includes ten strategies in total:

- Planning strategy: a personal learning style or positive learning strategies
- Active Strategy: an active approach to the learning task
- Empathic strategy: a tolerant and outgoing approach to the target language and empathy with its speakers
- Formal strategy: technical know-how about how to tackle a language
- Experimental strategy: a methodical but flexible approach, developing the new language into an ordered system and constantly revising it
- Semantic strategy: constant searching for meaning
- Practice strategy: willingness to practice
- Communication strategy: willingness to use the language in real communication
- Monitoring strategy: self-monitoring and critical sensitivity to language use
- Internalization strategy: developing a second language as a separate reference system and learning to think in it

In an attempt to establish a taxonomy for the learning strategies he previously compiled, he argues that the learning strategies can be divided into four groups: “active planning strategy”, “academic (explicit) learning strategy”, “social learning strategy” and “affective strategy” (Stern, 1991, p. 411). This grouping of learning strategies, in a later study, evolves into a rational taxonomy which has five main groups: management and planning strategies, cognitive strategies, communicative – experiential strategies, interpersonal strategies and affective strategies. Table 2 displays Stern’s (1992, p. 262) classification of learning strategies:

Table 2

Stern’s Taxonomy of Learning Strategies

Stern’s (1992) Learning Strategy Groups	Management and Planning Strategies
	Cognitive Strategies
	Communicative - Experiential Strategies
	Interpersonal Strategies
	Affective Strategies

As the first group, management and planning strategies are learners’ taking charge of their own learning process which involves developing a plan that is devised by the learners through the teachers’ or the tutors’ advices. Cognitive strategies, on the other hand, are used for solving problems which demands “direct analysis, transformation, or synthesis of learning materials”; and these cognitive strategies are clarification, verification, guessing, inductive inferencing, deductive reasoning, practice, memorization and monitoring (Stern, 1992, p. 264; Hismanoglu, 2000). Another type of strategy, according to Stern (1992), helps prevent breakdowns in communication, these are called “communicative – experiential strategies” which are “circumlocution, gesturing, paraphrase, asking for repetition and explanation” (Stern, 1992, p. 265; Hismanoglu, 2000). Following group, interpersonal strategies comprise learners’ monitoring self-development and getting familiar with the speakers of target language. Affective strategies, as the final group, are employed by the learner to deal with the emotional aspect of the learning process thus create positive attitude towards the material (Stern, 1992, p. 266; Hismanoglu, 2000).

2.5.2 Dansereau (1978)

Dansereau's (1978) taxonomy of learning strategies comprises two main categories called primary strategies and support strategies. The strategies in the former category are "used to operate directly on the materials" and these can be listed in order as identification, comprehension, retention, retrieval and utilization (Dansereau, 1978, p. 4). The support strategies, on the other hand, are the employed by the learner in order to keep functioning well by adjusting the 'psychological environment' within. The strategies in this category enable efficient and effective use of primary strategies. Table 3 summarizes the taxonomy by Dansereau (1978, p. 4):

Table 3

Dansereau's Taxonomy of Learning Strategies

Primary Strategies	Identification
	Comprehension
	Retention
	Retrieval
	Utilization
Support Strategies	Techniques for establishing an appropriate learning attitude
	Methods for coping with loss of concentration due to the presence of distractions, fatigue, frustration, or the like
	Techniques for monitoring (checking) and correcting the ongoing primary strategies

2.5.3 Rubin (1981)

Rubin identified learning strategies as "the techniques or devices which a learner may use to acquire knowledge" (1975, p. 43). Drawing on this definition, she put forward two main groups of strategies: "direct" learning strategies and "indirect" learning strategies (Rubin, 1981, p. 124). As the names suggest, direct learning strategies affect the learning process in a more direct way whereas indirect learning strategies contribute indirectly.

Rubin (1975) began to gather data to develop an understanding of learning strategies used by high achieving language learners. In roots of this taxonomy lies Rubin's classroom observations, discussions of students on their own strategies and observations of learning situations by instructors (Stern, 1991, p. 405).

Table 4 illustrates Rubin's (1981, p. 124-126) classification of learning strategies:

Table 4

Rubin's Taxonomy of Learning Strategies

Direct Strategies	Clarification/verification
	Monitoring
	Memorization
	Guessing/inductive inferencing
	Deductive reasoning
	Practice
Indirect	Creating opportunities for practice
Strategies	Production tricks

Rubin (1981) with her broad definition and classification both pioneered the era and raised some questions. Rubin also included communication strategies under a learning strategy category, production tricks and this, at that time, was found to be controversial since these two are considered to be separate notions in learning strategy research (Griffiths, 2004). So, while being rather controversial, it can be observed from later research such as Oxford (1990) and Weinstein and Mayer (1986), Rubin (1981) has had an influential contribution to the field, especially in terms of naming the categories.

2.5.4 Weinstein & Mayer (1986)

Weinstein and Mayer (1986) base their taxonomy on three main types of strategies: rehearsal strategies, elaboration strategies and organizational strategies. Furthermore, they differentiate between basic or complex learning tasks and define the strategies combining the main

three categories and the nature of the task: basic or complex. Basic tasks involve “rote or verbatim memorization or learning” and complex learning tasks involve “higher-level conceptual or content learning” (Weinstein, Husman & Dierking, 2000, p. 731). This brings forward a total of six categories of learning strategies. Another two complementary groups are added to this typology finally which are comprehension monitoring strategies and affective & motivational strategies. These two groups aid the completion of the learning tasks and are in harmony with the first six groups (Weinstein & Hume, 1998, p. 23; Weinstein, Husman & Dierking, 2000, p. 731).

Weinstein and Mayer (1986) implement the learning strategies into the information processing theory. By doing so, they suppose that human mind operates like a computer which gathers data, analyzes it and gives out an output. Learning strategies, in this case, can be thought of as formulae which help ease the process. Thus, Weinstein and Mayer (1986) do not mention social strategies as most of the other researchers in the field do (Stern, 1975; O’Malley and Chamot, 1990; Oxford, 1990).

A detailed illustration of Weinstein and Mayer’s (1986) work is given in Table 5:

Table 5

Weinstein and Mayer’s Taxonomy of Learning Strategies

Strategy Groups	Nature of the Task	Strategies	Aim
Rehearsal Strategies	Basic	Recitation or repetition of information	To select and encode information in a verbatim manner
	Complex	Copying material, taking notes, and underlining or marking texts	
Elaboration Strategies	Basic	Creating mental imagery and using mnemonic techniques	To make information meaningful and to build connections between information given in the learning
	Complex	Paraphrasing, summarizing, creating analogies, relating the	

		new information to prior knowledge, questioning, trying to teach the information to another person	material and a learner's existing knowledge
Organizational Strategies	Basic	Sorting or clustering related information based on common characteristics or relationships	To construct internal connections among the pieces of information given in the learning material
	Complex	Outlining or diagramming the information and creating spatial relationships using strategies such as networking	
Comprehension Monitoring Strategies	Both	Self-questioning, error detection, problem solving	To assess the learner's understanding of the learning material and to executively control the use of acquisition and organizational strategies
Affective and Motivational Strategies	Both	Positive self-talk, anxiety reduction, and time management	To help focus the learner's attention and maintain the learner's motivation

2.5.5 O'Malley and Chamot (1990)

O'Malley and Chamot (1990, p. 43) classify learning strategies in three main categories: 'metacognitive strategies, cognitive strategies and socio-affective strategies'. The first category,

‘metacognitive strategies’ enables the doer of the task to gain knowledge about his own cognition and revise it, however, a task requires him to do so (O’Malley & Chamot, 1990; Brown, 1982). Cognitive learning strategies, on the other hand, can be described as dedicated learning activities which make the learning material more understandable to the learner (O’Malley & Chamot, 1990; Brown, 1982). Finally, socio-affective strategies are the ones which learners use to regulate their learning in some cases that require them to co-operate with peers or in ones that causes anxiety or stress.

O’Malley and Chamot (1990, p. 43) exemplify metacognitive strategies as selective attention, functional planning, monitoring and evaluation. Selective attention is focusing the attention to a particular aspect of the learning task. A fine example to this could be planning to notice the grammatical aspect of the language in a listening task. Functional planning is the planning ahead how a discourse, spoken or written, will take place. Monitoring, another metacognitive learning strategy, enables the learner to notice which part of the learning task will be useful, thus should be remembered. Finally, evaluation is examining a task in terms of comprehension and product to be able to see which steps worked well or not.

Cognitive strategies according to O’Malley and Chamot (1990) consist of rehearsal, organization, inferencing, summarizing, deducing, imagery, transfer and elaboration. Every strategy in this category being almost self-explanatory, only a brief explanation for each one is needed. The first cognitive learning strategy, rehearsal is learners’ repetition of the words which should be remembered at the end of the learning task. Organization is organizing the words to be learnt according to their attributes which in turn makes it easier to remember these words for the learner. Inferencing, another cognitive learning strategy, enables the learner to guess the meanings of new vocabulary items, to come up with a presupposition for missing parts in a text and to find causations. Summarizing is examining the gained knowledge to make sure that needed information still remains. Deducing is finding out how rules of a language work and applying them to similar or new contexts. Imagery, on the other hand, is linking verbal knowledge to visual images to make sure that it is remembered and understood. Transfer is using the gained knowledge in new learning tasks. Finally, elaboration is learning something new in order to gain new ideas or vice versa, applying the ideas on an old information.

Final main category is socio-affective learning strategies. This category consists of three learning strategies, designated by O'Malley and Chamot (1990): co-operation, questioning for clarification and self-talk. The first one of them, co-operation is learners' working with their peers in order to check their understanding or to get feedback on their performance. Questioning for clarification is being taught by a more able peer or a tutor who provide examples and extensive explanation on the task. Self-talk, the last socio-affective strategy, is regulating stress and anxiety by assuring oneself with positive thinking on the course of the task.

Table 6 displays O'Malley and Chamot's (1990) taxonomy briefly:

Table 6

O'Malley and Chamot's Taxonomy of Learning Strategies

Main Categories	Learning Strategies	Explanation
Metacognitive Strategies	Selective attention	Focusing the attention to a particular aspect of the learning task.
	Functional planning	Planning ahead how a discourse, spoken or written, will take place.
	Monitoring	Noticing which part of the learning task will be useful, thus should be remembered.
	Evaluation	Examining a task in terms of comprehension and product to be able to see which steps worked well or not.
Cognitive Strategies	Rehearsal	Repetition of the words which should be remembered at the end of the learning task.
	Organization	Organizing the words to be learnt according to their attributes which in turn makes it easier to remember these words for the learner.
	Inferencing	Guessing the meanings of new vocabulary items, coming up with a presupposition for missing parts in a text and finding causations.
	Summarizing	Examining the gained knowledge to make sure that needed information still remains.

Socio-affective Strategies	Deducing	Finding out how rules of a language work and applying them to similar or new contexts.
	Transfer	Using the gained knowledge in new learning tasks.
	Elaboration	Learning something new in order to gain new ideas or vice versa, applying the ideas on an old information.
	Imagery	Linking verbal knowledge to visual images to make sure that it is remembered and understood.
	Co-Operation	Working with peers in order to check understanding or getting feedback on the performance
	Questioning for clarification	Being taught by a more able peer or a tutor who provide examples and extensive explanation on the task.
	Self-Talk	Regulating stress and anxiety by assuring oneself with positive thinking on the course of the task.

2.5.6 Oxford (1990)

Oxford (1990) puts forward one of the most elaborate taxonomies in the field of learning strategies. Her way of classification is partly based on “earlier classification work by researchers such as O’Malley, Chamot, Rubin, Tarone, Dansereau, Weinstein and others” before her (Oxford, Lavine & Crookall, 1989, p. 32). Rather than being a purely intuitive list like Stern’s (1975), it relied on accumulated knowledge. In Oxford’s taxonomy, learning strategies are divided into two main classes as direct strategies and indirect strategies. Category of direct strategies includes compensation, memory and cognitive strategies. These strategies are used in order to retain the knowledge. The indirect strategies category, on the other hand, includes metacognitive, social and affective strategies. These strategies serve the purpose of organization and overseeing in the learning task (Oxford, 1990, p. 17).

After the division of two main classes and six groups, Oxford (1990, p. 17) furthermore names nineteen sets of strategies, all of which belong to a particular class and a group. The illustration of Oxford's (1990, p. 17) taxonomy is depicted in Table 7:

Table 7

Oxford's Taxonomy of Learning Strategies

Classes	Groups	Sets
Direct Strategies	Cognitive Strategies	Practicing
		Receiving and sending messages strategies
		Analyzing and reasoning
		Creating structure for input and output
	Memory Strategies	Creating mental linkages
		Applying images and sounds
		Reviewing well
		Employing action
	Compensation Strategies	Guessing intelligently
		Overcoming limitations in speaking and writing
Indirect Strategies	Metacognitive Strategies	Centering your learning
		Arranging and planning your learning
		Evaluating your learning
	Affective Strategies	Lowering your anxiety
		Encouraging yourself
		Taking your emotional temperature
		Asking questions
	Social Strategies	Cooperating with others
		Empathizing with others

As a final word, in her six groups of learning strategies which are cognitive, memory, compensation, metacognitive, affective and social strategies, Oxford (1990) shows us how each group serves a specific purpose. Cognitive strategies, for instance, are the ones which make the learning task more accessible to the learner. Metacognitive strategies, on the other hand, can be described as learners' ability to oversee and consciously ponder about his own learning process. Memory strategies, an essential group to make the knowledge more retainable, enable the learner to remember the necessary information in the learning material. Learners cannot be expected to know everything, so compensation strategies are needed for making up for this lack of knowledge and finally, social and affective strategies involve strategies in which learners use the interaction and discussion of feelings to furthermore make the learning process easier and more comfortable.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter seeks to inform the reader on the model of the study, the participants, the data collection instruments employed, the procedure of the study and the way followed for data analysis.

3.2 Model of the Study

This study, in design, follows a ‘survey study method plan’. Survey design method is used to reveal data about “quantitative description of trends, attitudes, and opinions of a population, or tests for associations among variables of a population, by studying a sample of that population” (Creswell & Creswell, 2018, p. 207). This study adopts such a descriptive and quantitative method in order to answer two types of research questions: ‘descriptive questions’ and ‘questions about the relationships between variables’.

Büyüköztürk et al. (2016, p. 14) define survey research as studies used to determine certain characteristics of a group. They exemplify this research model as follows. Given that there is a teacher who wants to learn what students think about the lecturing methods, they suggest that the teacher can get the best answers to the questions by using the survey method. The questions for this particular situation vary, however few examples could be what the best lecturing methods are according to the students, which ones are students’ favorites and which ones are disliked by the students. Since this study looks for similar answers, survey study method is found to be very plausible.

3.3 Participants

In this study, the participants are divided into two groups which differ in age and English language proficiency. Table 8 displays the details about the participants:

Table 8

Participants

Group	Gender	N	English Proficiency	Age
University Students	Male	46	C1 or above	18-19
	Female	51		
Secondary School Students	Male	54	A2	12-14
	Female	52		

The sampling method employed in the selection of the participants is convenience sampling from nonrandom sampling methods (Fraenkel & Wallen, 2006, p. 98). The first of the two groups consists of 97 Turkish students from English Language Teaching Department. These participants were freshman year students in the 2018-2019 academic year. The participants in the second group are conveniently selected 106 Turkish students from two secondary schools. These students were selected from the 6th, 7th and 8th grades of the 2018-2019 academic year. Thus, the total number of participants reaches 203.

One of the questionnaires filled by secondary school students and three by university students had to be excluded from the study. Table 9 displays the final number of participants who took the survey:

Table 9

Number of Surveyees

Group	Learning Strategy Scale	N
University level (higher proficiency)	Turkish	94
	English	
Secondary school level (lower proficiency)	Turkish	105
	English	

One of the comprehension tests answered by a secondary school student and two by the university students also had to be omitted due to some defects in the forms. Table 10 shows the final number of participants who partook in the comprehension tests:

Table 10

Number of Test-Takers

Group	Comprehension Test	N
University level (higher proficiency)	Turkish	95
	English	
Secondary school level (lower proficiency)	Turkish	105
	English	

The 5th graders in secondary schools were not included in the study because the curriculum for English language teaching determined by Turkish Ministry of National Education for the 5th grade is only limited to A1 level. The reason for the inclusion of the 6th graders, on the other hand, is that the 6th grade functions as a transition grade to A2 level in terms of English language proficiency. The proficiency level of the 7th and 8th grades is determined as A2 by the English language teaching curriculum of the Turkish Ministry of National Education (Turkish Ministry of Education, 2019, p. 10). Proficiency level of freshman students at English Language Teaching Department is accepted as C1 and above according to CEFR criteria (Council of Europe, 2001, p. 24).

3.4 Data Collection Instruments

There are two different age groups in this study, to address both properly, two 5-point Likert scales are used to determine the participants' frequency of learning strategy use. One of the scales employed is Learning Strategies Determination Scale by Güven (2004). The scale consists of 39 items and its Cronbach alpha reliability coefficient was found as .90 (Güven, 2004, p. 107). This scale was designed to address older learners' strategy use by the author, so it was given to the older group of the current study, university students.

Other scale, developed for addressing younger learners' learning strategy use, is a revised version of her former scale by Güven (2008). The revised version comprises 35 items instead of 39 and expressions are simpler, shorter and clearer. Cronbach alpha reliability coefficient of this questionnaire is found as .87 (Güven, 2008, p. 35). Both forms measure five different strategy groups. The strategy groups are listed as rehearsal strategies, elaboration strategies, organizational

strategies, comprehension monitoring strategies, and affective-motivational strategies. The latter scale was also used in various studies to determine the learning strategies of the participants at secondary school level (Arslan, Güler & Gürbüz, 2017). Both groups are administered the suitable inventory to their age group only once, which renders the inventories employed by the current study “cross-sectional” surveys (Fraenkel & Wallen, 2006, p. 398).

Two reading tests were devised to determine the achievement scores of the participants for reading comprehension in English and in Turkish. Each test included a text and ten multiple-choice items. Article-style texts were preferred over other styles since the main aim was to convey information and check for how much of the text was actually comprehended by the participants. Articles which were too challenging for the lower proficiency group, and those which were too simplistic for the higher proficiency group were eliminated. Turkish article had Flesch-Kincaid readability test score of 52.5 while English article was rated to have a score of 74.1 which meant the English article was fairly easy to read. The questions, on the other hand, aimed to encourage the students to employ strategies as well as help them reflect on the learning strategies they usually use. The test required almost no interpretation and were prepared in order to address information which can be easily obtained from the texts. The supervisor’s opinion on the items and the texts was taken for the validity of the tests. Through split-half method, the Spearman-Brown coefficient for the Turkish test was found to be .73. English test, proving to be slightly more reliable, showed a Spear-Brown coefficient of .86.

The current study, considering that a reading comprehension task is involved in it, favors Weinstein and Mayer’s (1986) taxonomy since there is no need to assess social learning strategies for this particular task, and there is no need to classify the strategies employed by the learners as language learning strategies. The data collection instruments employed are also based on the same taxonomy and follow relatively a broader approach to learning strategies. Being tested in a Turkish context, on the other hand, makes it even more reasonable to utilize Güven’s (2004, 2008) Learning Strategies Determination Scales over other scales. Finally, neither the taxonomy nor the inventory includes social strategies which are believed to be too elusive for an inventory to determine (Hajar, 2019).

3.5 Procedure

Subsequent to the study, all required official permissions were taken in order to commence. In the study, the participants were given reading comprehension tasks in two different languages, Turkish and English. Each reading comprehension task consisted of a text and ten multiple-choice items. For the completion of reading the Turkish text and answering the questions, the participants were allowed 20 minutes. After the test, Learning Strategies Determination Scale (Güven, 2004; Güven, 2008) was filled in by the participants according to their learning strategy use in Turkish language for the next 25 minutes. Then, the same steps were repeated for English language, following 15 minutes of break. Table 11 illustrates the procedure:

Table 11

Procedure of the Survey Study

Steps	Actions	Time
1 st	Administration of the Turkish text and answering 10 multiple-choice comprehension questions.	20 minutes
2 nd	Participants fill in the Learning Strategies Determination Scale (Güven, 2004; Güven, 2008) according to their strategy use in Turkish language.	25 minutes
3 rd	Break	15 minutes
4 th	Administration of the English text and answering 10 multiple-choice comprehension questions.	20 minutes
5 th	Participants fill in the Learning Strategies Determination Scale (Güven, 2004; Güven, 2008) according to their strategy use in English language.	25 minutes

3.6 Data Analysis

The SPSS software (IBM SPSS Statistics 23) was used to record the scale results and evaluate them statistically for the analysis of research data. There were two kinds of data, test

scores and values from five-level Likert items. The results obtained from the comprehension tests were used to determine a mean score for each group's performance in Turkish and English. Each scale, on the other hand, gave data about a set of five learning strategy groups which are rehearsal, elaboration, organizational, comprehension monitoring, and affective-motivational strategies. A mean of frequency for general learning strategy use was also obtained by adding up the means for these five individual strategy groups. Since there were two inventories and two groups in the study, the total number of the data sets to be examined added up to twenty-four. Then, each set was correlated with its corresponding set obtained from other language and/or other age group. Twenty-four individual T-tests were performed to reveal the correlations between the variables.

Table 12 shows the variables for twenty-four T-tests:

Table 12

Variables and T-Tests

	Test	Variable 1	Variable 2
T-Test 1	Strategy	Frequency of <i>learning strategies</i> use	Frequency of <i>learning strategies</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>university level participants</i>	<i>university level participants</i>
T-Test 2	Strategy	Frequency of <i>learning strategy</i> use	Frequency of <i>learning strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>
T-Test 3	Strategy	Frequency of <i>learning strategy</i> use	Frequency of <i>learning strategy</i> use
	Language	in <i>Turkish</i>	in <i>Turkish</i>
	Group	<u>university level participants</u>	<u>secondary school level participants</u>
T-Test 4	Strategy	Frequency of <i>learning strategy</i> use	Frequency of <i>learning strategy</i> use
	Language	in <i>English</i>	in <i>English</i>
	Group	<u>secondary school level participants</u>	<u>university level participants</u>
T-Test 5	Strategy	Frequency of <i>elaboration strategy</i> use	Frequency of <i>elaboration strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>university level participants</i>	<i>university level participants</i>

T-Test 6	Strategy	Frequency of <i>elaboration strategy</i> use	Frequency of <i>elaboration strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>
T-Test 7	Strategy	Frequency of <i>elaboration strategy</i> use	Frequency of <i>elaboration strategy</i> use
	Language	in <i>Turkish</i>	in <i>Turkish</i>
	Group	<u>university level participants</u>	<u>secondary school level participants</u>
T-Test 8	Strategy	Frequency of <i>elaboration strategy</i> use	Frequency of <i>elaboration strategy</i> use
	Language	in <i>English</i>	in <i>English</i>
	Group	<u>secondary school level participants</u>	<u>university level participants</u>
T-Test 9	Strategy	Frequency of <i>affective strategy</i> use	Frequency of <i>affective strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>university level participants</i>	<i>university level participants</i>
T-Test 10	Strategy	Frequency of <i>affective strategy</i> use	Frequency of <i>affective strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>
T-Test 11	Strategy	Frequency of <i>affective strategy</i> use	Frequency of <i>affective strategy</i> use
	Language	in <i>Turkish</i>	in <i>Turkish</i>
	Group	<u>university level participants</u>	<u>secondary school level participants</u>
T-Test 12	Strategy	Frequency of <i>affective strategy</i> use	Frequency of <i>affective strategy</i> use
	Language	in <i>English</i>	in <i>English</i>
	Group	<u>secondary school level participants</u>	<u>university level participants</u>
T-Test 13	Strategy	Frequency of <i>comprehension monitoring strategy</i> use	Frequency of <i>comprehension monitoring strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>
	Group	<i>university level participants</i>	<i>university level participants</i>
T-Test 14	Strategy	Frequency of <i>comprehension monitoring strategy</i> use	Frequency of <i>comprehension monitoring strategy</i> use
	Language	in <u>Turkish</u>	in <u>English</u>

T-Test 15	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>
	Strategy	Frequency of <i>comprehension</i> <i>monitoring strategy use</i>	Frequency of <i>comprehension</i> <i>monitoring strategy use</i>
	Language	<i>in Turkish</i>	<i>in Turkish</i>
T-Test 16	Group	<u>university level participants</u>	<u>secondary school level participants</u>
	Strategy	Frequency of <i>comprehension</i> <i>monitoring strategy use</i>	Frequency of <i>comprehension</i> <i>monitoring strategy use</i>
	Language	<i>in English</i>	<i>in English</i>
T-Test 17	Group	<u>secondary school level participants</u>	<u>university level participants</u>
	Strategy	Frequency of <i>organizational</i> <i>strategy use</i>	Frequency of <i>organizational</i> <i>strategy use</i>
	Language	<i>in Turkish</i>	<i>in English</i>
T-Test 18	Group	<i>university level participants</i>	<i>university level participants</i>
	Strategy	Frequency of <i>organizational</i> <i>strategy use</i>	Frequency of <i>organizational</i> <i>strategy use</i>
	Language	<i>in Turkish</i>	<i>in English</i>
T-Test 19	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>
	Strategy	Frequency of <i>organizational</i> <i>strategy use</i>	Frequency of <i>organizational</i> <i>strategy use</i>
	Language	<i>in Turkish</i>	<i>in Turkish</i>
T-Test 20	Group	<u>university level participants</u>	<u>secondary school level participants</u>
	Strategy	Frequency of <i>organizational</i> <i>strategy use</i>	Frequency of <i>organizational</i> <i>strategy use</i>
	Language	<i>in English</i>	<i>in English</i>
T-Test 21	Group	<u>secondary school level participants</u>	<u>university level participants</u>
	Strategy	Frequency of <i>rehearsal strategy use</i>	Frequency of <i>rehearsal strategy use</i>
	Language	<i>in Turkish</i>	<i>in English</i>
T-Test 22	Group	<i>university level participants</i>	<i>university level participants</i>
	Strategy	Frequency of <i>rehearsal strategy use</i>	Frequency of <i>rehearsal strategy use</i>
	Language	<i>in Turkish</i>	<i>in English</i>
	Group	<i>secondary school level participants</i>	<i>secondary school level participants</i>

T-Test 23	Strategy	Frequency of <i>rehearsal strategy</i> use	Frequency of <i>rehearsal strategy</i> use
	Language	in <i>Turkish</i>	in <i>Turkish</i>
	Group	<u>university level participants</u>	<u>secondary school level participants</u>
T-Test 24	Strategy	Frequency of <i>rehearsal strategy</i> use	Frequency of <i>rehearsal strategy</i> use
	Language	in <i>English</i>	in <i>English</i>
	Group	<u>secondary school level participants</u>	<u>university level participants</u>

The 1st, 5th, 9th, 13th, 17th and 21st T-tests are for determining the differences between the frequency of learning strategy use in Turkish and English by university level students. The 2nd, 6th, 10th, 14th, 18th and 22nd T-tests are performed in order to determine the differences between the learning strategies employed in Turkish and English by secondary school level students in terms of frequency. The 3rd, 7th, 11th, 15th, 19th and 23rd independent variable tests are conducted to compare the frequency of learning strategy use by university level students and secondary school level students in Turkish. Final six T-tests, the 4th, 8th, 12th, 16th, 20th and 24th ones, determine the differences between the frequency of learning strategies employed by university level and secondary school level students in English. The table below summarizes the aims:

Table 13

Aims of the T-Tests

T-Tests	Aim
1 st , 5 th , 9 th , 13 th , 17 th , 21 st	To determine the differences between the frequency of learning strategy use in Turkish and English by university level students
2 nd , 6 th , 10 th , 14 th , 18 th , 22 nd	To determine the differences between the frequency of learning strategy use in Turkish and English by secondary school level students
3 rd , 7 th , 11 th , 15 th , 19 th , 23 rd	To determine the differences between the frequency of learning strategy use by university level and secondary school level students in Turkish
4 th , 8 th , 12 th , 16 th , 20 th , 24 th	To determine the differences between the frequency of learning strategy use by university level and secondary school level students in English

The other data analysis techniques consist of Pearson correlation tests. These correlation tests were conducted in order to determine the relationship between age and learning strategy use and to investigate the relationship between learning strategy use and the reading test scores.



CHAPTER 4

RESULTS AND FINDINGS

4.1 Introduction

This chapter aims to display the results of the comprehension tests and analyzes the independent samples tests performed on the data. In the following sections, the learning strategies used by university students will be presented as an answer to the first research question. Then, the second research question will be accordingly replied in order to investigate if there is a change in learning strategy use depending on the language. In the same way, the third research question concerning which learning strategies secondary school students employ and the fourth research question which looks into the changes in secondary school students' strategy use related to the language will be replied. The two groups, then, will be compared in terms of their learning strategy use in Turkish to clarify if age determines the use of learning strategies, which is the fifth research question. In addition, university students' frequency of strategy use in English will be compared to their secondary school counterparts in order to shed light on the effects of proficiency on learning strategies, which is the issue raised in the sixth research question. Finally, the data on the seventh question regarding the learning strategy use and reading comprehension will be presented.

4.2 Comparison of University Students' Frequency of Learning Strategy Use in Turkish and English

Six independent-samples T-tests (1st, 5th, 9th, 13th, 17th, 21st T-tests) were conducted to compare university level participants' reported use of learning strategies in Turkish and English. Through these T-tests, it is aimed to find an answer to the first research question which looks into the strategy use by university students. Also, comparing two languages will enable us to seek information for the answer of the second question, the change in learning strategies depending on the language. Table 14 displays the results:

Table 14

T-tests Comparing University Students' Learning Strategy Use in Turkish and in English

Use of	Language	n	M	SD	t	df	p
Learning Strategies	Turkish	94	119.25	14.20	-1.41	186	.16
	English	94	122.28	15.22			
Elaboration Strategies	Turkish	94	37.14	5.25	-1.33	184	.18
	English	94	38.15	5.01			
Affective Strategies	Turkish	94	27.18	3.29	-.81	186	.41
	English	94	27.58	3.42			
Comprehension Monitoring Strategies	Turkish	94	21.59	5.83	-1.39	186	.16
	English	94	22.79	5.97			
Organizing Strategies	Turkish	94	18.87	3.66	-.69	186	.48
	English	94	19.25	3.83			
Rehearsal Strategies	Turkish	94	14.63	3.63	-.09	186	.92
	English	94	14.68	3.86			

There was not a significant difference in the scores of university students for reported frequency of learning strategy use in Turkish (M=119.25, SD=14.20) and reported frequency of learning strategy use in English (M=122.28, SD=15.22) conditions; $t(186) = -1.41$, $p = .16$. This means the frequency of strategy use in both languages showed similarities. The frequency of rehearsal strategies ($p=.92$) was found to be very similar in both languages. Comprehension monitoring strategies ($p=.16$), on the other hand, showed a slight difference between languages relatively. Listed from the most similarly employed strategies in Turkish and in English in terms of frequency to the least similarly employed strategies, the learning strategy groups are rehearsal strategies ($p=.92$), organizing strategies ($p=.48$), affective strategies ($p=.41$), elaboration strategies ($p=.18$) and comprehension monitoring strategies ($p=.16$).

In terms of frequency means of learning strategy use, the participants reported slightly more frequent use of learning strategies in English (M=122.28) compared to Turkish (M=119.25). This trend was apparent in every strategy group. To sum up, university level participants utilize

learning strategies slightly more frequently in English, and there was no evidence that learning strategy use differed from language to language.

4.3 Comparison of Secondary School Students' Frequency of Learning Strategy Use in Turkish and English

A set of six independent-samples T-tests (2nd, 6th, 10th, 14th, 18th, 22nd T-tests) was employed to reveal the relationship between secondary school students' reported learning strategy use in Turkish and in English. Through these T-tests, it is aimed to find an answer to the third research question which looks into the strategy use by secondary school students. Also, comparing the strategy use in English and Turkish will provide information for the answer of the fourth research question which focuses on the change in learning strategies depending on the language for secondary school students. The data in table 15 concern these research questions:

Table 15

T-tests Comparing Secondary School Students' Learning Strategy Use in Turkish and in English

Use of	Language	N	M	SD	t	df	p
Learning Strategies	Turkish	105	130.18	16.88	3.17	189.97	.00
	English	105	121.42	22.30			
Elaboration Strategies	Turkish	105	35.46	6.83	2.68	196.69	.00
	English	105	32.56	8.72			
Comprehension Monitoring Strategies	Turkish	105	29.82	5.71	1.77	195.46	.07
	English	105	28.20	7.40			
Affective Strategies	Turkish	105	28.86	3.08	3.25	203	.00
	English	105	27.22	4.07			
Organizing Strategies	Turkish	105	19.88	4.02	3.45	208	.00
	English	105	17.94	4.13			
Rehearsal Strategies	Turkish	105	15.36	2.77	1.99	184.57	.04
	English	105	14.41	4.03			

There was a significant difference in the results of secondary school students for reported frequency of learning strategy use in Turkish (M=130.18, SD=16.88) and in English (M=121.42, SD=22.30) conditions; $t(189.97)= 3.17$, $p= .00$. The two values are not similar to each other.

Therefore, it can be safely stated that secondary school students' learning strategy use depends heavily on the language in which the learning task is given. The most similarly used strategy group in both languages was found to be comprehension monitoring strategies ($p=.07$) in terms of frequency. Affective strategies ($p=.00$) and organizing strategies ($p=.00$) employed in Turkish or English do not display any relevance in terms of frequency. Listed from the most similarly employed strategies in Turkish or English to the least similarly employed strategies, the learning strategy groups are found to be comprehension monitoring strategies ($p=.07$), rehearsal strategies ($p=.04$), elaboration strategies ($p=.00$), affective strategies ($p=.00$) and organizing strategies ($p=.00$).

Participants reported significantly more frequent use of learning strategies in Turkish ($M=130.18$) than in English ($M=121.42$). This phenomenon was observed in every strategy group. Most frequently employed strategy group was found to be elaboration strategies in both languages ($M=35.46$ in Turkish, $M=32.56$ in English). The least frequently employed strategies in both languages were revealed to be rehearsal strategies ($M=15.36$ in Turkish, $M=14.41$ in English). To conclude, it is observed that secondary school students' strategy use changes according to the language they are learning in. The only exception to this finding is comprehension monitoring strategies ($p=.07$) which seem to be used in both languages at a similar frequency.

4.4 Comparison of Secondary School Students' and University Students' Frequency of Learning Strategy Use in Turkish

The relationship between frequency of learning strategy use by secondary level students and by university level students in Turkish was explored through six independent-samples T-tests (3rd, 7th, 11th, 15th, 19th, and 23rd T-tests). These T-tests intended to find an answer to the fifth research question which seeks information on the effects of age on learning strategies. Following table displays the results:

Table 16

T-tests Comparing Secondary School Students' and University Students' Learning Strategy Use in Turkish

Use of	Group	N	M	SD	t	df	p
Learning Strategies	University Lev.	94	119.25	14.20	4.89	195	.00
	Sec. School Lev.	105	130.18	16.88			
Elaboration Strategies	University Lev.	94	37.14	5.25	-1.95	192.30	.05
	Sec. School Lev.	105	35.46	6.83			
Comprehension Monitoring Strategies	University Lev.	94	21.59	5.83	10.04	197	.00
	Sec. School Lev.	105	29.82	5.71			
Affective Strategies	University Lev.	94	27.18	3.29	3.71	195	.00
	Sec. School Lev.	105	28.86	3.08			
Organizing Strategies	University Lev.	94	18.87	3.66	1.84	197	.06
	Sec. School Lev.	105	19.88	4.02			
Rehearsal Strategies	University Lev.	94	14.63	3.63	1.57	173.44	.11
	Sec. School Lev.	105	15.36	2.77			

A significant difference was ascertained in the results of secondary school students' reported frequency of strategy use in Turkish ($M=130.18$, $SD=16.88$) and university students' reported frequency of strategy use in Turkish ($M=119.25$, $SD=14.20$) conditions; $t(195)= 4.89$, $p=.00$. It is clear that the frequency means of strategy use by university students and secondary school students are not similar to each other. Therefore, participants from both groups have divergent beliefs about how frequently they employ learning strategies in Turkish. This divergence also goes for comprehension monitoring strategies ($p=.00$) and affective strategies ($p=.00$). However, both groups' use of rehearsal strategies ($p=.11$), organizing strategies ($p=.06$) and elaboration strategies ($p=.05$) display relevance. Thus, university students and secondary school students use rehearsal strategies ($p=.11$), organizing strategies ($p=.06$) and elaboration strategies ($p=.05$) at similar intervals.

Secondary school students ($M=130.18$) reported a much higher frequency of learning strategy use in Turkish than of university students' ($M=119.25$). Elaboration strategies are reported to be the most frequently employed strategy group by both university students ($M=37.14$) and secondary school students ($M=35.46$). On the other end of the line, there are rehearsal strategies which were the least frequently used strategies by both university students ($M=14.63$) and secondary school students ($M=15.36$). When the frequency means for the learning strategies are taken into account, each strategy is reported to be similarly used by both groups in terms of frequency, except for the comprehension monitoring strategies (University Lev. $M=21.59$, Sec. School Lev. $M=29.82$). Apparently, for Turkish, younger learners employ learning strategies such as self-questioning, error detection and problem solving more frequently than older learners do.

4.5 Comparison of Secondary School Students' and University Students' Frequency of Learning Strategy Use in English

The 4th, 8th, 12th, 16th, 20th, and 24th independent-samples T-tests were conducted to discover the relevance of secondary level students' frequency of learning strategy use in English to that of university level students'. These T-tests aimed to discover the effect of proficiency on learning strategy use.

Table 17 displays the results:

Table 17

T-tests Comparing Secondary School Students' and University Students' Learning Strategy Use in English

Use of	Group	N	M	SD	t	df	p
Learning Strategies	University Lev.	94	122.28	15.22	-.31	180.95	.75
	Sec. School Lev.	105	121.42	22.30			
Elaboration Strategies	University Lev.	94	38.15	5.01	-5.60	169.38	.00
	Sec. School Lev.	105	32.56	8.72			
Comprehension Monitoring Strategies	University Lev.	94	22.79	5.97	5.68	194.96	.00
	Sec. School Lev.	105	28.20	7.40			
Affective Strategies	University Lev.	94	27.58	3.42	-.65	194	.51
	Sec. School Lev.	105	27.22	4.07			
Organizing Strategies	University Lev.	94	19.25	3.83	-2.31	197	.02
	Sec. School Lev.	105	17.94	4.13			
Rehearsal Strategies	University Lev.	94	14.68	3.86	-.48	197	.62
	Sec. School Lev.	105	14.41	4.03			

A significant difference is not observed in the results of secondary school students' reported the frequency of learning strategy use in English (M=121.42, SD=22.30) and university students' reported the frequency of learning strategy use in English (M=122.28, SD=15.22) conditions; $t(180.95)=-.31$, $p=.75$. It can be stated that university students and secondary school students employ learning strategies in English at very similar intervals. From the data, we can also conclude that the frequency of affective strategies ($p=.51$) and rehearsal strategies ($p=.62$) by both university students and secondary school students are very correlative. Elaboration strategies ($p=.00$), comprehension monitoring strategies ($p=.00$) and organizing strategies ($p=.02$) represent the other end of the spectrum. These learning strategy groups do not display significant difference. Therefore, university students employ these learning strategy groups more frequently than secondary school students or vice versa.

It is clear that university students ($M=122.28$) use learning strategies slightly more frequently than secondary school students ($M=121.42$) in English. University students employ elaboration strategies ($M=38.15$) most frequently in English, and this is followed by affective strategies ($M=27.58$), comprehension monitoring strategies ($M=22.79$), organizing strategies ($M=19.25$) and rehearsal strategies ($M=14.68$). Similarly, elaboration strategies ($M=38.15$) are found to be the most frequently employed learning strategy group by secondary school students for English language. The other learning strategy groups which secondary school students employ in English language, listed from the most preferred to the least are comprehension monitoring strategies ($M=28.20$), affective strategies ($M=27.22$), organizing strategies ($M=17.94$) and rehearsal strategies ($M=14.41$).

4.6 Comprehension Test Scores and Strategy Use

Comprehension test scores of the participants are used in order to reveal whether frequency of learning strategy use has an influence on reading comprehension which is the subject of the seventh research question. The table below exhibits the scores:

Table 18

Comprehension Test Scores

Group	Tests	Valid n^a	n^b	M	SD
University Students	English Test	94	97	9.58	0.60
	Turkish Test	92	97	9.70	0.52
Secondary School Students	English Test	65	105	5.53	1.39
	Turkish Test	101	105	7.90	1.24

Note. The maximum score is 10.

^a This value (valid n listwise) denotes the number of participants who do not have any blank questions in the test.

^b This value marks the total number of the participants who took the test.

Four Pearson correlation tests were conducted to investigate the relationship between learners' learning strategy use and their test scores. The first test was to determine if there is a

relationship between university students' learning strategy use in Turkish and their Turkish test scores. Table 19 showcases the results:

Table 19

Pearson Correlations between University Students' Learning Strategy Use in Turkish and Turkish Test Scores

Variable	1	2
1. University Students' Strategy Use in Turkish	-	
2. University Students' Turkish Test Scores	.071*	-

*p=.49

Table 19 shows that there was not significant relationship between university students' learning strategy use in Turkish and their test scores. The second correlation test, as seen in Table 20, focuses on university students' learning strategy use in English and their English test scores:

Table 20

Pearson Correlations between University Students' Learning Strategy Use in English and English Test Scores

Variable	1	2
1. University Students' Strategy Use in English	-	
2. University Students' English Test Scores	.061*	-

*p=.56

As it can be observed from Table 20, there was not a significant relationship between university students' learning strategy use in English and the students' English test scores.

The third and the fourth Pearson correlation tests concerned secondary school students' learning strategy use and their test scores. Table 21 demonstrates the Pearson correlation test

conducted on the secondary school students' learning strategy use in Turkish and their scores for the Turkish test:

Table 21

Pearson Correlations between Secondary School Students' Learning Strategy Use in Turkish and Turkish Test Scores

Variable	1	2
1. Secondary School Students' Strategy Use in Turkish	-	
2. Secondary School Students' Turkish Test Scores	.054*	-

*p=.58

Table 21 shows that there was not a significant relationship between secondary school students' learning strategy use in Turkish and the students' Turkish test scores. The last Pearson correlation test summary is given in Table 22:

Table 22

Pearson Correlations between Secondary School Students' Learning Strategy Use in English and English Test Scores

Variable	1	2
1. Secondary School Students' Strategy Use in English	-	
2. Secondary School Students' Turkish Test Scores	.31*	-

*p=.001

Table 22 shows that there was a significant relationship between secondary school students' learning strategy use in English and the students' English test scores.

The test scores indicate that university students are more successful in both learning tasks given in both languages than secondary school students are. However, the gap between the scores of university students and secondary school students proves to be wider in English reading

comprehension test. Secondary school students leave more questions blank than university students do. This is most obvious in English test. Forty secondary school students left one or more questions blank in English test as opposed to three students in the other group.

University students are found to be more successful in Turkish test than in English test. However, this difference is minute. Secondary school students, on the other hand, are clearly more successful in Turkish test as expected. This shows that university students are more capable of comprehending English texts compared to secondary school students. The reason for this may be related to the fact that university students, in this study, are exposed to English language and English texts more often. However, the secondary school students are expected to read and comprehend Turkish texts in their education for the most part.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Discussion

The current study aims to determine if language difference, age, and language proficiency affect learners' use of learning strategies. This chapter will point out whether the language difference affects the learning strategies, which age group employs which strategies more frequently in English or Turkish and discuss possible implications as to why they do so. Finally, how language proficiency affects learning strategies, and whether there is a relationship between strategy use and reading comprehension will be discussed. Then the findings of the study will be projected onto the literature and evaluated comparatively. Discovering where the current study stands in the learning strategy research will help produce suggestions for further research in the learning strategies field, both for the learners and the teachers.

5.1.1 Language and University Students' Learning Strategy Use

The first research question inquired which learning strategies were employed by the university students. Also, building on this, the second research question was 'Do the learning strategies employed by the freshman students in the Department of English Language Teaching change when the students use their mother tongue, Turkish or English as a foreign language?'. This section concerns these two questions. The findings proved that the strategy use of university students in English and Turkish did not show statistically significant difference ($p = .16$). This means that the frequency of strategy use in both languages was similar. All strategies, including rehearsal strategies ($p = .92$), organizing strategies ($p = .48$), affective strategies ($p = .41$), elaboration strategies ($p = .18$) and comprehension monitoring strategies ($p = .16$) proved to be used by university students in both languages at comparable intervals. In terms of frequency means of learning strategy use, the participants reported slightly more frequent use of learning strategies in English ($M = 122.28$) compared to Turkish ($M = 119.25$). Consequently, university level participants used learning strategies slightly more frequently in English, and there was no evidence that learning strategy use differed from language to language.

It is known that the university students are proficient (C2 according to CEFR criteria) in Turkish language. For English language, university students have the proficiency level of C1 and above. Having set up the context for discussion, the frequency means of university students' learning strategy use and the results of T-tests are displayed in Figure 2:

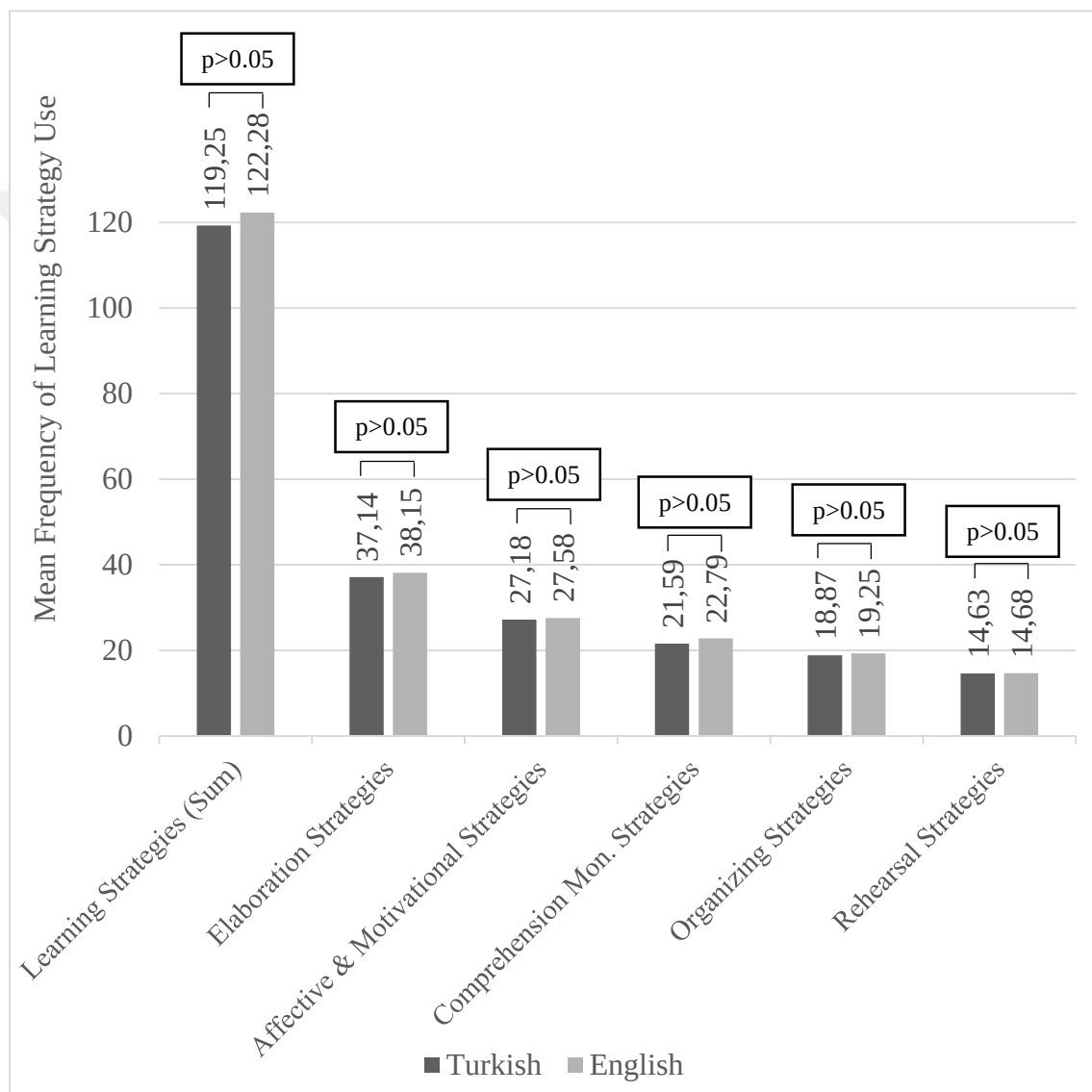


Figure 2. Frequency of University Students' Learning Strategy Use and P-values

As expected, holding high proficiency levels in both English and Turkish, university students reported very closely matched learning strategy use for both languages. They employed learning strategies slightly more frequently in English. The reason for this may be the fact that

English is the medium of instruction for these participants. They are used to reading English texts rather than Turkish counterparts. Also, independent samples T-tests displayed no statistically significant difference between Turkish and English throughout the categories and the learning strategies in general. The amount of learning strategies used by university students can be deemed practically the same for both languages. The university students are able to transfer all learning strategies from their mother tongue to the foreign language thanks to their closely matched proficiency levels in both languages.

5.1.2 Language and Secondary School Students' Learning Strategy Use

The strategy use of secondary school students in English and Turkish showed statistically significant difference ($p = .00$). This means that the frequency of strategy use in both languages was different. Therefore, it can be safely stated that secondary school students' learning strategy use depends heavily on the language in which they engage the learning process. The only most similarly used strategy group in both languages was found to be comprehension monitoring strategies ($p = .07$) in terms of frequency. Affective strategies ($p = .00$) and organizing strategies ($p = .00$) employed in Turkish or English do not display any relevance.

Participants reported significantly more frequent use of learning strategies in Turkish ($M = 130.18$) than in English ($M = 121.42$). This phenomenon was observed in every strategy group. Most frequently employed strategy group was found to be elaboration strategies in both languages ($M = 35.46$ in Turkish, $M = 32.56$ in English). The least frequently employed strategies in both languages were revealed to be rehearsal strategies ($M = 15.36$ in Turkish, $M = 14.41$ in English).

Figure 3 takes a look at secondary school students' frequency of learning strategy use and p-values:

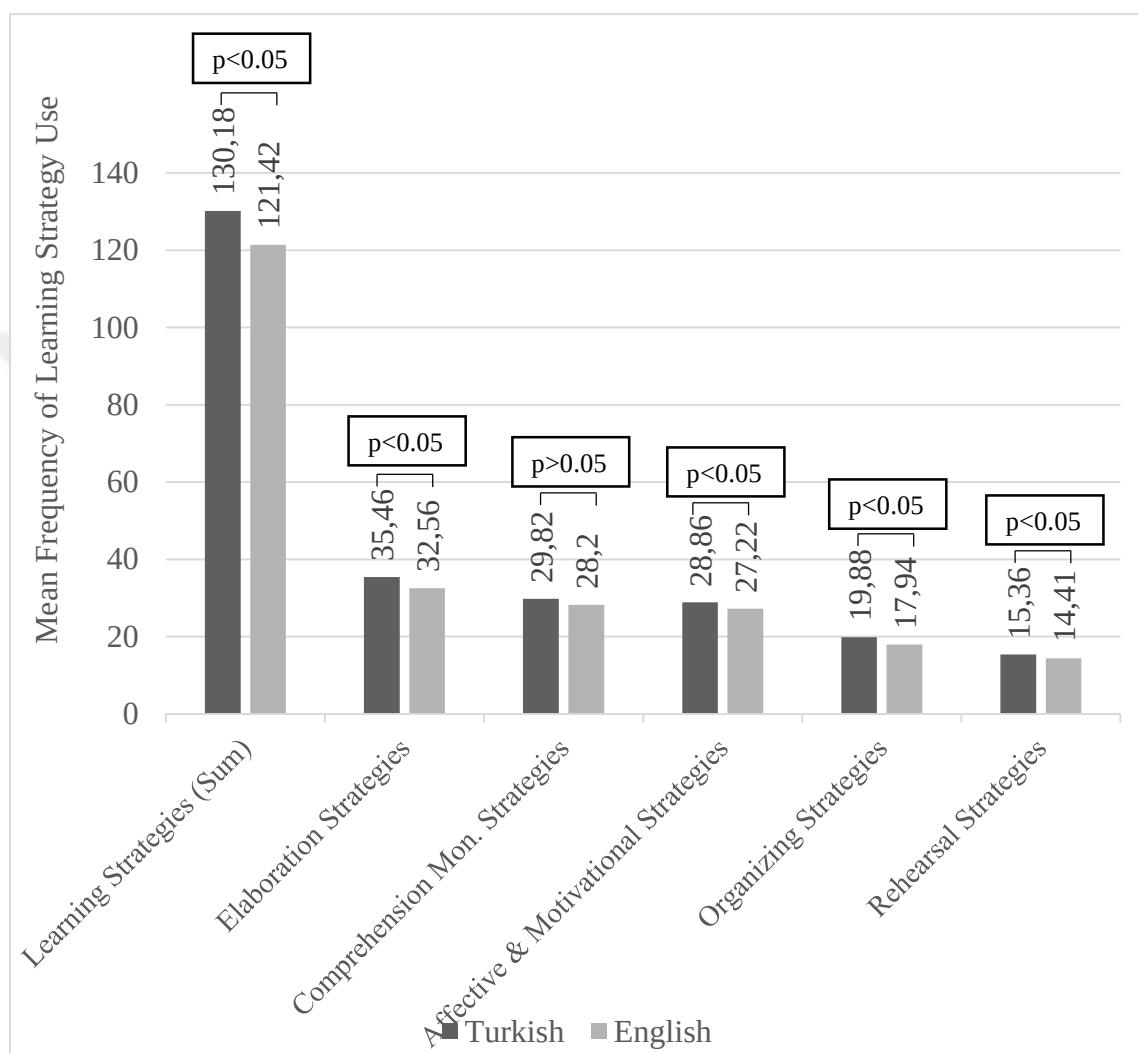


Figure 3. Frequency of Secondary School Students' Learning Strategy Use and P-values

To conclude, it is observed that secondary school students' strategy use changes according to the language they are learning in. Apparently, they used the learning strategies more frequently in the language which they were proficient, Turkish. The only exception to this finding was comprehension monitoring strategies ($p > .05$) which seem to be used in both languages at a similar frequency. These strategies include self-questioning, error detection and problem solving. Due to their nature, they do not require any specific cognitive processes, thus they are found to be transferrable to any situation easily. Even in a condition precedent, given that there is a proficiency

gap between the languages, the secondary school students had no trouble to transfer these strategies.

5.1.3 Age and Learning Strategy Use

The fifth research question inquired how age affects the learning strategy use. From a scientific perspective, it is known that age has a very serious effect on human brain (Schultz et al., 1994). Human mind, due to its nature, follows a path from processing concrete notions to abstract ones. Therefore, from the learning strategy research perspective, a movement from concrete learning strategies such as affective and social strategies to more abstract ones such as cognitive and metacognitive strategies is expected (Gunning, 1997). However, learning strategy research shows that children may utilize cognitive and metacognitive strategies as well (Purdie & Oliver, 1999). On the other hand, it is known that adults do not necessarily abandon social and affective strategies (Ioup et al., 1994). Another view argues that even in a situation where two individuals from two different age groups claim that they are using a particular learning strategy, the mental processes underlying that particular learning strategy might be totally different (Mosher & Hornsby, 1966; Bruner & Mackworth, 1970; Rubin, 1975). The data obtained will be discussed from this point of view. Figure 4 displays the relationship between secondary school students' and university students' frequency of learning strategy use in Turkish:

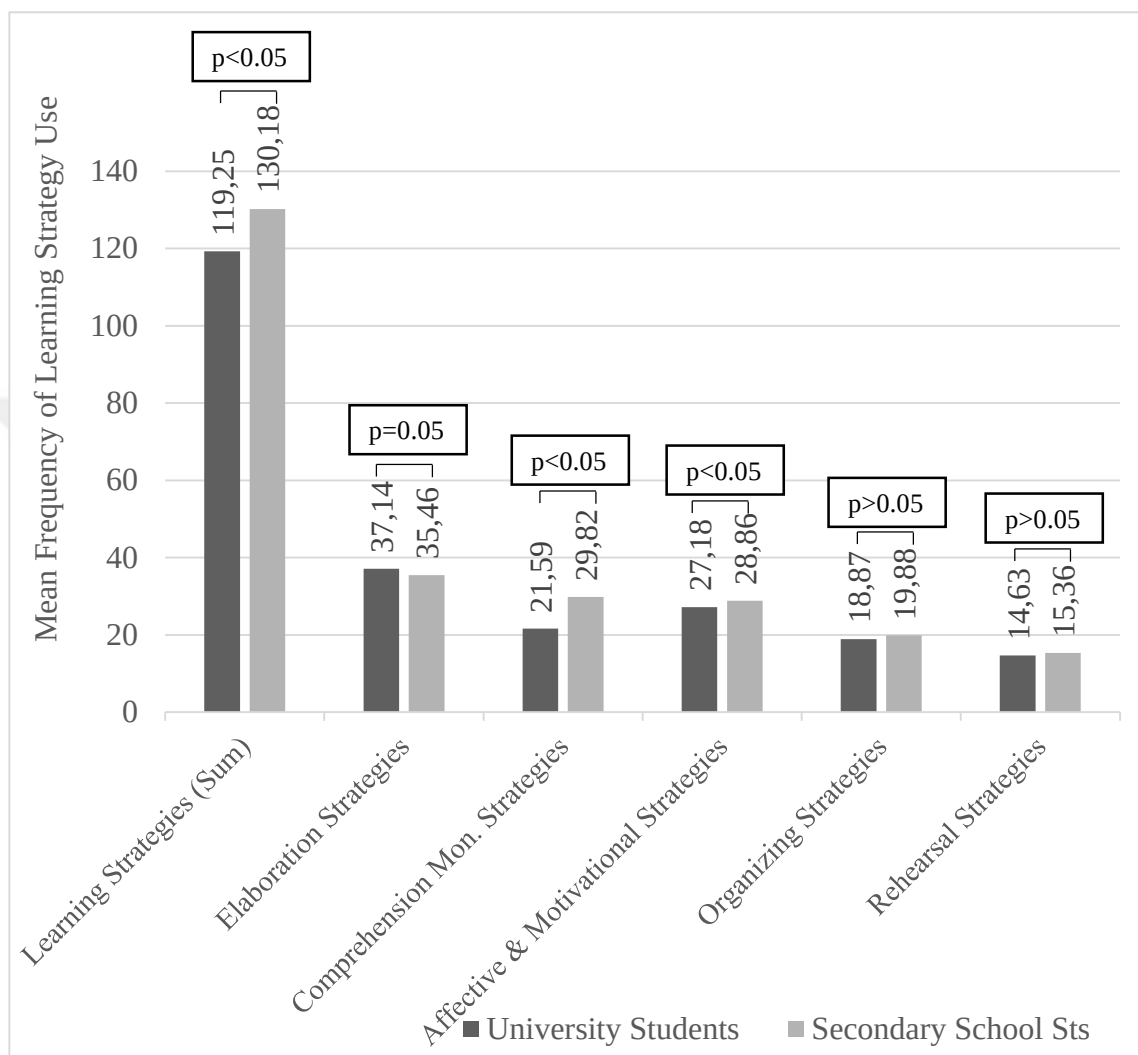


Figure 4. Secondary School Students' and University Students' Frequency of Learning Strategy Use in Turkish and P-values (Age)

The participants in both groups are native speakers of Turkish language, so any variable which is brought in by a foreign language will be avoided in this discussion. Analyzing the data collected from the younger group, secondary school students were found to be utilizing elaboration strategies the most ($M=35.46$) and comprehension monitoring strategies emerge as the second most used strategies ($M=29.82$). Also, affective and motivational strategies ($M=28.86$) are as frequently employed as comprehension monitoring strategies. Organizing ($M=19.88$) and rehearsal strategies ($M=15.36$), on the other hand, are less frequently utilized by a large margin. Therefore, early adolescent participants in this study can be declared to be utilizing a mix of

cognitive, metacognitive and affective strategies; cognitive strategies being the most frequently utilized and followed by metacognitive and affective strategies respectively.

The findings yield the similar results in the study by O'Malley et al. (1985a) on adolescents. O'Malley et al. (1985a) state that affective strategies, when compared to the other strategy groups, are less frequently utilized by a large margin. However, frequency of cognitive strategy, metacognitive strategy and affective strategy use is very similar in the current study. This difference between studies may be due to the fact that the participants of the current study are early adolescents. Similarly, Purdie and Oliver (1999) state that a group of participants aged from 9 to 12 years old used social strategies the least while they frequently employed cognitive and metacognitive strategies, which also complies with the findings of the current study.

Learning strategies used for Turkish by the older group in the study, listed from the most frequently utilized to the least, were found to be elaboration strategies ($M=37.14$), affective and motivational strategies ($M=27.18$), and comprehension monitoring strategies ($M=21.59$) respectively. These findings contradict Gunning's (1997) study. According to Gunning (1997), it is expected that younger age groups do not tend to utilize abstract strategies such as elaboration strategies and comprehension monitoring strategies while adults adopt abstract strategies more frequently. The older group of the current study was in late adolescence which is a transitional developmental stage to adulthood. Nevertheless, it is observed that these participants preferred affective and motivational strategies to comprehension monitoring strategies. In other words, this group used affective strategies which are relatively concrete strategies more than metacognitive ones which are relatively abstract. This outcome may be because of the anxiety caused by the foreign language being the medium of instruction for these students (Dulay, Burt & Krashen, 1982).

When P-values of the T-tests conducted are considered, early adolescent group and late adolescent group have different beliefs about how frequently they employ learning strategies in Turkish in general ($p<0.05$). Also, comprehension monitoring strategies ($p<0.05$) and affective-motivational strategies ($p<0.05$) were found to be different in terms of strategy use. This is due to university students' preference of affective-motivational strategies over comprehension strategies. This situation is reversed in secondary school students' case. However, both groups' use of rehearsal strategies ($p>0.05$), organizing strategies ($p>0.05$) and elaboration strategies ($p>0.05$)

displays relevance in terms of frequency. Therefore, both groups tend to employ cognitive strategies in a similar frequency, but this is not the case with metacognitive strategies.

Figure 5 exhibits the relationship between secondary school students' and university students' frequency of learning strategy use in English:

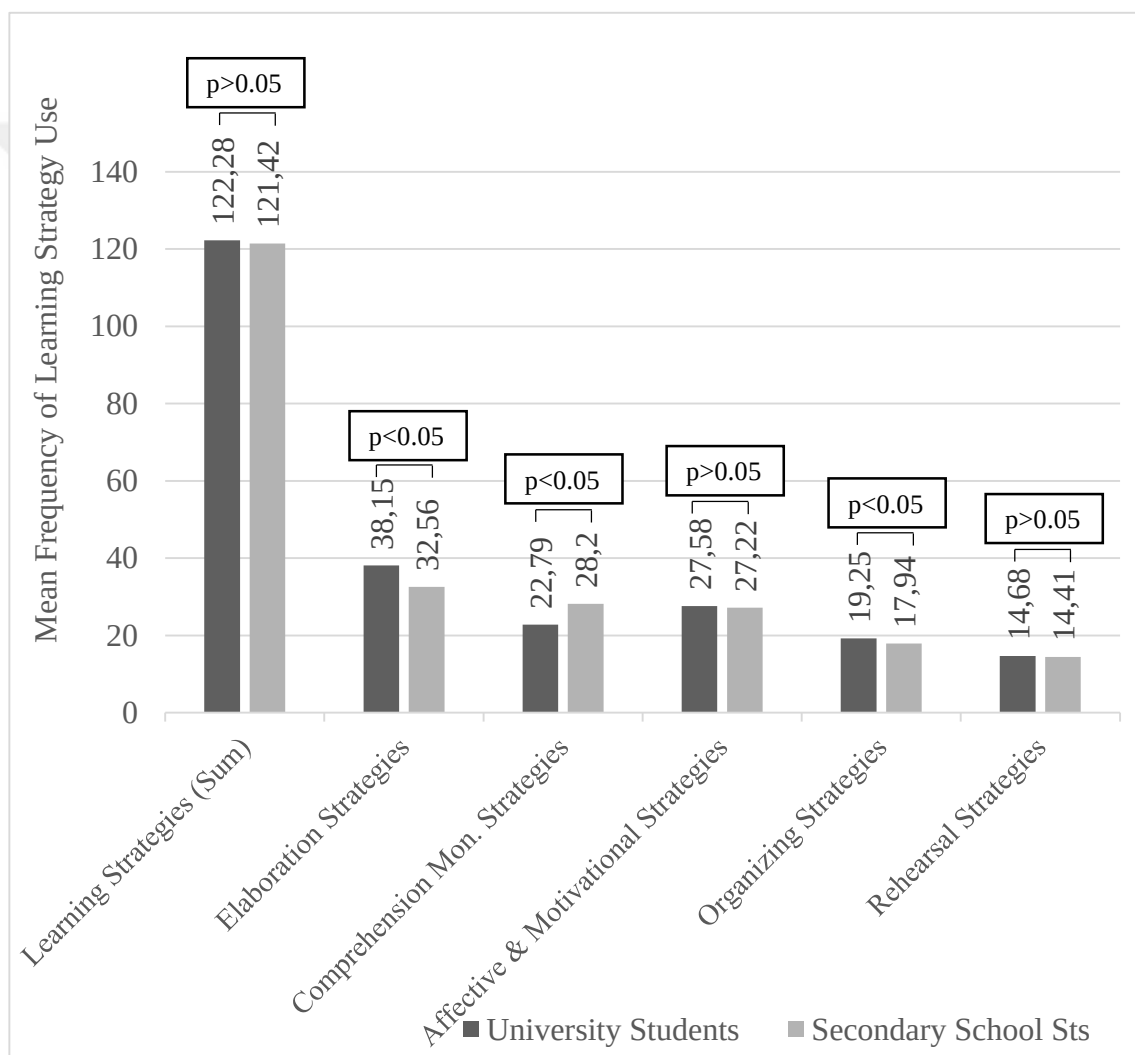


Figure 5. Secondary School Students' and University Students' Frequency of Learning Strategy Use in English and P-values (Age)

It is observed that university students and secondary school students employ learning strategies in English very similarly in terms of frequency. From the P-values, it can be concluded that utilization frequencies of affective strategies ($p > 0.05$) and rehearsal strategies ($p > 0.05$) are

similar for both groups. Elaboration strategies ($p < 0.05$), comprehension monitoring strategies ($p < 0.05$) and organizing strategies ($p < 0.05$), on the other hand, portray difference in both groups. Overall, it can be stated that the early adolescent group and the late adolescent group have similar beliefs about how frequently they employ learning strategies in English. The matter of interest in these findings is that the sequence of learning strategies from the most frequently employed to the least frequently employed stayed the same both in English and in Turkish.

Affective and motivational strategies showed no relevance in Turkish in terms of frequency in both groups. However, in English, a correlation is observed between the frequency of affective and motivational strategies employed by the secondary school students and university students. The reason behind this could be learners' lack of confidence in the foreign language as opposed to their mother tongue. With the introduction of a foreign language many other variables such as anxiety and motivation emerge (Gunning, 1997). To defeat anxiety and the lack of motivation, both groups seem to have resorted to affective and motivational strategies. This decline in secondary school students' frequency of learning strategy use to a mean of 121.42 for English language from 130.18 in Turkish may also be due to the proficiency factor. Therefore, it can be maintained that proficiency is a factor that affects the learning strategies as well.

The relationship between age and both groups' strategy use in English was also discovered through Pearson correlation test which is demonstrated in Table 23:

Table 23

Pearson Correlations between Learning Strategy Use in English and Age

Variable	1	2
1. Strategy Use in English	-	
2. Age	.046*	-

* $p > .05$

As it is observed from Table 23, there was not a significant relationship between the strategy use in English and age. Table 24 portrays the relationship between both groups' learning strategy use in Turkish and age:

Table 24

Pearson Correlations between Learning Strategy Use in Turkish and Age

Variable	1	2
1. Strategy Use in Turkish	-	
2. Age	-.297*	-

* $p < .01$

Table 24 reveals that there was a negative and significant relationship between the two groups' learning strategy use in Turkish and age. Therefore, in the mother tongue, as the age of learner increases, the frequency of learning strategy use declines. To sum up, age influenced the learning strategy use in the mother tongue, Turkish. In English, on the other hand, both groups' strategy use did not display significant difference. This finding leads to the conclusion that in foreign language, age ceases to be a defining factor for the strategy use since many issues concerning the proficiency levels of the students are introduced.

Learning strategy training helps learners become more efficient at learning (Rubin, 1975; Stern, 1975; Wesche, 1975; Wong-Fillmore, 1976; Naiman et al., 1978; Dansereau, 1978; Weinstein, 1978; Rigney, 1978; Slavin, 1980; Hosenfeld, Arnold & Kirchofer, 1981; Brown and Palinscar, 1982; Dansereau, Larson & Spurlin, 1983; Nambiar, 2009). Pedagogical implication of this study is that the age of the learner neither hinders nor supports the variety of the learning strategies implemented into the learning process as drastically as it is thought since the younger age groups are able to use a wide repertoire of learning strategies, including abstract strategies such as cognitive and metacognitive ones, even more frequently than older age groups (Chamot, 1996). Therefore, from the perspective of learning strategy training, age may not be a significant factor. Instead, in learning strategy training both proficiency and age are important factors. However, it is also observed that early adolescents' frequent use of learning strategies does not grant them success at the reading test given when compared to the older age group who used learning strategies economically yet scored very highly in the reading test. Therefore, the teachers should be aware of the fact that when instructing the learners on learning strategies, they should not assume that younger learners would not be able to grasp cognitive and metacognitive strategies since these are abstract strategies. However, this does not mean younger age groups will be able to use these strategies as effectively as older age groups. Nevertheless, the younger learners with

lower proficiency levels should be taught the learning strategies and how to implement them into the learning process effectively.

The older age groups in other educational environments, similar to the late adolescent group in this study, should not be confined to the hypotheses that dictate their choice of learning strategies. Apparently, having a strong authority on their own learning, they are able to use more concrete and simpler strategies such as affective and motivational strategies as effectively as cognitive and metacognitive ones which are abstract. In general, for learning strategy training, teachers should not make assumptions on which age group necessitates which particular learning strategy. Rather, learning strategy training should help widen the learning strategy repertoire of the learners and help them discover which strategy works best for them.

5.1.4 Language Proficiency and Learning Strategy Use

The sixth research question sought for information whether proficiency play a role in the use of the learning strategies. In learning strategy research, it is widely believed that proficient learners of a particular language employ a variety of learning strategies frequently during a learning task and frequent implementation of the learning strategies into the learning process enables the learner to reach higher levels of proficiency in that language (Chamot & Kupper, 1989; Chamot, 1995; Green & Oxford, 1995; Dreyer & Oxford, 1996; Gunning, 1997; Park, 1997; Sheorey, 1999; Bremner, 1999; Kayad, 1999; Nambiar, 1996; Sarjit Kaur & Salasiah, 1998; Bruen, 2001; Griffiths, 2003; Peacock & Ho, 2003; Gan, Humphreys & Hamp-Lyons, 2004; Lai, 2005). However, an opposing view proposes a curvilinear relationship between the language proficiency and learning strategies (Phillips, 1991; Hong-Nam & Leavell, 2006). According to this view, learners who are neither highly proficient nor incompetent at a language employ the learning strategies the most frequently.

As to the research question, it can be claimed that proficiency is found to have an effect on affective and motivational strategies. From the findings, it was clear that the learning strategy use of the participants from both groups followed a similar pattern in the foreign language, English, as in their mother tongue, Turkish. Figure 6 displays the means for the frequency of learning strategy use by secondary school students and university students in English, and P-values of T-tests:

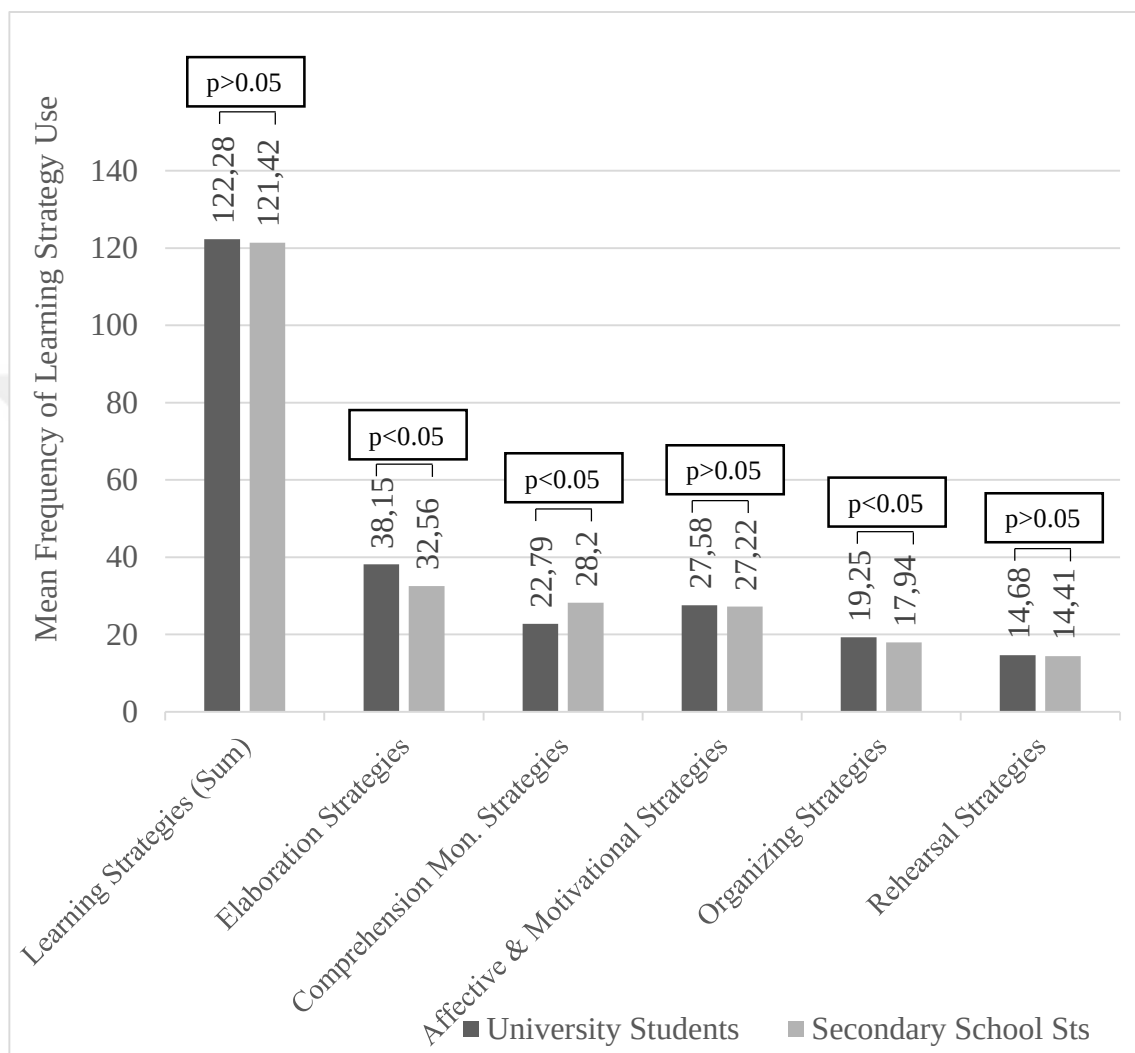


Figure 6. Secondary School Students' and University Students' Frequency of Learning Strategy Use in English and P-values (Proficiency)

It is observed that university students and secondary school students employ learning strategies in English very similarly in terms of frequency. From the P-values, it can be concluded that utilization frequencies of affective strategies ($p > 0.05$) and rehearsal strategies ($p > 0.05$) are similar for both groups. Elaboration strategies ($p < 0.05$), comprehension monitoring strategies ($p < 0.05$) and organizing strategies ($p < 0.05$), on the other hand, portray difference in both groups. It can be stated that the early adolescent group and the late adolescent group have similar beliefs about how frequently they employ learning strategies in English. It is clear that the sequence of

learning strategies from the most frequently employed to the least frequently employed were the same both in English and in Turkish.

There was no significant difference between the two groups' use of affective- motivational strategies in Turkish in terms of frequency. However, in English, a significant difference is observed between the frequency of affective-motivational strategies employed by the secondary school students and university students. This may be due to the fact that the learners have to deal with many other variables such as anxiety and motivational issues in a foreign language (Gunning, 1997). The reason why the secondary school students' used the learning strategies more frequently in Turkish ($M=130.18$) stemmed from the proficiency factor. Thereby, it can be concluded that proficiency is a factor that affects the learning strategies.

When we compare the two groups, it is observed that in English language, secondary school students (lower proficiency group) have a mean frequency of 121.42 for strategy use while university students (higher proficiency group) have a mean of 122.28. Even though secondary school students achieved just above fifty percent in English reading test ($M=5.53$), the mean values for university students' and secondary school students' learning strategy use in English are very close. In the same test, university students achieved almost perfect score ($M=9.58$). In their mother tongue, Turkish, secondary school students reported much higher frequency of learning strategy use ($M=130.18$) than university students' learning strategy use ($M=119.25$). However, secondary school students' excessive use of learning strategies over university students' use of learning strategies did not manifest itself in the comprehension test. Secondary school students scored a mean of 7.9 while university students scored 9.7 in the reading comprehension test for Turkish language. Even though the secondary school students improved in Turkish reading comprehension test compared to their performance in English, this improvement does not compensate for the gap between the learning strategy use of secondary school students and the university students.

The findings of this study contradict with the studies which claim there is a linear relationship between learning strategy use and language proficiency (Chamot & Kupper, 1989; Chamot, 1995; Green & Oxford, 1995; Dreyer & Oxford, 1996; Gunning, 1997; Park, 1997; Sheorey, 1999; Bremner, 1999; Kayad, 1999; Nambiar, 1996; Sarjit Kaur & Salasiah, 1998; Bruen, 2001; Griffiths, 2003; Peacock & Ho, 2003; Gan, Humphreys & Hamp-Lyons, 2004; Lai, 2005). Since the lower proficiency group, in this study, uses the learning strategies as frequently

as the higher proficiency group, there is more likely to be a curvilinear relationship between the language proficiency and learning strategies as proposed by Phillips (1991), and Hong-Nam and Leavell (2006). According to this view, learners who are neither highly proficient nor incompetent at a language employ the learning strategies the most frequently and the lower proficiency group of this study fits perfectly to this description according to the findings.

Approaching from another perspective, Cohen and Apehek (1981) assert that poorly implemented learning strategies hinder the learning process rather than assist it. The findings of this study parallel Cohen and Apehek's (1981) assertion. This brings us to the learning strategy training which helps the learners obtain the effectiveness they need while implementing the learning strategies into the learning process. It is proven that learning strategy training helps learners being more efficient learners through the use of learning strategies (Rubin, 1975; Stern, 1975; Wesche, 1975; Wong-Fillmore, 1976; Naiman et al., 1978; Dansereau, 1978; Weinstein, 1978; Rigney, 1978; Slavin, 1980; Hosenfeld, Arnold & Kirchofer, 1981; Brown and Palinscar, 1982; Dansereau, Larson & Spurlin, 1983; Nambiar, 2009). Lower proficiency group of the current study would be able to achieve much higher scores in English test with the proper training on learning strategies.

Figure 7 displays the relationship between secondary school students' and university students' frequency of learning strategy use in Turkish:

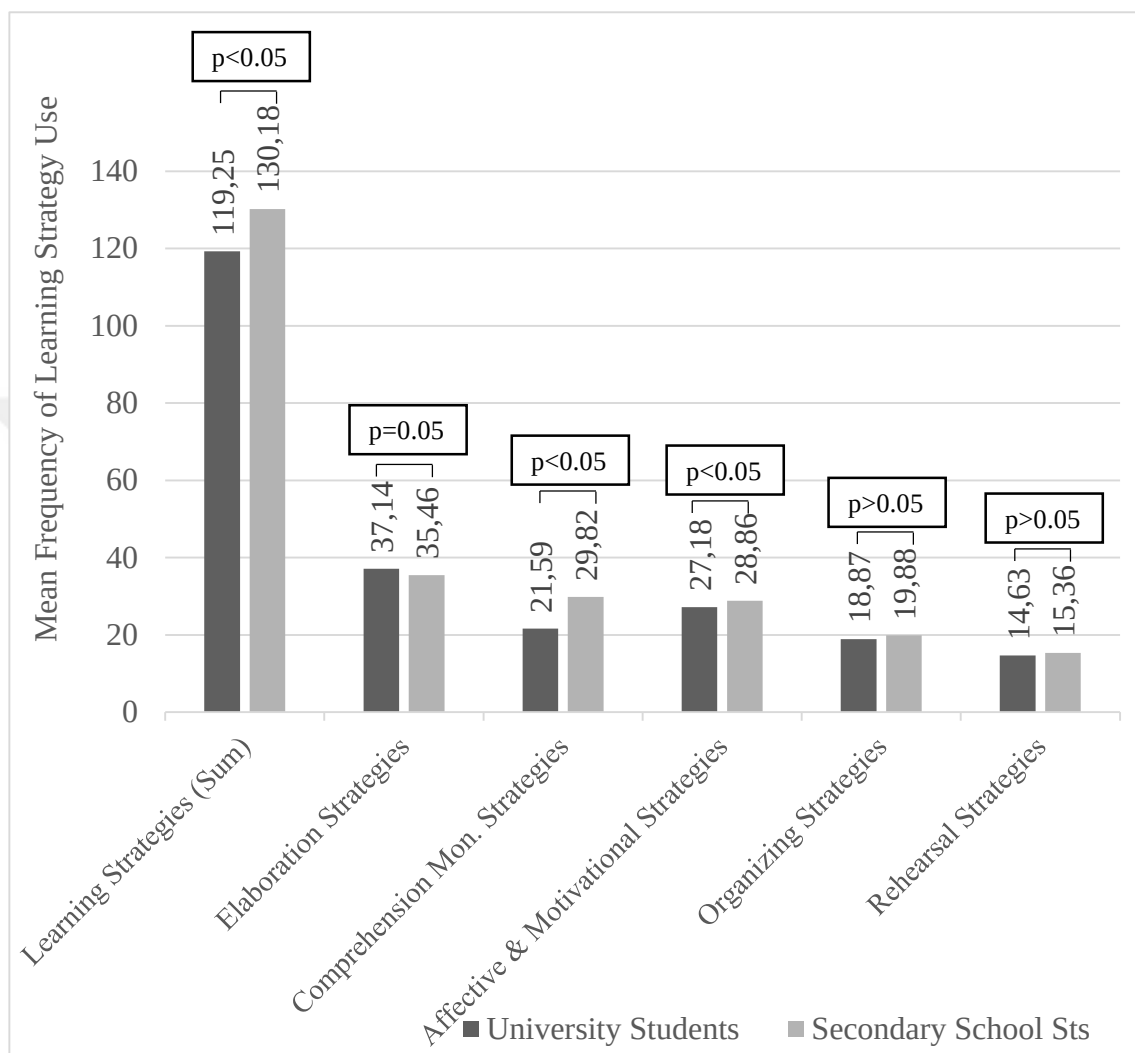


Figure 7. Secondary School Students' and University Students' Frequency of Learning Strategy Use in Turkish and P-values (Proficiency)

There was a significant difference between the secondary school students' frequency of strategy use and university students' frequency of strategy use in Turkish. Therefore, participants from both groups have divergent beliefs about how frequently they employ learning strategies in Turkish. Since the participants in both groups are the native speakers of Turkish, proficiency ceases to be a defining factor in the learning strategy use in the mother tongue. This difference stems from age. On the other hand, both groups' strategy use did not display significant difference in English. This finding leads to the conclusion that in the foreign language, age ceases to be a defining factor for the strategy use since many issues concerning the proficiency levels of the

students are introduced. This similarity in learning strategy use of the two groups in English is caused by the curvilinear relationship (Phillips, 1991; Hong-Nam & Leavell, 2006).

From a pedagogical point of view, the findings of this study provide the implication that the teachers who instruct either in the foreign language or in the mother tongue should first check secondary school students' effectiveness of implementing the learning strategies into the learning process since these early adolescent learners cannot compensate what they lack in quality with quantity. The next step for helping secondary school students with the implementation of learning strategies would be training. This would help them figure out the most effective strategies for their particular style of learning and expand their learning strategy repertoire. As for the instructors in higher education programs, it should be pointed out that proficient and older learners are indeed meticulous conductors of their own learning, thus neither the fact that they implement the learning strategies relatively less frequently nor their atypical use of learning strategies entail a handicap for their success at learning.

5.1.5 The Relationship between Strategy Use and Reading Comprehension Test Scores

The seventh research question intended to discover if the frequency of learning strategy use has an influence on reading comprehension. The implementation of the learning strategies into the learning process carries great importance in terms of learner autonomy and learning success (Wenden, 1985). It is also widely believed that academic success is very strongly tied to self-regulated learning process which is achieved by learners through the utilization of learning strategies (Zimmerman, 1986; Pintrich & Schrauben, 1992). However, quantity does not entail quality. Even if the learners employ a plethora of learning strategies, this does not mean a guaranteed success at learning. This possibility of failure may stem from the learners' lack of ability to use learning strategies properly (Weinstein & Hume, 1998).

In the current study, it was found out that secondary school students reported more frequent use of learning strategies in Turkish. In English, however, both groups reported almost the same amount of learning strategy use. Figure 8 showcases this:

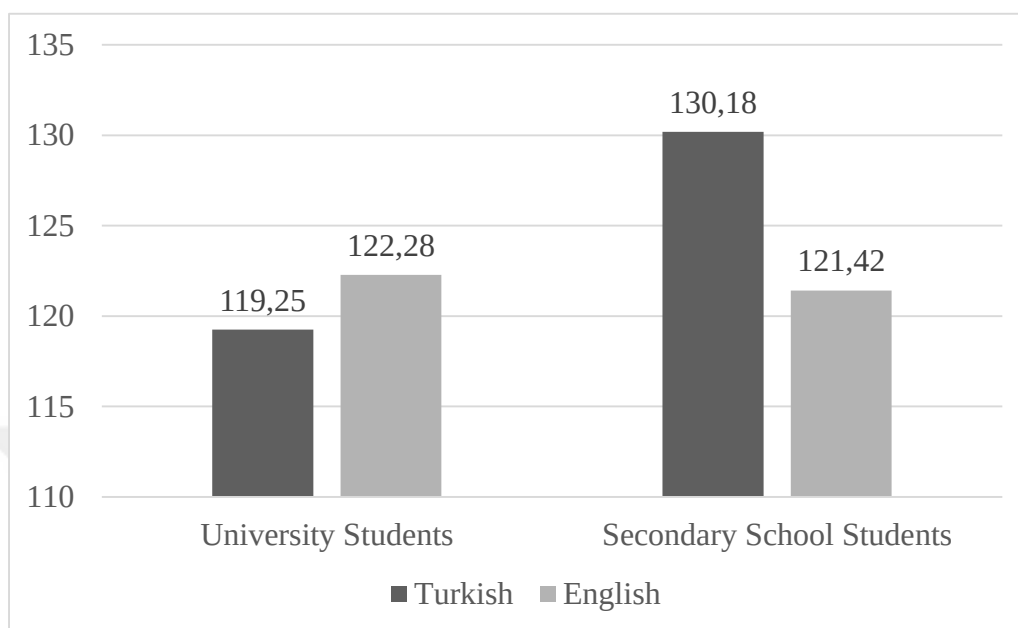


Figure 8. Reported Frequency of Learning Strategy Use

Therefore, it can be concluded that overall, secondary school students employ the learning strategies more frequently than the university students. It may also be expected that secondary school students would have an edge in reading comprehension test scores when compared to the university level counterparts.

To determine whether frequent use of learning strategies results in higher achievement in the reading comprehension test, the scores are displayed in Figure 9:

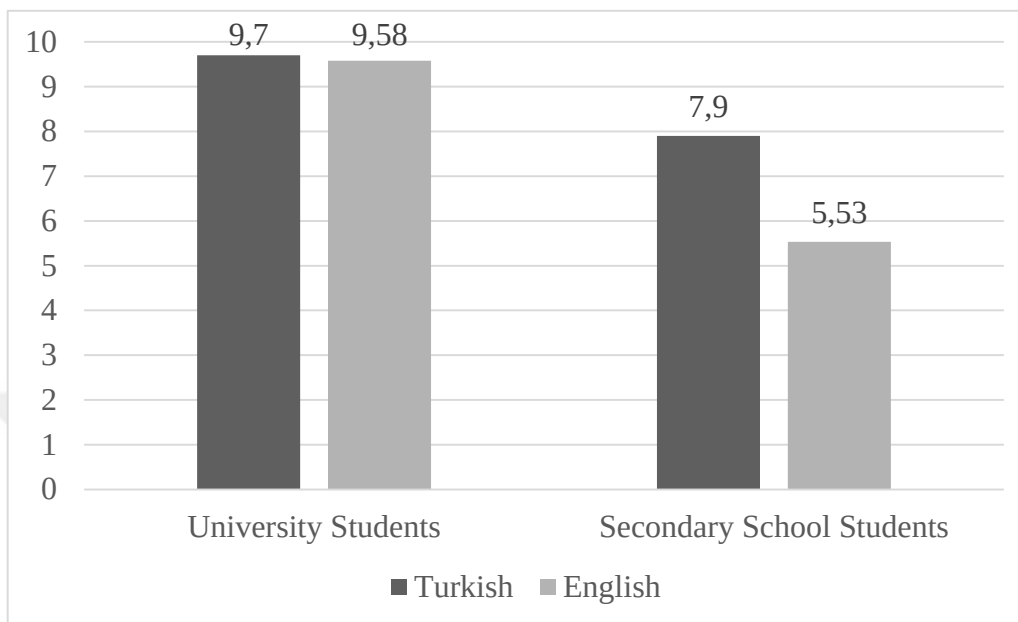


Figure 9. Means of Reading Comprehension Test Scores

It is observed that university students achieved almost perfectly in both tests. The achievement difference between languages is minimal. Secondary school students, on the other hand, scored 2.1 points below the perfect score in Turkish. English performance of the secondary school students was only mediocre. Under all circumstances, secondary school students were not able to reach the success level of university students in reading comprehension tests.

Weinstein and Hume (1998) state that knowing how to implement the learning strategies into the learning process properly is just as important knowing which learning strategies to employ. The findings of this study complement their statement. Secondary school students implemented the same amount of learning strategies as university students in English and they employed the strategies even more frequently in Turkish. However, not knowing how to use the learning strategies properly, they were not able to achieve as well as university students did.

Academic success is believed to be achieved through self-regulated learning process which is conducted by the learners through the use of learning strategies (Zimmerman, 1986; Pintrich & Schrauben, 1992). The findings prove that frequency of learning strategy use and the variety of learning strategies do not necessarily reflect that the learner reached self-regulation stage

at learning. In turn, neither do they reflect academic success. When the self-regulated and academically successful learners are studied for discovering what renders them the way they are, it would not be surprising to find out that they are using a variety of learning strategies frequently in the learning process. However, it would not be logical to assume that every learner employing a lot of strategies for multiple times in a learning process is successful and self-regulated. It is very important to structure the premises of this syllogism correctly, otherwise the conclusion detaches from reality very rapidly.

Pearson correlations showed that only secondary school students' use of learning strategies in English was correlated with their test scores. Therefore, it can be stated that the secondary school students benefited the most from using the learning strategies in English. However, this was not the case with university students' learning strategy use in both languages and the secondary school students' strategy use in Turkish. Hence, it is not necessary instructing the older learners with higher proficiency levels on the learning strategies. Again, the younger learners with high proficiency levels do not need learning strategy instruction. Thus, the learning strategy training can be more beneficial for the younger learners with lower proficiency levels.

In conclusion, it is clear from the findings that employing a lot of learning strategies frequently does not necessarily mean success at learning. It would be wiser for the learner to discover how the learning strategies at one's disposal work the best. University students, having more experience at learning, may have figured out how to implement learning strategies effectively without any instruction on learning strategies. Secondary school students, on the other hand, seem to be lacking this effectiveness when employing learning strategies. After all, what matters is how effectively the learning strategies are employed rather than how many of them or how many times they were used during a task. The only immediate method to lessen the difference between the frequency of strategy use and achievement would be through learning strategy training. As suggested by Dansereau et al. (1975), Wong-Fillmore (1976), Dansereau (1978), Weinstein (1978), Rigney (1978), and Hosenfeld, Arnold and Kirchofer (1981), if the secondary school students had a training for learning strategies, the gap between the university students' and the secondary school students' achievement levels would be smaller.

5.2 Conclusion

The use of learning strategies helps the learners through the learning process. The strategies altogether or the effective ways to employ them can be taught to the learner. However, there are many variables that affect the strategy use such as language used for the learning, age, and proficiency. The present study, through comparison of two age groups which differ in proficiency in their foreign language, aims to discover how language difference, age, and proficiency affect the strategy use. The procedure followed a survey-study scheme; the participants from both groups were given two reading comprehension tests in Turkish and English. After the tests, through Learning Strategies Determination Scale (Güven, 2004; Güven, 2008), the data concerning the strategies used by the participants were gathered. The data, then, were analysed with the help of independent variables T-tests and Pearson correlations.

With regard to language difference and the strategy use, it was found that university students, having high proficiency levels in the foreign language, reported similar use of learning strategies in Turkish and English. Independent samples T-tests showed that rehearsal strategies, organizing strategies, affective strategies, elaboration strategies and comprehension monitoring strategies were used at a similar frequency by this group. Thus, the language difference was demonstrated to have minimal effect on the strategy use because the university students were as proficient in the foreign language as in their mother tongue.

Secondary school students' strategy use, on the other hand, was found to be dependent on the language. The results of the T-tests on the strategy use by this group revealed that the strategy use showed differences between Turkish and English, except for the comprehension monitoring strategies consisting of self-questioning, error detection and problem solving. The reason why these strategies were used in both languages at a similar frequency could have stemmed from the ease of transfer due to the simplicity of the cognitive processes underlying. In other words, the proficiency gap between the mother tongue and the foreign language is the determinant factor which affects the use of learning strategies. The wider the gap is, the more different the learning strategy use.

As another concern of the study, age was discovered to be a factor that has an influence on the learning strategies. It was found that secondary school students preferred cognitive and

metacognitive strategies more frequently than affective strategies (O'Malley et al., 1985a; Purdie & Oliver, 1999). Unexpectedly, university students employed elaboration strategies, affective-motivational strategies, and comprehension monitoring strategies respectively. This demonstrated that the older learners employed concrete and simpler strategies such as affective strategies; and in the same way, the younger learners were able to use abstract and rather complex strategies such as cognitive and metacognitive ones. Therefore, the learning strategy use were affected by age. However, this was not in the expected way as in Gunning's (1997) study which proposes a shift from concrete to abstract. To conclude, learning strategy use did not follow such a sequential pattern in terms of age.

The findings of the study displayed that there was a curvilinear relationship between the language proficiency and learning strategy use (Phillips, 1991; Hong-Nam & Leavell, 2006). To put it clearly, learners who possess an average level of proficiency tend to use learning strategies more frequently. This finding was in contrast with other studies which claimed a linear relationship (Chamot & Kupper, 1989; Chamot, 1995; Green & Oxford, 1995; Dreyer & Oxford, 1996; Gunning, 1997; Park, 1997; Sheorey, 1999; Bremner, 1999; Kayad, 1999; Nambiar, 1996; Sarjit Kaur & Salasiah, 1998; Bruen, 2001; Griffiths, 2003; Peacock & Ho, 2003; Gan, Humphreys & Hamp-Lyons, 2004; Lai, 2005). Consequently, it was observed that the frequency of learning strategy use did not necessarily increase in accordance with the proficiency level of the learner.

In present study, secondary school students employed the learning strategies more frequently than university students. However, the comprehension test scores of the former group were significantly lower than the scores of the latter. Therefore, it was clear that frequent strategy use did not enable the secondary school students to be more successful. University students, on the other hand, employing the learning strategies relatively less frequently than the other group still achieved higher scores. As a conclusion, concerning the success at reading comprehension, the effective use of learning strategies bore more importance than the frequency of strategy use.

To summarize, according to the current study, language difference, age and proficiency had an effect on the learning strategies. Also, the performance of the learner in using the strategies was discovered to be of great importance in order to achieve better at reading comprehension.

5.3 Implications and Suggestions

It is a fact that learning strategy training programs help learners to be more effective at learning (Rubin, 1975; Stern, 1975; Wesche, 1975; Wong-Fillmore, 1976; Naiman et al., 1978; Dansereau, 1978; Weinstein, 1978; Rigney, 1978; Slavin, 1980; Hosenfeld, Arnold & Kirchofer, 1981; Brown and Palinscar, 1982; Dansereau, Larson & Spurlin, 1983; Nambiar, 2009). It is indicated in this study that the learning strategies employed in the mother tongue and the foreign language may differ if the learner does not possess similar levels of proficiency in both languages. Thereby, foreign language teachers should give importance to instructing their lower proficiency students on the learning strategies as well as on the course content.

The reading comprehension test scores of the current study indicated that the frequency of learning strategy use was not proportional to the achievement levels and Pearson correlation tests revealed that the younger group benefited more from the use of learning strategies in English. This finding suggests that learning strategy instruction would be more beneficial for 12-14 year-old learners with lower proficiency levels. That is to say, efficiency at using the strategies is also important. To provide an insight for learners into the effective ways of employing the learning strategies, teachers should lead them to figure out the proper use of strategies through the aid of instruction (Dansereau, Long, McDonald, Actkinson, Ellis, Collins, Williams & Evans, 1975; Wong-Fillmore, 1976; Dansereau, 1978; Weinstein, 1978; Rigney, 1978; Hosenfeld, Arnold & Kirchofer, 1981). By doing so, less successful learners would be able to keep up with more successful learners.

Reaching to a certain age (18-19) and threshold in proficiency (C1 or above) seems to lessen the effect of frequency of learning strategy use. Even though employing the strategies less frequently, these learners were able to achieve higher scores. Therefore, teachers should take note that they do not need to instruct these learners on the learning strategies. However, when instructing the younger learners on the learning strategies, there seems to be no need for teachers to consider the age of these learners as a limiting factor since the learning strategy use does not develop in a pattern from concrete to abstract. The younger learners were able to use abstract strategies, and the older learners preferred concrete strategies (Chamot, 1996). While teaching to 12-14 year-old learners with lower proficiency levels, the foreign language teachers should give importance to learning strategies. According to this study, these learners tended to use the learning

strategies more frequently and got the most out of them. On the other side, for the learners, using the strategies which suit well with their own way of learning may be the most effective action to be taken in a learning situation. With the aid of the learning strategy training, the aim of the teacher should be helping the learners discover as many learning strategies as they can do, and the learners should seek for the strategies which work the best for them.

As a consequence, language difference, age and proficiency should be taken into consideration as the elements which reveal the deficiencies of the learners with regard to their learning strategy use. For further research, another age group can be included so as to collect more data on age, proficiency and learning strategy use. To sum up, learning strategy training can be useful for young learners with lower proficiency levels; however, it may not create the same effect on the older learners with high proficiency levels.

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APPENDICES

Appendix 1. Academic Curriculum Vitae of the MA Student

Kişisel Bilgiler			
Name and Surname	Murat Bayalaş		
E-mail	muratbayalas@gmail.com		
Foreign Language(s)	English		
Field	ELT		
Öğrenim Bilgileri			
	University	Department	Year
Undergraduate Degree	Dokuz Eylül University	English Language Teaching	2011-2015
Dissertation title	An Exploratory Study on Age and Language Differences in the Utilization of Learning Strategies		
Supervisor	Prof. Dr. F. Feryal Çubukçu		

Appendix 2. English Reading Comprehension Test¹

1. Read the newspaper article below and answer the questions. Your number, ...

Turn off your TV!

Can you live without television for a week? That's what millions of people do every April as part of TV-Turnoff Week. Some anti-television groups organize this activity. "Surely, TV can sometimes be fun and exciting, especially when you're tired at the end of the day," says Rudy Matthews from NoTV.com, "but most of the time it's just boring. We want people to turn off the TV and do something more interesting instead." An ordinary American family watches TV for 7 hours and 40 minutes every day, and British men watch 27 hours a week (British women "only" 24 hours). This means we spend over ten years of our life watching TV!

Many people are worried about children. Every American child sees 16,000 murders on TV before he or she is 18, and 20,000 commercials every year. This is a problem. Children spend more time watching TV than in school. TV-Turnoff Week started in the USA in 1995 and now happens every year in the UK, France, the Netherlands and Australia. More than 25 million people turn off their televisions for a week, so why don't you do the same?

A) Choose the correct answer.

1. Rudy Matthews says that watching TV is most of the time.
a) exciting b) fun
c) boring d) interesting
2. An average person spends over years of his/her life watching TV.
a) ten b) twelve
c) fifteen d) twenty
3. British women watch TV British men.
a) more than
b) less than
c) more carefully than
d) less loudly than
4. TV-Turnoff Week was first introduced in
a) the UK b) the USA
c) the Netherlands d) France
5. TV-Turnoff Week is celebrated in every year.
a) March b) April
c) May d) June
6. American children see killings on TV before the age of 18.
a) 7,500 b) 12,000
c) 16,000 d) 20,000
7. American children watch advertisements on TV every year.
a) 12,000 b) 16,000
c) 20,000 d) 24,000
8. Rudy Matthews works for a called NoTV.
a) website b) TV channel
c) newspaper d) company
9. People are worried about children because
a) they don't attend to school regularly
b) they watch TV during the TV-Turnoff Week
c) they are exposed to violence and crimes through the TV
d) they spend more time at school than watching TV
10. Which of the following statements is **TRUE** according to the text?
a) TV-Turnoff Week is celebrated by only 20 million people.
b) TV-Turnoff Week was introduced when TV was first invented.
c) An average American family watches TV less than 8 hours a day.
d) Everyone in the world turns off their TV in TV-Turnoff week.

¹ An excerpt from Face2Face pre-intermediate students' book (2nd Edition, pg. 37)

Appendix 3. Turkish Reading Comprehension Test²

1. Aşağıdaki haber yazısını okuyup soruları cevaplayınız. Numaranız, ...

Kara Trenin Son Makinisti

Seferleri 1978'den sonra azalmaya başlayan ve 1990 sonrası tamamı raylardan uzaklaşarak bir kısmı hurdaya, bazıları da müzelere çekilen buharlı lokomotiflerden hâlihazırda kullanılabilir durumdaki sonuncusu Uşak'ta bulunuyor. Çoğunlukla "buharlı lokomotifleri" tanımak isteyen ziyaretçileri ağırlayan bu lokomotif; belgesel, dizi, film ve reklam çekimleri için zaman zaman bulunduğu yerden ayrı kaldığı raylar üzerine indiriliyor.

Türkiye'de çalışan son "kara trenin" son makinisti ise 32 yıldır baba mesleğini sürdüren 58 yaşındaki Naci Akdağ. Belgesel çekimi için İzmir'den Uşak'a gelen Akdağ, AA muhabirine yaptığı açıklamada, Türkiye'de buharlı lokomotif kullanabilen iki makinistin daha bulunduğunu, kara trenin dizi, belgesel, reklam çekimleri için raylara indirildiğinde genelde kendisinin bu görevi üstlendiğini bildirdi.

A) Doğru şıkkı işaretleyiniz.

1. Türkiye'de ulaşımda kullanılan son kara trenler en son görülmüştür.

- a) 1970'te b) 1978'de
c) 1980'de d) 1990'da

2. Son kullanılabilir durumda olan buharlı lokomotif ilinde bulunmaktadır.

- a) İzmir b) Uşak
c) İstanbul d) Ankara

3. Müzelerde bulunan buharlı lokomotifler..... sektöründe halen kullanılmaktadır.

- a) sinema b) eğitim
c) ulaşım d) taşıma

4. Buharlı lokomotifleri kullanabilen Naci Akdağ hariç makinist daha bulunmaktadır.

- a) bir b) iki
c) üç d) dört

5., Naci Akdağ için çocuklukta hayalini kurduğu meslekti.

- a) Şoförlük b) Kömürcülük
c) Makinistlik d) Pilotluk

6. Naci Akdağ'ın makinistliğe ve trenlere olan ilgisi ne zaman başlamıştır?

- a) Lise çağında. b) 1978'de.
c) İlkokul çağında. d) 32 yıl önce.

Makinist Babanın Oğlu

Babasının da buharlı lokomotif makinisti olduğunu, çocukluğunda babasının görevi gereği bulunduğu istasyonlarda lokomotiflerin geçişini hayranlıkla izlediğini ve kısa mesafelerde babasıyla yolculuklara katıldığını belirten Akdağ "İlkokul çağlarımda bile onlara yardım ederdim, kömür atardım. İdeallerimdeki tek meslek buydu. Babam çok zorladı, 'Oğlum başka iş yok mu?' diye ama benim tek yapacağım iş makinistlikti ve idealimdeki baba mesleğine ulaştım." dedi.

Akdağ şöyle konuştu: "Şu an buharlı lokomotifte görev alacak personel yok denecek kadar az. Bu açığı kapatmak için 12 gönüllü arkadaş seçtik ve eğitim veriyoruz. Ayrıca altı farklı tipte daha buharlı lokomotifin yapılacağını duyduk, bu bizim için sevindirici oldu. Dünya mirası dediğimiz şu makineler çalışsın istiyorum ki çocuklarımız, torunlarımız bunları sadece siyah beyaz filmlerde izlemesin, teknolojinin nereye geldiğini görsünler.

7. Buharlı lokomotiflerin 1990 sonrası bir kısmı müzelere kaldırılmış bir kısmı ise

- a) yurtdışına satılmıştır.
b) personel eğitimi için okullara bağışlanmıştır.
c) hurdaya verilmiştir.
d) sinema sektörüne satılmıştır.

8. Aşağıdaki ifadeye **uygun olmayan** sözcüğü işaretleyiniz.

Çoğunlukla buharlı lokomotifler son zamanlarda çekimleri için kullanılmaktadır.

- a) klip b) reklam
c) film d) belgesel

9. Naci Akdağ neden buharlı lokomotiflerin çalışmasını istiyor?

- a) Dizi, film çekimlerinde kullanılmaları için.
b) Buharlı lokomotifleri az sayıda kişi kullanabildiği için.
c) Gelecek nesillerin de buharlı lokomotifleri görebilmesi için.
d) Müzelerde sergilenmeleri için.

10. Bu metinle ilgili aşağıda verilen bilgilerden hangisi yanlıştır?

- a) Buharlı lokomotifler günümüzde dizi çekimleri için kullanılmaktadır.
b) Son kullanılabilir durumda olan buharlı lokomotif Uşak'ta bulunmaktadır.
c) Naci Akdağ ve babası aynı mesleğe sahiptir.
d) Ülkemizde buharlı lokomotifte görev alacak personel sayısı yeterlidir.

² An excerpt from an article published on *Milliyet Online Newspaper* (29.08.2014).

Appendix 4. Learning Strategies Determination Scale for Secondary School Students (English)

ÖĞRENME STRATEJİLERİNİ BELİRLEME ÖLÇEĞİ (İNGİLİZCE)

Sevgili öğrenciler,

Bu ölçeğin amacı İngilizce’de kullandığınız öğrenme stratejilerini belirlemektir. Bu ölçeği size verilen İngilizce okuma-anlama görevini ve İngilizce öğrenimini göz önünde bulundurarak yanıtlamanızı rica ediyorum.

Katıldığınız için teşekkür ederim.

Açıklama: Aşağıda öğrenme stratejileri ile ilgili 35 adet önermeye (ifade) yer verilmiştir. Her bir önermenin karşısında yanıtlama amacıyla kullanabileceğiniz "bana tamamen uygun, bana oldukça uygun, bana biraz uygun, bana pek uygun değil, bana hiç uygun değil" biçiminde en olumludan en olumsuz doğru bir derecelendirme ölçeği bulunmaktadır. Her bir önermeyi dikkatle okuduktan sonra, bunun size ne ölçüde uygun olduğunu ölçeğin üzerinde ayrılan yere (X) işareti koyarak belirtiniz: Bir önermeyi okuduktan sonra ilk anda size uygun gelen seçeneği işaretleyiniz. Lütfen işaretsiz madde bırakmayınız. Anketi yanıtlamak yaklaşık 25 dakikanızı alacaktır.

Önermeler	Bana tamamen uygun	Bana oldukça uygun	Bana biraz uygun	Bana Pek uygun değil	Bana hiç uygun değil
1. Ders çalışırken konuyu kendi cümlelerimle açıklamaya çalışırım.					
2. Yeni bir sözcüğü öğrenirken gerektiğinde onu cümle içinde kullanarak öğrenmeye çalışırım.					
3. Ders çalışırken konuyla ilgili kendime sorular sorarak onları yanıtlarım.					
4. Yeni bilgiyi daha önce öğrendiğim başka bir bilgiyle benzerliğini kurarak öğrenmeye çalışırım.					
5. Çalışma sonunda öğrenip öğrenmediğimi belirlemek için kendime sorular sorar ve yanıtlar veririm.					
6. Konu başlıklarından yola çıkarak önemli noktaları belirlerim.					
7. Çalıştığım konuya ilişkin bilgileri kısa bir öykü oluşturarak zihnimde canlandırmaya çalışırım.					
8. Üzerinde çalıştığım konuyu anlamak için özetini çıkarırım.					

9. Derste önemli gördüğüm ve öğretmenimin vurguladığı noktaları not alırım.					
10. Okuduğum metinde öncelikle ana düşünceyi bulmayı çalışırım.					
11. Ders çalışma saatlerim günün her zaman aynı saatlerindedir.					
12. Ders çalışmaya başlamadan önce ne çalışacağıma, nasıl çalışacağıma ve ne kadar süre çalışacağıma tam olarak karar veririm.					
13. Sınavlara hazırlanmanın en iyi yolu her gün düzenli şekilde ders çalışmaktır.					
14. Çalışmaya başlamadan önce bir plan yaparım ve bu plana göre çalışmaya devam ederim.					
15. Derslerim için günlük, haftalık ve aylık planlar yaparım.					
16. Ders çalışırken sadece çalıştığım konuya odaklanırım.					
17. Konuyla ilgili her notu düzenli şekilde tutarım.					
18. Her gün ders çalışırım.					
19. Öğreneceğim konuyla ilgili olgular, kavramlar ve örnekler arasındaki ilişkileri gösteren bilgi haritaları (örn; canlı-bitki-ağaç ilişkisi) oluştururum.					
20. Çalışırken bilgileri şekil veya tablo biçiminde düzenlemekte güçlük çekiyorum.					
21. Metinde öğreneceğim kavramların birbirleriyle ilişkisini gösteren (örn. kök - yaprak) kavram haritaları oluşturmaya çalışırım.					
22. Öğrenmem gereken bilgileri ortak özelliklerine göre gruplayarak öğrenirim.					
23. Çalıştığım konuyla ilgili fikir ve kavramları basitten karmaşığa doğru sıralayarak öğrenirim.					
24. Çalıştığım konularda ana düşünce ile yan düşünceleri ayırt etmekte zorlanıyorum.					
25. Konuyu derste öğrenmeye çalışırım.					

26. Derslerde başarının kendi çabama bağlı olduğuna inanırım.					
27. Yeni şeyler öğrenmeyi her zaman severim					
28. Düzenli ders çalışmanın başarı için gerekli olduğuna inanırım.					
29. Ders çalışırken başarısız olacağımı düşünüp endişelenirim.					
30. Ders çalışırken çalışma ortamımda konsantrasyonumu bozacak eşyaların olmamasına özen gösteririm. (Örn: masada, odada)					
31. Kalabalık veya gürültülü ortamda ders çalışmamaya özen gösteririm.					
32. Sınavda çıkacağını düşündüğüm konu ya da konu bölümlerini tamamen ezberlerim.					
33. Konuyla ilgili önemli bilgileri çıkarıp onları ezberlerim.					
34. Ders çalışırken tuttuğum ders notlarını tekrar ederek ezberlemeye çalışırım.					
35. Bir konu öğrenirken ezberlemeyi tercih ederim.					

Appendix 5. Learning Strategies Determination Scale for Secondary School Students (Turkish)

ÖĞRENME STRATEJİLERİNİ BELİRLEME ÖLÇEĞİ (TÜRKÇE)

Sevgili öğrenciler,

Bu ölçeğin amacı Türkçe’de kullandığınız öğrenme stratejilerini belirlemektir. Bu ölçeği size verilen Türkçe okuma-anlama görevini ve Türkçe öğrenimini göz önünde bulundurarak yanıtlamanızı rica ediyorum.

Katıldığınız için teşekkür ederim.

Açıklama: Aşağıda öğrenme stratejileri ile ilgili 35 adet önermeye (ifade) yer verilmiştir. Her bir önermenin karşısında yanıtlama amacıyla kullanabileceğiniz "bana tamamen uygun, bana oldukça uygun, bana biraz uygun, bana pek uygun değil, bana hiç uygun değil" biçiminde en olumludan en olumsuz doğru bir derecelendirme ölçeği bulunmaktadır. Her bir önermeyi dikkatle okuduktan sonra, bunun size ne ölçüde uygun olduğunu ölçeğin üzerinde ayrılan yere (X) işareti koyarak belirtiniz: Bir önermeyi okuduktan sonra ilk anda size uygun gelen seçeneği işaretleyiniz. Lütfen işaretsiz madde bırakmayınız. Anketi yanıtlamak yaklaşık 25 dakikanızı alacaktır.

Önermeler	Bana tamamen uygun	Bana oldukça uygun	Bana biraz uygun	Bana Pek uygun değil	Bana hiç uygun değil
1. Ders çalışırken konuyu kendi cümlelerimle açıklamaya çalışırım.					
2. Yeni bir sözcüğü öğrenirken gerektiğinde onu cümle içinde kullanarak öğrenmeye çalışırım.					
3. Ders çalışırken konuyla ilgili kendime sorular sorarak onları yanıtlarım.					
4. Yeni bilgiyi daha önce öğrendiğim başka bir bilgiyle benzerliğini kurarak öğrenmeye çalışırım.					
5. Çalışma sonunda öğrenip öğrenmediğimi belirlemek için kendime sorular sorar ve yanıtlar veririm.					
6. Konu başlıklarından yola çıkarak önemli noktaları belirlerim.					
7. Çalıştığım konuya ilişkin bilgileri kısa bir öykü oluşturarak zihnimde canlandırmaya çalışırım.					

8. Üzerinde çalıştığım konuyu anlamak için özetini çıkarırım.					
9. Derste önemli gördüğüm ve öğretmenimin vurguladığı noktaları not alırım.					
10. Okuduğum metinde öncelikle ana düşünceyi bulmayı çalışırım.					
11. Ders çalışma saatlerim günün her zaman aynı saatlerindedir.					
12. Ders çalışmaya başlamadan önce ne çalışacağıma, nasıl çalışacağıma ve ne kadar süre çalışacağıma tam olarak karar veririm.					
13. Sınavlara hazırlanmanın en iyi yolu her gün düzenli şekilde ders çalışmaktır.					
14. Çalışmaya başlamadan önce bir plan yaparım ve bu plana göre çalışmaya devam ederim.					
15. Derslerim için günlük, haftalık ve aylık planlar yaparım.					
16. Ders çalışırken sadece çalıştığım konuya odaklanırım.					
17. Konuyla ilgili her notu düzenli şekilde tutarım.					
18. Her gün ders çalışırım.					
19. Öğreneceğim konuyla ilgili olgular, kavramlar ve örnekler arasındaki ilişkileri gösteren bilgi haritaları (örn; canlı-bitki-ağaç ilişkisi) oluştururum.					
20. Çalışırken bilgileri şekil veya tablo biçiminde düzenlemekte güçlük çekiyorum.					
21. Metinde öğreneceğim kavramların birbirleriyle ilişkisini gösteren (örn. kök - yaprak) kavram haritaları oluşturmaya çalışırım.					
22. Öğrenmem gereken bilgileri ortak özelliklerine göre gruplayarak öğrenirim.					
23. Çalıştığım konuyla ilgili fikir ve kavramları basitten karmaşığa doğru sıralayarak öğrenirim.					

24. Çalıştığım konularda ana düşünce ile yan düşünceleri ayırt etmekte zorlanıyorum.					
25. Konuyu derste öğrenmeye çalışırım.					
26. Derslerde başarının kendi çabama bağlı olduğuna inanırım.					
27. Yeni şeyler öğrenmeyi her zaman severim					
28. Düzenli ders çalışmanın başarı için gerekli olduğuna inanırım.					
29. Ders çalışırken başarısız olacağımı düşünüp endişelenirim.					
30. Ders çalışırken çalışma ortamımda konsantrasyonumu bozacak eşyaların olmamasına özen gösteririm. (Örn: masada, odada)					
31. Kalabalık veya gürültülü ortamda ders çalışmamaya özen gösteririm.					
32. Sınavda çıkacağını düşündüğüm konu ya da konu bölümlerini tamamen ezberlerim.					
33. Konuyla ilgili önemli bilgileri çıkarıp onları ezberlerim.					
34. Ders çalışırken tuttuğum ders notlarını tekrar ederek ezberlemeye çalışırım.					
35. Bir konu öğrenirken ezberlemeyi tercih ederim.					

Appendix 6. Learning Strategies Determination Scale for University Students (Turkish)

ÖĞRENME STRATEJİLERİNİ BELİRLEME ÖLÇEĞİ (TÜRKÇE)

Sevgili öğrenciler,

Bu ölçeğin amacı Türkçe’de kullandığınız öğrenme stratejilerini belirlemektir. Bu ölçeği size verilen Türkçe okuma-anlama görevini ve Türkçe öğrenimini göz önünde bulundurarak yanıtlamanızı rica ediyorum.

Katıldığınız için teşekkür ederim.

Açıklama: Aşağıda öğrenme stratejileri ile ilgili 39 adet önermeye (ifade) yer verilmiştir. Her bir önermenin karşısında yanıtlama amacıyla kullanabileceğiniz "bana tamamen uygun, bana oldukça uygun, bana biraz uygun, bana pek uygun değil, bana hiç uygun değil" biçiminde en olumludan en olumsuz doğru bir derecelendirme ölçeği bulunmaktadır. Her bir önermeyi dikkatle okuduktan sonra, bunun size ne ölçüde uygun olduğunu ölçeğin üzerinde ayrılan yere (X) işareti koyarak belirtiniz: Bir önermeyi okuduktan sonra ilk anda size uygun gelen seçeneği işaretleyiniz. Lütfen işaretsiz madde bırakmayınız. Anketi yanıtlamak yaklaşık 25 dakikanızı alacaktır.

Önermeler	Bana tamamen uygun	Bana oldukça uygun	Bana biraz uygun	Bana Pek uygun değil	Bana hiç uygun değil
1. Ders çalışırken, önemli gördüğüm adları, kavramları, tarihleri birkaç kez sessiz okuyarak tekrar ederim.					
2. Çalıştığım konuya ilişkin bilgileri kısa bir öykü oluşturarak zihnimde canlandırmaya çalışırım.					
3. Çalışacağım konunun ne ile ilgili olduğunu ve ne tür bilgileri kapsadığını anlamak için ana başlıkları gözden geçiririm.					
4. Ders çalışırken konuyla ilgili kendime sorular sorarak onları yanıtlarım.					
5. Ders çalışırken dikkatimi sadece çalıştığım konu üzerine yoğunlaştırırım.					
6. Öğreneceğim konudaki ana düşünceleri şema çıkararak çalışırım.					
7. Öğrenmemi sağlayan bir stratejiyi sonraki öğrenmelerimde kullanmaya çalışırım.					

8. İlgimi çekmeyen derslerde bile yapmam gereken çalışmaları tam olarak yaparım.					
9. Ders çalışırken kavramları çeşitli simgelerle zihnimde canlandırıyorum.					
10. Derslere ve sınavlara çalışırken konuyu en ayrıntısına varıncaya kadar birkaç sesli okuyarak tekrar ederim.					
11. Ders çalışırken öncelikle konunun ana düşüncesi ile yardımcı düşüncelerini belirlemeye çalışırım.					
12. Öğreneceğim konuyla ilgili olgular, kavramlar ve örnekler arasındaki ilişkileri gösteren bilgi haritaları oluştururum.					
13. Ders çalışırken metni sessiz bicimde -içimden- okuyarak tekrar ederim.					
14. Ders çalışırken farklı bicimde yazılmış sözcük ya da cümlelere (italik, koyu, altı çizili vb.) daha çok önem veririm.					
15. Yeni bilgiyi daha önce öğrendiğim başka bir bilgiyle benzerliğini kurarak öğrenmeye çalışırım.					
16. Ders çalışmaya başlamadan önce çalışmamı engelleyeceğini düşündüğüm gürültü, dağınıklık, kalabalık gibi olumsuz durumları ortadan kaldırıyorum.					
17. Ders çalışırken konunun içerisindeki şekil ve çizelgelerin açıklamalarına dikkat ederim.					
18. Öğrenmem gereken bilgileri ortak özelliklerine göre gruplandırarak öğrenirim.					
19. Ders çalışırken konuyu metinde verildiğinden farklı olarak kendi cümlelerimle anlatmayı tercih ederim.					
20. Metinde önemli gördüğüm bilgileri metinde geçen biçimiyle aynen not alırım.					
21. Öğretmenimin yaptığı ödevlerle ilgili dönüt vermesini isterim.					
22. Eksik öğrenmelerimi tamamlamak ya da yanlış öğrenmelerimi düzeltmek için kendime yeni öğrenme stratejileri belirlerim.					

23. Ders çalışırken konuda geçen işlemlerin aşamalarını şekille gösteririm.					
24. Ders çalışırken verilen metnin özetini çıkarırım.					
25. Ders çalışmaya başlamadan önce plan yapar ve bu plana göre çalışmamı yürütürüm.					
26. Çalıştığım konuda sınavda soru olarak çıkabileceğini düşündüğüm yerleri işaretlerim.					
27. Çalıştığım metinde önemli gördüğüm yerlerin altını çizerek bunları tekrar ederim.					
28. Çalıştığım materyalde metin kenarlarına kendi cümlelerimle açıklamalar yaparım.					
29. Çalışma sonunda yeterli düzeyde öğrenip öğrenmediğimi belirlemek için kendime sorular sorar ve yanıtlar veririm.					
30. Derslerde başarının kendi çabama bağlı olduğuna inanırım.					
31. Yeni bir sözcüğü öğrenirken gerektiğinde onu cümle içinde kullanarak öğrenmeye çalışırım.					
32. Çalışırken bir konuyla ilgili bilgileri çizelge biçiminde düzenlerim.					
33. Eksik ya da yanlış öğrendiğim noktaları niçin öğrenemediğimi araştırırım.					
34. Yeni şeyler öğrenmek bana zevk vermez.					
35. Derste önemli gördüğüm ve öğretmenimin vurguladığı noktaları not alırım.					
36. Ders çalışırken tuttuğum ders notlarını kendi kendime sesli tekrar ederek ezberlemeye çalışırım.					
37. Ders çalışma yöntemimi konunun özelliğine göre belirlerim.					
38. Öğrenmeye güdülenmek için geleceğimle ilgili amaçlarımı düşünürüm.					
39. Öğreneceğim konunun öncelikle ana hatlarını ve bunları oluşturan alt bilgilerini çıkartırım.					

Appendix 7. Learning Strategies Determination Scale for University Students (English)

ÖĞRENME STRATEJİLERİNİ BELİRLEME ÖLÇEĞİ (İNGİLİZCE)

Sevgili öğrenciler,

Bu ölçeğin amacı İngilizce’de kullandığınız öğrenme stratejilerini belirlemektir. Bu ölçeği size verilen İngilizce okuma-anlama görevini ve İngilizce öğrenimini göz önünde bulundurarak yanıtlamanızı rica ediyorum.

Katıldığınız için teşekkür ederim.

Açıklama: Aşağıda öğrenme stratejileri ile ilgili 39 adet önermeye (ifade) yer verilmiştir. Her bir önermenin karşısında yanıtlama amacıyla kullanabileceğiniz "bana tamamen uygun, bana oldukça uygun, bana biraz uygun, bana pek uygun değil, bana hiç uygun değil" biçiminde en olumludan en olumsuz doğru bir derecelendirme ölçeği bulunmaktadır. Her bir önermeyi dikkatle okuduktan sonra, bunun size ne ölçüde uygun olduğunu ölçeğin üzerinde ayrılan yere (X) işareti koyarak belirtiniz: Bir önermeyi okuduktan sonra ilk anda size uygun gelen seçeneği işaretleyiniz. Lütfen işaretsiz madde bırakmayınız. Anketi yanıtlamak yaklaşık 25 dakikanızı alacaktır.

Önermeler	Bana tamamen uygun	Bana oldukça uygun	Bana biraz uygun	Bana pek uygun değil	Bana hiç uygun değil
1. Ders çalışırken, önemli gördüğüm adları, kavramları, tarihleri birkaç kez sessiz okuyarak tekrar ederim.					
2. Çalıştığım konuya ilişkin bilgileri kısa bir öykü oluşturarak zihnimde canlandırmaya çalışırım.					
3. Çalışacağım konunun ne ile ilgili olduğunu ve ne tür bilgileri kapsadığını anlamak için ana başlıkları gözden geçiririm.					
4. Ders çalışırken konuyla ilgili kendime sorular sorarak onları yanıtlarım.					
5. Ders çalışırken dikkatimi sadece çalıştığım konu üzerine yoğunlaştırırım.					
6. Öğreneceğim konudaki ana düşünceleri şema çıkararak çalışırım.					
7. Öğrenmemi sağlayan bir stratejiyi sonraki öğrenmelerimde kullanmaya çalışırım.					

8. İlgimi çekmeyen derslerde bile yapmam gereken çalışmaları tam olarak yaparım.					
9. Ders çalışırken kavramları çeşitli simgelerle zihnimde canlandırırım.					
10. Derslere ve sınavlara çalışırken konuyu en ayrıntısına varıncaya kadar birkaç sesli okuyarak tekrar ederim.					
11. Ders çalışırken öncelikle konunun ana düşüncesi ile yardımcı düşüncelerini belirlemeye çalışırım.					
12. Öğreneceğim konuyla ilgili olgular, kavramlar ve örnekler arasındaki ilişkileri gösteren bilgi haritaları oluştururum.					
13. Ders çalışırken metni sessiz bicimde -içimden- okuyarak tekrar ederim.					
14. Ders çalışırken farklı bicimde yazılmış sözcük ya da cümlelere (italik, koyu, altı çizili vb.) daha çok önem veririm.					
15. Yeni bilgiyi daha önce öğrendiğim başka bir bilgiyle benzerliğini kurarak öğrenmeye çalışırım.					
16. Ders çalışmaya başlamadan önce çalışmamı engelleyeceğini düşündüğüm gürültü, dağınıklık, kalabalık gibi olumsuz durumları ortadan kaldırırım.					
17. Ders çalışırken konunun içerisindeki şekil ve çizelgelerin açıklamalarına dikkat ederim.					
18. Öğrenmem gereken bilgileri ortak özelliklerine göre gruplandırarak öğrenirim.					
19. Ders çalışırken konuyu metinde verildiğinden farklı olarak kendi cümlelerimle anlatmayı tercih ederim.					
20. Metinde önemli gördüğüm bilgileri metinde geçen biçimiyle aynen not alırım.					
21. Öğretmenimin yaptığım ödevlerle ilgili dönüt vermesini isterim.					

22. Eksik öğrenmelerimi tamamlamak ya da yanlış öğrenmelerimi düzeltmek için kendime yeni öğrenme stratejileri belirlerim.					
23. Ders çalışırken konuda geçen işlemlerin aşamalarını şekille gösteririm.					
24. Ders çalışırken verilen metnin özetini çıkarırım.					
25. Ders çalışmaya başlamadan önce plan yapar ve bu plana göre çalışmamı yürütürüm.					
26. Çalıştığım konuda sınavda soru olarak çıkabileceğini düşündüğüm yerleri işaretlerim.					
27. Çalıştığım metinde önemli gördüğüm yerlerin altını çizerek bunları tekrar ederim.					
28. Çalıştığım materyalde metnin kenarlarına kendi cümlelerimle açıklamalar yaparım.					
29. Çalışma sonunda yeterli düzeyde öğrenip öğrenmediğimi belirlemek için kendime sorular sorar ve yanıtlar veririm.					
30. Derslerde başarının kendi çabama bağlı olduğuna inanırım.					
31. Yeni bir sözcüğü öğrenirken gerektiğinde onu cümle içinde kullanarak öğrenmeye çalışırım.					
32. Çalışırken bir konuyla ilgili bilgileri çizelge biçiminde düzenlerim.					
33. Eksik ya da yanlış öğrendiğim noktaları niçin öğrenemediğimi araştırırım.					
34. Yeni şeyler öğrenmek bana zevk vermez.					
35. Derste önemli gördüğüm ve öğretmenimin vurguladığı noktaları not alırım.					
36. Ders çalışırken tuttuğum ders notlarını kendi kendime sesli tekrar ederek ezberlemeye çalışırım.					
37. Ders çalışma yöntemimi konunun özelliğine göre belirlerim.					

38. Öğrenmeye güdülenmek için geleceğimle ilgili amaçlarımı düşünürüm.					
39. Öğreneceğim konunun öncelikle anahatlarını ve bunları oluşturan alt bilgilerini çıkartırım.					



Appendix 8. Informed Consent Form

BİLGİLENDİRİLMİŞ ONAM FORMU

Bu formun amacı katılmanız rica edilen araştırma ile ilgili olarak sizi bilgilendirmek ve katılmanız ile ilgili izin almaktır.

Bu kapsamda “An Investigation of Age and Language Differences in the Utilization of Learning Strategies” başlıklı araştırma Murat BAYALAŞ tarafından **gönüllü katılımcılarla** yürütülmektedir. Araştırma sırasında sizden alınacak bilgiler gizli tutulacak ve sadece araştırma amaçlı kullanılacaktır. Araştırma sürecinde konu ile ilgili her türlü soru ve görüşleriniz için aşağıda iletişim bilgisi bulunan araştırmacıyla görüşebilirsiniz. Bu araştırmaya **katılmama** hakkınız bulunmaktadır. Aynı zamanda çalışmaya katıldıktan sonra çalışmadan **çıkabilirsiniz**. Bu formu onaylamanız, **araştırmaya katılım için onam verdiğiniz** anlamına gelecektir.

Araştırmayla İlgili Bilgiler:

Araştırmanın Amacı: Araştırmanın amacı, yaş grubunun ve öğrenmede kullanılan dildeki yeterlik seviyesinin öğrenme stratejilerinin kullanılma sıklığına ve öğrenme stratejilerinin seçimine nasıl etki ettiğini bulmaktır.

Araştırmanın Nedeni: Katılımcılar tarafından kullanılan öğrenme stratejilerini belirlemek.

Çalışmaya Katılım Onayı:

Katılmam beklenen çalışmanın amacını, nedenini, katılmam gereken süreyi ve yeri ile ilgili bilgileri okudum ve gönüllü olarak çalışma süresince üzerime düşen sorumlulukları anladım. Çalışma ile ilgili ayrıntılı açıklamalar sözlü olarak araştırmacı tarafından yapıldı. Bu çalışma ile ilgili faydalar ve riskler ile ilgili bilgilendirildim.

Bu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

Katılımcının (Islak imzası ile)

Adı-Soyadı:

İmzası:

Araştırmacının

Adı-Soyadı: Murat BAYALAŞ

e-posta: muratbayalas@gmail.com

İmzası:

Appendix 9. Official Permission from the Institute of Educational Sciences, Dokuz Eylul University



T.C.
DOKUZ EYLÜL ÜNİVERSİTESİ
Buca Eğitim Fakültesi



Sayı : 85316909-399.99-E.34545
Konu : tez uygulaması

02/05/2019

DOKUZ EYLÜL ÜNİVERSİTESİ
(Eğitim Bilimleri Enstitüsü Müdürlüğü)

İlgi : 24.04.2019 tarih ve 878 sayılı yazınız.

Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği Yüksek Lisans Programı 2017950003 numaralı öğrencisi Murat BAYALAŞ'ın An Exploratory Study on Age and Language Differences in the Utilization of Learning Strategies konulu tez çalışması kapsamında Fakültemiz Yabancı Diller Eğitimi Bölümü İngiliz Dili Eğitimi Anabilim Dalında tez uygulaması yapma isteği dersleri aksatmamak ve uygulamayı kendisinin takip etmesi koşuluyla uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof.Dr. Ercan AKPINAR
Dekan V.



Dokuz Eylul Üniversitesi – Buca Eğitim Fakültesi
Adres: Uğur Mumcu Cad. 135 Sk. No 5 35150 Buca-İZMİR
Tel: 0 232 420 48 82 Elektronik Ağ: <http://bcef.deu.edu.tr>
Kep Adresi: dokuzeyluluniversitesi@hs01.kep.tr

Bilgi için İrtibat
Sevgi TİFTİK
Dahili

E-Posta: sevgi.tiflik@deu.edu.tr

izmir

Appendix 10. Official Permission from Manisa Provincial Directorate of National Education



T.C.
MANİSA VALİLİĞİ
İl Millî Eğitim Müdürlüğü

Sayı : 46949512-605.01-E.10458942
Konu: Araştırma İzni

28.05.2019

MÜDÜRLÜK MAKAMINA

- İlgi: a) Millî Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 22.08.2017 tarih ve 12607291 sayılı 2017 / 25 No'lu genelgesi,
b) Dokuz Eylül Üniversitesi Rektörlüğü Öğrenci İşleri Daire Başkanlığı' nın 26.04.2019 tarih ve 32753 sayılı yazısı.

İlgi (b) yazı ve ekinde; Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği yüksek lisans programı öğrencisi Murat BAYALAŞ'a ait "An Exploratory Study on Age and Language Differences in the Utilization of Learning Strategies" konulu tez çalışması için Manisa İli Kırkağaç İlçesi İlyaslar İlkokulu Müdürlüğünde araştırma yapmak istediği belirtilmektedir.

Söz konusu çalışmanın; 2018 - 2019 eğitim öğretim yılı içerisinde, eğitim öğretimi aksatmadan, yazımız ekinde bulunan onaylı formların kullanılması koşuluyla, uygulamanın yapılacağı okul idaresinin bilgi ve gözetiminde, gönüllülük esasına dayalı olarak uygulanmasında Müdürlüğümüzce bir sakınca görülmemektedir.

Makamlarınızca uygun görülmesi halinde olurlarınıza arz ederim.

M. Tahsin KALAYCI
Şube Müdürü

OLUR
28.05.2019
İsmail ÇETİN
İl Millî Eğitim Müdürü

Nisancıpaşa Mah. Atatürk Blv. 45020 MANİSA
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e-posta: ab45@meb.gov.tr

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Evrakınız <http://dosyulama.dcu.edu.tr> linkinden FD53FB0CA7 kodu ile doğrulanabilmektedir.

Appendix 11. Permissions for Learning Strategies Determination Scale

Murat bayalaş <muratbayalas@gmail.com>
Alici: mguven

Merhabalar hocam.

Adım Murat BAYALAŞ, DEU İngilizce Öğretmenliğinde yüksek lisans öğrencisiyim.

Tez aşamasındayım ve tezim için nicel bir araştırma yapıyorum. Doktora tezinizi inceledim, yaptığınız çalışmada kullandığınız ölçeğin benim araştırmama da uygun olduğunu düşünüyorum. Tezinizde yer alan öğrenme stratejileri belirleme ölçeğini kendi araştırmamda kullanmak istiyorum.

Bunun için sizden izin almak istedim. Mümkün müdür? Cevabınız için şimdiden teşekkürler.

Tezinmin başlığı: **An Exploratory Study on Age and Language Differences in the Utilization of Learning Strategies**

9 Nis 2019 14:40 (4 gün önce)

☆

↩

...

Meral GÜVEN
Alici: ben

Merhaba

ölçeği kullanmanızda sakınca yoktur.

Çalışmalarınızda kolaylıklar diliyorum.

Prof. Dr. Meral GÜVEN

21:28 (2 saat önce)

☆

↩

...

Öğrenme stratejileri belirleme ölçeği hakkında 📧

Gelen Kutusu x



Murat bayalaş <muratbayalas@gmail.com>
Alıcı: mguven ▼

Merhabalar hocam,

Adım Murat BAYALAŞ. DEÜ İngilizce Öğretmenliğinde yüksek lisans öğrencisiyim. Daha önce doktora tezinizde kullandığınız "öğrenme stratejileri belirleme ölçeği"ni kendi çalışmamda kullanmama izin verdiğiniz için çok çok teşekkür ediyorum.

Çalışmamda iki yaş grubu olduğu için ortaöğretim için kullandığımız ölçeği ilköğretim grubuna uygulamakta sorun yaşayacağımı fark ettim. WASJ (2008) 4(1) dergisinde yayımlanan makalenizdeki ölçek benim çalışmama katılan ortaokul öğrencileri için çok uygun.

Bu ölçeği çalışmamda kullanmam mümkün müdür?

Çok teşekkürler.



21 Nisan Paz 15:41 (8 saat önce) ☆ ↩ ⋮



Meral GÜVEN
Alıcı: ben ▼

Merhaba
ölçeği kullanabilirsiniz.

Prof. Dr. Meral GÜVEN

21 Nisan Paz 22:46 (1 saat önce) ☆ ↩ ⋮

