LINKING EFL LEARNING ENVIRONMENT CHARACTERISTICS TO
PERSISTENCE IN EFL LEARNING: A MIXED-DESIGN STUDY

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Approval of the Graduate School of Social Sciences

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ABSTRACT

LINKING EFL LEARNING ENVIRONMENT CHARACTERISTICS TO PERSISTENCE IN EFL LEARNING: A MIXED-DESIGN STUDY

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This study aims to investigate learning environment characteristics that may relate to persistence in EFL learning as a student affective outcome through qualitative and quantitative facets. An EFL Learning Environment Questionnaire and a Persistence Scale in EFL learning were used to investigate learning environment characteristics and persistence. In addition, qualitative interviews were carried out to describe these characteristics and persistence in EFL learning. The sample for this mixed-design study included 1365 English preparatory program students from the seven universities located in seven different geographical regions of Turkey. Quantitative data were analyzed by means of descriptive and inferential statistics. Content analysis was performed on the transcribed qualitative data by using a priori theoretical guiding scheme. Quantitative results showed that learning environment characteristics were associated with students' persistence and materials environment dimension was

found to be a stronger predictor of student persistence compared to the other learning environment dimensions. Qualitative results further corroborated the presence of associations between the six EFL learning environment characteristics and persistence in EFL learning and enlightened the outlook into the sub-factors that might influence the level of persistence in EFL within each of the EFL learning environment dimensions. When the results on variance of the relationship between persistence and EFL class factors were examined by background factors, differences were observed such as the loss of the predictive ability of particular EFL learning environment characteristics in relation to the different subsets of the same student background characteristics.

ÖZ

İNGİLİZCE ÖĞRENME ORTAMI ÖZELLİKLERİ İLE İNGİLİZCE ÖĞRENMEDE SEBAT ETME DAVRANIŞI İLİŞKİSİ: BİR KARMA DESEN ÇALIŞMASI

MUTLU, Gülçin

Doktora, Eğitim Bilimleri Bölümü

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Haziran 2017, 299 sayfa

Bu çalışma İngilizce öğrenmede sebat etme durumunu bir duyuşsal çıktı olarak alarak, sınıf öğrenme ortamı özellikleri ve sebat etme arasındaki ilişkiyi nitel ve nicel yöntemleri kullanarak araştırmayı amaçlamaktadır. Öğrenme ortamı ve İngilizce öğrenmede sebat etme davranışına ait veriler Yabancı Dil Olarak İngilizce Öğrenme Ortamı Anketi ve İngilizce Öğrenmede Sebat Etme Ölçeği ile toplanmıştır. Ayrıca öğrenme ortamı ve İngilizce öğrenmede sebat etme arasındaki ilişkiyi tanımlamak için nitel görüşmeler yapılmıştır. Bu karma desen çalışmasının örneklemini Türkiye'nin yedi coğrafi bölgesindeki yedi ayrı hazırlık okulunda öğrenim gören 1365 İngilizce hazırlık programı öğrencisi oluşturmaktadır. Nicel veriler betimsel ve çıkarımsal istatistik yöntemleri kullanılarak analiz edilmiştir. Yazıya aktarılan görüşme verileri oluşturulan öncül bir teorik çerçevenin eşliğinde içerik analizi yöntemiyle analiz edilmiştir. Nicel bulgular sınıf öğrenme ortamı özelliklerinin öğrencilerin sebat etme

davranışları ile ilişkili olduğunu göstermiştir ve bu bağlamda materyal ortam boyutu diğer boyutlara göre daha güçlü bir yordayıcıdır. Nitel sonuçlar bazındaki analizler, sözü geçen altı İngilizce öğrenme ortamı boyutu ile İngilizce öğrenmede sebat etme arasındaki ilişkiyi doğrulamaktadır ve her bir boyuta ilişkin sebat etme düzeyini etkileyen alt faktörlere daha geniş bir bakış açısı getirmektedir. Öğrenme ortamı ve sebat etme arasındaki ilişki ayrıca öğrenci özgeçmiş değişkenlerinin ayırt ediciliğine göre de incelenmiş ve var olan ilişkinin ve yordayıcı öğrenme ortamı özelliklerinin öğrenci özgeçmiş değişkenlerinin alt boyutlarında farklılıklar gösterdiği tespit edilmiştir.

Anahtar Kelimeler: İngilizce Öğrenmede Sebat Etme, yabancı dil olarak İngilizce öğrenme ortamı, sınıf öğrenme ortamı.

I dedicate this dissertation to my late father, Hüseyin Berkil, though sometimes in tough ways, who always empowered me to persist with the realization of the profound cognizance of "Knowledge is Power". This research is also dedicated to my son, Mete who somehow has taken the responsibility of empowering me after my father.

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First and foremost, I would like to express my thanks and deepest gratitude to my supervisor, Prof. Dr. Ali Yıldırım. Without his expert guidance right from the very beginning of this dissertation, it could have been impossible to complete this work. This is because of his perfectionism and critical thinking which draws me to persist to the extremes but learn more in every step.

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I would like to thank Prof Dr. Perry den Brok who accepted me as a trainee through the Erasmus + scheme of academic mobility to his institution in Netherlands. A week of suggestions and constructive feedback helped me to improve this work.

I, of course, owe too much to my family, my sister and mother. My sister, Fatma Berkil Musluoğlu was always beside me to empower and extend her frank opinions for the problems I have at every part of my life. My mother, Hafize Berkil, though not physically because of her serious health problems, was with me from her heart with her prayers and encouragement. Hanife Kanar, my right-hand in looking after my son and the house has become a real part of my family and she deserves a sincere note of thanks for her support even at the weekends and evenings. I should also thank my husband, Ömer Mutlu who took an active part in the logistics issues related to my dissertation, that is, my frequent trips to Ankara and other several trips for my academic work.

Before I finish, I should express that this dissertation was another track for me to show persistence in my life. I believe that my dissertation topic is a reflection of my life with the notion of persistence that it drew upon. I know that as we live, we will face difficulties in every part of our lives and thus it is my sincere hope that we should never give up struggling with the difficulties or barriers in front of us so as to reach our goals and manage our ultimate potentials in life.

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LIST OF ABBREVIATIONS

EFL   English as a Foreign Language

PS   Persistence Scale in English

QEFL-LE   Questionnaire on EFL Learning Environment

WIHIC   What Is Happening In This Class Questionnaire

CHAPTER 1

INTRODUCTION

This chapter included information first pertaining to the background to study to introduce the main phenomenon and constructs investigated. Following this background related to the study, the purpose and research questions of the study, significance of the study and the definition of the key terms utilized in the study were presented.

1.1. Background to the Study

"A river cuts through rock, not because of its power, but because of its persistence."

— Jim Watkins

Einstein also said "It's not that I'm so smart, it's just that I stay with problems longer" by referring to his continued efforts to sort out the problems over his geniosity. On his famous paper entitled "Hereditary Genious" in which he analyzed the biographies of famous and important people, that is, all high achievers, Galton (1892) mentioned the importance of "the concrete triple event, of ability combined with zeal and with capacity for hard labor" on the way to success (p. 38). Here, the third asset, the capacity for hard labor, refers to the idea of persistence. In a similar type of analysis, another famous psychologist, Cox (1926, p. 218) reported that "persistence of motive and effort, confidence in their abilities, and great strength or force" predicted lifetime achievement beyond the effects of IQ. We also see such examples or phenomena that may be termed as persistence and are closely associated with success in more informal accounts. An often-told story, Aesop's fable of the tortoise and the hare emphasizes the importance of continuing towards our goals even in the face of some difficulties. In the story, the tortoise though being slow never gives up his continuing towards the finish line while the hare is taking a nap in the middle of the race thinking that he has already outpaced

the tortoise and it is never possible for it to reach the finish line first. When the hare wakes up, he sees that the tortoise is about the win the race. Thus, the above accounts make the point that persistence is a known human phenomenon in our everyday experiences and in theory and closely and positively related to success.

Persistence literally refers to continuing to try to do something though one may face with difficulties (Oxford Advanced Learners' Dictionary, 2013). This term has been investigated in several disciplines and handled from different viewpoints in relation to the meaning or indication of persistence. Most studies look at persistence as one's continued enrollment and retention at an educational institution. That is, persistence is regarded as course or school retention or intention to continue an educational program from one grade level to the other or from one year to the other (Hu, McCormick, & Gonyea, 2011; Wolniak, Mayhew, & Engberg, 2012; Gardner, Smythe, Clement, & Gliksman, 1976; Joo, Lim, & Kim, 2011; Ramage, 1990). In this essence, several measures have been taken as indicators of persistence such as withdrawal rates, assignment completion rates, course completion (Poellhuber, Chomienne & Karsenti, 2008) and decisions to continue or discontinue for the following level or grade (Hu et al., 2011; Erler & Macoro, 2010; Gardner et al., 1976; Matsumato & Obano, 2001).

Given the above measures, though they are semantically different, they center on the very same idea which is simply explained as continuation or discontinuation. However, the above indicators of persistence emphasize a more analytical or concrete look at the issue, while persistence may be a more qualitative or abstract construct drawing upon the students' willingness or goal-oriented behaviors. In this sense, little is known about persistence as a more affective and motivational construct in the literature and it is not clear what factors may influence or relate to such outcomes. This affective look into persistence may be explained as students' effort to continue to do something in spite of obstacles or problems faced in a study and learning of a discipline or a topic. Only one study to date (Duckworth, Peterson, Matthews, & Kelly, 2007)

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has handled persistence from this view point by naming the construct grit and further defining it as "persistence and passion for long-term goals," and this trait requires people to maintain interest and effort over a long period of time in spite of losses, challenges and problems faced. When the disciplines studied in relation to persistence has been considered, there are several research studies in relation to distant education (Joo et al., 2011; Poellhuber et al., 2008), foreign languages (Gardner et al., 1976; Ramage, 1990) and physical education (Gao, Lee, Xiang, & Cosma, 2011). Persistence in foreign language learning has been investigated regarding this continuation or discontinuation or retention terminology. Most of these studies examined motivational and attitudinal factors, and their relevance to persistence as retention, and these factors have been found to be related to continuation in foreign language study (Bartley, 1970; Gardner & Smythe, 1975; Gardner et al., 1976). However, in addition to these factors, there may be some other factors or variables that may account for persistence in foreign language study. In other words, given the variables studied in relation to persistence as retention, it appears that motivational and attitudinal factors have been most extensively investigated, while there is a scarcity of research on environmental and teaching and learning process-related variables.

There is a known research venue dealing with these environmental or environment related variables within educational research. This has been termed as learning environments research and is already a firmly established area of expertise in the international literature. Since the work of Lewin (1936) and Murray (1938) who recognized the influence of environment and its interactions and related situational variables upon human behavior, there have been many attempts regarding the conceptualization, evaluation and examination of learning environments (Fraser, 1998, 2002; Goh & Khine, 2002). Investigation into the associations between the students' perceptions of learning environment and their cognitive and affective outcomes appears to be the strongest research tradition of learning environments research (Fraser, 2002). It is also seen that investigation of secondary level science classrooms

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has tended to dominate research into learning environments as understood from both international (e.g. Chang, Hsiao & Chang, 2011; Dorman, Fraser, & Mcrobbie , 1997; Dorman, Fisher, & Waldrip, 2006; Taylor & Fraser , 2013; She & Fisher , 2002) and national (e.g. Arısoy, 2007; Pamuk, 2014; Rakıcı, 2004; Yerdelen, 2013) research attempts. Though there have been several international (e.g. Wei, den Brok & Zhou, 2009; Wei & Elias, 2011; Wei & Onsawad, 2007; Wei, Zhou, Barber, & den Brok, 2015) and national (e.g. Atbaş, 2004) attempts with regard to EFL classroom environments, no research to date has been found that surveyed the link between learning environment and foreign language persistence as a student affective outcome. While investigating such links, it would be also necessary to define EFL classrooms as a different context in its own right. That is, EFL classrooms or more generally speaking, language classrooms may have more differentiated facets and particularities when compared to other classes or courses. In this regard, investigation into EFL classroom environments is needed and on the way to this attempt, there would be need to explore and develop new measures to elicit student perceptions regarding EFL classrooms.

It is also vital to discuss the background relevant to the second language learning perspective for the purposes of current research. Gardner (2006) posits that individuals' classroom learning motivation is influenced by several factors related to the language class such as classroom atmosphere, course content, course materials and physical environment offered in the class. Thus, it is possible to contend that if motivation and language classroom factors are that associated; a similar kind of a relationship may also be expected between persistence and language classroom factors. Furthermore, the model he proposed, called as the "Model Indicating the Effects of the Cultural and Educational Contexts on Motivation in Second Language Learning" (Gardner, 2006), clearly depicts the existence of such a relationship between the language classroom environment and persistence and between motivation and persistence as well. It is also possible to observe the influence of the nature of context and experiences in these contexts on individual differences in language

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acquisition in Gardner's already established work, that is, the Socio-educational Model of Second Language Acquisition (Gardner, 1985). His model is based on the causal interplay of the four types of variables: the social milieu, individual differences, language acquisition contexts and outcomes. Likewise, this current study seeks to understand such interplay between the language classroom environment context and persistence as an affective student outcome. Moreover, there are several researchers (Crookes & Schmidt, 1991; Dörnyei, 1994; Graham, 2003; Qxford & Sherarin, 1994) who encouraged further research to incorporate new and additional motivational constructs from other fields of enquiry, mainly from the general educational psychology to the second language learning. Hence, one of the aims of this study responds to this call by adding persistence as a new motivation-related phenomenon thus also broadening motivational research agenda in language learning.

Given the above account, the research literature lacks sufficient research on persistence with regard to the study of English as a foreign language. Several studies investigated such languages as German, French and Spanish (Erler & Macaro, 2011; Gardner et al., 1976; Ramage, 1990) solely from the retention perspective of persistence. However, persistence in foreign language study as either an indicator of continued enrollment (i.e. retention) or an affective outcome has not been investigated sufficiently. Moreover, there appears to be a need for such a new construct for the second language motivational research agenda. Hence, this study aims to investigate classroom learning environment characteristics that may relate to English language study persistence as a student outcome. Second, as is also put forth by Wei and his colleagues (2009), though most studies within the learning environment research have been on secondary science, biology, mathematics or physics classrooms, it has been studied comparatively less with regard to foreign language classrooms and other education (schooling) levels excluding secondary education. Thus, this study attempts to respond to this need in the literature by investigating the relationship between foreign language classroom learning environment and its

associated characteristics and persistence in English as a foreign language (EFL) as an affective student outcome by the help of new instruments. Related to this perspective, such variables as the classroom materials used, instructional activities as applied by teachers, teacher-student relationships appear to be worthy of investigation as learning environment factors or characteristics.

1.2. Purpose of the Study

The purpose of this study is to investigate the predictive ability of learning environment characteristics of a tertiary level EFL class on English language learners' persistence in English study thus extend the idea of persistence to the arena of English language learning through the EFL learners' perceptions.

The following research questions guided the present study:

1. How well do certain characteristics of EFL classes, certain student characteristics, and they combined predict persistence in English language study?

2. Does the relation between certain characteristics of EFL classes and persistence in English language study vary by certain student characteristics?

3. What are the perceptions of the tertiary English preparatory program students in relation to the associations between the classroom environment factors and their persistence in English language study?

1.3. Significance of the Study

By exploring persistence as an affective student outcome or non-cognitive student characteristic and the nature of the relationship between persistence and a number of learning environment variables, this study may shed more light on the affective outcome of persistence and different types of factors that may have an influence on this construct. The literature provides perspectives in relation to persistence as an indicator of retention and its links to other affective outcomes but falls short in explaining persistence as a non-cognitive outcome in itself and its possible links with environmental variables. Such

links are not especially clear in foreign language education. Thus, this study may provide a further understanding of learning environments in terms of a different sample, discipline area and cultural setting.Moreover, the findings of the study may contribute not only to the newly developing and promising area of non-cognitive skills in psychology research but also to the second language motivational research agenda. In this essence, especially with the inclusion of a new affective construct for EFL in this study, investigations into EFL learning environments may shine new light on the associations between learning environment and affective student outcomes.

Persistence is important for foreign language learners in that it entails learners to continue and retain effort and interest in such a difficult task of learning a foreign language which may take months or longer for them to accomplish. It is perhaps with the persistence in them that they do not give up, change and choose a new pursuit other than the target language though sometimes stumbling and losing ground with this difficult task and process of learning a foreign language. However, it remains unclear about what factors are influential on the learners' this effortful and passionate behavior. In this regard, investigation into environmental or classroom factors may bring about answers to this issue. That is, in the light of the findings of this study, foreign language teaching theoreticians and practitioners may have a better understanding of the factors influencing learners' performance and persistence.

The exploration of the learning environment and teaching-learning activities in class and their possible associations with English learning persistence may provide insights for curricular decisions to be taken, and facilities to be provided for the better design and implementation of EFL lessons. If this study provides evidence for the associations between student perceptions of the EFL classroom environment and their persistence in the study of EFL, such evidence may further point out the possibility of increasing student persistence through changing the details or characteristics of an EFL class. For example, results pertaining to what aspect or aspects in combination of an EFL classroom may contribute to student persistence could help the

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teachers or schools to organize or modify the EFL classroom characteristics so as to encourage more persistent learners. Furthermore, the results of the current study may also give insights for the training of English language teachers for them to have and boost more persistent and motivated students in their classrooms based on the possible results regarding the associated effective teacher behaviors. Such results pertaining to effective teacher behaviors including implementationonal strategies, assessment procedures and social skills could be used for the purposes of in-service training.

Learning environment instruments have been used to elicit both actual and preferred classroom conditions and research on learning environments has already shown some evidence for the applicability and feasibility of feedback information from the students' perceptions related to the actual and preferred learning classroom learning environments to improve the learning environment conditions created by the teachers (Fraser & Fisher,1986; Thorp, Burden, & Fraser, 1994; Yarrow, Millwater, & Fraser, 1997). To serve such improvement purposes, this study will attempt to develop an instrument solely investigating EFL classroom environments based on the assumption that foreign language classrooms have a different tone, ambiance or atmosphere compared to other discipline areas thus requiring different instruments over those prepared based on more generic facets of the classrooms at schools. An important practical use of this new instrument could be also for supervision purposes. Feedback information from the discrepancies between the actual and preferred environments may be elicited and reflected for the EFL teachers so that the teachers could improve themselves in the areas showing the most discrepancies or problems (Aldridge, Fraser, & Ntuli, 2009; Fraser & Fisher, 1986; Fraser, 2002).

Following the identification of such actual-preferred discrepancies, EFL teachers might be trained in these problem areas. At this point, some evidence and implications provided by learning environments research could be used for inclusion in in-service professional development for practicing teachers or pre-service teacher education. For example, consistent results from several studies

within the learning environments research has shown such teacher behaviors as leadership, friendly and understanding are likely to promote student outcomes whereas dissatisfied, uncertain and admonishing behaviors have been found to be associated in an opposite direction with the student outcomes. There were also some conflicting results when promoting achievement and attitudes at the same time each of which requires opposite levels of strictness (Wubbels, 1993, p. 7).

Similarly, results from this current study regarding the positively-related classroom dimensions with student persistence may potentially be valuable for inclusion in foreign language teacher education programs. That is, the results of this study related to those teacher behaviors (including both the instructional and non-instructional facets) that are positively correlated with the students' persistence may be employed in the training of teachers and thus teachers may be trained to develop these skills and strategies to be more effective language teachers. To serve such teacher education purposes, this study may try to provide answers to the question "What type of professional development programs might enable teachers to create learning environments in which students are more persistent in learning foreign languages." Hence, the results of this current research may shape the design, content and more generally the type of professional development programs that will enable EFL teachers to create learning environments in which students are more persistent in learning EFL.

Walberg (1975, as cited in Fraser, Anderson, & Walberg, 1982) depreciated the frequent use of achievement as criteria in curriculum evaluation and encouraged the use of psychosocial classroom dimensions as potential criteria of curricular effectiveness. In this essence, researchers and teachers have used results from the learning environment instruments pertaining to several classroom climate characteristics as criteria of effectiveness in the evaluation of educational innovations and curricula (Martin-Dunlop & Fraser, 2007; Khoo & Fraser, 2008; Spinner & Fraser, 2005). Thus, the instrument particularly developed for language classrooms could be employed as a tool to evaluate the

language programs with regard to their degree of correspondence with the several language classroom environment characteristics.

Finally, it is assumed that the results of the study may add to our understanding about students' continued efforts in English study in spite of some hurdles or obstacles faced from the real perspectives of the major experimenters, that is, students and from their in-depth perspectives or narratives regarding the incidents, events, and statements about the factors having an influence on their persistence (i.e. supports and hindrances for their foreign language learning process) and English language learning. To put it differently, this study being a type of mixed research enables us to have learners' quantitative data enriched and corroborated with learners' qualitative data based on their in-depth perspectives or narratives. Furthermore, as there are only a few attempts of mixed research designs in the literature, this study may offer a more integrated and bigger picture of the investigated phenomenon, that is, the association between the two main variables.

1.4. Definition of Key Terms

Persistence: refers to perseverance and passion for learning English in the face of difficulties and includes goal-driven behavior in that the learners possess an ultimate goal of success in English study. This emphasis on the ultimate goal of achieving in English functions like a value created by the learners themselves. This feeling or state of continued efforts includes the learners' internalization and purposefully acting upon this ultimate value, and thus it could be placed into the characterization level of the affective domain (Krathwohl, Bloom & Masia, 1964). Therefore, persistence in English learning has been operationalized as an affective outcome in this study. In the study, persistence is defined as the mean score received from the 18-item one dimensional Persistence Scale (PS) elicited on a scale of (1) *not at all true of me* to (5) *completely true of me*.

Learning Environment: basically refers to all kinds of teaching and learning related activities. For the purposes of this dissertation, the researcher operationalized the EFL class learning environment with regard to such characteristics as a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and f) authenticity and congruency with reality of the assessment tasks. Each dimension of the EFL learning environment is treated individually and defined as the mean score received from the items composing one particular dimension on a scale of (1) *never* to (5) *always*.

Student Background Characteristics: refers to a composite term including a total of eight variables in the form of student demographic characteristics (gender, age and reported family income level), b) educational background (university subject domain, previous English courses attended and high school perceived level English proficiency) and lastly c) exposure to English language (outside exposure to English via audio-visual tools and outside exposure to English via visual-printed tools).

CHAPTER 2

REVIEW OF THE LITERATURE

In this chapter, first, theoretical and conceptual aspects of persistence and learning environments are explored. Moving from these theoretical underpinnings, research related to these two concepts is presented. That is, this part revolves respectively around the two main research perspectives: a) research related to the alternative ways of looking at persistence including both the earlier retention perspectives and the latest research on persistence as a non-cognitive skill and discussion about some possible links to learning environments b) research related to the learning environments and more specifically to the links between learning environment perceptions and student affective outcomes.

2.1. Concept of Persistence (Grit)

Defined as persistence and passion for long-term goals, grit helps people continue working towards something in spite of hurdles and problems faced. As Duckworth and her colleagues (2007, p. 1088) pointed out, "the gritty individual approaches achievement as a marathon; his or her advantage is stamina." That is, gritty individuals approach success and attainments as a long-term and time consuming activity like a marathon not like a sprint and they stick to the activities they have started and sustain their efforts to finish these whatever happens on the way. Grit has been frequently assumed to be a non-cognitive human skill that is of great importance to success beyond the effects of intelligence and it is seen that it has taken different labels each time but the same meanings or connotations. That is, the idea of persistence and importance of it for success outcomes beyond the measure of intelligence is not a recent finding and it possesses a firm background. As a result of his analyses on the biographies of successful individuals (e.g. musicians, judges, statesmen

and wrestlers), Galton (1892), for instance, asserted that in addition to their abilities, these individuals possess the "ability combined with zeal and with capacity for hard labor." Likewise, Cox (1926, p. 218) working on geniuses also asserted the predictive ability of the traits of "persistence of motive and effort, confidence in their abilities, and great strength or force of character" controlling for the effects of intelligence quotatant. These previous work emphasizes the presence of such a characteristics as persistence or what has been lately called grit and its importance for success in one's life. The search for non-cognitive skills like grit other than intelligence is considered as a growing area of psychology research today (Hanford, 2013).

2.1.1. Persistence, Engagement and Motivation Distinction

Persistence is a manifestation of engagement. Both concepts relate to an individual's working towards the accomplishment of a task or goal, yet they are distinguishable in that engagement refers to the active behaviors, feelings and thinking as to performing tasks, activities and even school in a general sense (Fredricks, Blumenfeld, & Paris, 2004; Reeve, Jang, Carrell, Jeon, & Barch, 2004) whereas persistence is furthering this activity by putting too much effort in pursuing these tasks or activities even in the face of adversities which is very much related to conscientiousness (Duckworth et al., 2007). Russell, Ainley, and Frydenberg (2005, p. 1) defines engagement as "energy in action". That is, you use your energy to do a task, you get involved in the task and so you are engaged. However, to be persistent, you need to be engaged in a task and even too much engaged in the task that you continue doing it in spite of difficulties and failures you encounter. In this sense, one can logically define persistence as "sustained energy in action in the face of obstacles". This conceptualization further suggests that engagement and persistence are orthogonal. In other words, one needs to be engaged in an activity if she or he is to be persistent in that.

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There is a need to make a distinction between motivation and the above two constructs. In this regard, motivation can be thought as the "energy" component of the definitions. It is the driving energy to perform (engage) and continue (persist) a certain task. Using the three terms in the same sentence, Von Culin, Duckworth, and Tsukayama (2014, p. 6) contended that "pursuit of engagement and meaning, as opposed to pleasure, comprise the motivational correlates of grit (i.e. persistence). Likewise, Gardner (2006) depicted the association between motivation and persistence as the one in which persistence is the result and extension of the motivated behavior. His model termed as the "Model Indicating the Effects of the Cultural and Educational Contexts on Motivation in Second Language Learning" clearly shows this association (Figure 2.1).
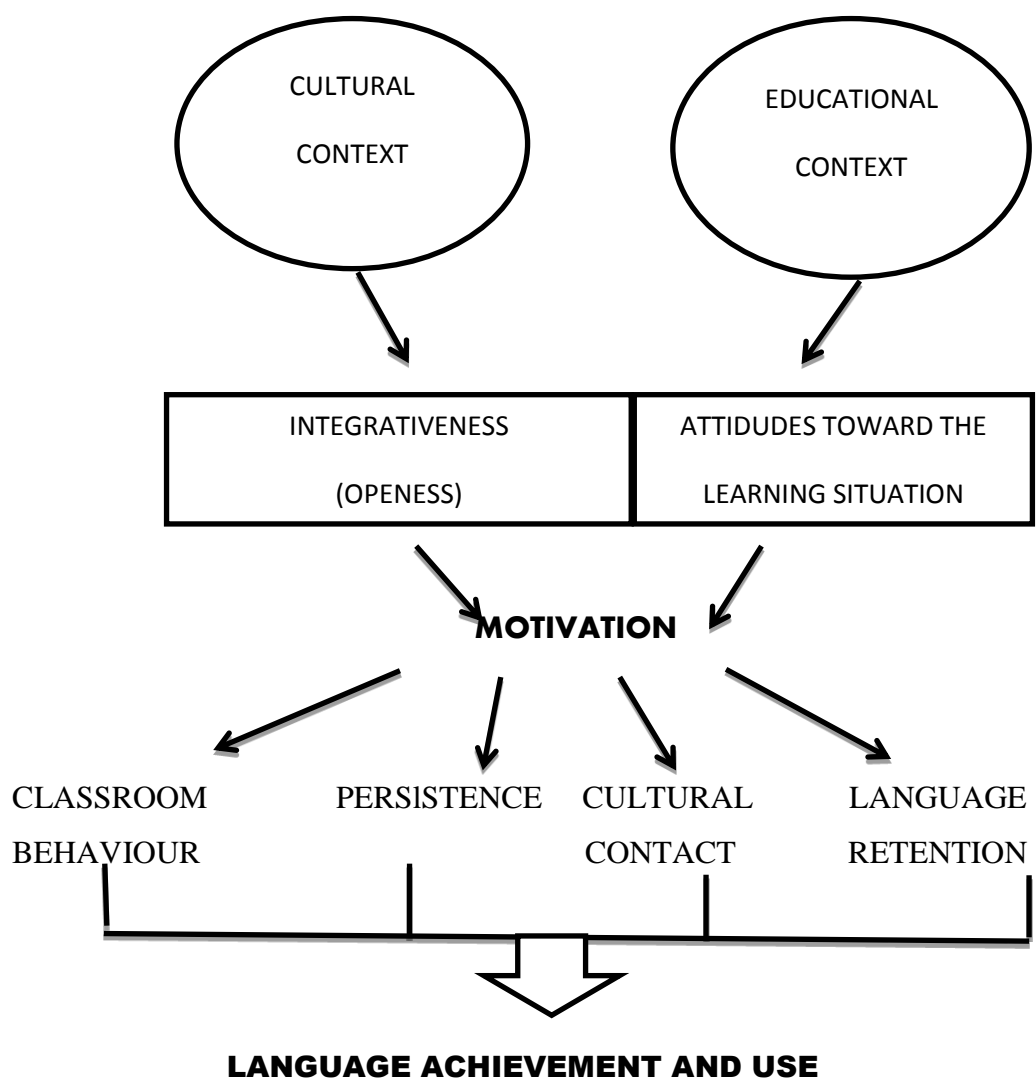
Figure 2.1. Model Indicating the Effects of the Cultural and Educational Contexts on Motivation in Second Language Learning. (from Gardner, 2006, p. 15)

2.1.2. Persistence (Grit) and Conscientiousness

Persistence is closely associated with the personality trait of conscientiousness (Duckworth et al., 2007). Conscientiousness is one of the five dimensions of the Five-Factor Personality Model (Big Five) which is considered as the most widely accepted taxonomy of personality traits (Goldberg, 1971, 1990).

Conscientiousness refers to the tendency to be self-disciplined, dutiful, thoughtful and achievement-striving and goal-directed which can also be considered as the attributes of the persistent behavior. Conscientiousness is demonstrated in three related facets, achievement orientation (hardworking & persistent), dependability (respectful & careful) and orderliness (planful & organized). In other words, conscientiousness relates to individuals' self-control, need for achievement and persistence (Costa, McCrae, & Dye, 1991, as cited in Judge, Higgins, Thoresen, & Barrick, 1999). Given the above account, it is easy to arrive at the point that like all of the other dimensions of Big Five, Conscientiousness encompasses a variety of distinct and specific personality qualities and persistence is referred as one of this distinct characteristics affiliated to conscientiousness (John & Srivastava, 1999).

The link between grit and conscientiousness is further supported by recent empirical evidence (Duckworth et al., 2007; Duckworth & Quinn, 2009) in that the data from the grit scale demonstrated strong correlations with the Big Five Conscientiousness elicited by means of the Big-Five Inventory. However, as one little difference, Duckworth and her associates (2007) asserted that grit is different from conscientiousness with its emphasis on stamina, that is, the passion for long term goals.

2.1.3. Persistence as an Affective Student Outcome

Non-cognitive skills are defined as any attitudes, behaviors and strategies which contribute to success at school and workplace other than those academic and cognitive skills required to reach this success. For instance, motivation, perseverance and self-control are among those non-cognitive skills. The academic and cognitive skills can be assessed through tests and teachers while it is difficult and debatable to measure non-cognitives as non-cognitive skills being devoid of one single clear measure. There is even some debate on their definition and scope. Hence, they can be sometimes named differently as 'character skills', 'competencies', 'personality traits', 'soft skills' and 'life

skills'. However, their contrast to academic and cognitive abilities is common and base to those different terminologies (Gutman & Schoon, 2013).

There has been a recent emphasis on persistence as one of non-cognitive skills that may have a positive relationship to achievement in academic and work life. Heckman and Rubinstein's (2001, p. 145) make it clear that persistence is a non-cognitive skill that can compete with intellectual ability by saying: "Numerous instances can be cited of people with high IQs who fail to achieve success in life because they lacked self-discipline and of people with low IQs who succeeded by virtue of persistence, reliability and self-discipline". Furthermore, some researchers have lead the field to consider non-cognitive skills equally or even much more important than cognitive skills for success in academic or vocational performances (Duckworth et al., 2007; Duckworth & Quinn, 2009; Heckman, Stixrud, & Urzua , 2006; Lieras, 2008) and especially grit, a very recent terminology attached to the same meaning as persistence, has started to receive considerable attention (Duckworth et al., 2007; Duckworth & Quinn, 2009).

Given the affective outcomes, in line with Bloom's (1956) and Gagne's (1984) taxonomies, Kraiger, Ford, and Salas, (1993) refer to affective learning outcomes (Figure 2.2) as including attitudinal (attitude object and strength) and motivational outcomes (disposition, self-efficacy and goal setting). In their categorization, they further include persistence of effort among the mechanisms required for goal setting. Hence, this categorization further asserts the place of persistence as an affective outcome.

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                        │  LEARNING   │
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LEARNING

Cognitive Outcomes	Skill-based Outcomes	Affective Outcomes

▪ Verbal knowledge	▪ Compilation
	  - Proceduralization
	  - Composition
		▪Attitudinal

▪ Knowledge organization	▪Automaticity	▪ Motivational
		  - Motivational disposition
		  - Self-efficacy
		  - Goal-setting

▪ Cognitive strategies		
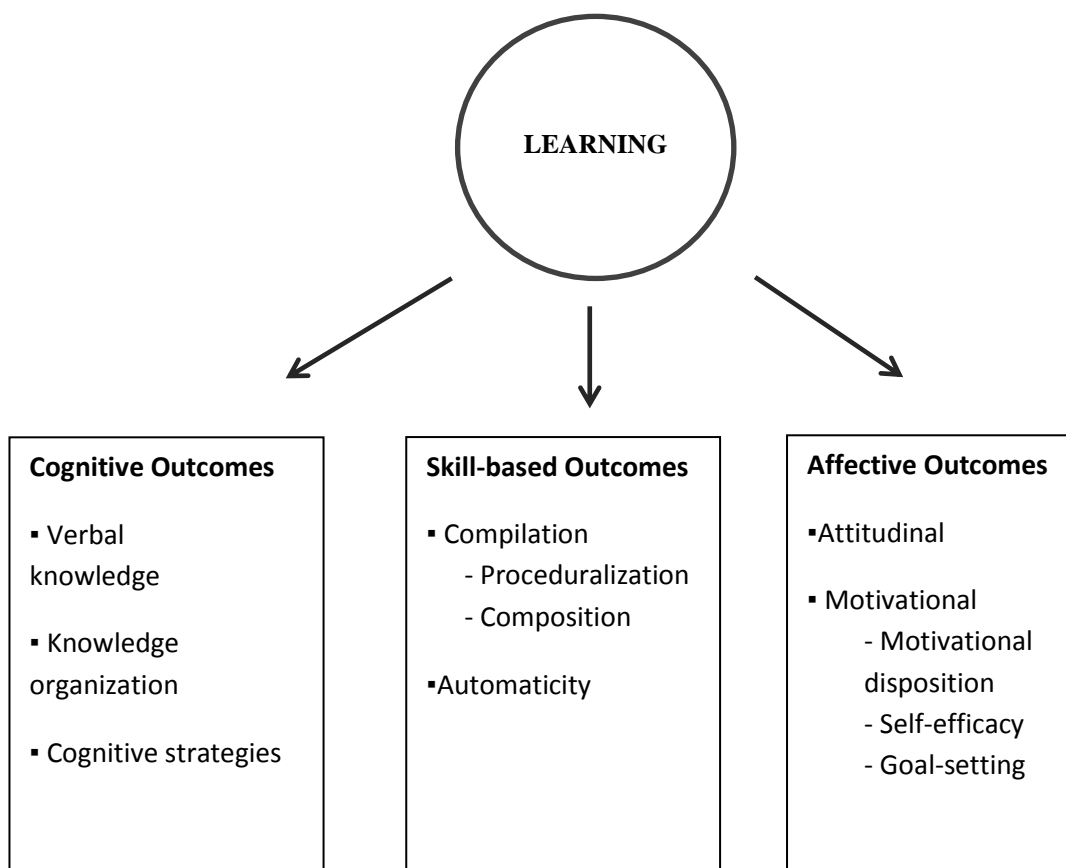
Figure 2.2. A Preliminary Classification Scheme of Learning Outcomes. (from Kraiger et al., 1993, p. 312)

2.2. Learning Environment

The field of learning environment has its roots in Lewin's (1936) seminal work in non-educational settings. Lewin (1936) proposed that the environment and its interaction with the personal characteristics of the individual are determinants of human behavior. Murray (1938) extended Lewin's work by proposing a Needs-Press Model which emphasizes that the existence of situational variables in the environment results in behavioral differences. Following and extending Murray's model, Stern (1970) developed his Person-Environment Congruence Theory and proposed the possibility of gaining enhanced outcomes when personal needs and environmental press are in a harmony. By considering the class as a social system, Getzels and Thelen

(1960) mentioned the predictive ability of the interaction among personality needs, expectations and environment upon human behaviors. Following the above pieces of work and thus the strong theoretical base brought by them, the assessment of individuals' perceptions has started to receive attention for the educational research purposes. Preliminary examples included the development of Learning Environment Inventory (Walberg, 1968) and Classroom Environment Scale (Tricket & Moos, 1973). Moos (1979) identified three main dimensions to characterize human environmentin his conceptual framework for human environment. That is, he contends that environment possesses relationship, personal growth and lastly system maintenance and change dimensions. Relationship dimension refers to personal relationships, personal growth to the opportunities for personal development and self-enhancement while the system management and change centers on the degree to which the environment is orderly, clear in expectations, having the control-power and responsive to change. It is seen that Moos' conceptual framework for human environments has been the dominant theory of the data collection instruments developed to investigate the learning environment.

Another example is Walberg's (1981, as cited in Aldridge & Fraser, 1999) Multi-factor Psychological Theory of Educational Productivity which discusses the important role of aptitude-related, instructional and psychosocial variables in student learning. As is clear from the above theoretical background, it is wise to understand that the term learning environment has grown to encompass a whole range of components, activities and contexts within which learning takes places. In other words, the term has been extended further to include a variety of components so as to denote psychological, social and physical dimensions of the classroom environment.

Following the proponent earlier work on learning environment, there has been a great deal of research emphasis on the influence of the learning environment upon the educational processes and outcomes and the term has been extended to include all types of interaction taking place in the classrooms, different teacher behaviors including all instructional and non-instructional

facets, classroom assessment procedures, all classroom materials and physical locations and basically all atmospheric characteristics of a school or a class, that is, its all presiding ethos and features.

2.3. Research on Persistence as a Measure of Retention and Learning Environment

The conceptualization of persistence as a non-cognitive skill is a very recent phenomenon and the researchers have recently started to pay attention to this phenomenon and its related variables. Hence, the number and variety of variables investigated in relation to this construct (persistence as a non-cognitive skill) is considerably limited and related research is still in its infancy. In line with this situation, there have been no attempts to solely investigate this construct as it relates to learning environment measures in the literature available to the researcher of this dissertation. However, the other outlook into the construct of persistence considering it as retention or intentions to continue to the further levels of proficiency and study (i.e. persistence as retention) has investigated the relationship between this perspective of persistence and several variables related to learning environment.

Two studies to date considering persistence as a personal characteristic have investigated the relationship between the persistence and the variables of learning activity, students' self-efficacy, outcome expectancy and learning outcomes (moderateto-vigorous physical activity, grand point average). In one of these studies, Gao et al. (2006) investigated the relationships among learning activity, students' self-efficacy, outcome expectancy, moderateto-vigorous physical activity (MVPA) and persistence in a physical education course for the Grades 6 to 8. The results of their study yielded that self-efficacy and outcome expectancy were significant predictors of effort/persistence across learning activities, while only self-efficacy predicted MVPA. The scale used by the researchers had items centering on the persistence as a human skill or trait and also physical education terminology or notion in them.

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With the exception of Duckworth and others' (2007) studies, no previous study has solely focused on persistence as a student trait or characteristic with no mention of other discipline-specific terminology or notion in it. Across six studies, the researchers named the idea of persistence grit. The results from the studies firstly demonstrated that the significant variance in success outcomes (e.g. grade point average and avocational outcome of ranking in the National Spelling Bee) was explained by the differences in grit. There were also some other secondary results. Grit was positively associated with age and educational attainment (i.e. levels of education) in their first study with the suggested result that grit increases with age and levels of education. In their final study, they also reported that hours of practice mediated the relationship between grit and success. That is, grittier individuals surpassed their less gritty competitors because they studied longer.

In further investigating the construct of grit and its possible motivational correlates, Von Culin and her colleagues (2014) looked at the associations between the three different orientations to happiness (pursuing engagement, pursuing meaning and pursuing pleasure) and grit and worked with online samples of adults. The results indicated possible associations between the two variables with the engagement orientation having more significant associations with grit compared to meaning and pleasure orientations.

In Duckworth and others' (2007) work, grit has been treated as the independent variable and success outcomes as the dependent. In Gao and others' study (2006), persistence was the dependent variable. As is obvious with the available research, there is a need for more work on the persistence as a student outcome both as a dependent and independent variable in order to provide more conclusive answers. In this sense, further studies should answer the question of what underlies the ability to persist, that is, to continue doing something in spite of hurdles and obstacles encountered and how this ability itself relate to several other variables. Moreover, available literature lacks discussions of the variables that may have predictive abilities upon persistence which is also shown as an important correlate of achievement in the literature.

To put it differently, such factors as one's personal and dispositional characteristics and environmental and situational factors may bear an influence on their levels of persistence. Furthermore, one's level and intensity of persistence may be also dependent on the type of task or topic they are dealing with. One can be more persistent with doing sports than studying mathematics. Hence, further research is needed to investigate other possible variables associated with grit (persistence) and also to examine it as a domain-specific measure (e.g. as a discipline-based construct). Further investigation into different settings with different samples and discipline areas to study, is also needed to gain a better understanding of the issue.

Given the research linking persistence as a measure of retention to learning environment, some learning environment-related concepts have been studied in relation to the indicators of persistence. Poellhuber and others (2008), for instance, looked at the influence of courses enriched with peer interaction upon student persistence in a distance education context with a purpose to explore the variable of instructional practices (learning activities) and their influence on persistence. No significant differences were found between the students in the peer interaction condition (treatment group) and those in the no-interaction condition (control group) with regard to their persistence reported in terms of withdrawal rates.

A follow-up study conducted by Vansteenkiste, Simons, Sheldon, Lens, and Deci (2004) looked at the effect of intrinsic goal framing and autonomy-supportive learning climates on students' learning, performance and persistence. Their analyses indicated a significant main effect of the learning climate variables on the depth of processing, test performance and persistence.

Using the data from the Wabash National Study of Liberal Arts Education (WNSLAE), Wolniak, Mayhew and Engberg (2012) also pointed out the importance of instruction for the student persistence. That is, they contended that exposure to good teaching practices moderated the effects of grade point average on persistence, thus emphasizing the importance of good teaching on increasing student persistence.

Pascarella, Seifert and Whitt (2008) and Pascarella, Salisbury and Blaich (2011) also investigated the relationship between student perceptions of teaching and persistence. These two studies second being the replication of the first one showed that perceptions regarding exposure to organized and clear classroom instruction (perceptions about the teacher skill/clarity as well as preparation and organization) significantly increased the likelihood that the student persists to the next year.

In her qualitative study, Standford-Bowers (2008) investigated the perceptions of administrators, faculty and students in community college distance education programs about the factors influencing student retention. The researcher used a modified Delphi technique to elicit the three stakeholders' responses regarding the most important factors supporting their persistence in the online course and reported 16 factors from his analyses. Among these factors are responsiveness of the instructor, prompt feedback, student-teacher interaction, course design, independent learning and responsibility, self-motivation and discipline, independent-learning and responsibility and dedication.

Another qualitative inquiry performed by Matsumato and Obana (2001) while also eliciting factors motivating learners to continue learning Japanese as a foreign language looked at the reasons students provided for their change of mind from continuing to discontinuing. The researchers categorized the data regarding reasons into three which are teacher and class matters (e.g. class dynamics, teachers' attitude and teaching skills and a well-organized class), actual language learning (e.g. speaking and kanji practice) and anxiety (e.g. pressure to pass the course and repeating mistakes).

Overall, based on the findings of the above studies, it seems that the results confirm a link between the variables of instruction and teaching techniques, teacher and course-related characteristics and persistence from the perspective of retention. Thus, we can speculate on a common conclusion drawn by the majority of the studies that good teaching and teacher and course qualities are positively associated to the idea of persistence as retention. It is also evident

that the available literature lacks sufficient evidence for the relationship between the learning environment-related variables and persistence. Furthermore, the results of the previous studies do not lead us to draw any strong conclusions as to the influence of environmental variables upon persistence in foreign language study. Further studies are needed to investigate the learning environment variables and their relative influences or predictive abilities upon the measure of persistence, and this need is more obvious for the foreign language study.

2.4. Research on Affective Student Outcomes and Learning Environment: A Global Look

The effect of the learning environment on the education processes and especially on the student cognitive and affective outcomes has been widely investigated in the literature, which, in turn, a considerable number of researchers finding evidence of a strong relationship between student perceptions of classroom learning environment and student outcomes (Fraser & Fisher, 1982; Wubbels & Brekelmans, 1998; den Brok, Brekelmans, & Wubbels, 2004). Moreover, Fraser (1994; 1998) has reported that the research field of learning environments has undergone advancement in defining and assessing learning environments. This conceptualization and investigation of learning environments has resulted in many attempts in the literature to bring about strong links between student outcome measures and learning environment investigated by means of a variety of instruments across a variety of settings and grade levels. These student outcomes have been investigated in different types of classroom environments such as constructivist classroom environments (Aldridge, Fraser, & Huang, 1999; Taylor, Fraser, & Fisher, 1997), science laboratory classroom environments (Fisher, Harrison, Henderson, & Hofstein, 1998; Henderson, Fisher, & Fraser, 2000; McRobbie & Fraser, 1993; Wong & Fraser, 1994), technology and computer-assisted classroom environments (Dorman & Fraser, 2009; Fisher & Stolarchuk, 1998;

Stolarchuk, & Fisher, 2001; Teh & Fraser, 1994) and clinical learning environments (Chan, 2002; Dunn & Hansford, 1997; Fisher & Camillus, 1998).

When the student outcomes investigated in relation to learning environment perceptions have been considered, it seems that at the beginnings of the learning environment research, cognitive outcomes have been widely popular over attitudinal ones as perhaps it has been much more important to find convincing evidence for the effect of classroom environment upon student learning. That is, it seems that after having a firmer support for the proposition that students learn better when they have good and positive perceptions of the classroom environment, the researchers have started to look for some other side constructs that may account for and also contribute to student learning. Hence, the following will attempt to review the available research investigating associations between learning environment and student-related attitudinal and affective outcomes. Following this broad account on the affective variables studied in relation to learning environment, the review will center on research connecting the variables of persistence and learning environment.

The denotation of the term non-cognitive makes it clear that it refers to anything non-cognitive which is distinct from academic and cognitive skills usually measured through tests. Moreover, although it has been difficult to define students' affective outcomes with clear terms as is also mentioned above, the following parts of the review will include any attitudes, behaviors and strategies which are widely considered to facilitate success at school and workplace as affective outcomes. Thus, research linking learning environment to affective student outcomes centered on number of outcomes including among others attitude, self-efficacy, academic efficacy and achievement motivation. The following presents the studies conducted in relation to the links between affective student outcomes and classroom learning environments starting with the research conducted in the disciplines other than foreign languages before narrowing the gaps to the research on foreign languages.

In his attempts to investigate the secondary Mathematics classrooms in Hong Kong, Wong (1995) utilized semi-structured interviews and open-ended questions in order to investigate students' perceptions, which later enabled the researcher to elicit some descriptors and criteria to be used in the following phase of instrument development. Some of the descriptors of a good mathematics classroom included order, teacher's clear expectations, student involvement and cooperation with peers. Qualitative results from the first phase of his study also showed that good teacher-student relationship adds to students' exertion of effort in the course.

Dorman and his associates (1997) attempted to investigate associations between science and mathematics students' perceptions of their classroom learning environments and their attitude to the class in Australia. Investigating the interpersonal teacher behavior facet of the learning environment, they reported that all the sub-scales of their instrument (Questionnaire on Teacher Interaction) significantly relate to students' attitudes with higher attitude scores associated with higher perceived leadership, helping/friendly and understanding behaviors of the teachers.

In a further investigation into the cross-cultural validity and use of the two learning measures, classroom environment and interpersonal teacher behavior in secondary science classes in Korea, Kim, Fisher and Fraser (2000) found positive relationships between learning environment measures and students' attitudinal outcome. Also investigating gender-related differences in students' perceptions, they found that boys showed more favorable attitudes toward their science classes compared to girls.

Focusing on the measure of teacher communication behavior as an aspect of learning environment, She and Fisher (2002) investigated the relationship between middle school biological/physical science students' perceptions of their teachers' communication behaviors and their attitudes towards science in a Taiwanese setting. The researchers indicated positive associations between students' perceptions of their teachers' communication behaviors and their attitudes toward science. Teacher communication behavior was assessed

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through The Teacher Communication Behavior Questionnaire (TCBQ) including five scales, challenging, encouragement and praise, non-verbal support, understanding and friendly and lastly controlling while the variable of attitude was elicited thorough four sub-scales, social implications of science, enjoyment of science lessons, leisure interest in science and career interest in science.

Another dimension of learning environment which was termed as the students' perceptions of assessment tasks was examined by Koul, Fisher and Earnest (2006) in relation to its relationship to the two attitudinal outcomes, students' attitude to science classes and their academic efficacy. The researchers indicated that there was a significant positive relationship between all of the sub-scales of the students' perceptions of assessment questionnaire and student attitudes to science and their academic efficacy perceptions, with the scales of congruence with planned learning, authenticity, transparency and diversity showing positive associations while scale of student consultation showing negative associations in relation to attitude to science. Investigating the gender-related differences, they reported no statistically significant differences in students' perceptions of assessment with regard to their gender. In contrast, academic efficacy showed statistically significant differences between female and male students.

Using a similar design with the above study, Dorman et al. (2006) investigated the predictive ability of classroom environment and perceptions of assessment dimensions upon academic efficacy and attitude to science. Using structural equitation modeling techniques as different from the multiple correlations techniques employed in the above study, they found that classroom environment and perceptions of assessment significantly predicted the two affective outcomes. With the data analysis technique used in the study, mediating variables were added into the interpretation of results. Thus, they found a direct effect of the scale of congruence with planned learning on attitude to science while the four remaining scales had indirect effects on attitude by means of academic efficacy.

By naming the predictor of her study as teaching and learning environment, Meriläinen (2014) employed an instrument which encompassed five sub-scales named as workload, pedagogical counseling, quality of teaching, evaluation and social relations. The researcher worked on how teaching-learning environment related to the outcome measure of achievement motivation including three subscales, ability beliefs, expectation of study success and appreciation of studies. The analyses from the structural equation modeling indicated that the measure of the teaching-learning environment correlated with the students' reported achievement motivation.

Fraser, Aldridge and Soerjaningsih (2010) examined associations between student attitudes towards computers and students' perceptions of interpersonal teacher behavior as an aspect of learning environment in an Indonesian setting with tertiary level students from the Computer Science and Management departments. Simple correlation and multiple regression analyses showed positive associations between student attitudes towards computers and interpersonal instructor behavior by indicating that positively connotated (favorable) teacher behaviors (i.e. leadership, helpful/friendly, understanding and student responsibility and freedom) are most likely to promote positive student attitudes whereas less favorable teacher behaviors (uncertain, dissatisfied, admonishing and strict) seem to promote less positive attitudes.

Another investigation into teacher behavior as an aspect of classroom environment was conducted by Kyriakides (2006) who attempted to integrate two research traditions, process-product model of teacher effectiveness and psychologically oriented research into teacher interpersonal behavior to investigate teachers' role in creating a learning environment in their classrooms. Data elicited by means of the two types of questionnaires developed in line with these two different research traditions revealed that student perceptions about their teachers' behavior are related to affective outcomes of schooling concerning students' attitudes towards peers, teachers, school and learning. The results also showed that data from the teacher interpersonal behavior questionnaire (QTI) explained more variance in

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affective outcomes than the data from the quality of teaching questionnaire of effectiveness research.

Chang, Hsiao and Chang (2011) compared the relative effectiveness of two learning environment preferences on students' attitudes towards earth science lessons with 10th grade students in Taiwan. The learning environment measure was realized in two groups, student-centered and teacher-centered combined (STBIM) and teacher-centered (TCIM). The attitude outcome was explored by means of the three subscales which were attitudes toward the earth science subject, attitudes toward the learning of earth science, and attitudes toward the involvement in earth science activities. The results revealed that students in the STBIM classes showed more positive attitudes toward earth science than those in the TCIM classes.

Taylor and Fraser (2013) conducted research on the relationships between learning environment and mathematics anxiety with the high school mathematics students in California. Mathematics anxiety was examined in two dimensions as evaluation anxiety and learning anxiety. The findings revealed statistically significant relationships between anxiety and learning environment scales for learning mathematics anxiety but not for mathematics evaluation anxiety. Given the gender differences, statistically significant differences were reported between the genders for five of the seven What Is Happening in This Class Questionnaire (WIHIC) scales with females showing higher means and thus viewing the environment more favorably than males.

Vermeulen and Schmidth (2008) included motivation as an affective outcome in their research and studied it in relation to the quality of academic learning environment. The researchers questioned graduates of a university regarding their opinions about the quality of academic learning environment (elicited in terms of positive staff-student and student–student interactions and curriculum-related characteristics) during the time they studied at the university. The results of their study revealed positive relationships between the quality of the learning environment and student motivation, which in turn also increases their learning outcomes related to knowledge acquisition.

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Another research study conducted by Harbaugh and Cavanagh (2012) looked at the construct of student engagement as operationalized as learning capabilities (self-esteem) and expectations of learning and its relationship to the secondary level students' perceptions of the classroom learning environment in Western Australia. The self-esteem subscale included some items that are relevant to the construct of persistence but also including items questioning students' general capabilities about learning. The learning environment component of their study had eight subscales which are educational values, learning outcomes, classroom learning attitudes and behaviors, classroom and peer support, classroom discussion, classroom planning, expectations and support from teacher and lastly parental involvement. The results gained through Rasch Modeling statistics revealed direct effects of classroom-learning environment on students' self-esteem and direct and indirect effects of those upon students' expectations of the classroom environment.

Comparing learner-perceived effectiveness of the two types of learning environments (the traditional teacher-talk whole-group instructional environment versus Mixed Mode Delivery Model in a constructivist learning environment) with regard to the magnitude of the gaps between actual and preferred learning environment scores, Koh and Fraser (2014) worked with the secondary level students from schools offering business education in Singapore. The results showed that the magnitude of the gap between the actual and preferred learning environments were significantly higher for the control group, which thus shows the effectiveness of the Mixed Mode Delivery Model in terms of student constructivist learning environment perceptions.

In a recent study conducted with students from secondary level mathematics students in China, Yang (2015) investigated associations between mathematics classroom learning environment and attitudes towards mathematics (student confidence and perceptions about the usefulness of mathematics). The results from the regression analyses revealed that three dimensions of the learning environment that were teacher support and equality,

involvement and investigation significantly predicted the students' confidence in mathematics. When the other outcome measure, usefulness of mathematics was considered, the three sub-scales, that is, investigation, task orientation, and teacher support and equality were found to be significantly predicting the scores on this outcome.

Using the learning environment instrument as a program evaluation tool, Soebari and Aldridge (2015) looked at a one-year teacher professional development program with regard to the changes in students' perception scores on the learning environment scales (before and after the teachers attended the program) in Indonesia. Observations and interviews were later used to corroborate the findings from the quantitative and qualitative data. The results showed a statistically significant pre-post difference for the six of the seven learning environment scales with low effect size scores, which in turn, demonstrated limitations with regard to the success of the professional development program. Some contextual factors elicited from the qualitative methods supported these results.

Given the learning environment studies conducted in the disciplines other than foreign languages above, it is seen that most of the studies were performed with the secondary school science-related disciplines though there have been a few exceptions (e.g. Fraser et al., 2010; Soebari & Aldridge, 2015). The affective outcomes investigated included mostly the attitudinal outcomes towards the specific lessons examined. Though there has been no one particular study solely investigating or naming the outcome measure as persistence, it could be understood that a few studies attempted to include the constructs that could imply the idea of persistent behaviors (e.g. Harbaugh & Cavanagh, 2012; Wong, 1995). Given the research designs used, there is a superiority of associational and quantitative research studies over qualitative or mixed designs. The above global look also suffices it to say that both Western and Non-Western researchers made an effort to investigate the links between learning environments and student affective outcomes in the disciplines other than foreign languages.

Given the studies conducted in foreign languages, on the other hand, the earliest study available to the researcher of this current study was performed by Wei and Onsawad (2007) who sought associations between students perceptions of interpersonal teacher behavior and the two student outcomes, attitudes toward learning English and achievement in English. The results revealed that strictness behavior of the teacher significantly and positively related to students' attitudes to learn English. No other interpersonal dimensions of the teacher behavior was found to be related to the variables of attitude and achievement.

Wei et al. (2009) investigated the relationship between teacher interpersonal behavior and student achievement in English with the Grade 8 students in a Chinese context. The results showed proximity (teacher cooperation) as a significant predictor of student achievement and also a significant negative relationship between teacher uncertainty and student achievement.

With their interest in the affective student outcomes, Wei and Elias (2011) looked at the relationship between the student perceptions of classroom environment and students' intrinsic and extrinsic motivations in learning English in a secondary school context in Malaysia. They found that students' perceptions of affiliation of the class positively related to and their perceptions of involvement negatively related to their intrinsic motivation. For the extrinsic motivation, however, only the task orientation subscale demonstrated positive associations.

Wei and his associates (2015) examined the relationship between interpersonal teacher behavior as an aspect of learning environment and student achievement and carried out their study with Grade 7-10 secondary school students in China. The results indicated that teacher proximity (Cooperation-Opposition) was a significant predictor of student achievement while there were no statistically significant associations between teacher influence (Dominance-Submission) and student achievement. Based on the results, it is

understood that the better perceptions of teacher proximity learners have, the more successful they are in English.

Built mainly on the investigation into the developmental changes in the study variables within a school year, Maulana, Opdenakker, den Brok and Bosker's (2011) study looked at the associations between the development of teacher influence and proximity and the development of academic motivation with secondary school Mathematics and English classes in Netherlands. The researchers employed a different technique called growth curve modeling first to identify the developmental changes and then to investigate the associations. The results revealed that differences in the development of autonomous motivation were explained by the differences in the development of teacher interpersonal behavior while the development of controlled motivation exhibiting no associations to the teacher behavior dimensions (i.e. influence and proximity).

Conducted in the context of Chinese language classrooms in Singapore, Chua, Wong, and Chen (2009) examined the relationship between secondary three (Grade 9) level students' perceptions about the Chinese language classroom environment characteristics and their motivation in learning Chinese. The researchers found that three dimensions of teacher support, involvement and task orientation (out of a total of six in their instrument) were associated with student motivation.

Out of the six learning environment studies conducted in foreign languages above, five were conducted in relation to English as a foreign language (EFL). All of the EFL-related studies were performed with the secondary level students in China, Malaysia and Netherlands. With the exception of Wei and Elias (2011) who worked on a much broader perspective of classroom environment the characteristics of which they elicited through the Actual Classroom Environment Scale, the remaining four investigated teacher interpersonal behavior via Questionnaire on Teacher Interaction. In this essence, it appears that there is an overuse of the same instrument for the same level of students to investigate their perspectives about the English classroom

learning environment. Although this attempt in investigating foreign languages against the dominance of science related disciplines is something positive and innovative within the learning environment research agenda, there is still a need for further research which will investigate the same phenomenon and its related constructs by means of some other instruments and with different student profiles and in new contexts.

Overall, previous studies have indicated that all components regarding psychological, social and physical classroom environments are important facets of the classroom learning environment. With a more terminology specific language, classroom learning environment is composed of such dimensions as interpersonal teacher behavior, teacher communication behavior, student perceptions of assessment, class and peer support and teacher instructional behavior and these are strongly related to a variety of student affective outcomes. For the research designs employed, as also recognized by Dorman and Fraser (2009) earlier, it would be meaningful to note here that most of the past learning environment research are exploratory and correlational rather than experimental. Moreover, this past research often employed questionnaires in line with these correlational designs. In other words, investigation into associations between student outcomes and their perceptions regarding classroom learning environment has become the strongest and the most common tradition in the past classroom environment research and thus the use of quantitative methods has tended to dominate learning environment research. Further research with qualitative and mixed-methods designs appears as a need to gain a broader picture of the associations.

When the instrumentation of the studies was considered, it is observed that the studies usually employed the very same instruments gaining popularity in the literature to elicit the learning environment data. This inclination may be due to the existence of many cross-validations and adaptations of the instruments and their robustness. It is easy to understand the researchers to utilize questionnaire data at this point in that they may agree with Fraser (1994) who contends that students are reliable as to make accurate judgments about

classrooms as they have experienced and spent sufficient amount of time in many different classroom learning environments so as to form correct judgments. However, it is also apparent that this inclination resulted in research studies very much replicating and repeating one another and thus limiting the variety of findings about the possible facets of learning environment. Therefore, there should be some other ways of eliciting students' perceptions about the components of learning environment. Hence, one can suggest that future studies should utilize new instruments and new research designs. The development of new instruments may be of great help in detecting the problems and issues that are unique to particular classrooms rather than solely relying on the questionnaires originated in English and originally developed for Western contexts. As is clearly understood from the above account related to the research designs employed, the use of qualitative methods has been less common compared to that of quantitative methods in spite of some evidence regarding the benefits of using quantitative data followed by qualitative data (i.e. mixed methods design; Lee & Fraser, 2001, Lee, Fraser, & Fisher, 2003; Wilks, 2000).

Kyriakides (2006) also experienced that the classroom environment instrument he employed for his study attempted to measure or encompass generic teaching skills, thus eschewing the possibility of the differentiated effect of teachers' quality of teaching. Based on the basic premise of "context specificity" (Hopkins & Reynolds, 2001) as the first emerging term and then the" differentiated effectiveness" across different subjects, different student background variables, different student personal characteristics and different cultural and organizational contexts (Campbell, Kyriakides, Muijs & Robinson, 2004), Kyriakides (2006) asserts that further research is needed to investigate the differentiated effect of teacher behavior on student outcomes in different subjects. Therefore, it would be wise to attempt to develop instruments to examine classroom learning environment and especially the teacher behavior in different subject areas. These new instruments may be better suited and

sensitive to the contextual demands and characteristics of different subject areas.

It is seen from the review of the studies above that most of them investigated the secondary level students' perceptions about learning environment. The number of studies working with tertiary level students is highly limited. In this vein, there is a need for more studies to be conducted with the tertiary level students. For the disciplines investigated, there is a superiority of science and science classrooms over other discipline areas. For this reason, further studies need to examine other disciplines and courses other than science classes so as to gain a deeper understanding of the concept of classroom learning environment and its relationships to and effects on student outcomes. For the construct of persistence, Constantin, Holman, and Hojbotă (2008) also asserts that individuals' persistence vary in relation to the type of tasks. That is, one can be more persistent and engaged in a specific type of task while he may be reluctant to do and put an effort in doing some other tasks. This account may lead us to think about the task-specificity or more generally domain-specificity of the variable of persistence. Earlier work on grit has a domain general view of the phenomenon (Duckworth et al., 2007; Duckworth & Quinn, 2009), but addressed this concern by recommending future studies to be conducted for the domain- specificity of the grit (Duckworth & Quinn, 2009). Therefore, this study is based on the domain specificity of grit and this construct has been operationalized as "persistence in English language learning". Likewise, Duckworth and others (2007) also assume that the degree and nature of grittiness may change according to the experiences one have and people may have more grittiness for some things and not others (Hanford, 2013). These experiences may be those faced by the students in their language classrooms and students may have different degrees or orientations of persistence in foreign languages than for example in art or science-related disciplines and courses. Thus, this current research looks at the experiences that may specifically relate to language classrooms and language learning.

2.5. Research on AffectiveStudent Outcomes and Learning Environment: A Local Look

While there is a growing body of research and interest with regard to learning environments research at the international scene with a dominance of Western research over the past few decades (Fraser, 2002), this research agenda is still at its infancies in Turkey with a past account of a little more than a decade. The following presents several attempts to investigate learning environment in the local context of Turkey.

Atbaş (2004) looked at the associations between student experiences of several aspects of the classroom environment (e.g. psychosocial, instructional and physical) and three language learning outcomes, class participation, study habits and English achievement with the tertiary English preparatory program students. Some of the results from his analyses showed that teacher supportiveness, satisfaction with the course materials and involvement significantly predicted students' level of class participation and their achievement in English.

Şimşeker (2005) examined the relationship between perceived teacher interpersonal behaviors and the two student outcomes represented as attitudes towards mathematics and mathematics achievements. The results showed that teacher interpersonal behavior and student attitudes towards mathematics and their mathematics achievements were related. There was also a significant difference in student perceptions of teacher interpersonal behavior with regard to their economic and cultural backgrounds.

Another investigation into science attitudes were conducted by Telli, Çakıroğlu, and den Brok (2006) who investigated associations between students' attitudes towards Biology and their perceptions of the high school biology classroom environment. The researchers reported that all of the WIHIC scales were positively associated with students' biology-related attitudes with the three sub-scales of teacher support, equity and investigation demonstrating very high correlations with the variable of attitudes.

Arısoy (2007) sought to investigate the associations between the constructivist learning environment and affective variables of motivational beliefs and attitudes toward science in Grade 8 science classrooms. Part of the aim of her study was to investigate the effects of gender on perceived learning environment variables. The canonical correlation analyses indicated that all of the constructivist learning environment variables and all motivational variables were positively associated with one another. The results also showed a significant effect of gender in favor of girls.

Employing more than one classroom learning environment instrument in her study, Rakıcı (2004) investigated the unique contributions of each instrument (one investigating the perceptions of classroom environment and other investigating those of teacher interactional behavior) to the variance in the two different types of student outcomes, student achievement and attitudes. Data from both instruments were found to be associated with the student cognitive and affective outcomes. Another investigation into the constructivist learning environment were performed by Doğanay and Sarı (2012) who examined the predictive ability of constructivist learning environment upon the characteristics of thinking-friendly classroom with Grade 5 elementary students. The analyses indicated constructivist learning environment as a significant predictor of student reports of thinking-friendly classroom.

Given her investigations into the several interrelations among Grade 7 students' science achievement, self-regulation in science classes, classroom learning environment perceptions and several teacher-level variables, Yerdelen (2013) found a significant predictive ability of learning environment upon students' cognitive (science achievement) and affective variables (self-regulation related variables) with the self-regulation variables mediating the relationship between learning environment perceptions and achievement.

Pamuk (2014) investigated the relationship between constructivist learning environment and science achievement working with the Grade 7 students in Ankara. The results of his study revealed constructivist learning environment perceptions as a significant predictor of students' science achievement.

With the use of structural equation modeling, Yerdelen-Damar and Aydın (2015) attempted to examine the associations among high school students' approaches to learning science, perceptions of constructivist classroom learning environment and achievement goals. The results demonstrated that perceived classroom environment and mastery approach goals had a significant relationship with students' deep approaches to learning science with mastery approaches goals having a mediatory role. It was also observed that students' perceptions of classroom learning environment were significantly related to their mastery-approach goals.

As is understood from the above account, the past decade of research into learning environments in Turkey shows a very similar pattern to that of international agenda in that investigation of associations between students' perceptions of classroom environment and student outcomes has become the most common and preferred line of research. It is also important to note that Turkish studies have provided support to the international research for the existence of associations between the classroom environment and student outcomes. Moreover, it is also seen that there is a strong emphasis on the investigation of secondary education science classrooms compared to other disciplines. When the research on the foreign languages was examined, with the exception of Atbaş's study (2004), no other study has been found that attempted to investigate foreign language classroom learning environment with regard to student outcomes. However, when the variables investigated in his study were taken into consideration, it seems that there is a need for further research which will investigate foreign language classrooms with regard to some attitudinal or affective outcomes. One other implication relates to the lack of qualitative or mixed research designs in the Turkish studies to explore learning environments. Thus, some desirable directions for further research into learning environments include more use of qualitative or mixed research methods and variations in the disciplines, education levels and student outcomes investigated.

2.6. Summary of the Literature Review

The introduction of persistence as a motivational construct and linking it to the broader research venue of learning environments is of great importance as such an attempt gains more vitality first by offering a new motivation-related construct like persistence to second language acquisition research and also by enriching the learning environment research agenda. Thus, the review of literature first started with a general theoretical outlook into the idea of persistence and conceptualization or differentiation of it in relation to other similar constructs utilized in the literature. It was apparent that persistence has been studied mostly as a measure of retention in the form of course completion or withdrawal rates. Though there have been some research that considers the notion of persistence as a non-cognitive skill, there is an unfortunate lack of research that questions the domain-specificity of or the applicability of this construct to a more pedagogical or schooling-related contexts. Moreover, the idea or meaning of learning environments and its some relevant characteristics were also theoretically presented in this part to offer the insights that it is a broad area of expertise including almost all the details investigated in classroom pedagogical research. Following the provision of a firm theoretical background on the study variables, the review focused on the research-related background on the study variables that have been theoretically presented earlier. That is, this part first draws into the persistence as a measure of retention and its possible links to the learning environments so as to point out the possibility of the presence of a link between the two variables though persistence has been handled from a different point of view in the reviewed research here. With the new and innovative outlook introduced by the current research where persistence was to be handled as a non-cognitive, affective and domain-specific student outcome, it was vital to discuss and provide the existent sufficient evidence of associations between learning environments and other student affective outcomes frequently studied in the literature, which, in turn, is expected to imply that a similar type of a relationship could be expected between persistence in EFL study as an affective outcome and learning

environment perceptions. This part of the review particularly involved the presentation of research studies conducted abroad and in Turkey in order to emphasize or justify the need for and significance of such a research as the current one in the global or national research agenda. The review ended with the discussion of the gaps in the literature that this study will attempt to fill in by drawing upon the two stands of research (global and local) into learning environments and affective student outcomes.

CHAPTER 3

METHOD

This chapter describes the design of the study, research questions, population and sample, the instruments used to collect the data, the data collection procedures, data analyses and finally the limitations of the study.

3.1. Research Design

The research design is a mixed methods triangulation design (the convergence model) in that the purpose is to integrate, vary, cross-validate or corroborate the findings gained through qualitative and quantitative methods (Creswell, 2002; Creswell & Plano Clark, 2007). On the quantitative dimension, it is a correlational design as the aim of the study is to gain and understanding of the relationships between EFL learning environment, student background variables and students' persistence. On the qualitative dimension, it is a phenomenology design as the goal is to gain an in-depth understanding of the students' perceptions (Yıldırım & Şimşek, 2016) with regard to the associations between certain characteristics of the EFL learning environment and their persistence in the EFL learning. Figure 3.1 presents an overall conceptual model for the study. The qualitative dimension was designed to gain a better understanding of the quantitative findings about how the characteristics of English preparatory classrooms may be linked to students' level of persistence in learning English as perceived by the students themselves. In short, the researcher aimed to converge qualitative and quantitative findings to investigate the existence of associations between the EFL learning environment and student persistence. In addition, as a theoretical lens, learning environment dimensions guided the study. For this reason, besides its concurrent nature, the study has the transformative purpose. However, this concurrent transformative strategy (as termed by Creswell,

2002) may be characterized as "inductive, drawn from the literature but mostly generated during the research process" (p. 225).
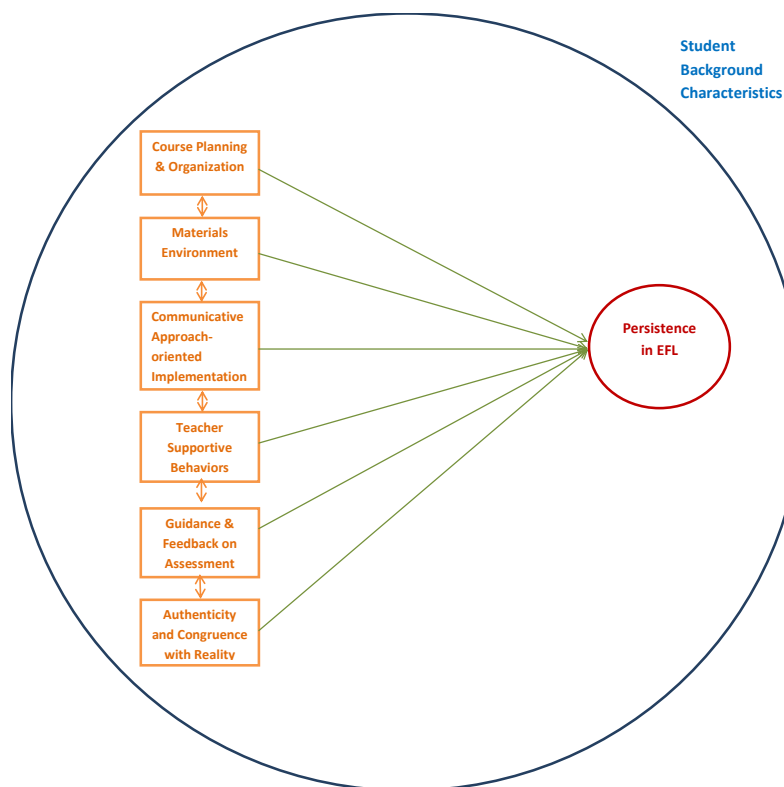
Figure 3.1. Conceptual Model for the Study

Given the research question one (RQ1), the first group of independent variables are the six dimensions of EFL classroom environment which are a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and f) authenticity and congruency with reality of the assessment tasks. Given the second group of independent variables, these elicit more personal and student background data that have been gathered into three umbrella terms for the purposes of easy recall. These are a) student demographic characteristics (gender, age and

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reported family income level), b) educational background (university subject domain, previous English courses attended and high school perceived level of English proficiency) and lastly c) exposure to English (outside exposure to English via audio-visual tools (television and internet) and outside exposure to English via visual-printed tools (books and magazines). The dependent variable for the RQ1 is persistence in EFL learning. For the research question two (RQ2), the independent variables are those of six EFL learning environment dimensions while the dependent variable again is the student persistence in EFL. Research question three (RQ3) will employ a qualitative research design realized in phenomenological investigation in that qualitative data from student perceptions about the associations between EFL learning environment and their level of persistence will be employed to corroborate and enhance the quantitative findings. Figure 3.2 shows the research design model utilized. As is clear from the notations used (i.e. QUAN + qual), the priority in this mixed methods study was given to quantitative data collection and analyses. The qualitative and quantitative data collection was concurrent and the results from the two methods were integrated during the interpretation phase.

QUAN	qual

QUAN   qual
  Data Collection   Data Collection

      ↓   ↓

QUAN   qual
  Data Analysis ⟷   Data Analysis
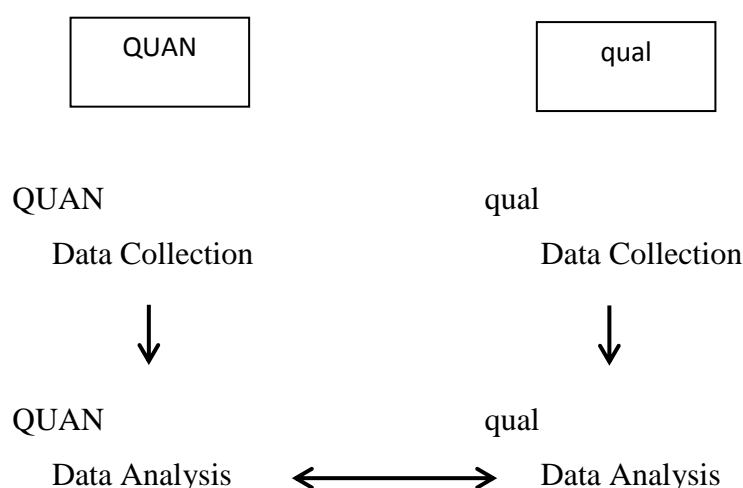
Figure 3.2. Research Design of the Study (adapted from Creswell, 2002, p. 214)

3.2. Research Questions

The research addresses the following research questions.

1. How well do certain characteristics of EFL classes, certain student characteristics, and they combined predict persistence in English language study?

2. Does the relation between certain characteristics of EFL classes and persistence in English language study vary by certain student characteristics?

3. What are the perceptions of the tertiary English preparatory program students in relation to the associations between the classroom environment factors and their persistence in English language study?

3.3. Population and Sample

The target population of the study was all English preparatory class students currently enrolled in the foreign languages departments or schools of the state universities in Turkey. The target population, being the researcher's ideal choice (Fraenkel & Wallen, 2006), was all freshman students enrolled in English preparatory programs in Turkey but this would be no possible within the limits of the current study. Hence, the researcher followed with her realistic choice that is termed as the accessible population (Fraenkel & Wallen, 2006). This accessible population was identified as all freshman students enrolled in English preparatory programs at the seven universities of the seven geographical regions of Turkey. Then, as a next step in sampling, the researcher decided the real sample of the study based on students' proficiency levels. Thus, the researcher had 1365 English preparatory program students of A1 proficiency level selected from those enrolled in the English preparatory programs of the seven universities located in seven different regions of Turkey as the main participants of her study. The process of determining the sample of the quantitative part is graphically depicted in Figure 3.3. As is clear from Figure 3.3., cluster sampling was employed with the each university in each of the seven geographical regions. For the qualitative dimension, maximum

variation sampling was performed to reach students with different characteristics from the English preparatory classes in order to get variation on the main interest of this study, the link between EFL learning environment and student persistence. That is, the researcher aimed to "identify important common patterns that cut across variations" (Patton, 2002, p. 243).

TARGET POPULATION

All freshman students enrolled in English preparatory programs of all of the universities in Turkey

↓

ACCESSIBLE POPULATION

All freshman students enrolled in English preparatory programs at the seven universities of the seven geographical regions of Turkey

↓

SAMPLE: 1365 English preparatory program students of A1 proficiency level selected from those enrolled in the English preparatory programs of the seven universities located in seven different regions of Turkey

Figure 3.3. The Process of Determining the Sample

3.3.1. Sampling Procedures and Participants

Employing cluster sampling in which the sampling unit is a group rather than an individual (Fraenkel & Wallen, 2006, p. 98), the researcher chose seven groups (clusters) based upon the seven geographical regions of Turkey. The clusters of subjects were determined based upon certain rationale. The universities first were categorized with regard to their respective geographical

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regions. As a second step and another sampling criterion, the oldest universities of the each of the seven regions were included in the sample. Some universities though being the oldest one in the region had no English preparatory programs and thus the researcher proceeded with the second oldest ones in the list. Table 3.1 below shows the distribution of the participants in terms of their universities and the geographical regions to which these universities belong.

Table 3.1

Institutions of the Participants (N = 1365)

University	Geographical Region	n	%
Gazi University	Central Anatolia Region	257	18. 8
Atatürk University	Eastern Anatolia Region	111	8. 1
Karabük University	Black Sea Region	233	17.1
Çukurova University	Mediterranean Region	239	17.5
Ege University	Aegean Region	152	11.1
İstanbul University	Marmara Region	165	12.1
Gaziantep University	Southeastern Anatolia Region	208	15.2

Following the selection of the universities based on the location and foundation year criteria, the researcher continued with some other rationale relevant more to the instruction or language education offered. In this sense, the obligatory English preparatory program students were chosen for the study because the inclusion of both must and optional English preparatory program students might distort the results as they were often expected to have different kinds of motivation in becoming an English preparatory program student and also in their study habits. Moreover, A1 level students were included in the study based on the rationale that those students were going to move towards

A2 level or basically pre-intermediate level of proficiency at the time of data collection phase for the study. In other words, the participants of the questionnaire and scale were those students that had started their English studies as true beginners and were getting A2 level in the first weeks of January when the data collection was managed. Therefore, the participants were believed to have had sufficient amount of time to get familiarized with the EFL classroom environment and all other relevant EFL learning processes and procedures. They were also believed to have spent sufficient amount of time to test and experience their persistent behaviors in the study of EFL. The exit level from the preparatory department is intermediate level (B2 level with regard to the European Common Framework). Hence, the students were expected to complete the preparatory program in one year and gain an intermediate level of proficiency so as to continue to their content area studies (university subject departments). As another general characteristics of the participants, they are all freshman students enrolled in the must English preparatory programs this year. There were no repeat students in the clusters and all of the participants started learning English at the preparatory programs in late September or early October of 2015-2016 academic year and had spent at least three months in the preparatory programs when this study was performed in early January.

3.4. Data Collection Instruments

The quantitative data for the RQ1 and RQ2 were gathered through the survey design, that is, from the administration of scales and questionnaires (i.e., learning environment scale and persistence scale). The qualitative data for the RQ3 were gathered by means of interviews with students which are open-ended and center on eliciting the perceptions of students in terms of the research problem, that is, the associations sought between students' reported persistence in EFL and the several dimensions of the EFL learning environment operationalized mainly in the quantitative phase of the study. That is, the interviews were conducted through the interview schedule prepared

in accordance with the six main EFL learning dimensions specifically operationalized for this study and also utilized in the questionnaires answered by the study participants. Hence, both types of data, qualitative and quantitative were collected with a purpose for triangulation to converge information and to provide evidence for the links between EFL learning environment and student persistence in EFL study. These two types of data were collected concurrently as an implementation strategy in Creswell's (2002) terms. The following presents detailed information about the instruments of the study and their development procedures.

3.4.1. Persistence Scale in EFL (PS)

The following presents the main steps in the PS development. The researcher made use of the four main steps offered by Netemeyer, Bearden and Sharma (2003). These steps are: a) construct definition and content domain, b) generating and judging measurement items, c) designing and conducting studies to develop and refine the scale and lastly d) finalizing the scale. Given the first step, construct definition and content domain, the researcher first attempted to clearly define the construct, that is, the students' persistence in EFL learning and its facets and domains. Cronbach and Meehl (1955) emphasize the importance of theory in the scale development process. Thus, as a first step, the researcher looked for a theoretical framework or well-specified theory which her construct of interest should be grounded in. Guided by the idea that "this well-thought-through theory starts with construct conceptualization/definition based in a thorough review of literature," she conducted a detailed review of literature, which led her to arrive at the Goal Setting Theory as a general theoretical foundation for her construct. This theory is based upon the idea that conscious goals have an influence on action (Locke & Latham, 2002). Ryan's statement that "it seems a simple fact that human behavior is affected by conscious purposes, plans, intentions, tasks and the like" lies in the center of construct definition and domain specification of this study. That is, persistent behavior of the students is believed to be

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dependent upon students' conscious goals, plans and intentions in the study of EFL and also the tasks required by the EFL study. The four mechanisms of the Goal Setting Theory by which goals operate was a lot relevant to the construct of persistence. According to the theory, goals operate through the following four mechanisms (Locke & Latham, 2002, pp. 706-707):

a) They have a directive function in that they regulate attention and effort of individuals' goal-related activities.

b) They serve an energizing function in that high goals result in more effort than low goals.

c) They have an effect upon persistence.

d) They have an effect upon action in indirect ways in that the goals direct people to recently discover or make use of the already-present knowledge and skills which are also related to goal-attainment.

The above account clarifies the role or relationship of persistence in the Goal Setting Theory. Delineating this theory as the guiding framework for the PS development, the researcher continued with the remaining three steps of the recommended four-step methodology above by Netemeyer et al. (2003). Accordingly, the researcher continued with generating and judging measurement items for EFL persistence in accordance with the above theoretical framework offered by the Goal Setting Theory. That is, the items were generated as to include and relate to goal-driven connotations and implications. Moreover, as a more contemporary direction in the goal-setting research, the researcher also have taken other goal-orientation constructs or basically constructs pertaining to Achievement Goal Theory which are further termed as Mastery Goal Orientation (developing competence via learning) and Performance Goal Orientation (demonstrating competence relative to others; Dweck, 1986; Elliott & Dweck, 1988; Dweck & Leggett, 1988; Pintrich, 2000). That is, one can be persistent because of his motivations for learning or mastering the content or motivations for performing better than others. Hence, such orientations were also considered in the writing of items.

As a follow-up stage of generating (entitled below as *preparation of item pools*) and judging measurement items (entitled below as *expert opinions*) stage, at the third step, the researcher designed and performed studies first to develop and refine the scale (entitled below as *pilot studies*) and later to prepare a final form of it (validation study) as a final step. The following sections and headings explain this PS development process mentioned above in detail.

3.4.1.1. Preparation of Item Pools

An initial pool of 38 items was generated based on the existing instruments preliminarily including such scales as Grit Scales (Duckworth et al., 2007; 2009), Conscientiousness Sub-scale of the Big-Five Character Inventory (John & Srivastava, 1999), Student Engagement Instrument (Appleton, Christenson, Kim, & Reschly, 2006), Values in Action Inventory of Strengths (Peterson & Seligman, 2004) and Goal Setting Theory (Locke & Latham, 2002). However, there was no specific and existing persistence instrument developed for EFL. Therefore, some other similar constructs and the instruments and their relevant sub-scales in which the notion of persistence is included were closely examined in the scale development process. The researcher conducted focus group interviews with a group of English preparatory program students (*n*=25). The results from the interview findings guided the reduction and exclusion of the items due to repetitions or irrelevancies so as to enhance the instruments' face validity, which was further confirmed by the expert opinions.

3.4.1.2. Expert Opinions

The revised scale based on the feedback from the focus group participants was given to experts for their corrections and confirmations so as to enhance face and content validity of the instrument. There were four senior EFL academicians, two EFL instructors, four psychology experts, one Turkish language teacher and one measurement and evaluation expert in the expert committee. The experts were requested to assess the persistence scale with

regard to its content, coverage, meaning and comprehensibility of the items and the structural problems with the items. Most corrections included wording problems or deletion or combination of items having almost the same meanings. After receiving a final feedback from the experts, the number of items was reduced to 30 and the final scale was again checked for grammar, language structure and language problems by a Turkish teacher. The final version of the persistence scale was sent to the Human Subjects and Ethics Committee at the Middle East technical University (METU) to confirm also the ethical appropriateness of the instrument. An approval for the administration of the scale was received from the Human Subjects and Ethics Committee at METU (see Appendix A).

3.4.1.3. Pilot Studies

Two pilot studies were conducted with the students from the English Preparatory Program from the Necmettin Erbakan University in Konya. Prior to each main pilot study, the researcher herself administered the scale to one class of English preparatory students for face validity purposes. In line with their comments, necessary corrections, deletions and changes were performed in respect to grammar and spelling, comprehensibility and meaning of the items, double statements, layout and format. Most comments included corrections on the layout and some repeating statements.

3.4.1.3.1. First Pilot Study: Item Reduction

The aim of the first pilot study was to reduce the number of the items in the remaining pool of 30 items as the researcher wanted to have one-dimensional and economical tool to elicit the students' perceptions about their levels of persistence. The data gathered from 286 students were analyzed using Principal Component Analysis (PCA), a technique used for data reduction purposes (Preacher & MacCallum, 2003). The researcher has designed the scale as one-dimensional. In other words, the researcher had an *a priori* hypothesis about the number of factors to extract.

PCA was performed on the 30 items. Before performing PCA, some assumptions for factor analysis were tested. The sampling adequacy assumption assessed via The Kaiser-Meyer-Olkin value, *KMO* =.95. was adequate (Kaiser, 1970, 1974). Inspection of the correlation matrix revealed correlations above .30 and a significant result from the Barlett's test of sphericity, $\times^2$ (435) = 2875.63,$p < .001$ further verified the suitability of the data for factor analysis. The ratio of at least five cases (Gorsuch, 1983; Hatcher, 1994) and of preferably 6 cases or more for each of the variables (Cattell, 1978) and also the presence of high communalities (MacCallum, Widaman, Zhang, and Hong, 1999) verified the suitability of the sample size for further analysis. There was also no violation of the multivariate normality.

PCA extraction with a priori one component specification explained 31.51 % of the variance. Cronbach's Alpha value of .93 verified the reliability of the instrument. Given the pre-specified one component solution and using the cutoff value of .55, the items which were highly preferred by the participants were included in the factor solution as shown in Table 3.2. In conclusion, the number of items was reduced into 18 as a result of the PCA conducted on the first pilot data. The expert opinions were again sought on the final draft of PS-EFL. Some minor changes in relation to wording and word choice were performed and thus the final draft was finalized for the second piloting stage.

Table 3.2

Summary of Factor Loadings for One-Component Solution for PS-EFL (N = 286)

Item	Factor loading
I work hard to learn English. (#15)	.81
I continue to invest time and effort in language activities in spite of the hard work and patience they require. (#5)	.76
I continue a difficult language activity even when the others have already given up on it. (#18)	.74

Table 3.2 (continued)

If I am not good at a skill in English, I keep struggling to master it. (#1)	.74
Once I decide to do something when learning English, I do not give up until I reach my goal. (#3)	.73
When I have trouble with a language point, I practice it more. (#14)	.70
The more difficult a language activity is, the more determined I am to finish it. (#6)	.70
I try my best to do all I can to learn English (#29)	.69
I do more than what is expected of me by my teachers when learning English. (#12)	.64
When I get a poor mark in my English class, I work harder next time. (#26)	.64
I force myself to study more than other people when learning English. (#9)	.63
I insist on reaching my goal of learning English even if it involves considerable trouble. (#22)	.62
When working on language learning activity, I try hard to finish it in spite of the distractions around. (#23)	.61
I am not discouraged by setbacks I face in my English learning process. (#19)	.61
I make an effort to follow through with the plans I make for my studying when learning a language skill. (#10)	.60
If I fail to solve a problem I face in a language assignment, I try again and again in the hope that I will be successful. (#25)	.60
My ultimate goal of mastering English motivates me to overcome day to day difficulties. (#2)	.60
When it comes to learning English, I finish whatever I begin though I feel tired. (#20)	.55

3.4.1.3.2. Second Pilot Study: Confirmatory Analysis

The aim of the second pilot study was to test the factor structure of the final version, that is, the version with the top 18 items receiving the highest loadings (see Appendix B and Appendix C). The piloting data were collected from 304 English preparatory program students. The 18 items of the PS-EFL were subjected to Exploratory Factor Analyis (EFA). Prior to EFA, the suitability of data for factor analysis was assessed. The Kaiser-Meyer-Olkinvalue, *KMO* = .95, exceeded the recommended value of .60 (Kaiser, 1970, 1974) and thus was satisfactory. Inspection of the correlation matrix and a significant result from the Barlett's test of sphericity, $\times^2$ (153) = 2858.64, *p*< .001 further verified the suitability of the data for factor analysis. The ratio of at least five cases (Gorsuch, 1983; Hatcher , 1994) and of preferably 6 cases or more for each of the variables (Cattell, 1978) and also the presence of high communalities (MacCallum et al., 1999) were all satisfied with a sample size of 304. Multivariate normality has not been violated as there appeared to be no outlying cases for the researcher to remove.

EFA with Maximum Likelihood extraction with a priori one factor specification explained 49.41 % of the variance (Table 3.3). Cronbach's Alpha value of .94 verified the reliability of the instrument as it was over the acceptable value of .70 (Nunnaly,1978).

Table 3.3

Summary of Factor Loadings for One-Factor Solution for PS-EFL (N = *304*)

Item	Factor loading
If I am not good at a skill in English, I keep struggling to master it. (#7)	.77
The more difficult a language activity is, the more determined I am to finish it. (#13)	.77

Table 3.3 (continued)

I continue to invest time and effort in language activities in spite of the hard work and patience they require. (#9)	.76
I try my best to do all I can to learn English. (#12)	.76
Once I decide to do something when learning English, I do not give up until I reach my goal. (#14)	.75
If I fail to solve a problem I faced in a language assignment, I try again and again in the hope that I will be successful. (#16)	.72
I insist on reaching my goal of learning English even if it involves considerable trouble. (#5)	.71
I work hard to learn English. (#18)	.71
I continue a difficult language activity even when the others have already given up on it. (#15)	.70
When I have trouble with a language point, I practice it more. (#4)	.69
When it comes to learning English, I finish whatever I begin though I feel tired. (#2)	.66
I do more than what is expected of me by my teachers when learning English. (#6)	.65
I force myself to study more than other people when learning English. (#3)	.65
When I get a poor mark in my English class, I work harder next time. (#8)	.63
I force myself to study more than other people when learning English. (#9)	.63
I insist on reaching my goal of learning English even if it involves considerable trouble. (#22)	.62
When working on language learning activity, I try hard to finish it in spite of the distractions around. (#23)	.61
I am not discouraged by setbacks I face in my English learning process. (#19)	.61

3.4.1.4. Validity and Reliability of the Instruments

Evidence for face, content and construct validity was sought during the instrument development stage. For the face validity of the instrument, the researcher consulted the experts from several discipline areas and students who are the main respondents of the instrument and attempted to revise the instrument based on their comments and suggestions. In addition, the researcher had the scale designed by a professional designer so as to enhance the appearance and layout of the instrument in the eyes of the respondents. In order to provide evidence for the content validity, the researcher conducted a detailed review of literature with a close examination of the existing instruments to prepare the most efficient items for the content of the scale. Two pilot studies performed on the earlier versions of the PS enabled the researcher to provide evidence for the construct validity of the instrument. Construct validation also encompasses the content-related evidence and is seen as the broadest category among the evidences for validity (Fraenkel & Wallen, 2006), and thus based on the above attempts to provide evidence for the content of the PS with the utilization of experts and theory-driven development process, it is believed that some evidence for construct validity was also provided. The results for the evidence for construct validity were also presented above under the pilot studies section. The factor and reliability analyses were also conducted with the main study data to maintain further validity and reliability evidence for the PS and these will be presented in the next chapter when presenting the results of the whole study.

3.4.2. EFL Learning Environnent Questionnaire (QEFL-LE)
3.4.2.1. Methodological Approach to the Development of QEFL-LE

Fraser (1986, as cited in Waldrip, Fisher, & Dorman, 2008) and Hase and Goldberg (1967) mentions four different methods for instrument development. These methods are a) intuitive-rational, b) intuitive-theoretical, c) empirical group discriminative and d) factor analytic. In the intuitive-rational and intuitive-theoretical methodologies, the items are nominated to their tentative

scales prior to the administration of the instrument while the remaining two, empirical group discriminative and factor analytic strategies require test administration prior to the nomination of items to the scales. QEFL-LE was developed following an intuitive-rational method to instrument design and validation. In their attempt to develop and validate another learning environment instrument, Waldrip and his associates (2008, p. 562) have talked about a three-step intuitive-rationale instrument development process: a) identification of salient dimensions, b) writing sets of items that are in line with the salient dimensions and c) field test of the instrument. Moving from Waldrip and his colleagues (2008, p. 562) definitions, salient dimensions are determined based on the literature review on the topic enhanced by the researchers' academic capability. Writing of items is also related to the researcher's academic expertise in scale development and partly to the literature review. Field testing stage refers to the administration of the scale to a group of participants and then reporting several available statistical values: the internal consistency (e.g. using Cronbach alpha coefficient) and discriminant validity (e.g. mean correlation of each scale with the remaining scales. Factor analysis may also be consulted for scale refinement purposes.

3.4.2.1.1. Step 1: Identification of Salient Dimensions for QEFL-LE

The researcher developed this instrument with an attempt to integrate several traditions related to learning environment research and its related sub-aspects, such as several types of teacher behavior general characteristics of a classroom environment and assessment procedures. Thus, the research first identified several classroom dimensions and characteristics from the literature that may compose a classroom learning environment and more specifically an EFL classroom learning environment. To develop these dimensions further, the extensive literature on the process-product model of teacher effectiveness, psychologically oriented research into teacher interpersonal behavior and research on several other aspects of classroom environment such as teacher instructional behavior, general physical classroom conditions, social climate

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and assessment procedures were all taken into consideration during the instrument development phase. In this regard, the results from all research agendas above and review of related literature guided the researcher first to develop an instrument that involves two main dimensions, that is, a) general classroom environment characteristics, and b) assessment procedures. That is, in the literature, investigation into general classroom learning environment and student perceptions of assessment has been viewed as two different research venues. In the literature, general classroom learning environment refers to such broad characteristics as social relationships among individuals in class, teacher-related behaviors (instructional and non-instructional ones) and physical conditions. In short, general classroom learning environment involves all presiding ethos, relationships and characteristics of a classroom. Fraser (1998, p. 7) mentions the presence of "a variety of economical, valid and widely-applicable assessment instruments" to investigate classroom learning environments. An extensive literature review conducted by the researcher with an analysis of over 20 classroom learning environment or course/school evaluation questionnaires and examination of research papers on exemplary EFL classroom learning environment characteristics further supported Fraser's (1998) above claim. The historically important and contemporary instruments from the literature included Learning Environment Inventory (Fraser et al., 1982), Classroom Environment Scale (Moos and Trickett, 1995), School-Level Environment Questionnaire (Fisher & Fraser, 1990) , Individualized Classroom Environment Questionnaire (Fraser, 1981), My Class Inventory (Fisher & Fraser, 1981), College and University Classroom Environment Inventory (Fraser, Treagust, & Dennis, 1986), Questionnaire on Teacher Interaction (Wubbels, 1993), Constructivist Learning Environment Survey (Taylor, Fraser, & Fisher, 1997), The Questionnaire on Instructional Behavior (Lamberigts & Bergen, 2000, as cited in den Brok, Bergen, & Brekelmans, 2006) and WIHIC questionnaire (Aldridge & Fraser, 2000; Fraser, McRobbie, & Fisher, 1996; see Appendix D for an overview of the instruments and related Moos' scheme categories).

In sum, the researcher made a detailed evaluation on the existing instruments and policy and research papers on EFL teaching methodology and identified the following six tentative dimensions for the QEFL-LE: a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and f) authenticity and congruency with reality. Table 3.4 presents these salient dimensions and their common sense definitions together with the classification of each dimension according to Moos (1974). These definitions were again compiled in line with the detailed review of literature mentioned above.

Table 3.4

Description of QEFL-LE (Tentative Form)

Dimension	Description	Moos' Schema
Course Planning and Organization	The extent to which the EFL lessons are performed, planned, orderly, fluent and connected to each other by the teacher	S
Materials Environment	The extent to which the course materials and physical conditions are contributing to students' learning	S
Communicative approach-oriented Implementation Practices	The extent to which students are activated and facilitated to take active roles in performing classroom learning activities	P
Teacher Supportive Behaviors	The extent to which the teacher helps, encourages, befriends and prepares a comfortable, fair and respectful environment for the students	R
Feedback and Guidance on the Assessment Tasks	The extent to which the EFL assessment procedures are modelled for the students and evaluated for feedback purposes by the teacher	P
Authenticity and Congruence with Reality of the Assessment Tasks	The extent to which the EFL assessment procedures are relevant to real-life and real context of learning.	P

Note. R= Relationship, P= Personal Development and S= System Maintenance and System Change

Perceptions about the classroom assessment procedures have been treated as a different entity in itself in the literature and there have been a number of attempts to develop instruments to elicit merely the students' perceptions of assessment as a new and novel venue of research within the learning environments research agenda as different from the above popular classroom

environment questionnaires. The biggest important source for this study was Perceptions of Assessment Tasks Inventory (PATI) developed by Dorman and Knightley (2006). The three scales of this questionnaire, authenticity, student consultation and transparency were particularly relevant to the current study. Authenticity dimension guided the researcher for writing items to elicit information on the authenticity and congruence with reality dimension related to EFL assessment tasks used, while the remaining two scales were used for the writing and development of items tapping to the teacher control of assessment tasks which also has somehow a contradictory stand against the authentic practices of a language classroom. Taking the importance of alignment between teaching and testing, the researcher also made use of the instruments developed to elicit student perceptions about the teachers' instructional behavior especially when writing the items for the dimension about the feedback and guidance. Among these instruments, particular interest was devoted to the three sub-scales of The Questionnaire on Instructional Behavior (Lamberigts & Bergen, 2000, as cited in den Brok, Bergen & Brekelmans, 2006) which pertain to the three different types of teacher control behavior of students' learning activities. In this essence, teacher behavior was believed to have a role upon students' perceptions of classroom assessment environment as it is the teachers themselves that create and monitor the assessment tasks and activities in the classroom (Brookhart, 1997). Another important source for the present study was Alkharusi's (2011) Perceived Classroom Assessment Environment Scale. The learning-oriented assessment environment dimension of the questionnaire was particularly related to the current research for the derivation of items linked to the two main dimensions delineated by the researcher for the purposes of current instrument development.

3.4.2.1.2. Step 2: Writing of QEFL-LE Items

As a second step in the intuitive-rational approach to scale development, the researcher attempted to write items that are conceptually and theoretically related to each tentative dimension identified in the previous phase. With the

purpose of having an economical and non-lengthy tool, a pool of 41 items was developed.

3.4.2.1.2.1. Expert Opinions

The pool of 41 items was checked by two academics with an expertise in educational sciences and psychological measurement and three language instructors specialized in teaching of English as a foreign language. Particular attention was given to the scale allocation of items, ambiguities, repeating statements and face validity of the instrument. This review process ended with 28-item instruments with six scales as previously identified. However, the labeling of one of the scales was changed from student negotiation and shared control into communicative approach-oriented implementation practices because such a label would be more appropriate and encompassing for some of the items combined as a result of reviews by the experts. The instructors taking part in the expert opinion feedback sessions also thought that this newly recommended label would be much more domain-specific and thus more closely related to teaching of English as a foreign language. This section was based on the communicative approach that is a very popular and widely used methodology in the teaching of English all around the world. Accordingly, following the expert opinions, the finalized version of 28 items with six scales was administered to one class of English preparatory students ($n = 25$) so as to gain feedback on the clarity and understandability of the items and required amount of time for responding to the instrument. A group discussion followed the administration of the finalized version of QEFL-LE in respect to the wording, grammar and spelling mistakes, layout and more importantly understandability. The students had comments on the layout only and their suggestions were noted for the main study (see Appendix E and Appendix F for the final form of the QEFL-LE). An approval for the administration of this instrument was again received from the Human Subjects and Ethics Committee at METU.

3.4.2.1.3. Step 3: Field testing, Validity and Reliability

The third step in the intuitive-rational approach to instrument development required the field testing of the instrument. The QEFL-LE was field tested in the main study here with 1365 English preparatory program students from seven different state universities in Turkey responding to the instrument. Apart from the face and content-related evidence practices mentioned above with the expert opinions and student group discussions, further validity and reliability analyses of QEFL-LE were performed using the data obtained from the main study data from 1365 participants. The internal consistency reliability (Cronbach Coefficient α) of each scale was computed. Detailed information on the reliability and construct validity of the instrument will be provided in the next chapter when the psychometric characteristics of QEFL-LE are presented.

3.4.3. Interview Schedule

The interview schedule designed for the study possesses several questions prepared in line with the EFL learning environment dimensions investigated through the QEFL-LE. The aim was to gain more comprehensive views of the participants. The researcher prepared the first draft of the schedule and sought expert opinions. Following some minor changes based on the feedback from the experts, the interview schedule was finalized and pilot tested.

The schedule included two main parts in the form of a) background questions and b) questions about content and process (see Appendix G and Appendix H for the final form of interview schedule). The first part included six open-ended questions related to the personal information and the general background characteristics of the students. The aim was to prepare the students for the main content questions. The student background information elicited through the first part of the schedule basically included the university department, perceived level of persistence at the program currently, ideas about learning English and earlier experience with learning English. In the second part of the interview schedule, there were twelve open-ended questions each

aiming at eliciting students' perceptions about their persistent activities for the sake of learning English and about how such activities were influenced by or linked with the characteristics of the EFL environments, that is, by mainly those six factors in the classroom atmosphere that have been also questioned by means of the quantitative tool, QEFL-LE. There were such questions as "Do you think that the behaviors of the English teacher in the classroom are influential upon your giving up or continuing to learn English? and "Does a systematic and planned English class influence your being perseverant and decisive in learning English?"

3.4.3.1. Pilot Study

Four students took part in the piloting stage of the interview schedule. These students were purposively selected from the English preparatory program students at Necmettin Erbakan University. The researcher being an English teacher herself at the program identified some students (two females and two males) from various university subject domains who were believed to provide detailed information about the questions. These four students were interviewed in the teachers' office. The students were asked about the clarity and wording of the questions. The researcher recorded the expected time for an approximate estimate of the needed time for interviews. Following the interviews, the researcher listed to the recorded data to check any need to change some of the questions or any prompts or alternative questions to enrich the understandability of the questions. Accordingly, some minor changes were performed in that more effective words or ways of wording were added to the questions. One question were excluded from the final form as this question appeared to be ineffective as the students seemed to be answering it as connected to another question in the interview form. Hence, the final form of interview schedule included 11 questions pertaining to content and process.

3.4.3.2. Trustworthiness

The researcher attempted to ensure verification procedures in the form of peer debriefing. Peer debriefing refers to the use of an external look on the data and research process (Miles & Huberman, 1994). This process is thought to be instrumental for credibility (internal validity) purposes. Peer debriefing took place in two phases for the current study. Informal discussions with an experienced peer, that is, peer examination in qualitative research design was performed to find alternative explanations for the emerging codes and themes and overall interpretation of the data, which also serves for inter-coder agreement purposes. Secondly, expert opinions were consulted in that qualitative measures (interview schedule) was checked by external scholars, based on his suggestions and comments, relevant changes and adjustments was performed before the pilot testing of the instrument. Another procedure in achieving credibility (internal validity) was members' check procedure which is based on the assumption that participants serve as arbiters (Smith & Geoffrey, 1968, as cited in LeCompte & Goetz, 1982). The transcriptions of the several interviews were taken to the participants of the study (English preparatory program students) that are conveniently available for the researcher in order to correct researcher's misinterpretations and misperceptions. Finally, rich and thick descriptions of the setting, participants and data collection procedures were provided. This procedure is thought to be useful in achieving transferability (external validity) in that "adequate comparisons with other samples" (Miles & Huberman, 1994, p. 279) may be performed with the help of the broad descriptions of the characteristics of the sample, setting and processes of this study. Moreover, a structured interview forms was used; hence, other studies may gain a better understanding of the content of the data collection methods.

3.5. Data Collection Procedures

Before data collection could proceed following the finalization of the data gathering tools, permission was sought from the seven universities included in the sample. Request letters were sent to the administration of the each preparatory program so as to receive the necessary permission to administer the study instruments to the English preparatory program students and in some cases they were further contacted through phone. Based on the sampling criteria, the oldest universities of the respective regions were consulted first. However, for several constraints, the researcher had to choose the second or third oldest universities of the region. For instance, for the Southeastern Anatolia Region, Dicle University in Diyarbakır which was the oldest one in this region had no preparatory programs, and thus the researcher applied to the second oldest one in the region, Gaziantep University in Gaziantep. Moreover, for the Black Sea Region sample, Karadeniz Technical University in Trabzon was the oldest university but as the department was busy with the exams before the end of the semester; necessary permission could not have been received from the administration. Abant İzzet Baysal University in Bolu and Ondokuz Mayıs University in Samsun rejected the researcher's request for permission for the same reasons for the Black Sea Region. Therefore, the researcher applied to Karabük University in Karabük which was placed later on the list of Black Sea Universities in relation to their opening years and the school administration accepted this request. After dealing with such permission constraints, the final list of participant universities was determined and appointments for data collection were arranged. The approximate number of A1 level students was asked to the contact people at the universities for the preparation of data collection instrument copies to be administered.

In most of the classes, the researcher herself administered the instrument. For those classes or schools where the instructors requested to administer the tools themselves, the researcher had already prepared a detailed and informative instruction paper so that the instructors would know in detail how to conduct the questionnaire and what to explain to the students. For their

voluntary participation, the students were asked to sign informed consent forms (see Appendix I) including some brief information about the aim and nature of the study. When the data collection procedures were completed in one university, the researcher looked through the copies to remove the uncompleted forms with a lot of missing data and then put them into files for the following data analyses procedures.

For the interviews, the participants from the two universities that are convenient for the researcher were selected. For this selection, the English preparatory program course instructors were consulted for their suggestions about the information-rich participants who could provide detailed information about the research question. In addition, in line with the maximum variation sampling, a particular attention was paid to the selection of interviewees based on the criterion of similar degrees of representation of gender and university subject domain. Upon the completion of the questionnaires by the selected interviewees, the interviews were invited for the interview depending on the availability of their schedules. The researcher kept a list for appointments for the interviewees so that she could manage the time effectively. The interviews mostly took place in a convenient location which was quite such as a library or seminar hall affiliated to the preparatory schools. In some cases, as requested, the English instructors provided their offices for interviews. The researcher tried her best to offer a silent environment for the interviews to take place. The background questions in the interview schedule also formed a nice start for the interviewees to adapt to the atmosphere. The interviews were recorded using a good quality voice recorder and a typical interview took from 25 to 35 minutes depending on the pacing and detail of conversations. The interview audio files were transferred to the computer as soon as the interviews were completed and they were labeled accordingly.

3.6. Data Analysis Procedures

The study made use of two main analyses procedures for the analysis of quantitative data, the results of the inferential statistics preceded by the descriptive presentation of the data. Following the data entry, data were screened and cleaned for missing values. After making sure that there is no missing values exceeding 5 % of the whole data, the researcher continued with the factor analyses and other main analyses for the study.

For the purpose of research question one (RQ1), that is, to investigate the relationship between persistence and variables of six learning environment dimensions and several student background characteristics, multiple linear regression was employed. Thus, the dependent variable was the persistence scores of the students in the EFL study and the independent variables were the six EFL learning environment dimensions of a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks f) authenticity and congruency with reality of the assessment tasks. Another set of independent variables were that of student background variables: a) gender, b) age, c) university subject domain, d) family income level, e) prior English courses taken, f) perceived proficiency level in English at graduation from high school, g) exposure to English via audio-visual tools (television and internet) and finally h) outside exposure to English via visual-printed tools (books and magazines). The alpha level was set as .05 for the regression analyses for the RQ1 and all the statistical assumptions required for reliable regression analyses were checked against any violations.

For the purposes of RQ2, that is, to investigate report the relationship between the certain characteristics of EFL classes and persistence in English language study on the basis of the levels or the subsets of the student background characteristics, Multiple Regression analyses were conducted. Prior to the regression analyses, the researcher first selected the cases (observations) in the data set to form subsets of the each of the eight student-related variables. Hence, the dependent variable was again student persistence

in EFL, while the six EFL learning environment dimensions, a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and f) authenticity and congruency with reality, formed the independent variables of the study. The regression analyses were performed subsequently on each subset of the each of the eight student-related variables. The alpha level was determined as .05 for the regression analyses for the RQ2 and all the statistical assumptions were ensured against any violations.

For the analyses of qualitative data (RQ3), the researcher followed a "partway approach" (Miles & Huberman, 1994, p. 61) between the a priori and inductive coding strategies in that she first prepared a general accounting list for codes including the six main dimensions of the EFL learning environment in which further codes was generated inductively as the researcher was reading the transcriptions for regularly occurring topics. Similarly, Patton (2002) refers to such an approach as " analytic induction" in that the researcher begins with a priori theoretical guiding scheme to examine the regularly occurring patterns (deductive phase) and later or at the same time seeks to elicit the underlying patterns emerging out of the qualitative data (inductive phase). Thus, in brief, the researcher of this study first prepared a provisional start list of codes delineated from the six key dimensions of the EFL learning environment operationalized for the study and previously utilized in the quantitative phase and she thus first chose patterns on this existing framework and then also added more patterns emerging out of her data during the close reading. The interviews were transcribed by the researcher word by word on a word document, and a close reading of the transcribed data was performed. This close reading helped the researcher identify meaningful segments and then assign conceptual labels (codes). When assigning these codes, the conventional advice was sought in that the researcher coded the transcriptions by hand, that is, with a pencil and marked the recurring topics and patterns in the left-hand margin of the word documents for the transcribed data. The researcher wrote

codes of "chunks of varying size – words, sentences or whole paragraphs" (Patton, 2002, p. 56) by treating the six EFL learning environment dimensions as roof, guiding structures. Table 3.5 shows the illustration of list of themes and codes. Prior to the writing the qualitative report, these codes that cohered were then clustered by using scissors so that the six different pre-defined EFL different dimensions could be differentiated from one another with their associated codes. That is, the researcher cut the data thematically in order to create useful piles of data pertaining to the each dimension of the EFL learning environment. A post reading was performed in order to develop a better understanding in relation to the codes and themes generated and test these understandings. Finally, when the coding and post reading was completed, six different document files were composed in the light of the six EFL learning dimensions, that are, the themes or variables for which further data analyses report would be written.

Table 3.5

Illustration of List of Codes and Themes (final form)

THEME I: COURSE PLANNING & ORGANIZATION
too much familiarity with the course book
text-book-based scheduling/teachers' following the course schedule
level scheduling problems (multilevel classrooms)
same-level grouping

THEME II: MATERIALS ENVIRONMENT
Physical Conditions
ideal temperature
large classroom
comfortable desks
bright classroom
lighting
Course Materials
authentic (real-life) materials/content
supplementary materials
technology & video-based materials
four-skills textbook
challenge/difficulty in course materials
too much recycling in the textbook

THEME III: COMMUİCATİVE APPROACH-ORIENTED IMPLEMENTATION
four-skills based instruction
focus on speaking skills
students' speaking in the target language
group work
individual work
communication-based activities
language games
activities related to students' real-life
activities similar to real-life applications
students' being active in class time
varied (diversity in) class activities
grammar-based instruction

THEME IV: TEACHER SUPPORTIVE BEHAVIORS
friendly teacher
good communication with teacher
teacher encouragement
Teachers' speaking in the target language
talkative/communicative teacher
humorous teacher
considerate teacher
Teachers' giving individual care
disciplined/strict teacher
serious teacher
unfriendly teacher
rude teacher
distant teacher

THEME V: FEEDBACK AND GUIDANCE ON THE ASSESSMENT TASKS
Teachers' providing strategies and tactics
Teachers' correction
Teachers' way of giving feedback
need for feedback
need for guidance
need for correction
need for individual feedback
satisfaction with the feedback provided
clear criteria for feedback
indirect feedback

THEME VI: AUTHENTICITY AND CONGRUENCE WITH REALITY (ALIGNMENT WITH REAL LIFE AND REAL CONTEXT OF LEARNING)
tasks analogues to students' real-life
need for interactions between assessor and assesse
multistage tasks
concurrent feedback/guidance during the test
students' need for self-adjustment during the test
assessment aligned with curriculum
transparent criteria and standards

3.7. Limitations of the Study

The use of self-report instruments to measure persistence and the student perceptions of EFL classroom learning environment posit some concerns. That is, the persistence scale and EFL learning environment instrument are vulnerable to social desirability bias. Though qualitative methods in the form of questionnaires were also utilized so as to corroborate the quantitative findings and thus increase the reliability of the results, the results should be still treated with a caution for this study being a very first attempt to investigate the possibility of associations between the learning environment perceptions and students' perceptions of their persistence in EFL.

Another issue that should be approached with a caution is the study instruments. The PS and QEFL-LE instrument were both developed originally for the purposes of current study. To obtain construct-related evidence of validity, there is a need for "a broad array of evidence" (Fraenkel et al., 2015, p. 155). Construct-related evidence of validity being a very encompassing category of validity evidence covers both content-related and criterion-related evidence. Though the items and content of the instruments was indicated to be relevant and representative of the constructs to be measured by the independent experts and the literature and the underlying theories was well reviewed in the instrument development process, there is a need to provide more evidence about the functioning of the data gathering instruments used in this study with a variety of individuals and in a variety of situations. The development of the QEFL-LE instrument was guided mainly by the consistency with the existing instruments and the coverage of Moos's general categories. Hence, QEFL-LE was developed with a more focus on and evidence for content-related evidence of validity over other types of evidence. Therefore, a broader array of evidence should be obtained for this instrument. Thus, when the instruments were employed and tested in more studies thus providing more and more varied evidence, it would be then possible to make more warranted inferences about the results gained from these instruments.

For the qualitative inquiry, the results cannot be generalized to accessible population since this dimension of the study aimed to investigate the perceptions of the students purposefully selected from those answering the questionnaires in order to corroborate and enhance the findings and also see the compatibility of the results with the quantitative phase of the study. Qualitative data were elicited from the perceptions of the EFL learners included in this particular study; thus, extending the results beyond that specific sample is questionable and not logical and the results are limited to this specific group of students. Some strategies were used to ensure the trustworthiness of the qualitative phase; however, as expected, in such interpretivist and qualitative perspectives, they may not be completely independent of the perceptions of the researcher and thus exhibiting some degree of subjectivity.

CH APTER 4

RESULTS

The first section in this chapter presents the psychometric characteristics of the questionnaire and scale employed in the study. This section is followed by the presentation of the participant characteristics in order to provide a profile of the English preparatory programs students taking part in the study. The following sections display the results obtained in relation to each research question respectively. The last section combines and summarizes the quantitative and qualitative results gained in this study for corroboration purposes.

4.1. Psychometric Characteristics of the Study Instruments

The following presents the psychometric characteristics of the two study instruments together with the validity and reliability analyses performed during the development process of these instruments.

4.1.1. Psychometric Characteristics of PS

The researcher developed the PS-EFL in order to examine the English preparatory program students' perceptions in relation to their persistence in the process of learning English. The questionnaire was designed as one-dimensional. The validity and reliability analysis of the PS-EFL was performed using the data obtained from the two subsequent pilot studies followed by a validation study. That is, to confirm the factor solution found in the previous two factor analyses (reported in the methods section previously), the validation was conducted with the main study data. The data from the validation study was subjected to confirmatory factor analysis. The following presents the validation study.

4.1.1.1. Validation Study

The final version of 18-item scale was administered to 1365 English preparatory program students from seven different universities, which was the main study data, so as to validate the factor solution gained from the pilot studies. A confirmatory factor analysis was performed by means of LISREL 8.71 for Windows (Jöreskog & Sörbom, 1993) in order to confirm the one-factor structure. Prior to CFA, some assumptions for the suitability of the data for CFA have been assessed. In referring to the ratio of cases assumption (Cattell, 1978; Gorsuch, 1983; Hatcher, 1994), it is seen that the sample size (N = 1365) in the current study is adequate for CFA. Data set was transformed to z values to check extreme scores and the results showed no extreme cases (i.e. all were between -3 and +3). The distribution of the missing data in the data set was also checked and it was seen that the results for each scale item was below 1 % showing that the distribution of values was coincidental. Lastly, Skewness and Kurtosis coefficients of descriptive statistics were also examined and all values were between the acceptable range of -1 and +1.

For the interpretation of the model, Root Mean Square Error of Approximation (RMSEA), Non-Normed Fit Index (NNFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Root Mean Square Residual (RMR) and Standardized Root Mean Square Residual (SRMR) were utilized. The one-factor model proposed for the confirmatory factor analysis yielded an AGFI of .92, RMSEA of .060, NNFI of .98, CFI of .99, RMR of .042, and SRMR of .032. In talking about these confirmatory statistics, it is seen that the values of AGFI, NNFI and CFI are all above .90 and thus indicate a good fit (Jöreskog & Sörbom, 1993; Kline, 2005). Given the RMR and SRMR, they are all less than .05 and hence represent a good model fit (Jöreskog & Sörbom, 1993; Kline, 2005). The above RMSEA value also indicates mediocre fit (Browne & Cudeck, 1993). Overall, these fit indices revealed a good fit. The standardized path coefficients for each item are given in Figure 4.1 below. They ranged from .45 to .77. In conclusion, it has been seen that the structure in the original form is confirmed with the main data from the current study. In

other words, CFA conducted on the final 18-item version supported the researcher's proposal about persistence in EFL as a one-dimensional construct for the purposes of current research.
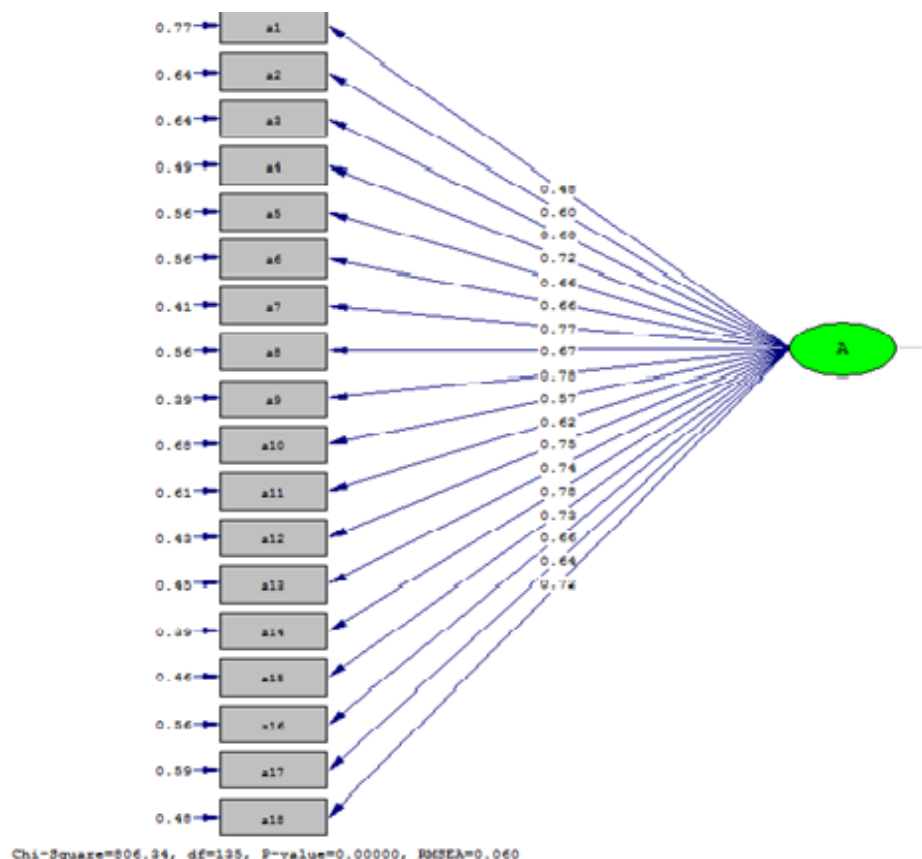
Figure 4.1. Structural Model for the18-Item Scale

4.1.2. Psychometric Characteristics of QEFL-LE

The questionnaire of the study, QEFL-LE, was prepared by the researcher to investigate the participants' perceptions on the EFL classroom learning environment mainly in relation to two encompassing dimensions, a) general in-class classroom environment characteristics and b) assessment procedures.

Thus, the researcher attempted to develop an encompassing instrument measuring both of these two dimensions.

The 21 items of the first dimension, EFL classroom environment characteristics were subjected to PCA. Prior to PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .30 and above, thus contributing to the appropriateness of data for factor analysis. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, $KMO = .94$, exceeding the recommended value of .60 (Kaiser, 1970, 1974). Barlett's test of sphericity was significant, $\times^2$ (210) = 10907.83, $p < .001$ and hence indicated that correlations between items were sufficiently large for EFA. Given the ratio of at least five cases (Gorsuch, 1983; Hatcher, 1994) and of preferably 6 cases or more for each of the variables (Cattell, 1978) and also the presence of high communalities (MacCallum et al., 1999), 1365 cases in the current study provide a good sample size for factor analysis. Multivariate normality has not been violated as the Madria's test was non-significant.

PCA extraction revealed the presence of four components with eigenvalues over Kaiser's criterion of 1.00 and in combination explained 57.48 % of the variance (Table 4.1). An inspection of the scree plot, as shown in Figure 4.2 below, revealed a clear break after the fourth factor. Using Catell's scree test (1966), four factors appeared. Given the results of the Kaiser's criterion and scree test, it was decided to retain these four factors for further investigation.

Table 4.1

Eigenvalues, Percentages of Variance and Cumulative Percentages for Factors of the 21-items of the EFL Classroom Environment Characteristics

Factor	Eigenvalue	% of variance	Cumulative %
1	7.96	37.91	37.91
2	1.70	8.11	46.02
3	1.38	6.57	52.60
4	1.03	4.89	57. 48
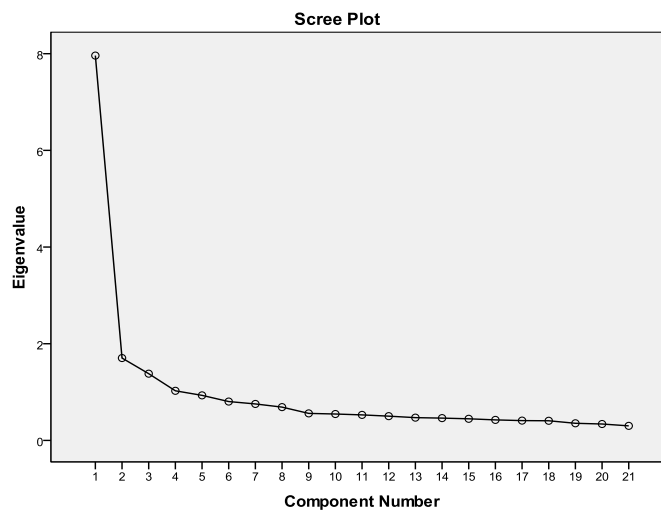
Figure 4.2. The Scree Plot for the Number of Factors to Retain

To aid in the interpretation of these four factors, varimax rotation was performed. Table 4.2 shows the factor loadings after rotation. Judging by the highest factor loadings for the all 21 items, the items that cluster on the same factors suggest that factor 1 represents course planning and organization procedures, factor 2 teacher supportive behaviors, factor 3 communicative approach-oriented implementation practices and factor 4 materials environment. Hence, the results from the PCA were in line with the results from the expert opinions and student pilot study group. Only two items (Item 8 and Item 16) were crossloading and that was not in accordance with the previously-thought way. When these two items crossloading into two dimensions were examined, it was seen that the items could be interpreted by the study participants in that way due to a presence of the same vocabulary item in the other items belonging to other components ("the teacher" in Item 16 as also seen in Item 14 of Component 3; "teacher" in Item 8 as also seen in Items 1-6 of Component 1). Moreover, participants might have elicited similar meanings from the words "different" and "extraordinary" in Item 16 and the word "diversify" in Item 14. Hence, it would be meaningful to contend that this lexical resemblance might have affected the students' placement of their responses. In conclusion, these two items were retained under the more meaningful dimensions as they were already previously assigned to (Item 16 in Component 2 and Item 8 in Component 4) again following the researcher's receive of the opinions and recommendations of the experts. Accordingly, all the factors appeared stable and easy to interpret.

Table 4.2

Summary of Factor Loadings for Varimax Four-Factor Solution for EFL Classroom Environment Characteristics (N = *1365*)

Item	Factor Loading			
	1	2	3	4
The teacher comes to the class well-prepared. (#1)	**.77**	.21	.10	.15
The teacher efficiently uses the class time. (#2)	**.79**	.16	.11	.17
The teacher relates the lesson to the previous or later lessons. (#3)	**.78**	.20	.09	.13
The teacher clearly explains the objectives of the lesson. (#4)	**.75**	.20	.18	.17
The teacher fluently manages to pass through the language skills. (reading, speaking listening vocabulary, pronunciation and grammar) (#5)	**.74**	.24	.14	.17
The teacher recommends some extra study at the end of the lesson for us to reinforce the class. (#6)	**.67**	.11	.27	.23
The textbook is very supportive of my learning. (#7)	.14	.06	.11	**.75**
The teacher uses additional materials supporting the class to be well-learned. (#8)	**.41**	.08	.27	**.47**
Real-life materials used are very supportive. (#9)	.28	.10	.31	**.57**
The technology-enhanced materials used are very supportive of my learning. (#10)	.24	.16	.10	**.76**
The physical class atmosphere is comfortable. (lighting, desks, board, class acoustics etc.) (#11)	.07	.24	.12	**.51**
The activities centering on communication have been performed. (#12)	.26	.20	**.68**	.16
Group activities are performed in the class. (#13)	.18	.10	**.74**	.10
The teacher diversifies methods and techniques. (#14)	.37	.25	**.61**	.22

Table 4.2 (continued)

The students have a say in the determination of the activities. (#15)	.03	.19	**.61**	.15
The teacher creates an atmosphere that is open to different and extraordinary ideas. (#16)	.01	**.36**	**.42**	.26
There is a class atmosphere where students may comfortably ask questions. (#17)	.14	**.73**	.19	.12
The teacher deals with students individually. (#18)	.27	**.57**	.33	.20
The students face no problems with communicating with the teacher. (#19)	.18	**.76**	.16	.14
The teacher treats equally to me and to my friends. (#20)	.28	**.73**	.06	.10
The teacher encourages students for active participation in the lesson. (#21)	.33	**.59**	.32	.12

Note. Boldface indicates highest factor loadings. Factor 1 = Course Planning and Organization; Factor 2 = Teacher Supportive Behaviors; Factor 3 = Communicative approach-oriented Implementation Practices; Factor 4 = Materials Environment.

The four factors, course planning and organization, communicative approach-oriented implementation practices, teacher supportive behaviors and materials environment had high reliabilities, showing Cronbach's alpha coefficients of .90, .73, .81, and .73 respectively, suggesting good and acceptable internal consistency reliability for each of the factors with this sample. The difference between the crossloadings (primary and secondary crossloadings) was adequate and all above the acceptable cut-off of 1.00 (Büyüköztürk, 2002, p. 119). All items of each factor are contributing to the reliability with high item-total correlations. There appears no need to remove any items from any of the factors because the deletion of any of the items clustering on each factor will lead to no increase in the overall reliability of each factor.

Based on the assumption that student perceptions of assessment is a different scale and construct in itself, the remaining 7 items of the second main dimension, student perceptions of EFL assessment were subjected to another PCA. Prior to conducting PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .30 and above. The Kaiser-Meyer-Olkin measure was adequate, *KMO* = .94, exceeding the recommended value of .60 (Kaiser, 1970, 1974). Barlett's test of sphericity reached statistical significance, x^2 (21) = 3008.68, *p*< .001 and thus supporting the factorability of the correlation matrix. In checking the ratio of cases (Cattell, 1978; Gorsuch, 1983; Hatcher, 1994) and also the presence of high communalities (MacCallum et al., 1999), the sample size was sufficient for performing a factor analysis. The assumption of multivariate normality was also checked and there were no violations. Based upon the review of literature, this dimension has been already designed on a theoretical priori and thus is believed to be made up of two further components. Accordingly, PCA was performed by limiting the number of factors to be extracted as two. The two-component solution explained 62.85 % of the variance, with Component 1 contributing 50.09 % and Component 2 contributing 12.76 % (Table 4.3).

Table 4.3

Eigenvalues, Percentages of Variance and Cumulative Percentages for Factors of the 7-items of the EFL Assessment Practices

Factor	Eigenvalue	% of variance	Cumulative %
1	3.51	50.09	50.09
2	1.00	12.76	62.85

To aid the interpretation of these two components, oblimin rotation was conducted. Table 4.4 shows the factor loadings after rotation. The items that cluster on the same factors suggest factor 1 represents feedback and guidance on the assessment practices while factor 2 authenticity and congruence with reality of the assessment practices. The rotated solution revealed that both components showed a number of strong loadings and all an adequate degree of difference between the major and secondary loadings (Büyüköztürk, 2002). It was also seen that the interpretation of the two components was consistent with previous research on the perceptions of assessment (Waldrip et al., 2006; Schaffner, Burry-Stock, Cho, Boney & Hamilton, 2000).

Table 4.4

Summary of Factor Loadings for Oblimin A priori Two-Factor Solution for EFL Assessment Practices (N = *1365*)

	Factor Loading	
Item	1	2
The teacher provides feedback to every student about their performances on the activities and assignments. (#21)	**.87**	.10
The teacher provides feedback to every student individually about the test results. (#22)	**.81**	.05
The teacher provides tactics and advice on how to successfully complete an assignment. (#25)	**.55**	.32
The teacher provides tactics and advice on how to well prepare for tests. (#26)	**.58**	.30
Test questions involve the language skills used in real life. (#27)	.10	**.87**
The exams are related to the real content of the lessons. (#23)	.25	**.56**
The assignments given are related to real-life. (#24)	.00	**.82**

Note. Boldface indicates highest factor loadings. Factor 1 = Feedback and Guidance on the Assessment Practices; Factor 2 = Authenticity and Congruence with Reality for Assessment Practices.

4.2. Profile of the Study Participants

The study participants were the students from the English Preparatory Programs at seven universities from the seven geographical regions of Turkey. The following also presents some demographic and attitudinal characteristics of the participants taking part in the survey part of the questionnaire. Following this detailed description on the survey participants, some information on those who took part in the qualitative phase of the study is also provided.

4.2.1. Profile of the Survey Respondents

The following presents the profile of the survey respondents in relation to student demographic characteristics, their educational background and reported exposure to English language outside the Englih class.

4.2.1.1. Demographic characteristics

Given the demographic characteristics of the sample ($n= 1365$) as also presented in Table 4.5 below, when the acceptable missing data (based on less than 5 % of the whole sample criterion) are excluded, there are 600 (44 %) females and 742 (54.4 %) males in the sample. When the distribution of the participants in relation to their ages is examined, the average is a little above 19 ($M = 19.07$, $SD = 1.50$). That is, most of the study participants, 548 students (40.1 %) are aged 18 and this age is followed by 19 with 440 students (32.2 %) and 20 with 185 students (13.6 %). There are only 17 (1.2 %) students who are aged 17 and the remaining 147 (10.8 %) students are aged 21 or above. Given the distribution of the participants regarding their family income levels, most study participants appear to have an income less than 5000 Turkish Liras with only 126 students reporting their family income above 5000 Turkish Liras. Half (49.8 %) of the participants ($n = 680$) report their family income levels as more than 2000 but less than 5000 Turkish Liras. The remaining 507 (37.1 %), briefly the two thirds of the participants, appear to come from families having an income less than 2000 Turkish Liras. These distributions in turn show that most students belong to families with low or moderate socio-economic status.

Table 4.5

Demographic Characteristics of Participants (N = 1365)

Characteristic	*n*	*%*
Gender		
Female	600	44. 0
Male	742	54. 4
Missing	23	1.7
Family income level		
0 - 2000	507	37.1
2001-5000	680	49.8
5000 +	126	9.2
Missing	52	3.8
Age		
17	17	1.2
18	548	40.1
19	440	32.2
20	185	13.6
21 +	147	10.8
Missing	28	2.1

4.2.1.2. Educational background

The distribution of the participants in terms of their university subject domains, as depicted in Table 4.6 below, shows that there are 1085 (79.5 %) students from the science related departments while the remaining 212 students (15.5 %) are enrolled in social sciences related departments of the universities. This different distribution appears to have resulted from the presence of more must English preparatory programs for science related disciplines at the Turkish universities.

When the distribution of the participants in relation to their responses about attending a previous English courses or not was examined, it was found that 1120 (82.1 %) participants have never taken an English course before while 201 students (14.7 %) reported such an earlier experience (Table 4.6). That is, more than 80 percent of the participants never attended an English course before, which is also in line with the sampling criteria of this current study. The participants were sampled based on their low level of proficiency (i.e. A1 level) at the start of the English preparatory program. Those reporting taking a previous English course probably faced with some difficulties to advance in terms of their English proficiencies in their earlier experience with the language.

Given the high school perceived level English proficiency, it is revealed that almost half of the study participants, 618 (45.3 %) students reported their proficiency in English when they graduated from the high school as poor. Similarly, another 523 students (38.3 %) perceived their proficiency as being at the moderate levels. In talking about the remaining participants, 129 (9.5 %) perceive their English proficiency level as being good and only 40 (2.9) students considered their English proficiency as very good (Table 4.6). Such perceptions are also in line with the sampling criteria and the results regarding the relatively low number of students taking previous English courses. The average scores of all the participants' responses on the perceived high school proficiency level in English also indicate that their proficiency perceptions fell

within the range of poor-to-moderate level (*M* = 1.69, *SD* = .77) on a scale of 1
to 4.

Table 4.6

Educational Characteristics of Participants (N = 1365)

Characteristic	*n*	*%*
University subject domain		
Science	1085	79. 5
Social Science	212	15. 5
Missing	68	5
Previous English courses attended		
Attendees	201	14.7
Non-attendees	1120	82.1
Missing	44	3.2
Perceived high school English proficiency		
Poor	618	45.3
Moderate	523	38.3
Good	129	9.5
Very good	40	2.9
Missing	55	4

4.2.1.3. Exposure to English language

Given the distribution of the participants with regard to their responses on the frequency of watching television or other internet-based sources as depicted in Table 4.7, it appears that almost one third of the participants, that is, 439 (32.2 %) students report that they frequently watch television or other internet material. Likewise, almost another one third of the participants, 453 (33.2 %) report their frequencies of outside exposure through television or internet as being sometimes. There are 131 (9.6 %) students reporting their frequencies as always. Thus, it is revealed that more than two thirds of the participants have an outside exposure to English through television and internet above an acceptable degree of exposure (i.e. more than rarely). Given the distribution of participants with rarely or never reportings for their outside exposure to English, 217 (15.9 %) students have reported a rarely degree of outside exposure through television or internet while only 65 (4.8 %) students have reported no degree of outside exposure to English via television and internet.

When the distribution of the participants with regard to their responses on the frequency of reading books or magazines in English has been examined, it is seen that approximately one third of the participants, that is, 455 (33.3 %) students report that they sometimes read books or magazines in English. However, there are comparatively less number of students who have reported their exposure as frequently ($n = 117$) and always ($n = 24$), together making almost 10.5 % of the participants. Conversely, when the distribution of the participants in relation to rarely or never reportings is calculated, it appears that more students, that is, almost half of the study participants (51.4 % when rarely and never ratings aggregated) report their outside exposure to English via reading books or magazines as being rarely ($n = 420$) or never ($n = 281$; Table 4.5).

The average scores of all the participants' responses on the outside exposure to English via reading books or magazines was found to be 3.63 (*SD* =.98) on a scale of 1 to 5. In this sense, a mean score of 3.63 implies that the outside exposure of the English preparatory program students taking part in the

study fell within the range of sometimes-to-frequently frequency. When the average scores of the study participants' responses in relation to their outside exposure to English via television or internet were considered, it was found that it was less compared to their exposure through reading books or magazines (*M* = 2.73, *SD* = 1. 02; Table 4.7).

Table 4.7

Outside Exposure Characteristics of Participants (N = 1365)

Characteristic	n	%
Exposure via books and magazines (*M* = 3.63, *SD* =.98)		
Always	24	1. 8
Frequently	117	8. 6
Sometimes	455	33.3
Rarely	420	30.8
Never	281	20.6
Missing	68	5
Exposure via television and internet (*M* = 2.73, *SD* = 1. 02)		
Always	131	9.6
Frequently	439	32.2
Sometimes	453	33.2
Rarely	217	15.9
Never	65	4.8
Missing	60	4.4

4.2.1.4. Persistence Characteristics of the Participants

Table 4.8 below shows the items on the EFL persistence scale and relevant descriptives (means and percentages) on each persistence item. The persistence of the participants was found to be at a moderate level (*M* = 3.26, S*D* = .79) on

a five-point scale ranging from *not at all true of me* (1), *slightly true of me* (2), *moderately true of me* (3), *very true of me* (4) to *completely true of me* (5). Upon the analysis of the persistence items separately and taking the items the most reflecting the persistence behaviors of the study participants into consideration (i.e. those items with mean scores above 3.50), it is seen that Item 5 "I insist on reaching my goal of learning English even if it involves considerable trouble" ($M = 3.69$, $SD = 1.16$) has received the highest mean value followed respectively by Item 8 " When I get a poor mark in my English class, I work harder next time" ($M = 3.67$, $SD = 1.19$) and Item 12 "I try my best to do all I can to learn English" ($M = 3.54$, $SD = 1.09$). The items with the least mean values are seen as Item 2 "When it comes to learning English, I finish whatever I begin though I feel tired" ($M = 2.77$, $SD = 1.20$), Item 3 "I force myself to study more than other people when learning English" ($M = 2.83$, $SD = 1.20$) and Item 6 "I do more than what is expected of me by my teachers when learning English" ($M = 2.97$, $SD = 1.08$). It appears that the most preferred three items imply that the participants show more mastery goal orientation when compared to performance goal orientation that is also more obvious with the three least favored items reported above. It is also interesting to see that no items have mean values above 4 on a scale of 1 to 5.

Table 4.8

Participants' EFL Persistence

Persistence Item	n	M	SD	a	b	c
I am not discouraged by setbacks I face in my English learning process. (#1)	1358	3.26	1.17	24.1	35.5	40.4
When it comes to learning English, I finish whatever I begin though I feel tired. (#2)	1364	2.77	1.20	41.6	31.5	26.9
I force myself to study more than other people when learning English. (#3)	1358	2.83	1.20	39	31.8	29.1
When I have trouble with a language point, I practice it more. (#4)	1358	3.32	1.14	22.8	30.6	46.6
I insist on reaching my goal of learning English even if it involves considerable trouble. (#5)	1362	3.69	1.16	15.9	24.2	59.8
I do more than what is expected of me by my teachers when learning English. (#6)	1361	2.97	1.08	30.5	40	29.5
If I am not good at a skill in English, I keep struggling to master it. (#7)	1359	3.26	1.07	22.8	35	42.2
When I get a poor mark in my English class, I work harder next time. (#8)	1364	3.67	1.19	18.1	19.9	62
I continue to invest time and effort in language activities in spite of the hard work and patience they require. (#9)	1359	3.30	1.12	22.6	31.9	45.5
When working on language learning activity, I try hard to finish it in spite of the distractions around. (#10)	1359	3.11	1.14	28.9	33.6	37.6
My ultimate goal of mastering English motivates me to overcome day to day difficulties. (#11)	1359	3.36	1.134	22.4	30.2	47.4
I try my best to do all I can to learn English. (#12)	1361	3.54	1.09	16.8	29.3	53.9

Table 4.8 (continued)

				a	b	c
The more difficult a language activity is, the more determined I am to finish it. (#13)	1358	3.27	1.11	23.1	33.9	43
Once I decide to do something when learning English, I do not give up until I reach my goal. (#14)	1361	3.47	1.06	18.4	29	52.5
I continue a difficult language activity even when the others have already given up on it. (#15)	1360	3.23	1.12	25.7	32.9	41.3
If I fail to solve a problem I faced in a language assignment, I try again and again in the hope that I will be successful. (#16)	1362	3.29	1.13	24.4	30.6	45
I make an effort to follow through with the plans I make for my studying when learning a language skill. (#17)	1361	3.15	1.11	27.2	32.8	39.9
I work hard to learn English. (#18)	1362	3.07	1.12	28.1	36	35.9

Note. a = total percentage of "not at all true of me" and "slightly true of me"; b = total percentage of "moderately true of me"; c = total percentage of "very true of me" and "completely true of me".

4.2.1.5. EFL Learning Environment Preferences of the Participants

When the frequency means on a five-point Likert scale with responses as *never* (1), *rarely* (2), *sometimes* (3), *frequently* (4) and *always* (5) on the six EFL learning environment dimensions have been considered, it is revealed that the study participants' learning environment perceptions falls within the high range on the course planning and organization sub-dimension while within the *medium-to-high* range on all of the five remaining sub-categories. Given the frequency means in relation to the characteristics of an EFL classroom (Table 4.9), planned and organized courses demonstrates the highest (*M* = 4.23, *SD* = .77) and authenticity of assessment procedures the lowest means (*M* = 3.45, *SD* = .93). When the frequency means on the EFL class sub-dimensions were examined in order to address the question of which learning environment characteristic the participants tend to favor over others, it is observed that the

participants appear to perceive course planning and organization dimension more positively over others. In other words, when the several characteristics of an EFL class are compared, it is understood that the EFL classes are perceived to be almost frequently organized and planned by the English preparatory program students. Though the results reveal the authenticity and congruence with reality dimension as having the lowest mean scores, it is seen that the EFL preparatory classes are still perceived to be moderately authentic with regard to the content of the assessment procedures.

Table 4.9

Participants' EFL Learning Environment Perceptions based on Sub-dimensions

EFL Learning Environment Dimension	N	M	SD
course planning and organization (CP)	1314	4.23	.77
materials environment (ME)	1347	3.67	.83
teacher supportive behaviors (TS)	1338	3.84	.78
communicative approach-oriented implementation practices (IP)	1338	3.52	.80
feedback and guidance on the assessment practices (FG)	1340	3.82	.84
authenticity and congruence with reality of assessment practices (AR)	1344	3.45	.93

Note. ME = materials environment; CP = course planning and organization; TS = teacher supportive behaviors; IP = communicative approach-oriented implementation practices; FG = feedback and guidance on the assessment tasks; AR = authenticity and congruence with reality for the assessment tasks.

As an another step to explore the participants' EFL learning environment perceptions and preferences, five most and five least favored learning environment items have been computed based on their mean values. Table 4.10

below displays in detail the five most favored EFL classroom dimensions along with their mean values, and it has been seen that there is only one teacher supportive behaviors item in comparison to four course planning and organization items among the five most favored EFL characteristics. This finding is obvious first in that the highest frequency means belong to the course planning and organization EFL class sub-dimension.

Table 4.10

Five Most Favored EFL Learning Environment Characteristics

EFL Learning Environment Item	*M*	*SD*	*Sub-dimension*
The teacher comes to the class well-prepared	4.34	.90	CP
The teacher relates the lesson to the previous or later lessons	4.27	.90	CP
The teacher fluently manages to pass through the language skills (reading, speaking listening vocabulary, pronunciation and grammar)	4.25	.92	CP
The teacher efficiently uses the class time	4.24	.94	CP
The teacher treats equally to me and to my friends	4.16	1.05	TS

Note. CP = course planning and organization; TS = teacher supportive behaviors.

Table 4.11 below also shows in detail the five least favored EFL classroom characteristics as reported by all the participants. When the frequency means for the least favored EFL classroom characteristics have been examined, it is indicated that there are two authenticity and congruence with reality items, one teacher supportive behavior item, one communicative approach-oriented implementation item and one materials environment item among the five least favored dimensions. This finding is again apparent first in that the lowest

frequency means are seen in the authenticity of assessment procedures sub-dimension.

Table 4.11

Five Least Favored EFL Learning Environment Characteristics

EFL Learning Environment Item	*M*	*SD*	*Sub-dimension*
Students have a say in the choice of the activities	3.01	1.21	IP
Test questions involve the language skills used in real life	3.27	1.15	AR
The classroom environment is open to different and extraordinary ideas.	3.28	1.20	TS
The assignments given are related to real-life.	3.32	1.17	AR
There is a comfortable physical class environment (lighting, desks, board, class acoustics etc.)	3.38	1.34	ME

Note. ME = materials environment; TS = teacher supportive behaviors; IP = communicative approach-oriented implementation practices; AR = authenticity and congruence with reality for the assessment tasks.

4.2.2. Profile of the Interviewees

The interviews were conducted in two of the universities included in the quantitative phase of the study, Karabük University and Gazi University. The information on the profile of interviewees includes the basic demographic characteristics of gender and university department and faculty as shown in Table 4.12. Given these basic sampling criteria to see maximum variations, there were a total of 20 interviewees. Out of these 20 interviewees, 11 individuals were males and nine were females. Given the distribution of the participants with regard to their university departments, 12 students were enrolled in several departments of architecture and engineering faculties. That is, there were students from the departments of electrical and electronics

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engineering ($n = 1$), civil engineering ($n = 1$), mechanical engineering ($n = 2$), automotive engineering ($n = 3$), architecture ($n = 1$), computer engineering ($n = 2$), biomedical engineering ($n = 1$), chemical engineering ($n = 1$). There was one student from the faculty of medicine. The remaining seven interviewees were enrolled in faculty of economics and administrative sciences. That is, there were four students from the department of political science and public administration, two students from the department of international relations and one student from the department of business administration.

Table 4.12

Main Characteristics of the Interviewees

Interviewees	*Gender*	*Department*	*Faculty*
Participant 1	F	Biomedical Engineering	Engineering
Participant 2	F	Computer Engineering	Engineering
Participant 3	M	Electrical and Electronics Engineering	Engineering
Participant 4	M	Mechanical Engineering	Engineering
Participant 5	M	Mechanical Engineering	Engineering
Participant 6	M	Business Administration	Economics and Administrative Sciences
Participant 7	M	Automotive Engineering	Engineering
Participant 8	F	Computer Engineering	Engineering
Participant 9	M	Automotive Engineering	Engineering
Participant 10	M	Automotive Engineering	Engineering
Participant 11	F	International Relations	Economics and Administrative Sciences
Participant 12	F	Architecture	Architecture

Table 4.12 (continued)

Participant 13	F	Medicine	Medicine
Participant 14	M	Civil Engineering	Engineering
Participant 15	F	Political Science and Public Administration	Economics and Administrative Sciences
Participant 16	M	Political Science and Public Administration	Economics and Administrative Sciences
Participant 17	F	Chemical Engineering	Engineering
Participant 18	M	International Relations	Economics and Administrative Sciences
Participant 19	F	Political Science and Public Administration	Economics and Administrative Sciences
Participant 20	M	Political Science and Public Administration	Economics and Administrative Sciences

Note. F = female; M = male

4.3. Results in Relation to Research Questions

4.3.1. How well do certain characteristics of EFL classes, certain student characteristics, and they combined predict persistence in English language study? (RQ1)

This section focuses on the results of the investigation of the relationship between perceived EFL learning environment characteristics (i.e. EFL classroom characteristics) and student background variables and students' persistence in English language study. The quantitative analyses were performed in a three-step manner. The first regression analyses were conducted to explore the predictive ability of EFL learning environment upon students' persistence in EFL. The second regression analyses were performed to investigate the predictive power of student background variables on their persistence in EFL. The final analyses were performed to examine the predictive abilities of both of the above predictors (EFL learning environment

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& student background characteristics) upon students' persistence when both type of predictors were treated together. Following the display of all of the results, this section is concluded by a brief account to summarize all of the results gained.

4.3.1.1. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: Step 1

Multiple regression analyses (enter method) was performed to assess the ability of the five main characteristics of the EFL teaching-learning activities (learning environment) to predict students' persistence in learning English. In this sense, the criterion variable was the persistence scores of the students in the EFL study, while the each EFL learning environment sub-scale was predictors. The six EFL classroom characteristics are a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and finally f) authenticity and congruence with reality of the assessment tasks.

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 1365 cases and 6 independent variables, the number of cases (ration of cases to independent variables) also is well above the minimum requirement (N ≥ 50+8m; m = number of independent variables) applying Tabachnick and Fidell's (2007) formula. Leverage statistics and Cook's Distance further verified the absence of influential observations (outliers). The assumption of the absence of multicollinearity has been satisfied with the appropriate Tolerance and VIF values and also with the preliminary analysis of bivariate correlations with no correlations found above .90. Table 4.13 presents the bivariate correlations and descriptive statistics for the variables in question. The Histogram and normal probability plot (P-P plot) of the residuals were observed to verify the assumption of normality (Figure 4.3 & Figure 4.4).
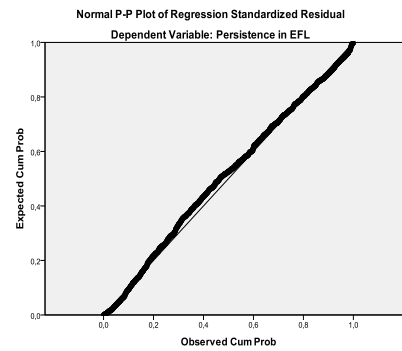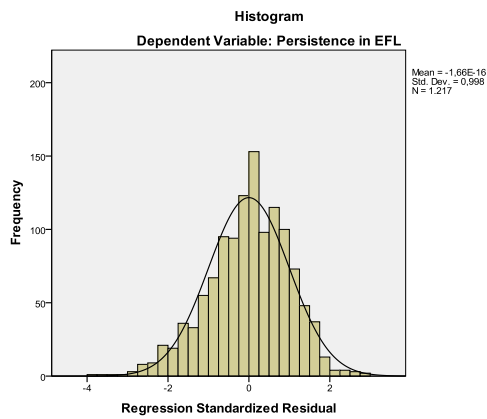
Figure 4.3. Histogram of Residuals   *Figure 4.4.* Normal P-P Plot of Residuals

Table 4.13

Means, Standard Deviations, and Intercorrelations for EFL Learning

Environment Predictors

Variable	M	SD	1	2	3	4	5	6
Persistence (criterion)	3.25	.79	.19	.35	.27	.23	.25	.29
Predictor variable								
1. course planning and organization	4.23	.77	—	.56	.56	.51	.59	.37
2. materials environment	3.67	.83	.56	—	.52	.55	.53	.50
3. teacher supportive behaviors	3.84	.78	.56	.52	—	.61	.64	.47
4. communicative implementation practices	3.52	.80	.51	.55	.61	—	.60	.49
5. feedback and guidance	3.82	.84	.59	.53	.64	.60	—	.61
6. authenticity and congruence with reality	3.45	.93	.37	.50	.47	.49	.61	—

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Homoscedasticity of the residuals has been satisfied as the residuals are roughly rectangularly distributed, with most of the scores concentrated in the centre (Pallant, 2007). The inspection of the residuals scatterplots (partial regression plots) verifies that the normality and linearity assumptions have not been violated. Assumption of the independence of the residuals has been satisfied with the Durbin-Watson score of 1.85.

Standard multiple regression analyses used to assess the ability of six EFL learning environment characteristics to predict levels of persistence revealed that the regression model was significant and the total variance explained by the model as a whole was 14 %, $F(6, 1210) = 34.75$, $p < .001$. The R^2 value of 14 indicates that 14 % of the variability in the students' persistence scores is predicted by a set of predictor variables of a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and finally f) authenticity and congruence with reality of the assessment tasks. Table 4.14 displays the results of the regression analyses with all the EFL learning environment dimensions.

Table 4.14

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence

Variable	B	$SE\ B$	β	t	p
1. course planning and organization	-0.20	0.11	-.07	-1.78	.076
2. materials environment	0.93	0.12	.27	7.45	.000
3. teacher supportive behaviors	0.38	0.12	.12	3.18	.002
4. communicative implementation practices	-0.13	0.17	-.03	-0.79	.428
5. feedback and guidance	-0.01	0.18	-.00	-0.07	.943
6. authenticity and congruence with reality	0.69	0.18	.14	3.89	.000

Note. $R^2 = .14$ ($p < .001$).

Given the predictors significantly contribute to the model, materials environment and authenticity and congruence with reality of assessment tasks were found to be significant, with the course materials recording higher unstandardized coefficients Beta values than the authenticity and congruence with reality dimension (Pallant, 2007), thus course materials making a stronger contribution to the prediction of the dependent (criterion) variable of persistence than the variable of authenticity and congruence with reality dimension, t (1210) = 7.447, $p < .001$. The direction of the relationship between these three predictors and the outcome appeared to be positive with positive standardized coefficient (B) values. The predictor of course materials uniquely explains 4 % of the variance in the persistence scores, $sr_i^2 = .04$, which is the highest R^2 value in the model and thus may be another evidence for the variable of course materials to be a stronger predictor than the other predictor. The authenticity and congruence with reality of assessment tasks uniquely explains 1 % ($sr_i^2 = .01$) of the variance in student persistence scores. In this vein, the remaining 9 % the variance in the criterion variable, student persistence is explained in combination by all six EFL learning environment dimensions (as a shared variance). This in turn shows that the other remaining four dimensions appear to have no unique and direct abilities to predict levels of persistence in EFL but somehow indirect effects. In using the beta values as suggested by Field (2009), one can learn "to what degree each predictor affects the outcome if the effects of all other predictors are held constant" (p. 238). Given the above results and using the standard deviations as recommended by Field (2009), it could be interpreted that when the materials dimension is increased by .83 standard deviations, the student persistence will be likely to increase by .27 standard deviations. That is to say that for every .83 more materials environment perceptions, an extra .21 persistence score is expected (0.27 × 0.79). Similarly, given the authenticity and congruence with reality in relation to assessment tasks, for every .93 more authentic assessment perceptions for an EFL class, an extra .11 persistence is expected.

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4.3.1.2. Regression Analyses for Background Variables in relation to Persistence: Step 2

A multiple regression analysis (enter method) was conducted to predict students' persistence in learning English from the student background variables which the researcher shortly categorized as demographic characteristics, a) gender, b) age, c) family income level; educational attainments, d) university subject domain, e) prior English courses taken, f) perceived proficiency level in English at graduation from high school; and experience with English, g) exposure to English via audio-visual tools (television and internet) and h) outside exposure to English via visual-printed tools (books and magazines). In brief, there are a total of eight student background variables. The categories were assigned just for an easy recall of the student level variables.

The results of evaluation of assumptions of multicollinearity (Tolerance and VIF values) and the influential observations (including Leverage statistics and Cook's Distance) were satisfactory. With 1365 cases and 8 independent variables, the assumption of the ratio of cases to independent variables has been also satisfied ($N \geq 50+8m$; Tabachnick and Fidell, 2007). Figure 4.5 and Figure 4.6 show the Histogram and normal probability plot (P-P plot) of the residuals respectively used for the assumption of normality. Table 4.15 below presents the bivariate correlations for the variables used in the analysis.
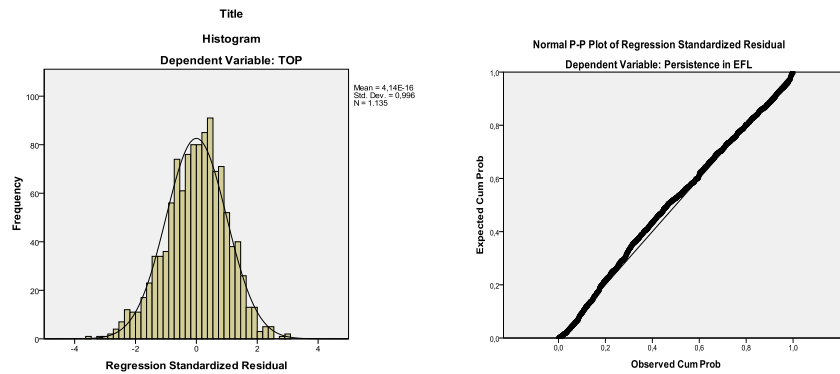
Figure 4.5. Histogram of Residuals *Figure 4.6.* Normal P-P Plotof Residuals

Table 4.15

Intercorrelations for Student Background Predictors

Variable	1	2	3	4	5	6	7	8
Persistence (criterion)	-.45	.04	.03	-.14	-.03	.15	-.23	-.35
Predictor variable								
1. gender	—	.15	- .15	-.11	-.02	- .03	-.08	.04
2. age	.15	—	.02	-.05	-.19	-.16	.02	-.01
3. university subject domain	-.15	.02	—	-.02	-.05	.03	-.03	-.04
4. family income level	-.11	-.05	-.02	—	-.08	.07	-.07	-.08
5. prior English courses taken	-.02	-.19	- .05	-.08	—	-.13	.07	.10
6. perceived high school English proficiency level	-.03	-.16	.03	.07	- .13	—	-.25	-.12
7. exposure to English via audio-visual tools	.08	-.02	.03	.07	- .07	.25	—	.43
8. exposure to English via visual-printed tools	-.04	01	.04	.08	-.10	.12	.43	—

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Examination of residuals scatterplots also verified the assumptions of homoscedasticity, normality and linearity. There was no violation of the assumption of the independence of the errors with an appropriate Durbin-Watson score of 1.90.

Standard multiple regression analyses showed that the regression equation was significant and the total variance (R^2) explained by the model as a whole was 17 %, $F (8, 1126) = 29.75$, $p < .001$. That is, the model which includes the eight student background variables, a) gender, b) age, c) university subject domain, d) family income level, e) prior English courses taken, f) perceived proficiency level in English at graduation from high school, g) exposure to English via audio-visual tools (television and internet) and finally h) outside exposure to English via visual-printed tools (books and magazines) explains 17 % of the variance in students' perceived persistence scores. Table 4.16 displays the results of the regression analysis for all student background variables.

Table 4.16

Regression Analyses Summary for the Student Background Predictors Predicting Persistence

Variable	B	SE B	ß	t	p
gender	- 1.88	0.79	-.06	-2.36	.018
age	0.60	0.28	-.06	2.16	.031
university subject domain	-0.04	1.05	-.00	-0.03	.973
family income level	-4.03	0.62	-.18	-6.56	.000
prior English courses taken	0.70	1.10	-.02	0.64	.524
perceived high school English proficiency level	2.05	0.54	.11	3.84	.000
exposure to English via audio-visual tools	1.30	0.43	.09	3.01	.003
exposure to English via visual-printed tools	4.51	0.44	.31	10.21	.000

Note. $R^2 = .17$ ($p < .001$).

When the predictors significantly contributing to the model were examined, the three student background variables, family income level, perceived proficiency level in English at graduation from high school, outside exposure to English via books and magazines were found to be significant ($p<$ .001) with the outside exposure to English via books and magazines recording the highest unstandardized coefficients Beta values followed by family income level and perceived English proficiency at graduation respectively. This leads us to conclude that outside exposure to English via books and magazines makes the strongest contribution to the prediction of the dependent (criterion) variable of persistence when compared to other variables in the regression, t (1126) = 10.208, $p < .001$. The direction of the relationship between family income level and persistence in EFL appeared to be negative with negative standardized coefficient (B) values while the remaining two predictors had positive standardized coefficient (B) values. With the negative B values representing the negative relationship between the predictor and the outcome variables, those who have a lower family income are likely to become more persistent in EFL. Conversely, with their positive B values, outside exposure to English via books and magazines and perceived high school English appear to be positively related to the outcome variable of persistence.

The predictor of outside exposure to English via books and magazines uniquely explains 8 % of the variance in the persistence scores, $sr_i^2 = .08$, which is the highest R^2 value in the model and thus becoming the strongest predictor of persistence in the specified model. This predictor is followed by the variable of family income which uniquely explains 3 % ($sr_i^2 = .03$) of the variance in students' persistence in EFL. Another predictor, perceived high school proficiency in English uniquely explained 1% of the variance ($sr_i^2 = .01$) in student persistence scores. In this vein, the remaining 5 % the variance in the criterion variable, student persistence is explained in combination by all of the eight background variables (as a shared variance). This in turn shows that the remaining five student background related variables (except for the

above three significant variables with their unique contributions) appear to have no unique and direct abilities to predict levels of persistence in EFL but indirect effects when they are evaluated in combination. In using the standardized beta values as suggested by Field (2009), one can suggest that when the outside exposure via books and magazinesis increased by .96 standard deviations, the student persistence will be likely to increase by .31 standard deviations. That is to say that for every .96 (*SD* for exposure via books and magazines) more exposure, an extra .25 persistence is expected (0.31×0.79).

4.3.1.3. Regression Analyses for EFL Learning Environment and Background Variables in combination in relation to Persistence: Step 3

A multiple regression analysis (enter method) was conducted to see if EFL learning environment and student background variables when employed in combination predicted the students' level of persistence in EFL. The EFL learning environment predictors were the six EFL learning environment dimensions, a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and finally f) authenticity and congruence with reality of the assessment tasks; while the student background predictors were a) gender, b) age, c) university subject domain, d) family income level, e) prior English courses taken, f) perceived proficiency level in English at graduation from high school, g) exposure to English via audio-visual tools (television and internet) and finally h) outside exposure to English via visual-printed tools (books and magazines).

The results of evaluation of assumptions of multicollinearity (Tolerance and VIF values) the influential observations (including Leverage statistics and Cook's Distance), ratio of cases to independent variables (N ≥ 50+8m; Tabachnick and Fidell, 2007) were satisfactory. Table 4.17 summarizes the bivariate correlations and descriptive statistics for the variables used in the

analysis. The Histogram and normal probability plot (P-P plot) of the residuals used for the assumption of normality are also shown in Figure 4.7 and Figure 4.8 respectively. The assumptions of homoscedasticity, normality and linearity were also satisfied with the residuals scatterplots. The Durbin-Watson value of 1.90 also verified the assumption of the independence of the errors.
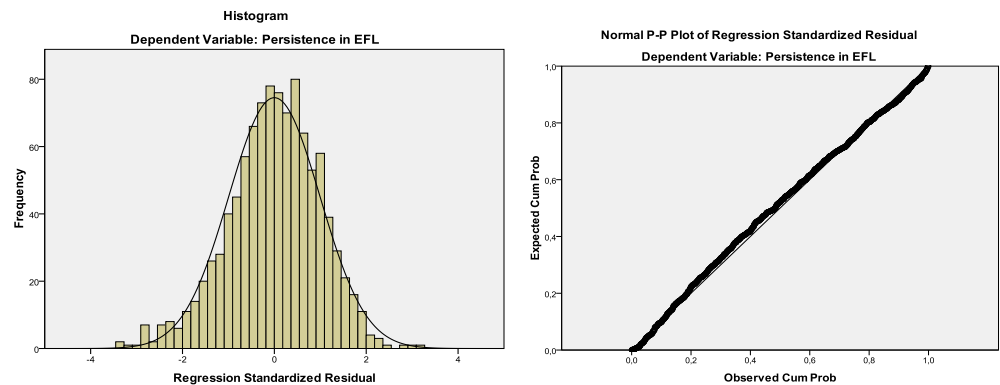
Figure 4.7. Histogram of Residual   *Figure 4.8.* Normal P-P Plot of Residuals

Table 4.17

Intercorrelations for Student Background and Learning Environment Predictors

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Persistence (criterion)	.18	.34	.28	.24	.26	.29	-.05	.04	.05	-.14	-.03	.13	-.23	-.34
Predictor variable														
1. course planning and organization	—	.58	.55	.52	.59	.39	-.08	-.05	.04	-.01	.00	.05	-.07	-.09
2. materials environment	.58	—	.52	.55	.53	.51	-.07	-.04	.01	-.05	.02	.10	-.08	-.11
3. teacher supportive behaviors	.55	.52	—	.60	.63	.47	-.06	-.03	-.01	-.05	-.01	.08	-.14	-.10
4. communicative implementation practices	.52	.55	.60	—	.60	.50	-.09	-.07	.06	.01	.01	.08	-.12	-.12
5. feedback and guidance	.59	.53	.63	.60	—	.61	-.09	.00	.05	-.05	-.01	.03	-.11	-.08
6. authenticity and congruence with reality	.39	.51	.47	.50	.61	—	-.04	-.03	.00	-.10	.03	.01	-.06	-.10
7. gender	-.08	-.07	-.06	-.09	-.09	-.04	—	.14	-.15	-.09	-.03	-.03	-.08	.03
8. age	-.05	-.04	-.03	-.07	.00	-.03	.14	—	.02	-.05	-.20	-.16	.03	-.01
9. university subject domain	.04	.01	-.01	.06	.05	.00	-.15	.02	—	-.04	-.06	.05	-.05	-.06

Table 4.17 (continued)

10. family income level		-.01	-.05	.01	-.05	-.10	-.09	-.05	-.04	—	-.08	.08	-.08	-.07
11. prior English courses taken	.00	.02	-.01	.01	-.01	.03	-.03	-.20	-.06	-.08	—	-.14	.07	.09
12. perceived high school English proficiency level	.05	.10	.08	.08	.03	.01	-.03	-.16	.05	.08	-.14	—	-.26	-.12
13. exposure to English via audio-visual tools	-.07	-.08	-.14	-.12	-.11	-.06	-.08	.03	-.05	-.08	.07	-.26	—	.44
14. exposure to English via visual-printed tools	-.09	-.11	-.10	-.12	-.08	-.10	.03	-.01	-.06	-.07	.09	-.12	.44	—

Standard multiple regression analyses indicated that the specified regression model was significant and the total variance (R^2) explained by the model as a whole was 26 %, F (14, 1009) = 26.50, $p < .001$. In other words, the model which includes the eight student background variables and six EFL learning environment dimensions explains 26 % of the variance in students' perceived persistence scores. Table 4.18 below shows the results of the regression analysis for all student background and learning environment variables.

Table 4. 18

Regression Analyses Summary for the Student Background and EFL Learning Environment Predictors in Combination Predicting Persistence

Variable	B	SE B	ß	t	p
1. course planning and organization	-0.32	0.12	-.10	-2.66	.008
2. materials environment	0.81	0.13	.24	6.39	.000
3. teacher supportive behaviors	0.35	0.12	.12	2.97	.003
4. communicative implementation practices	-0.13	0.17	-.03	-.77	.440
5. feedback and guidance	0.09	0.18	.02	.53	.597
6. authenticity and congruence with reality	0.56	0.18	.11	3.10	.002
7. gender	-1.22	0.79	-.04	-1.54	.124
8. age	0.58	0.27	.06	2.12	.035
9. university subject domain	0.56	1.06	.02	0.53	.596
10. family income level	-3.16	0.62	-.14	-5.15	.000
11. prior English courses taken	0.04	1.10	.00	0.03	.974
12. perceived high school English proficiency level	1.35	0.54	.07	2.51	.012
13. exposure to English via audio-visual tools	-1.05	0.44	-.08	-2.40	.017
14. exposure to English via visual-printed tools	-3.91	0.45	-.27	-8.74	.000

Note. R^2 = .26 ($p < .001$).

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When the statistically significant predictors in the specified regression model were examined, the three variables, family income level, materials environment and outside exposure to English via books and magazines were found to be significant ($p< .001$) with the outside exposure to English via books and magazines recording the highest unstandardized coefficients Beta values followed by materials environment and family income level respectively. This means that outside exposure to English via books and magazines makes the strongest contribution to the prediction of the dependent variable, student persistence among the other variables employed in the regression , $t (1009) = 8.739, p < .001$. The direction of the relationship between family income level and persistence was negative with negative standardized coefficient (B) values. That is to say that, if a student comes from a family with a lower social economic status, she is likely to become more persistent in learning English. On the other hand, the remaining two significant predictors had positive standardized coefficient (B) values and thus positively associated with the criterion variable of student persistence.

The predictor of outside exposure to English via books and magazines uniquely explains 6 % of the variance in the persistence scores, $sr_i^2 = .06$, which is the highest R^2 value in the model and thus becoming the strongest predictor of persistence in the specified model. This predictor is followed by the materials environment with this variable uniquely explaining 3 % of the variance in the persistence scores, $sr_i^2 = .03$. The remaining significant variable, family income which uniquely explains 2 % ($sr_i^2 = .02$) of the variance in students' persistence in learning English. Therefore, the remaining 15 % the variance in the criterion variable, student persistence in EFL is explained in combination by all of the eight background and six EFL learning environment variables (as a shared variance). This result leads us to conclude that the remaining 11 variables included in the model (except for the above three significant variables with their unique contributions) appear to have no

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unique and direct abilities to predict levels of persistence in EFL but indirect effects when they are evaluated in combination.

4.3.1.4. Summary of Regression Results

The results from the three subsequent regression analyses revealed that both EFL learning environment characteristics and student background variables are associated with student persistence in EFL study. However, the results also leads us to conclude that when these two types or variables are both included, they appear to have more predictive power for the explanation of the dependent variable, that is, the student persistence in EFL. That is, the statistical results showed an R^2 value of .26 accounted for by the two types of independent variablesin the third-step analysis. This final model found 15 % shared variance while the remaining 3 %, 6 % and 2% being explained by the materials environment, exposure through books and magazines and family income level respectively. However, given only the third step analysis, it would remain unclear to learn the relative proportions or contributions of two sets of variables in the shared variance of 15 % mentioned. Hence, the first two steps helped us to answer this question. The previous regression analyses have shown that background variables themselves explain 17 % of the variance in the student persistence scores while the learning environment variables alone 14 %. In this sense, it is easy to arrive at the result that when they are used in combination, learning environment variables add an extra 9 % variance over the background variables whereas background variables add an extra of 12 % variance to the learning environment variables so that the total variance explained by the two sets of criterion variables reached 26 %. Given these extra variances brought about, if there is an extra 9 % variance when the learning environment variables are included in the model and the final model shows only course materials as a sole significant contributor with its 3 % variance, then the remaining 6 % variance comes from the all remaining five learning environment dimensions, which means that except the course materials dimension, the remaining five have no individual predictive powers but they

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have a predictive power of 6 % when they come together. Out of 12 % variance added by the background variables, 8 % variance is explained by the two variables, exposure via books and magazines and family income level as also depicted in the third-step regression analyses. Thus, the remaining 4% percent belongs to all six student background variables employed in the last step analysis, which means again this 4 % is again a shared one in which the six student characteristics excluding the two sole significant contributors above all have contributions. So far, we have been able to explain a total of 10 % of the variance in a proportional manner out of the 15 % shared variance. If we had conducted only the third step, we would be left with no explanation for the proportional shares of the total 15 % shared variance. Thus, with the help of regression analyses results conducted in a three-step manner, we can say that when the 10 % variance is deduced from the total shared variance, the learning environment variables and student background variables account for a shared 5 % of the variance in the student persistence scores, which we can offer no further explanations for the relative shares of the two categories of predictors. In conclusion, using three subsequent regression analyses, we could explain the shared variance in more detail, at least with regard to the shares in terms of the two big sets of variables. The following diagram (Figure 4.9) helps us to understand the variance explained in student persistence by learning environment and student background variables.
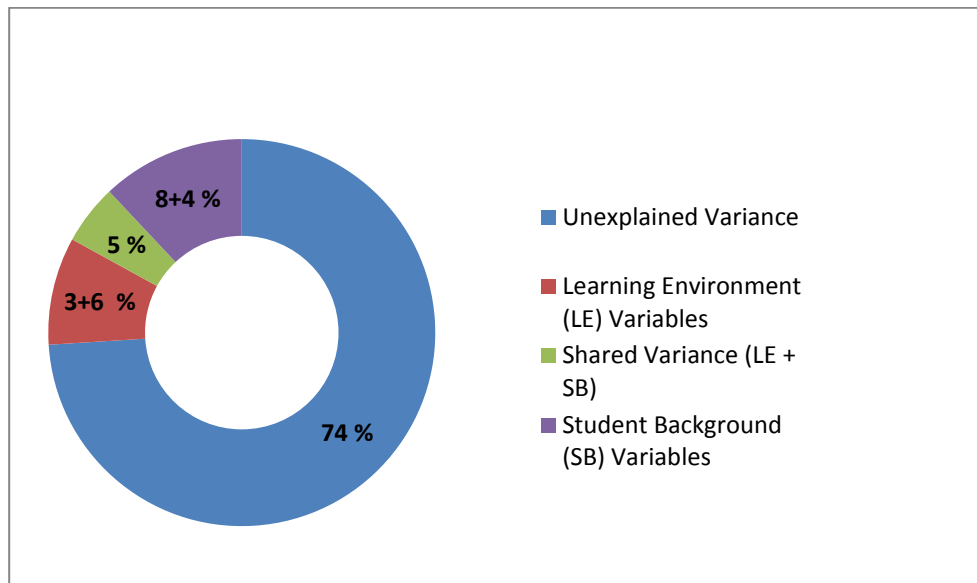
Figure 4.9. Common and Unique Contributions to Outcome Variance Made by Learning Environment and Student Background Predictors

4.3.2. Does the relation between certain characteristics of EFL classes and persistence in English language study vary by certain student characteristics? (RQ2)

This section focuses on the results on variance of the relationship between persistence and EFL class factors by background factors. In other words, the results report the relationship between the certain characteristics of EFL classes and persistence in English language study on the basis of the levels or the subsets of the student background characteristics. Prior to Multiple Regression analyses to be conducted to assess the predictive abilities of the EFL learning environment characteristics upon students' EFL persistence in relation to the sub-categories of the student background variables, the researcher first selected the cases (observations) in her data set in terms of the existing subset of the student background variables. There were available data regarding the eight background variables. Thus, the researcher performed her analyses on a subset of the each of the eight student-related variables. For example, for gender, the regression analyses were first performed only on

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females and then only on males. Several of the subsets were merged with an attempt to better interpret the results. That is, for the two outside exposure variables, outside exposure to English via visual-printed tools (books and magazines) and outside exposure to English via audio-visual tools (television and internet), the two of the ratings (*always and frequently*) and the remaining three (*sometimes, rarely and never*) were merged. In addition, the available three sub-sets for the demographic variable of family income level were reduced into two subsets by the merging of *more than 2000 but less than 5000 Turkish Liras* subset and *above 5000 Turkish Liras* subsets. In sum, the family income level was changed into two main subsets as *less than 2000 Turkish Liras* and *more than 2000 Turkish Liras*. The variable of age was recomputed as having two main subsets as *below 20 years old* and *above 20 years old*. While merging the subsets, the frequencies in the sub-sets were also checked to ensure no violations of the sample size assumption to conduct subsequent regression analyses.

For all the subsets regarding the student background variables, separate multiple regression analyses (enter method) was performed to assess the ability of the six main characteristics of the EFL teaching-learning activities (learning environment) to predict students' persistence in learning English by the subsets of the student-related variables. In this sense, in each of the regression analyses, the criterion variable was the persistence scores of the students in the EFL study, while the each EFL learning environment sub-scale was predictors. These EFL class characteristics were previously labeled as a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and finally f) authenticity and congruence with reality of the assessment tasks.

4.3.2.1. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subset of Gender

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 600 cases for females and 742 cases for males and 6 independent variables, the number of cases (ratio of cases to independent variables) also is well above the minimum requirement (N ≥ 50+8m; m = number of independent variables) employing Tabachnick and Fidell's (2007) formula. Leverage statistics and Cook's Distance further verified the absence of influential observations (outliers). The acceptable values for Tolerance and VIF and the preliminary analysis of the bivariate correlations verified the absence of multicollinearity. The Histogram and normal probability plot (P-P plot) of the residuals were observed to verify the assumption of normality (Figure 4.10 and Figure 4.11 for males; Figure 4.12 and Figure 4.13 for females).
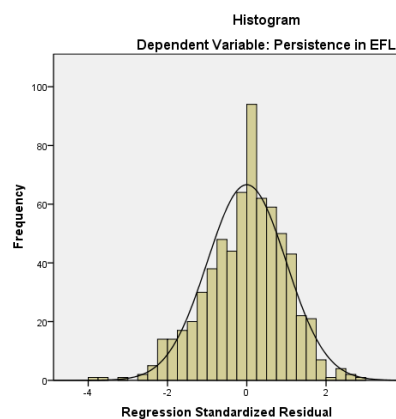
Figure 4.10. Histogram of Residuals (M)
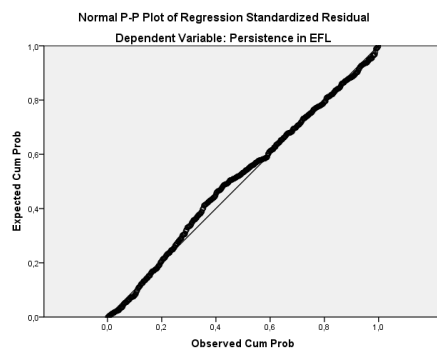
Figure 4.11. Normal P-P Plot of Residuals (M)
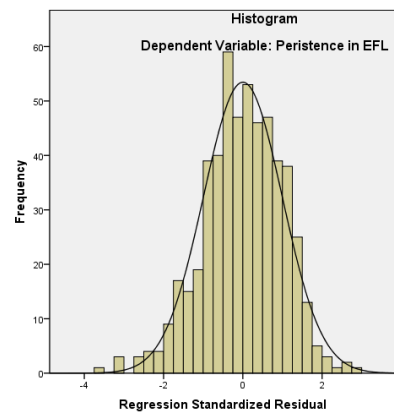
Figure 4.12. Histogram of Residuals (F)
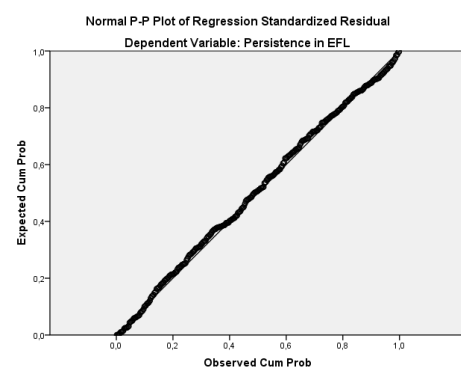
Figure 4.13. Normal P-P Plot of Residuals (F)

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The inspection of the residuals scatterplots (partial regression plots) verifies that the normality and linearity assumptions have not been violated. Assumption of the independence of the residuals has been satisfied with the Durbin-Watson score of 1.91 on the male subset and 1.89 on the female subset. Table 4.19 and Table 4.20 present the bivariate correlations and descriptive statistics for the variables based on the two subsets.

Table 4.19

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Males)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.21	.83	.18	.36	.27	.23	.24	.31
Predictor variable	4.19	.79						
1. course planning and organization	3.63	.84	—	.52	.55	.51	.56	.38
2. materials environment	3.82	.77	.52	—	.48	.54	.48	.47
3. teacher supportive behaviors	3.47	.80	.55	.48	—	.60	.63	.46
4. communicative implementation practices	3.78	.85	.51	.54	.60	—	.59	.50
5. feedback and guidance	3.43	.94	.56	.48	.63	.59	—	.60
6. authenticity and congruence with reality	3.21	.83	.38	.47	.46	.50	.60	—

Table 4.20

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Females)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.30	.73	.19	.32	.27	.22	.26	.27
Predictor variable								
1. course planning and organization	4.33	.71	—	.61	.56	.51	.61	.36
2. materials environment	3.75	.81	.61	—	.55	.55	.58	.55
3. teacher supportive behaviors	3.91	.77	.56	.55	—	.62	.66	.48
4. communicative implementation practices	3.62	.77	.51	.55	.62	—	.61	.49
5. feedback and guidance	3.91	.83	.61	.58	.66	.61	—	.62
6. authenticity and congruence with reality	3.50	.94	.36	.55	.48	.49	.62	—

On the female subset, a standard multiple regression analysis used to assess the ability of six EFL learning environment characteristics to predict levels of persistence revealed that the regression model was significant and the total variance explained by the model as a whole was 11 %, $F (6, 526) = 12.44$, $p < .05$. The R^2 value of 11 indicates that 11 % of the variability in the students' persistence scores is predicted by knowing scores on these six independent variables. The two EFL class characteristics, materials environment and teacher supportive behaviors were found to be significant, with the materials environment recording highest unstandardized coefficients Beta values, thus materials environment making a stronger contribution to the prediction of the dependent (criterion) variable of persistence than the variable of teacher supportive behaviors, $t (526) = 3.780$, $p < .05$. The size and the direction of the relationship suggest that more persistence in EFL study are observed among female students with more positive perceptions about both the class physical

environment and class atmosphere facilitated and supported by the teacher.
Table 4.21 presents the results from the regression analysis on the female
subset.

Table 4.21

Regression Analyses Summary for the EFL Learning Environment Predictors

Predicting Persistence (Female Subset)

Variable	B	SE B	ß	t	p
1. course planning and organization	-0.19	0.18	-.06	-1.08	.282
2. materials environment	0.74	0.20	.23	3.78	.000
3. teacher supportive behaviors	0.37	0.17	.13	2.13	.033
4. communicative implementation practices	-0.08	0.25	-.02	-0.31	.760
5. feedback and guidance	0.13	0.27	.03	0.47	.639
6. authenticity and congruence with reality	0.44	0.26	.09	1.69	.091

Note. $R^2 = .11$ ($p < .001$).

On the male subset, the results from the standard multiple regression analysis
revealed that the regression model was significant and the total variance
explained by the model as a whole was 16 %, $F(6, 658) = 21.56$, $p < .05$. This
indicates that 16 % of the variability in the students' persistence scores is
predicted by the six EFL characteristics. The three EFL class dimensions,
materials environment, authenticity and congruence with reality of assessment
tasks and teacher supportive behaviors were found to be significant, with the
materials environment revealing the strongest contribution to the prediction of
the dependent (criterion) variable of persistence, $t(658) = 6.199$, $p < .001$. The

direction of the relationship between these three predictors and persistence was positive. The results from the regression are shown in Table 4.22.

Table 4.22

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Male Subset)

Variable	B	SE B	ß	t	p
1. course planning and organization	-0.21	0.15	-.07	-1.37	.170
2. materials environment	1.03	0.17	.29	6.20	.000
3. teacher supportive behaviors	0.39	0.16	.12	2.39	.017
4. communicative implementation practices	-0.20	0.23	-.04	-0.84	.403
5. feedback and guidance	-0.11	0.24	-.03	-0.45	.652
6. authenticity and congruence with reality	0.93	0.25	.18	3.77	.000

Note. R^2 = .16 ($p < .001$).

4.3.2.2. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subset of University Subject Domain

The data were examined for any violations of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 1085 cases standing for science students and 212 cases for social-sciences students and 6 independent variables, the ratio of cases to independent variables was acceptable. Leverage statistics and Cook's Distance further verified the absence of influential observations (outliers). Multicollinearity was also checked through the bivariate correlations and Tolerance and VIF values and the results show no violations. The inspection of the residuals scatterplots (partial regression plots) indicates no violations of the normality and linearity assumptions. Assumption of the independence of the

residuals has been satisfied with the Durbin-Watson score of 1.86 on the science-related departments' subset and 1.76 on the social sciences-related departments' subset. The assumption of normality was also verified through the histogram and normal probability plot (P-P plot) of the residuals (Figure 4.14 and Figure 4.15 for science students; Figure 4.16 and Figure 4.17 for social-sciences students). Table 4.23 and Table 4.24 present the bivariate correlations and descriptive statistics for the variables in terms of the two subsets.
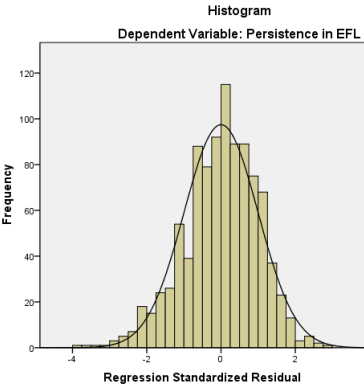
Figure 4.14. Histogram of Residuals (S)
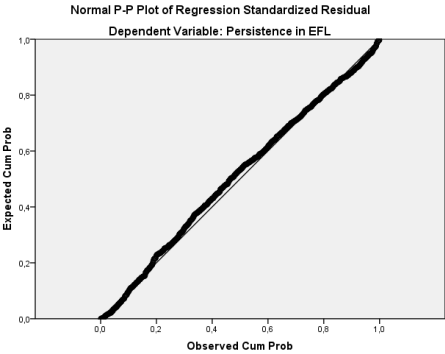
Figure 4.15. Normal P-P Plot of Residuals (S)
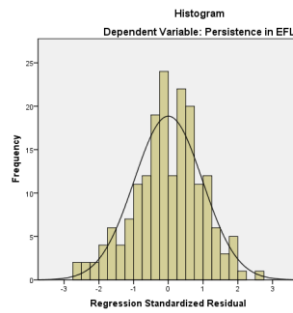
Figure 4.16. Histogram of Residuals (SS)
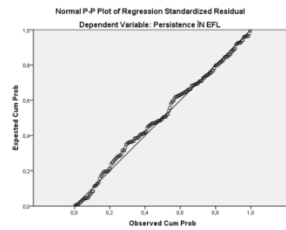
Figure 4.17. Normal P-P Plot of Residuals (SS)

Table 4.23

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Science Subset)

Variable	M	SD	1	2	3	4	5	6
Persistence (criterion)	3.24	.79	.18	.33	.26	.20	.23	.28
Predictor variable								
1. course planning and organization	4.25	.74	—	.56	.56	.50	.57	.38
2. materials environment	3.68	.82	.56	—	.50	.53	.51	.49
3. teacher supportive behaviors	3.87	.76	.56	.50	—	.61	.64	.47
4. communicative implementation practices	3.52	.78	.50	.53	.61	—	.59	.50
5. feedback and guidance	3.83	.83	.57	.51	.64	.59	—	.60
6. authenticity and congruence with reality	3.47	.94	.38	.49	.47	.50	.60	—

Table 4.24

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Social-Sciences Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.33	.76	.16	.35	.27	.23	.26	.27
Predictor variable								
1. course planning and organization	4.33	.70	—	.60	.54	.56	.69	.39
2. materials environment	3.74	.83	.60	—	.57	.61	.58	.56
3. teacher supportive behaviors	3.88	.79	.54	.57	—	.60	.63	.43
4. communicative implementation practices	3.68	.80	.56	.61	.60	—	.65	.46
5. feedback and guidance	3.94	.84	.69	.58	.63	.65	—	.62
6. authenticity and congruence with reality	3.47	.95	.39	.56	.43	.46	.62	—

A Standard multiple regression analysis was conducted on the cases belonging to science-related university subject domains to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results showed that the regression model with all six predictors was statistically significant,F (6, 967) = 26.15, $p < .05$, indicating an R^2 value of .13. This indicates that 13 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment dimensions. Only three of the independent variables contribute significantly to the regression. That is, the predictor of course materials, authenticity and congruence with reality of assessment tasks and teacher supportive behaviors significantly predicted students' persistence in EFL as shown in Table 4.25.

Table 4.25

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Science Subset)

Variable	B	SE B	ß	T	p
1. course planning and organization	-0.23	0.13	-.07	-1.79	.074
2. materials environment	0.91	0.14	.26	6.57	.000
3. teacher supportive behaviors	0.45	0.14	.15	3.36	.001
4. communicative implementation practices	-0.28	0.19	-.06	-1.47	.143
5. feedback and guidance	-0.03	0.20	-.01	-.18	.860
6. authenticity and congruence with reality	0.73	0.20	.15	3.69	.000

Note. $R^2 = .13$ ($p < .001$).

On the cases from the social sciences-related university subject domains, a standard multiple regression was again performed between the students' persistence and all six EFL learning environment characteristics. R for regression was significantly different from zero, $F (6, 179) = 5.11$, $p < .05$, with an R^2 value of .12. This R^2 value of 12 indicates that 12 % of the variability in the students' persistence scores is predicted by the student perceptions on the six EFL classroom characteristics. Only one of the EFL class characteristics, materials environment were found to be significant for the explanation of variance in the persistence scores. The size and the direction of the relationship suggest that more persistence in EFL study are observed among social sciences departments' students with more positive perceptions regarding course materials and class physical environment. Table 4.26 shows the results from the regression analysis conducted on the social-sciences related subject domains.

Table 4.26

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Social-Sciences Subset)

Variable	B	$SE\ B$	β	t	p
1. course planning and organization	-0.50	0.34	-.15	-1.46	.147
2. materials environment	1.00	0.34	.30	2.92	.004
3. teacher supportive behaviors	0.31	0.28	.11	1.10	.274
4. communicative implementation practices	-0.06	0.43	-.01	-.15	.885
5. feedback and guidance	0.34	0.50	.08	.67	.507
6. authenticity and congruence with reality	0.34	0.45	.07	.76	.450

Note. $R^2 = .12$ ($p < .001$).

4.3.2.3. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subsets of Family Income Level

The data were examined for any violation of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 806 cases from the more than 2000 Turkish Liras subset, 507 cases from the 2000 or less than 2000 Turkish Liras subset and 6 independent variables, there was an acceptable number for sample size. Influential observations were further verified by Leverage statistics and Cook's Distance. No violation for the assumption of Multicollinearity was observed with acceptable Tolerance and VIF values and bivariate correlations. The inspection of the residuals scatterplots (partial regression plots) indicates no violations of the normality and linearity assumptions. Assumption of the independence of the residuals has been satisfied with the Durbin-Watson score of 1.88 on less than 2000 Turkish Liras subset and of 1.85 on more than 2000 Turkish Liras subset. Histogram and normal probability plot (P-P plot) of the residuals were also examined to conform to the assumption of normality (Figure 4.18 and Figure 4.19 for 2000

or less than 2000 Turkish Liras subset; Figure 4.20 and Figure 4.21 for more than 2000 Turkish Liras subset). Table 4.27 and Table 4.28 present the bivariate correlations and descriptive statistics for the variables included in the two regression analyses on the related subsets.
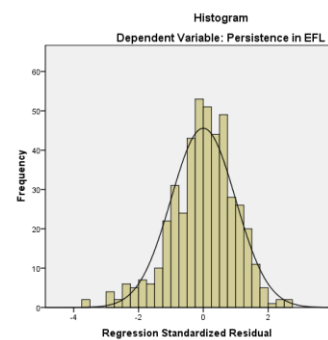
Figure 4.18. Histogram of Residuals (<)
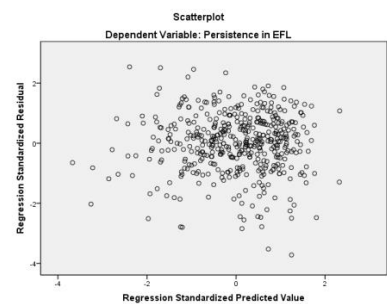
Figure 4.19. Normal P-P Plot of Residuals (<)
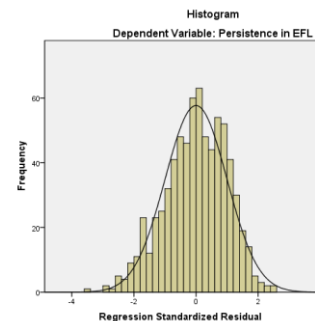
Figure 4.20. Histogram of Residuals (>)

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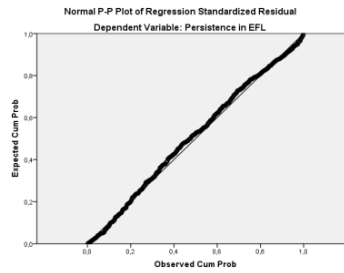
Figure 4.21. Normal P-P Plot of Residuals (>)

Table 4.27

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (2000 Turkish Liras or Less than 2000 Turkish Liras Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.36	.77	.27	.32	.22	.13	.24	.18
Predictor variable								
1. course planning and organization	4.25	.79	—	.61	.57	.50	.59	.39
2. materials environment	3.73	.83	.61	—	.50	.53	.54	.48
3. teacher supportive behaviors	3.89	.76	.57	.50	—	.61	.64	.47
4. communicative implementation practices	3.54	.80	.50	.53	.61	—	.62	.51
5. feedback and guidance	3.88	.81	.59	.54	.64	.62	—	.64
6. authenticity and congruence with reality	3.55	.88	.39	.48	.47	.51	.64	—

Table 4.28

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (More than 2000 Turkish Liras Subset)

Variable	M	SD	1	2	3	4	5	6
Persistence (criterion)	3.17	.79	.14	.36	.31	.29	.25	.33
Predictor variable								
1. course planning and organization	4.25	.73	—	.55	.55	.51	.58	.38
2. materials environment	3.64	.83	.55	—	.53	.56	.52	.52
3. teacher supportive behaviors	3.85	.78	.55	.53	—	.61	.64	.47
4. communicative implementation practices	3.53	.78	.51	.56	.61	—	.58	.49
5. feedback and guidance	3.81	.86	.58	.52	.64	.58	—	.60
6. authenticity and congruence with reality	3.40	.97	.38	.52	.47	.49	.60	—

A standard multiple regression analysis was conducted on the cases coming from families with an income of 2000 Turkish Lirasor less to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results showed that the regression model with all six predictors was statistically significant,F (6, 447) = 10.66, $p < .05$, indicating an R^2 value of .11. This indicates that 11 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment dimensions. As shown in Table 4.29, two of the predictors, course materials environment and communicative approach-oriented implementation practices significantly contributed to the regression model performed for the explanation of student persistence in EFL. Given the direction of the relationships, it is seen that communicative approach-oriented practices are negatively and materials

environment are positively related to the students' persistence as reported by the students coming from lower income families.

Table 4.29

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence(Less than 2000 Turkish Liras Subset)

Variable	B	SE B	ß	t	p
1. course planning and organization	0.25	0.18	.09	1.37	.173
2. materials environment	0.86	0.20	.26	4.26	.000
3. teacher supportive behaviors	0.22	0.20	.07	1.12	.262
4. communicative implementation practices	-0.69	0.27	-.16	-2.53	.012
5. feedback and guidance	0.40	0.31	.09	1.31	.191
6. authenticity and congruence with reality	0.05	0.31	.01	.17	.867

Note. $R^2 = .11$ ($p < .001$).

On the standard multiple regression performed on the cases coming from families with an income of more than 2000 Turkish Liras to examine associations between students' persistence and all six EFL learning environment characteristics, the results indicate the regression model statistically significant, $F (6, 713) = 27.29$, $p < .05$, indicating an R^2 value of .18. This R^2 value of 18 reveals that almost one fifth of the variability in the students' persistence is predicted by the student perceptions on the six EFL classroom characteristics. Four of the six EFL class characteristics, course materials environment, authenticity and congruence with reality of assessment tasks, teacher supportive behaviors and lastly course planning and organization were found to be statistically significant in the explanation of the variance in

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the higher income EFL students' persistence scores. The size and the direction of the relationship suggest that EFL students belonging to higher income families report higher levels of persistence in EFL when they perceive that they have more teacher supportive behaviors, more satisfying course materials environment, more authenticity and congruence with realilty but less planned and organized lessons. The results for the regression analysis performed on the higher family income subset are shown in Table 4.30.

Table 4.30

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (More than 2000 Turkish Liras Subset)

Variable	B	$SE\ B$	β	t	p
1. course planning and organization	-0.54	0.15	-.17	-3.65	.000
2. materials environment	0.87	0.16	.25	5.44	.000
3. teacher supportive behaviors	0.53	0.15	.17	3.53	.000
4. communicative implementation practices	0.26	0.22	.06	1.22	.222
5. feedback and guidance	-0.15	0.22	-.04	-.70	.486
6. authenticity and congruence with reality	0.86	0.22	.18	3.92	.000

Note. R^2 = .18 ($p < .001$).

4.3.2.4. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subsets of Perceived Proficiency Level in English at Graduation from High School

Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations before proceeding with the three separate regressions on the three different subsets. With 618 cases withpoorproficiency level, 523 with moderate level and 169 cases for good and very good level and 6 independent variables, the number of cases exceeded the minimum requirement suggested by Tabachnick and Fidell's (2007). Leverage statistics and Cook's Distance further verified the absence of influential observations (outliers). The histogram and normal probability plot (P-P plot) of the residuals were also observed and they appeared to verify the assumption of normality (Figure 4.22 and Figure 4.23 for poor; Figure 4.24 and Figure 4.25 for moderate and Figure 4.26 and 4.27 for good & very good).
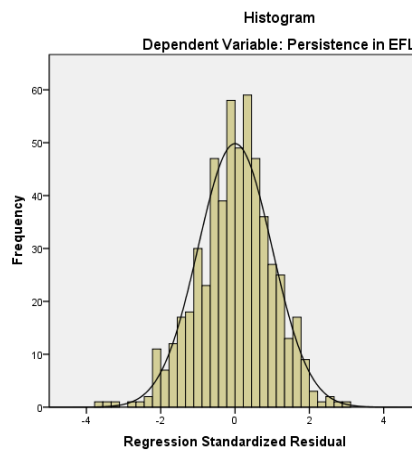
Figure 4.22. Histogram of Residuals (P)
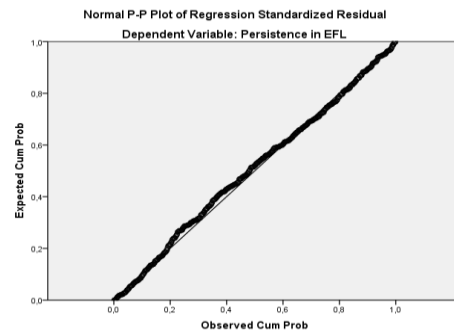
Figure 4.23. Normal P-P Plot of Residuals (P)
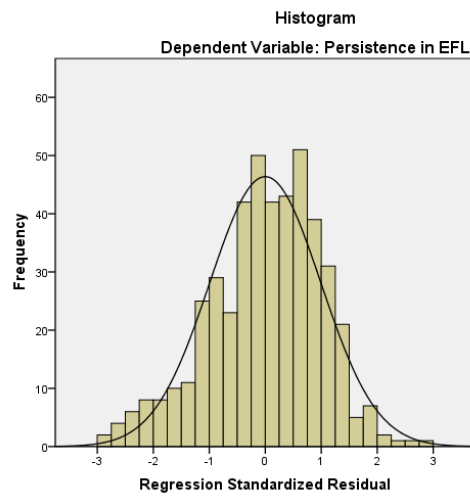
Figure 4.24. Histogram of Residuals (M)
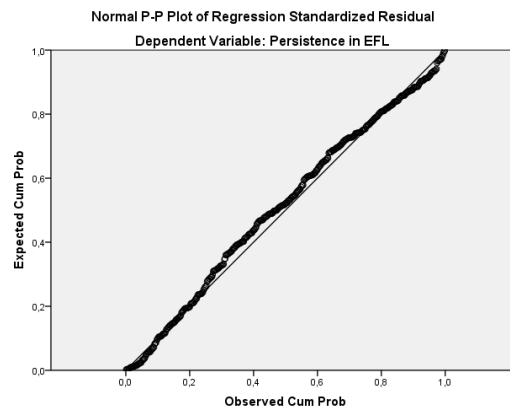
Figure 4.25. Normal P-P Plot of Residuals (M)

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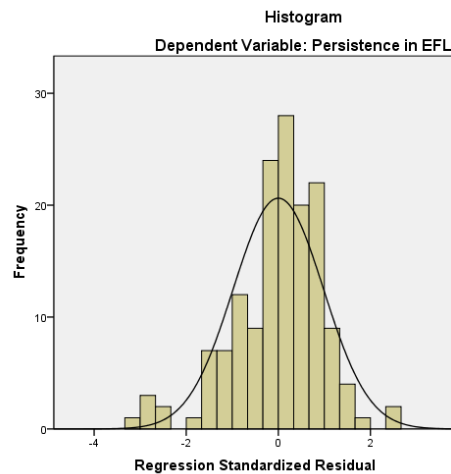
Figure 4.26. Histogram of Residuals (G)
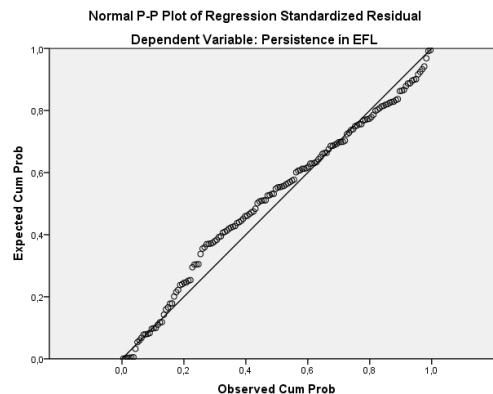
Figure 4.27. Normal P-P Plot of Residuals (G)

The inspection of the residuals scatterplots (partial regression plots) also verifies that the normality and linearity assumptions have not been violated. Durbin-Watson scores of 2.07, 1.82 and 2.02 respectively computed from the analyses on the poor, moderate and combined good and very good subsets showed no violations for the assumption of the independence of the residuals. The acceptable values for Tolerance and VIF and the preliminary analysis of the bivariate correlations satisfied the assumption of multicollinearity. Table 4.31, Table 4.32 and Table 4.33 respectively depict the bivariate correlations and descriptive statistics based on the three subsets of perceived high school proficiency level in English.

Table 4.31

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Poor Level Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.13	.79	.18	.34	.26	.20	.25	.31
Predictor variable								
1. course planning and organization	4.20	.78	—	.54	.54	.49	.59	.35
2. materials environment	3.60	.85	.54	—	.51	.55	.53	.49
3. teacher supportive behaviors	3.79	.80	.54	.51	—	.62	.64	.47
4. communicative implementation practices	3.46	.82	.49	.55	.62	—	.61	.47
5. feedback and guidance	3.79	.84	.59	.53	.64	.61	—	.61
6. authenticity and congruence with reality	3.45	.94	.35	.49	.47	.47	.61	—

Table 4.32

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Moderate Level Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.34	.76	.19	.35	.25	.26	.25	.29
Predictor variable								
1. course planning and organization	4.29	.72	—	.59	.59	.52	.59	.43
2. materials environment	3.76	.78	.59	—	.53	.55	.53	.55
3. teacher supportive behaviors	3.96	.72	.59	.53	—	.58	.62	.47
4. communicative implementation practices	3.63	.74	.52	.55	.58	—	.58	.53
5. feedback and guidance	3.91	.83	.59	.53	.62	.58	—	.64
6. authenticity and congruence with reality	3.47	.95	.43	.55	.47	.53	.64	—

On the cases with poor ratings about their high school English proficiency, a standard multiple regression was performed between the students' persistence and all six EFL learning environment characteristics. The results showed that the regression model with all six predictors was statistically significant, $F(6, 552) = 16.33$, $p < .05$, with an R^2 value of .14. This indicates that 14 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment characteristics. The two dimensions pertaining to materials environment and authenticity and congruence with reallty significantly predicted the outcome variable as shown in Table 4.34.

Table 4.33

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Good & Very Good Level Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.39	.82	.16	.35	.30	.21	.17	.26
Predictor variable								
1. course planning and organization	4.32	.73	—	.56	.52	.53	.60	.29
2. materials environment	3.76	.85	.56	—	.51	.50	.51	.43
3. teacher supportive behaviors	3.85	.79	.52	.51	—	.60	.68	.45
4. communicative implementation practices	3.57	.79	.53	.50	.60	—	.62	.53
5. feedback and guidance	3.85	.90	.60	.51	.68	.62	—	.56
6. authenticity and congruence with reality	3.49	.94	.29	.43	.45	.53	.56	—

Table 4.34

Regression Analyses Summary for the EFL Learning Environment Predictors

Predicting Persistence (Poor Level Subset)

Variable	B	$SE\ B$	β	T	p
1. course planning and organization	-0.18	0.16	-.06	-1.12	.265
2. materials environment	0.91	0.18	.27	5.06	.000
3. teacher supportive behaviors	0.32	0.17	.11	1.91	.057
4. communicative implementation practices	-0.37	0.24	-.09	-1.52	.128
5. feedback and guidance	0.11	0.27	-.03	.40	.689
6. authenticity and congruence with reality	0.86	0.26	.17	3.27	.001

Note. R^2 = .14 ($p < .001$).

On the cases with moderate ratings about their high school English proficiency, a standard multiple regression was again performed between the students' persistence and all six EFL learning environment characteristics. R for regression was significantly different from zero, $F\ (6, 455) = 12.66$, $p < .05$, with an R^2 value of .13. This R^2 value of 13 indicates that 13 % of the variability in the students' persistence scores is predicted by the student perceptions on the six EFL classroom characteristics. As presented in Table 4.35, only materials environment dimension was found to be significant and this predictor is positively associated with the outcome variable of persistence.

Table 4.35

Regression Analyses Summary for the EFL Learning Environment Predictors
Predicting Persistence (Moderate Level Subset)

Variable	B	SE B	ß	t	P
1. course planning and organization	-0.29	0.19	-.09	-1.51	.131
2. materials environment	0.93	0.21	.27	4.35	.000
3. teacher supportive behaviors	0.21	0.20	.07	1.06	.292
4. communicative implementation practices	0.27	0.28	.06	.98	.328
5. feedback and guidance	0.10	0.28	.03	.36	.716
6. authenticity and congruence with reality	0.50	0.29	.10	1.72	.086

Note. $R^2 = .13$ ($p < .001$).

On the cases with good and very good high school English proficiency perceptions, a standard multiple regression was again performed between the students' persistence and all six EFL learning environment characteristics. The regression model with all six predictors was statistically significant, $F_{(6, 145)}$ = 5.06, $p < .05$, indicating an R^2 value of .14. This indicates that 14 % of the variability in EFL students' persistence is predicted in combination by student perceptions on all six EFL classroom environment characteristics. The two dimensions, materials environment and teacher supported comfortable environment significantly predicted the outcome variable, that is, the persistence scores of students reporting good and very good levels of high school English proficiencies.Table 4.36 depicts the results for the regression analysis performed on the subset with good and very good high school English proficiency reportings.

Table 4.36

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Good & Very Good Level Subset)

Variable	B	SE B	ß	t	P
1. course planning and organization	-0.17	0.36	-.05	-.49	.626
2. materials environment	1.01	0.35	.29	2.91	.004
3. teacher supportive behaviors	0.80	0.34	.26	2.33	.021
4. communicative implementation practices	-0.16	0.51	-.03	-.31	.755
5. feedback and guidance	-0.75	0.50	-.18	-1.50	.137
6. authenticity and congruence with reality	0.82	0.51	.16	1.60	.113

Note. R^2 = .14 (p < .001).

4.3.2.5. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subsets of Prior English Courses Taken

The data were examined for any violations of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations for the two separate regressions to be performed. With 201 cases for those reporting they took a prior English course and 1120 cases for those reporting they took no prior English courses and 6 EFL class independent variables, there was an acceptable number for the sample size assumption. Influential observations were further verified by Leverage statistics and Cook's Distance. No violations for the assumption of Multicollinearity were observed with the acceptable Tolerance and VIF values and also with the examination ofbivariate correlations. The inspection of the residuals scatterplots (partial regression plots) indicates no violations of the normality and linearity assumptions. Assumption of the independence of the residuals has been satisfied with the

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Durbin-Watson score of 1.69 on yes reportings subset and of 1.96 on the no reportings subset. Histogram and normal probability plot (P-P plot) of the residuals were also examined to conform to the assumption of normality (Figure 4.28 and Figure 4.29 for Yes reportings subset; Figure 4.30 and Figure 4.31 for No reportings subset). Table 4.37 and Table 4.38 below also present the bivariate correlations and descriptive statistics for the variables from the two regression analyses performed on the relevant two subsets.
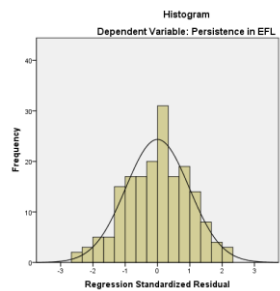
Figure 4.28. Histogram of Residuals (Y)
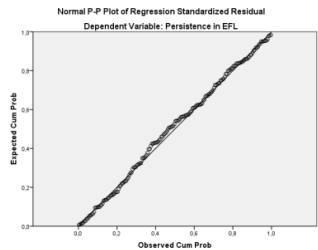
Figure 4.29. Normal P-P Plot of Residuals (Y)
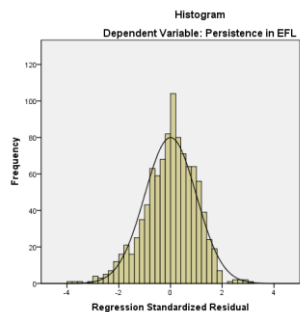
Figure 4.30. Histogram of Residuals (N)
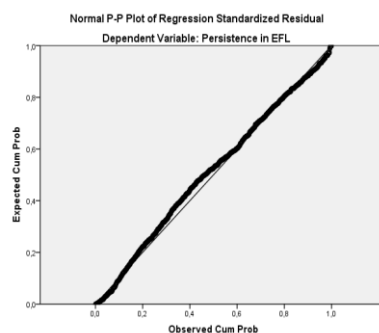
Figure 4.31. Normal P-P Plot of Residuals (N)

Table 4.37

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Prior Course Taken Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.34	.82	.15	.36	.27	.29	.21	.25
Predictor variable								
1. course planning and organization	4.27	.77	—	.62	.63	.55	.59	.43
2. materials environment	3.70	.90	.62	—	.64	.61	.56	.55
3. teacher supportive behaviors	3.92	.81	.63	.64	—	.65	.72	.51
4. communicative implementation practices	3.57	.77	.55	.61	.65	—	.65	.57
5. feedback and guidance	3.89	.90	.59	.56	.72	.65	—	.61
6. authenticity and congruence with reality	3.41	.98	.43	.55	.51	.57	.61	—

Table 4.38

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (No Prior Course Taken Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.23	.77	.19	.35	.28	.23	.26	.32
Predictor variable								
1. course planning and organization	4.25	.75	—	.55	.55	.50	.59	.36
2. materials environment	3.68	.81	.55	—	.49	.53	.52	.49
3. teacher supportive behaviors	3.87	.76	.55	.49	—	.60	.62	.46
4. communicative implementation practices	3.54	.79	.50	.53	.60	—	.58	.48
5. feedback and guidance	3.83	.83	.59	.52	.62	.58	—	.61
6. authenticity and congruence with reality	3.47	.94	.36	.49	.46	.48	.61	—

A Standard multiple regression analysis was conducted on the cases reporting they took an English course before (i.e. cases with yes reportings) to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results showed that the regression model with all six predictors was statistically significant, F (6, 173) = 5.28, $p < .05$, indicating an R^2 value of .13. This indicates that 13 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment dimensions. As shown in Table 4.39, only one of the independent variables significantly predicted the outcome. That is, the predictor of course materials environment uniquely predicted the students' persistence scores. Given the direction of the relationships, it is seen that this significant predictor is positively related to persistence as indicated by the students reporting they took a prior English course similar to the prep program.

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Table 4.39

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Prior Course Taken Subset)

Variable	B	SE B	ß	t	p
1. course planning and organization	-0.54	0.32	-.17	-1.72	.088
2. materials environment	1.07	0.34	.33	3.12	.002
3. teacher supportive behaviors	0.30	0.35	.01	.84	.401
4. communicative implementation practices	0.58	0.50	.12	1.16	.248
5. feedback and guidance	-0.22	0.48	-.05	-.47	.641
6. authenticity and congruence with reality	0.28	0.48	.06	.58	.566

Note. R^2 = .13 (p < .001).

On the standard multiple regression analysis performed on the cases with no reportings to examine associations between students' persistence and all six EFL learning environment characteristics, the results revealed that the regression model was statistically significant, F (6, 992) = 30.93, p < .05, indicating an R^2 value of .15. This adjusted R^2 value of 15 indicates that 15 % of the variability in the students' persistence scores is predicted by the student perceptions on all of the six EFL classroom characteristics. Three of the six EFL class characteristics which are course materials environment, authenticity and congruence with reality of assessment tasks and lastly teacher supportive behaviors were found to be statistically significant for the explanation of variance in persistence scores from the EFL students reporting that they never took an intensive English course before. The size and the direction of the relationship suggest that EFL students that took no prior English courses before report higher levels of persistence in EFL when they perceive that they are exposed to a more teacher supportive behaviors, more satisfying materials

environment conditions and also more authenticity and congruence with realilty. The results from the regression analysis performed on the no reportings subset are shown in Table 4.40.

Table 4.40

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (No Prior Course Taken Subset)

Variable	B	SE B	ß	T	P
1. course planning and organization	-0.18	0.12	-.06	-1.48	.141
2. materials environment	0.87	0.13	.25	6.49	.000
3. teacher supportive behaviors	0.39	0.13	.13	3.09	.002
4. communicative implementation practices	-0.18	0.18	-.04	-.10	.319
5. feedback and guidance	0.03	0.19	.01	.16	.872
6. authenticity and congruence with reality	0.84	0.19	.17	4.39	.000

Note. $R^2 = .15$ ($p < .001$).

4.3.2.6. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subset of Exposure to English via Audio-visual Tools (Television and Internet)

The data were examined for any violation of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 570 cases reporting they always or frequently watch television or other internet material and 735 cases in the other subset who report they sometimes or less (i.e. rarely and never also included in this subset) watch television or other internet material and 6 independent variables, there was no violation for the assumption of the ratio of cases to independent variables. Leverage statistics and Cook's Distance were also checked to ensure

the absence of influential observations (outliers). The inspection of the residuals scatterplots (partial regression plots) reveals no violations of the normality and linearity assumptions. The assumption of normality was also verified through the histogram and normal probability plot (P-P plot) of the residuals (Figure 4.32 and Figure 4.33 for always and frequently reportings subset; Figure 4.34 and Figure 4.35 for sometimes or less reportings subset).

Figure 4.32. Histogram of Residuals (A)

Figure 4.33. Normal P-P Plot of Residuals (A)

Figure 4.34. Histogram of Residuals (S)
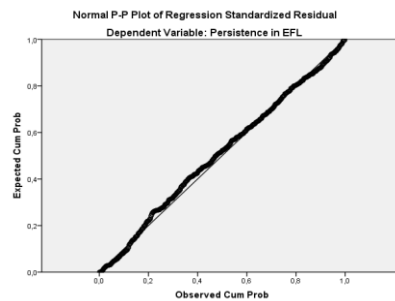
Figure 4.35. Normal P-P Plot of Residuals (S)

Assumption of the independence of the residuals has been satisfied with the Durbin-Watson score of 1.77 on those with always and frequently reportings subset and 1.82 on the cases with sometimes or less degrees of exposure subset. The acceptable values for Tolerance and VIF and the preliminary analysis of the bivariate correlations verify the absence of multicollinearity. Table 4.41 and Table 4.42 present the bivariate correlations and descriptive statistics for the variables in question.

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Table 4.41

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Always and Frequently Reportings Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.37	.78	.18	.40	.29	.27	.28	.34
Predictor variable								
1. course planning and organization	4.28	.73	—	.55	.53	.51	.57	.38
2. materials environment	3.72	.83	.55	—	.49	.56	.51	.50
3. teacher supportive behaviors	3.93	.74	.53	.49	—	.57	.61	.46
4. communicative implementation practices	3.60	.78	.51	.56	.57	—	.56	.51
5. feedback and guidance	3.89	.84	.57	.51	.61	.56	—	.65
6. authenticity and congruence with reality	3.51	.96	.38	.50	.46	.51	.65	—

Table 4.42

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Sometimes or Less Reportings Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.15	.79	.19	.31	.24	.19	.21	.25
Predictor variable								
1. course planning and organization	4.22	.78	—	.58	.57	.51	.61	.35
2. materials environment	3.65	.82	.58	—	.54	.54	.54	.51
3. teacher supportive behaviors	3.81	.79	.57	.54	—	.64	.66	.47
4. communicative implementation practices	3.49	.79	.51	.54	.64	—	.63	.49
5. feedback and guidance	3.80	.84	.61	.54	.66	.63	—	.57
6. authenticity and congruence with reality	3.41	.93	.35	.51	.47	.49	.57	—

A standard multiple regression analysis was conducted on the cases with always or frequently responses to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results showed that the regression model with all six predictors was statistically significant, F (6, 509) = 21.17, $p < .05$, indicating an R^2 value of .19. This indicates that 19 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment dimensions. The results revealed that four out of six EFL learning environment dimensions which are course materials environment, authenticity and congruence with reality, planned and organized courses and last teacher supportive behaviors contribute significantly to the regression. The direction of the relationship between the predictor of planned and organized courses and student persistence appeared to

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be negative with negative standardized coefficient (*B*) values while the remaining three predictors showed positive standardized coefficient (*B*) values thus relating positively to the outcome. Hence, those students with higher outside exposure to English through television or internet are likely to become less persistent in EFL when they perceive the class as planned and organized at higher levels but more persistent when they have positive perceptions about the other three significant dimensions. The results from the regression analysis performed on this subset are shown in Table 4.43.

Table 4.43

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Always and Frequently Reportings Subset)

Variable	*B*	*SE B*	*ß*	*t*	*p*
1. course planning and organization	-0.43	0.17	-.13	-2.50	.013
2. materials environment	1.13	0.18	.34	6.26	.000
3. teacher supportive behaviors	0.39	0.17	.13	2.27	.023
4. communicative implementation practices	-0.03	0.25	-.01	-.14	.893
5. feedback and guidance	0.00	0.26	.00	.01	.993
6. authenticity and congruence with reality	0.80	0.27	.16	2.98	.003

Note. R^2 = .19 (p < .001).

A standard multiple regression analysis was performed on the cases with sometimes or less responses to assess the ability of six EFL learning environment characteristics to predict levels of persistence. R for regression was significantly different from zero, F (6, 644) = 13.76, $p < .05$, with an R^2 value of .11. This R^2 value of 11 indicates that 11 % of the variability in the students' persistence is predicted by the student perceptions on the six EFL class characteristics. Only two of the predictors, course materials environment and authenticity and congruence with reality of assessment tasks were found to be significant in explaining the variance in the students' persistence in EFL. Given the direction of the relationship between the two significant predictors and the outcome, it is seen that they both are positively related to student persistence. The results from the regression analysis on this subset are shown in Table 4.44.

Table 4.44

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Sometimes or Less Reportings Subset)

Variable	B	SE B	ß	t	P
1. course planning and organization	-0.06	0.16	-.02	-.38	.702
2. materials environment	0.82	0.18	.24	4.61	.000
3. teacher supportive behaviors	0.29	0.17	.10	1.75	.081
4. communicative implementation practices	-0.16	0.24	-.04	-.66	.512
5. feedback and guidance	-0.06	0.25	-.02	-.26	.798
6. authenticity and congruence with reality	0.61	0.25	.12	2.49	.013

Note. R^2 = .11 ($p < .001$).

4.3.2.7. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subset of Outside Exposure to English via Visual-printed Tools (Books and Magazines)

The data were examined for any violations of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 141 cases for these cases reporting they always or frequently read books or magazines and 1156 cases in the other subset of those reporting they sometimes or less (rarely or never responses included in this subset) and 6 independent variables, the ratio of cases to independent variables was acceptable. Leverage statistics and Cook's Distance further verified the absence of influential observations (outliers). The inspection of the residuals scatterplots (partial regression plots) shows no violations of the normality and linearity assumptions. There were satisfying Durbin-Watson scores from the two regression analyses conducted, 1.68 on the cases with always or frequently responses subset and 1.87 on those with sometimes or less responses subset. The assumption of normality was also verified through the histogram and normal probability plot (P-P plot) of the residuals (Figure 4.36 and Figure 4.37 for always or frequently responses subset; Figure 4.38 and Figure 4.39 for sometimes or less responses subset).
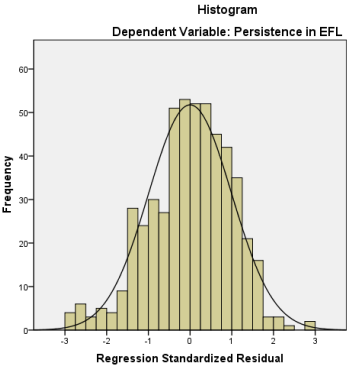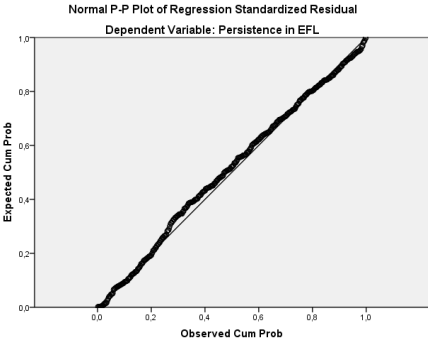
Figure 4.36. Histogram of Residuals (A)
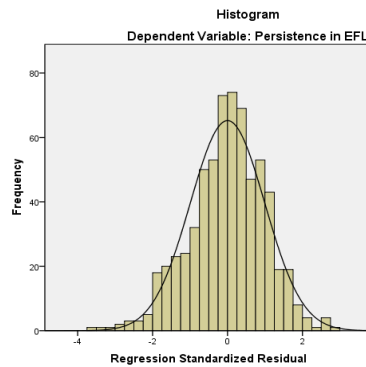

Figure 4.37. Normal P-P Plot of Residuals (A)
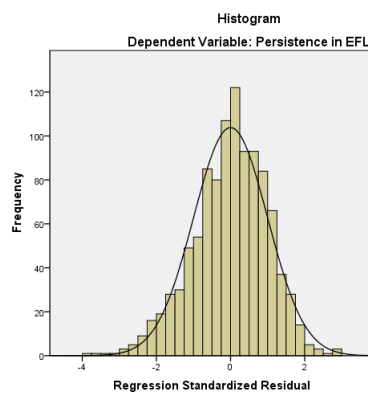

Figure 4.38. Histogram of Residuals (S)

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Persistence in EFL
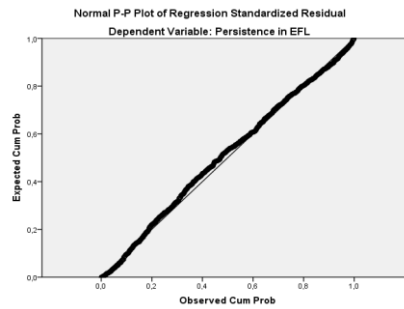
Figure 4.39. Normal P-P Plot of Residuals (S)

Multicollinearity was also checked with the Tolerance and VIF values and the results showed no violations. A subsequent inspection of the bivariate correlations further verified the absence of multicollinearity. Table 4.45 and Table 4.46 present the bivariate correlations and descriptive statistics for the variables in question.

Table 4.45

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Always & Frequently Reportings Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.62	.81	.27	.41	.25	.27	.16	.22
Predictor variable								
1. course planning and organization	4.30	.82	—	.66	.67	.60	.61	.34
2. materials environment	3.82	.88	.66	—	.53	.55	.50	.48
3. teacher supportive behaviors	3.97	.80	.67	.53	—	.65	.62	.50
4. communicative implementation practices	3.75	.84	.60	.55	.65	—	.66	.55
5. feedback and guidance	3.94	.84	.61	.50	.62	.66	—	.62
6. authenticity and congruence with reality	3.70	.90	.34	.48	.50	.55	.62	—

Table 4.46

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (Sometimes or Less Reportings Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.20	.78	.17	.34	.27	.22	.25	.29
Predictor variable								
1. course planning and organization	4.24	.75	—	.55	.55	.50	.59	.37
2. materials environment	3.66	.82	.55	—	.53	.55	.53	.51
3. teacher supportive behaviors	3.85	.77	.55	.53	—	.61	.65	.46
4. communicative implementation practices	3.51	.78	.50	.55	.61	—	.60	.49
5. feedback and guidance	3.82	.84	.59	.53	.65	.60	—	.61
6. authenticity and congruence with reality	3.43	.94	.37	.51	.46	.49	.61	—

On the subset including the cases with always or frequently responses, a standard multiple regression analysis was conducted to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results revealed that the regression model with all six predictors was statistically significant, $F (6, 115) = 4.35$, $p < .05$, indicating an R^2 value of .14. This indicates that 14 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment characteristics. The results also demonstrated that only one of the predictors, that is, the course materials environment contribute significantly to the regression as shown in Table 4.47.

Table 4.47

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Always or Frequently Reportings Subset)

Variable	B	SE B	ß	t	p
1. course planning and organization	0.04	0.42	.01	.09	.928
2. materials environment	1.25	0.40	.38	3.14	.002
3. teacher supportive behaviors	0.15	0.39	.05	.39	.694
4. communicative implementation practices	0.40	0.55	.09	.72	.471
5. feedback and guidance	-0.70	0.58	-.16	-1.21	.229
6. authenticity and congruence with reality	0.32	0.64	.06	.50	.616

Note. $R^2 = .14$ ($p < .001$).

On the subset including those students with sometimes or less responses, a standard multiple regression was again performed between the students' persistence and all six EFL learning environment characteristics. R for regression was significantly different from zero, $F_{(6, 1031)} = 28.85$, $p < .05$, with an R^2 value of .14. This adjusted R^2 value of 14 indicates that 14 % of the variability in the students' persistence scores is predicted by the student perceptions on the six EFL classroom characteristics. Four out of the six EFL class characteristics, materials environment, authenticity and congruence with reality of assessment tasks, teacher supportive behaviors and finally planned and organized courses were found to be significant with the predictor of course materials representing the strongest predictor of persistence in the specified model. The size and the direction of the relationship suggest that among those students with lower degrees of outside exposure to English by means of books and magazines, more persistence in EFL study is associated with more satisfying course materials environment, more teacher support and more

authenticity and congruence with reality for the assessment tasks but less planned and organized classrooms. The results from the regression analysis performed on this subset are presented in Table 4.48.

Table 4.48

Regression Analyses Summary for the EFL Learning Environment Predictors Predicting Persistence (Sometimes or Less Reportings Subset)

Variable	B	SE B	ß	t	P
1. course planning and organization	-0.26	0.12	-.08	-2.11	.035
2. materials environment	0.92	0.14	.27	6.78	.000
3. teacher supportive behaviors	0.36	0.13	.12	2.81	.005
4. communicative implementation practices	-0.18	0.18	-.04	-.99	.321
5. feedback and guidance	0.08	0.19	.02	.40	.690
6. authenticity and congruence with reality	0.68	0.19	.14	3.58	.000

Note. R^2 = .14 ($p < .001$).

4.3.2.8. Regression Analyses for EFL Class Characteristics (EFL Learning Environment) in relation to Persistence: The Subset of Age

The data were examined for any violations of the assumptions of normality, linearity, homoscedasticity, multicollinearity and the influential observations. With 1005 cases who are aged below 20 and 332 cases who are aged 20 and above and 6 independent variables, there was an acceptable number for sample size assumption. Influential observations were further checked with Leverage statistics and Cook's Distance and there were no outlying cases based on these values. No violations for the assumption of Multicollinearity were observed with acceptable Tolerance, VIF values and bivariate correlations. The

examination of the residuals scatterplots (partial regression plots) shows no violations for the normality and linearity assumptions. Assumption of the independence of the residuals has been satisfied with the Durbin-Watson score of 1.82 on below 20 subset and of 2.04 on the 20 and above subset. Histogram and normal probability plot (P-P plot) of the residuals were also examined to conform to the assumption of normality and these are shown in Figure 4.40 and Figure 4.41 for below 20 subset and Figure 4.42 and Figure 4.43 for 20 and above subset. Table 4.49 and Table 4.50 below also present the bivariate correlations and descriptive statistics for the variables included in the analyses.
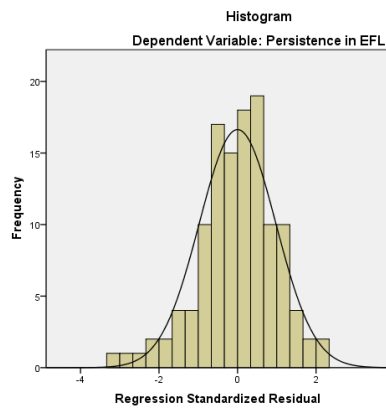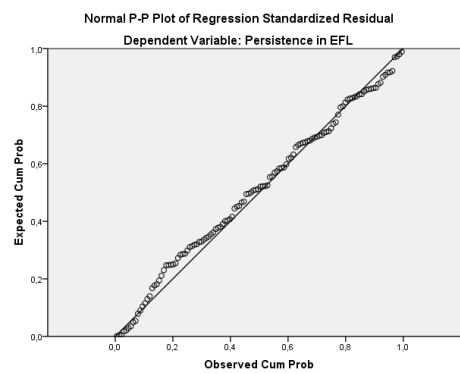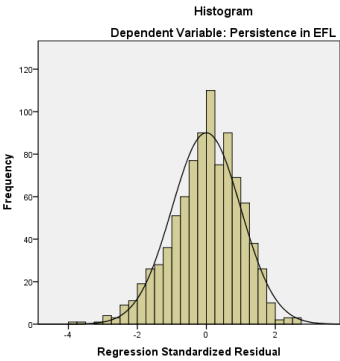

Figure 4.40. Histogram of Residuals (<20)
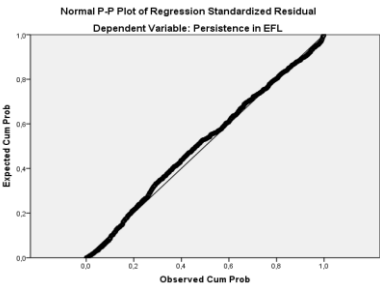
Figure 4.41. Normal P-P Plot of Residuals (<20)
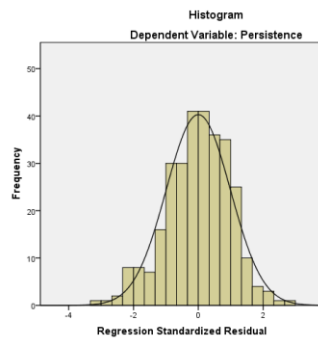
Figure 4.42. Histogram of Residuals (≥20)
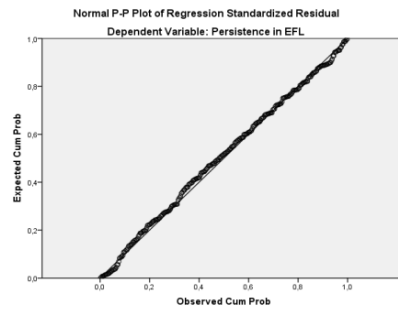
Figure 4.43. Normal P-P Plot of Residuals (≥20)

Table 4.49

Means, Standard Deviations, and Intercorrelations for EFL Learning
Environment Predictors (Below 20 Years Old Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.24	.77	.20	.34	.28	.24	.24	.30
Predictor variable								
1. course planning and organization	4.27	.72	—	.55	.52	.50	.56	.34
2. materials environment	3.70	.80	.55	—	.52	.55	.55	.52
3. teacher supportive behaviors	3.88	.75	.52	.52	—	.61	.64	.47
4. communicative implementation practices	3.55	.77	.50	.55	.61	—	.60	.49
5. feedback and guidance	3.82	.83	.56	.55	.64	.60	—	.60
6. authenticity and congruence with reality	3.46	.94	.34	.52	.47	.49	.60	—

Table 4.50

Means, Standard Deviations, and Intercorrelations for EFL Learning Environment Predictors (20 and above 20 Years Old Subset)

Variable	*M*	*SD*	1	2	3	4	5	6
Persistence (criterion)	3.26	.83	.19	.38	.24	.20	.27	.26
Predictor variable								
1. course planning and organization	4.20	.84	—	.57	.65	.51	.65	.47
2. materials environment	3.62	.89	.57	—	.51	.53	.48	.48
3. teacher supportive behaviors	3.82	.83	.65	.51	—	.61	.67	.48
4. communicative implementation practices	3.50	.82	.51	.53	.61	—	.59	.50
5. feedback and guidance	3.88	.87	.67	.48	.67	.59	—	.66
6. authenticity and congruence with reality	3.49	.93	.47	.48	.48	.50	.66	—

A standard multiple regression analysis was conducted on the cases aged below 20 years old to assess the ability of six EFL learning environment characteristics to predict levels of persistence. The results showed that the regression model with all six predictors was statistically significant, $F (6, 893) = 25.70$, $p < .05$, indicating an R^2 value of .14. This indicates that 14 % of the variability in EFL students' persistence is predicted by student perceptions on all six EFL classroom environment dimensions. Three of the six independent variables which are course materials environment, authenticity and congruence with reality of assessment tasks and teacher supportive behaviors significantly predicted the outcome. Given the direction of the relationships, it is seen that the three significant predictors are positively related to the students' persistence as reported by the students who are aged 20 or below. The results from the regression analysis performed on this subset are presented in Table 4.51.

Table 4.51

Regression Analyses Summary for the EFL Learning Environment Predictors
Predicting Persistence (20 and below 20 Years Old Subset)

Variable	B	$SE\ B$	β	t	p
1. course planning and organization	-0.08	0.13	-.02	-.58	.562
2. materials environment	0.81	0.15	.23	5.48	.000
3. teacher supportive behaviors	0.42	0.14	.14	3.08	.002
4. communicative implementation practices	-0.05	0.20	-.01	-.25	.801
5. feedback and guidance	-0.19	0.20	-.05	-.96	.337
6. authenticity and congruence with reality	0.78	0.20	.16	3.86	.000

Note. $R^2 = .14$ ($p < .001$).

On the standard multiple regression analysis performed on the cases aged
20 or above 20 years old to examine associations between students' persistence
and all six EFL learning environment characteristics, the results indicate the
regression model statistically significant, $F (6, 293) = 9.83$, $p < .05$, indicating
an R^2 value of .15. This R^2 value of 15 reveals that 15 % of the variability in the
students' persistence scores is predicted by the student perceptions on the six
EFL classroom characteristics. Only one of the six EFL class characteristics,
that is, the course materials environment was found to be statistically
significant. The size and the direction of the relationship suggest that EFL
students who are aged 20 or above show higher levels of persistence in EFL
when they are more satisfied with course materials environment. The results
from the regression analysis performed on this subset are shown in Table 4.52.

Table 4.52

Regression Analyses Summary for the EFL Learning Environment Predictors
Predicting Persistence (Above 20 Years Old Subset)

Variable	B	SE B	ß	t	P
1. course planning and organization	-0.46	0.24	-.15	-1.93	.054
2. materials environment	1.25	0.24	.37	5.30	.000
3. teacher supportive behaviors	0.20	0.25	.07	.81	.417
4. communicative implementation practices	-0.31	0.34	-.07	-.91	.363
5. feedback and guidance	0.61	0.38	.14	1.60	.111
6. authenticity and congruence with reality	0.31	0.40	.06	.79	.432

Note. R^2 = .14 (p < .001).

4.3.2.9. Summary of Regression Results

The results from the separate regression analyses conducted at each and every subset of student background variables revealed that EFL learning environment characteristics are again associated with student persistence in EFL study when the effects of student background variables were also considered. However, the results also indicated differences in terms of the relative predictive abilities of EFL learning environment characteristics upon student persistence by the subsets delineated from the grouping of students based on their responses on the background variables. Table 4.53 presents theresults from the regression analyses on the EFL Learning Environment Predictors which are statistically significant for the explanation of variance in the students' levels of persistence in EFL by the subsets of student background variables.

Table 4.53

Significant EFL Learning Environment Predictors as a Function of Students'
Persistence in EFL for the Subsets of Student Background Variables

Student Background Variables (in subsets)	Significant EFL Class Dimension
Gender	
Female	Materials Environment (+)
	Teacher Supportive Behaviors (+)
Male	Materials Environment (+)
	Teacher Supportive Behaviors (+)
	Authentic Assessment Procedures (+)
University Subject Domain	
Science-related	Materials Environment (+)
	Teacher Supportive Behaviors (+)
	Authentic Assessment Procedures (+)
Social-Sciences-related	Materials Environment (+)
Family Income Level	
More than 2000 Turkish Liras	Course Planning and Organization (-)
	Materials Environment (+)
	Teacher Supportive Behaviors (+)
	Authentic Assessment Procedures (+)
2000 or less than 2000 Turkish Liras	Materials Environment (+)
	Communicative approach-oriented Implementation Practices (-)
Perceived High School Proficiency Level in English	
Poor	Materials Environment (+)
	Authentic Assessment Procedures (+)
Moderate	Materials Environment (+)
Good & Very Good	Materials Environment (+)
	Teacher Supportive Behaviors (+)

Table 4.53 (continued)

Prior English Courses Taken	
Yes	Materials Environment (+)
No	Materials Environment (+) Teacher Supportive Behaviors (+) Authentic Assessment Procedures (+)
Outside Exposure to English via Television and Internet	
Always & Frequently	Course Planning and Organization (-) Materials Environment (+) Teacher Supportive Behaviors (+) Authentic Assessment Procedures (+)
Sometimes or Less	Materials Environment (+) Authentic Assessment Procedures (+)
Outside Exposure to English via Books and Magazines	
Always & Frequently	Materials Environment (+)
Sometimes or Less	Course Planning and Organization (-) Materials Environment (+) Teacher Supportive Behaviors (+) Authentic Assessment Procedures (+)
Age	
Below 20 Years Old	Materials Environment (+) Teacher Supportive Behaviors (+) Authentic Assessment Procedures (+)
20 Years Old and Above	Materials Environment (+)

Note. (-) indicates the direction of relationship as negative; (+) indicates the direction of relationship as positive.

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It is first seen that materials environment EFL class dimension was a significant predictor of students' persistence by each and every subsets of the student background variables. It is also noted that some EFL learning predictors have differing degrees of predictive abilities on persistence for the relevant subsets of one particular student background variable. For example, authenticity and congruence with reality of assessment tasks appear to be predictive of students' persistence in EFL for males but not for females though the other two significant predictors of student persistence in the regressed model were common to both females and males. Likewise, the two EFL class characteristics, teacher supportive behaviors and authenticity and congruence with reality of assessment tasks were predictive of persistence in EFL only for these students from the science-related university subject domains but not for those from the social sciences-related faculty departments.

Given the subsets of family income level, it is revealed that for the levels of persistence reported by the students from higher income families, four of the EFL class characteristics, course planning and organization, materials environment, teacher supportive behaviors and authenticity and congruence with reality of assessment tasks were all predictive of persistence in EFL. However, only materials environment and communicative approach-oriented implementation practices were found to be predictive of persistence as reported by those students from the lower income families.

For the three levels of perceived high school proficiency, it is observed that authenticity and congruence with reality of assessment tasks dimension significantly contributed to the explanation of variance in persistence reported by those with poor levels in English at graduation from high school but not by those with higher proficiency levels. Teacher supportive behaviors dimension was this time a predictor for persistence reported by those with higher levels of perceived proficiency in English but not for those with lower perceived proficiencies. In the same vein, the two dimensions (i.e. other than the materials environment common to both subsets), teacher supportive behaviors and authenticity and congruence with reality of assessment tasks were

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predictive of students' persistence reported by those who had taken a course in English before but not for those with no earlier course experiences. Course planning and organization and teacher supportive behaviors characteristics of an EFL class were predictive of persistence in EFL study only for the students who reported higher levels of outside exposure to English by means of television and internet. However, these two dimensions were not a significant predictor of persistence for the students with moderate or less exposure levels. In contrast, course planning and organization, teacher supportive behaviors and authentic assessment characteristics of an EFL class were this time significantly predicted persistence in EFL study only for the students who reported moderate or lower levels of outside exposure to English by means of books and magazines not for those with higher levels of exposure.

The results also showed differences between the two age subsets again in relation to the relative number of predictors of persistence other than the materials environment dimension. While the two dimensions, teacher supportive behaviors and authenticity and congruence with reality of assessment tasks were uniquely predicting persistence reported by younger students, these two dimensions had no predictive abilities for the explanation of variance in the older students' levels of persistence.

Finally, it is also important to note here that there is a shared variance contributed in combination by all of the EFL class predictors in all of the above reported regression analyses over and beyond the unique contributions of the statistically significant contributors in the regression models conducted within the student background variable subsets. The degree and size of the shared associations were not delineated in detail in the above account of regression models due to the nature and aim of the second research question in comparing the relative unique contributions of the EFL classroom characteristics upon student persistence by the subsets of student-related variables.

4.3.3. What are the perceptions of the tertiary English preparatory program students in relation to the associations between the classroom environment factors and their persistence in English language study? (RQ3)

The main concern of the RQ1 was also examined qualitatively for the purposes of RQ3 by means of interviews that were performed with the English Preparatory Program students (*n* = 20) from two of the universities involved in the quantitative dimension of the study. The results of the interviews regarding students' perceptions about the links between the EFL learning environment characteristics and their persistence in learning English were presented in this section under the relevant six main dimensions previously operationalized to define EFL learning environment in the quantitative phase of the study.

4.3.3.1. Course Planning & Organization

The students mostly evaluated the course planning and organization from a more institutional point of view which was questioned as more of a teacher-related characteristic in the quantitative phase of the study. In this regard, one of the most recurring themes among the students as related to students' reported level of persistence was the level-scheduling problems or simply the misplacement of students to the proficiency level groups in English. Hence, almost half of the students mentioned level-scheduling problems as hindering for the development of their persistent behaviors in learning English in that when they are misplaced in a proficiency level based on the modular system of their schools, they lose their motivations and are unable to sustain effort to learn English. Moreover, the differences among the proficiency levels in one class were reported to be resulting in students' having negative attitudes and ideas towards one another as reported mostly towards those with better proficiencies. That is because these students were seen as dominant figures by the lower proficiency level students who in turn swerve from their goals of learning English feeling that they should exert no efforts to compete against these natural and inevitable superiors in their classrooms. In contrast, when

students with similar proficiency levels were nominated into one particular class, a couple of students reported that they could show more persistence towards learning English as the lack of dominant figures leads into the arousal of a competitive atmosphere and they strive for surpassing the others with similar proficiencies in the classroom. Further exemplifying the above effects of level-scheduling problems on students' persistence, a couple of students mentioned that such misplacement results in social problems among students, which in turn discourages their focused efforts to develop their English. One of them stated: "There is othering. If you are different from the others, they are kicking you out. In such an atmosphere, you have difficulty in explaining yourself or practicing in the class to develop yourself." Similarly, one student explained her discouragement by her misplacement in the elementary level as opposed to her expectations to be in a pre-intermediate level of grouping as in the following:

> I am together with students of different proficiency levels in my preparatory class. That is, there are both better and worse students than me in my class. We study together and this is perhaps seen as equal opportunities; however, this situation discourages me from having a focused effort and interest in learning English because our teacher tends to teach in accordance with the most students' proficiency level. For our class is mostly composed of lower level students, she teaches at the very basic level and this badly affects our language development and even I feel my English is deteriorating. I know that this situation could be in the opposite direction in some other preparatory classrooms. If the class is mostly composed of higher level students, then the lower proficiency students may be totally lost in the class. I do not want to study diligently for English because of this simplification of the course by the teacher in my group.

Another recurring theme among the English prep students was the strict focus on the schedule offered in the textbooks used. That is, the interview results showed that teachers follow a textbook-based scheduling in the EFL classrooms as reported by most of the students in the interviews. Almost half of the interviewees had negative views on this close emphasis on the textbook-made ready schedules. The students complained that when teachers have a tendency to strictly follow the textbook line by line, they feel that the course

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planning seems as if it is not in the teachers' control, that is, it is neither teacher nor student-sensitive and driven but more of just finishing what the text books offer in the scheduled time that day. Thus, this lack of flexibility was reported to be having hindering effects upon the students' persistence in learning English in the class. Moreover, this close focus on following the schedule was also reported to be resulting in some timing problems and excessive familiarity with the system of the text book that are both perceived as hindering for student persistence in learning English. That is, teachers spend more time than the optimally required on a unit or sometimes slow down the lesson pacing in the class only because the course plan necessitates it. However, it was reported that prep students needed to do some extra practice in the form of videos, speaking and reading rather than spending extra time on the textbook when the textbook was already fully-covered. One student stated his criticism as in the following:

> The teacher's plan is the textbook's plan to me. The book company is perhaps an international one and has been prepared for anybody around the world; but, I do not feel myself to be used to such a system offered in the book. I do not know how to explain this; but, I feel it is too much structured, that is, it is not the right way of learning for us. We still learn the material but not at our highest potentials.

Another student pointed out the problem of getting too much used to the style presented in the text-book by saying:

> As time passed, the course organization is getting more and more boring because we already know what to do at what points during the class time. After a while, there is no need to listen to the teacher or not even the read the instructions in the course book. You know what comes next. You do not have any passion towards learning something new.

In conclusion, misplacement of students to the proficiency level groups and the strict focus on the schedule offered in the textbooks were considered as the main hindering factors for the students' level of persistence in learning English. It was also seen that some other sub-factors (i.e. lack of flexbibility in lesson progress and lack of competition among students) further stemming from these

hindering factors influenced the relationship between the course planning characteristics and persistence in the negative direction.

4.3.3.2. Materials Environment

Interview results showed that students perceive the characteristics pertaining to EFL course materials environment are related to their persistent behaviors in learning English, which further corroborates the findings from the quantitative phase. Materials environment were investigated in terms of two main characteristics, EFL course materials and EFL course physical conditions. Given the physical conditions, the size and the comfort of the desks, lightning and temperature were among the recurring themes reported to be associated with the students' persistent behaviors in learning English. When the classrooms possess the optimal conditions given the above characteristics, students reported that they could then get more engaged in learning English. In other words, when the classrooms lack the favorable physical characteristics and conditions and students are not satisfied with these, students focus more on themselves not on the lessons, and this situation is simply referred as "turning back to themselves rather than dealing with something else around." The unfavorable conditions in the form uncomfortable desks, dark and cold classrooms with low levels of ceilings from the surface when further combined with crowded class sizes were reported to be directly related to some negative psychological emotions in that students might feel moody, hopeless and sleepy. These negative emotions were reported to be having mediating effects to students' level of persistence in learning English in that when they were suffering from these negative feelings, they automatically become unwilling to learn or even try to learn. One of the students explained how the size of the desks might affect their persistence as following:

> Normally our teacher writes new vocabulary items on the board and I transfer these to my vocabulary notebook to further study at home. However, when the desks are too small to hold my textbook and other main class materials, I cannot find a space to place my vocabulary notebook and so I cannot find it immediately at my hand sides when the teacher is making notes on the board. I need to be quick to transfer the words from the board

but it takes time to find and open a space for my vocabulary notebook on the desk. Then, I give up and do not show any attempts to write from the board. I do not remember these vocabulary items when I get home back and I cannot remember the meaning of the words when I face it again the following day. This in turn makes me more non-persistent and unwilling towards English.

Similarly, another student pointed out the discouraging effects of classroom physical conditions on students' persistenceby criticizing the view from the classrooms at the bottom floors as in the following:

> When you look out of the window, the only thing you see is the pavements or walls. I want to see, for example, the snow or the trees. This situation makes me desperate and when I feel desperate, how can I show an effort to learn?

In contrast, a favorable physical condition that a few students reported to be positively associated with their persistence was related to technology. Students perceive themselves to be more persistent when the technological devices of the classrooms are working properly. One of the students mentioned a testing day. That day the speakers did not work properly and they had a hard time to understand the audio. He stated: "The proctors let us listen to the audio five or six times than the normal criterion of twice. However, as the speakers were not working properly, I gave up after the third trial."

When the EFL course materials used were taken into consideration, the interview results indicated them to be associated with the students' persistence in EFL. The results further revealed that students stated being more persistent and motivated towards learning English when the course materials include real-life topics and content. In addition, students reported that they become more motivated and persistent when they could find any real-life application of the topics covered in their EFL classrooms. Such topics that are related to the every-day activities of people or that can students' directly apply and use in their lives outside school were indicated as motivating and zest-increasing in English learning by the students. Such topics were further reported to bring the

class some variation and unusualness. One student explained on this issue as in the following:

I am mostly happy with the topics offered in the textbook. However, I expect such topics that we may more need in the real life. For example, now we have transportation as the topic and it is nice because we may need such content when we go abroad. I like content that may find application in real-life. When I like it, I want to learn and try more.

Parallel to the above statement, another student stated as follows:

Part by part, the textbook tells about how to communicate with the reception desk when you go to a hotel or it may tell you about how to speak to sales people in a shopping context. It teaches you how to describe the clothing when you are trying it on and how to pay for it. These topics that can be encountered in real life encourage me to learn more.

The degree of difficulty or challenge was reported to be positively related to the degree of persistence and effort exerted by the students in the EFL learning process. In other words, students reported that their level of persistence increase by the level of difficulty provided in the materials. When they see some difficulty with the content, language or grammar presented in the materials, they are automatically driven into the feeling that they should try hard and show more effort if they want to understand the material. Furthermore, it is believed by most of the students that it is the higher level of materials than their current level that adds to their knowledge schemata and skills. Thus, all these in turn result in more persistent behaviors to learn and gain more on the part of the students. While criticizing the low level of proficiency of the books, one student stated as in the following:

I think our current course materials are a lot below our current level of proficiency. In fact, I think the course book is lower in the level than it asserted. For instance, I think that if it was categorized as elementary, it is in fact starter level. I am certainly sure that I do not gain any further vocabulary knowledge. This creates problems and I do not want to tire myself to learn more because I already learned and knew what the book offers.

Paralleling with the complaints about the expected level of challenge or difficulty in the course book, students also criticized the repetitiveness in the course materials seen in the form of repetitive topics and repetitive type of exercises or activities. Students reported themselves to be more persistent when they see some variation or diversification in the course materials. At this point, one student stated:

> I accept that our level is not that advanced but a student at the university level already knows the colors and numbers. We started with such very easy topics in the elementary course book. I directly gave up! We also learned the basic grammar in the elementary book. However, then with the pre-intermediate course book, we again learn the same topics, same grammar structures but only a few new words.

Half of the interviewees pointed out that videos used in the EFL classroom are positively related to their motivation and persistent behavior in learning. The videos were praised for being a source of real taste of the target language, offering the language skills in an integrated manner (i.e. students listen, gain new vocabulary and learn correct pronunciation simultaneously). They particularly mentioned the influence of videos upon their language skills and the effect of such an influence on their showing more effort to learn more. In this essence, one student claimed: "Videos provide us with listening and then we can also learn new words and expressions. They also help our pronunciation. When materials offer me all of the language skills in a combined matter, I want to learn more."

Another materials environment characteristic which has been often mentioned by the interviewees was the use of supplementary materials and its positive influence on their persistence in learning English. Most of the students praised the use of supplementary materials in the form of worksheets, study packs, student copies and vocabulary handouts. One of the students stated as following:

> There are really good exercises in our worksheets and by doing these exercises, we review the topics covered in class before. In this way, I feel that I really learn English. When I feel that I learn English, I want more, I

want more than I have learned. This is like one's expecting more success upon one particular achievement. When you taste it, you want more and you can try more to have more achievement.

To conclude, it was seen that when the EFL classrooms appear to possess favorable conditions regarding the size and the comfort of the desks, lightning and temperature and use of technology, an optimal class size and such course materials that include certain amount of difficulty and real-life topics and applications, students are likely to show more persistence towards learning English.

4.3.3.3. Communicative Approach-oriented Implementation Practices

The interview results showed that most of the students favored the instruction designed upon the whole language skills and believe that four-skills instruction facilitates their persistent behaviors in learning English. One student stated:

> The instruction I receive should be focusing on all four language skills rather than limiting itself on one of them because I believe that these skills are complementary of one another and I love all of them though I have some difficulties with some of the language skills. I want to try more to further develop my problematic language skills to make them at the same level with the others.

Among the four language skills, most students reported that they had a preference for speaking skills over others as positively linked to their persistence in learning English. On the other hand, students frequently mentioned grammar as hindering for their persistence in learning English, which directly contrasts with the facilitating role of speaking skills. Comparing the form focus in grammar to the meaning or comprehension focus in speaking skills, one student stated:

> In-class activities are designed in the take, copy and paste format. There is nothing new. I am bad at memorizing but here is most of the activities are based upon memorization and grammar. I see that our refugee friends from Syria cannot properly speak Turkish but we can understand them. It is sufficient for someone to understand you. However, now everything, even tests are centering upon grammar, not comprehension. This discourages me from participating in the in-class activities.

Given the positive effects of speaking skills on the degree of persistence shown, a few students reported that when they speak in English, their self-confidence increases, which, in turn, makes them more motivated towards learning English. One student said: "When I speak English to my partner, I feel I could do that! When I understood him and he understood me, I say to myself that it happened and I did it. This encourages me to speak and learn more." Furthermore, speaking skills were reported to be an umbrella skill for the sake of which the students are to utilize and shown some effort for the other language skills concurrently so as to utter meaningful and comprehensible sentences for their listeners. Next, some students favored speaking skills over other language skills as positively related to their motivated and persistent behaviors in English since they could find a real-life application or instrumental use of the speaking skills in their own lives. With their instrumental motivation to use the target language in their future careers, they exert more effort to excel at the speaking skills. Focusing on the above driving force or effect of the speaking activities, one another student reported as following:

> Speaking skill is related to my level of persistence because I like speaking. When I speak to someone, I want to make a sentence. When I want to make a sentence, I directly refresh my knowledge of English. As I use words when speaking, they become more permanent in my mind. In case of unknown vocabulary items or a grammar structure -even though I hate grammar-, I even review and study grammar for the sake of speaking because I want to speak English.

Not only the classroom activities based upon speaking skills, but also the general medium of instruction conducted in English by the teachers were reported to be positively linked to more persistent behaviors on the part of the students. A couple of students mentioned that teachers' speaking in Turkish but not in English as hindering for their motivation and persistence in that the degree of effort exerted is correlated with the difficulty offered through the lesson and only English-medium instruction fully provides this notion of difficulty in the eyes of the students. In this essence, one student said:

When my teacher continuously speaks in English, I feel that I cannot speak and I cannot understand my teacher well and thus I must learn English and I must cope with this difficulty. This becomes an obligation for me and I strive to learn more.

Another recurring theme pertaining to the communicative approach-oriented classroom characteristics were the use of language games and communicative activities in the form of short film recording tasks, preparing dramas and theater-like activities and such communicative activities were reported to increase students' level of persistence in learning English. A couple of students reported that communication activities that are especially similar to real life encourage them to learn and try more in English. For some other, such activities provide variation and diversity in their learning and in this way they become more willing to try to achieve something with their current level of English by saying:

We were given a video recording homework and when doing this I speak English, I planned the scenario and I acted it out. This is something that is different and unusual to me because I do not do this very often. When I watch it or show it to my friends and family members and receive their praises, I feel proud of myself, which in turn makes me more eager to try to speak English the next time. I feel I am getting more relaxed to do something with my English.

The results from the interviews indicated that both group work and individual work were favored by the students as being facilitative for their persistence in learning English. For those reporting the positive effects of individual activities over group activities on the students' level of persistence, the critical point to support individual work was the unequal role share seen in the group work activities. While favoring individual work over group work, one student said:

I do not like group work activities because in such activities some speak a lot, some speak very little and thus there is no balance. One person certainly tends to be the leader. Therefore, in language learning, when one dominates the group with the others being at inferior positions, the group work gets unfruitful for the group and the inferiors usually give up and do not care about the things.

In contrast, the interview results showed that more students favored group work over individual work. Group work activities were praised for their giving way to sharing ideas and scaffolding among peers. This continuous act of sharing and expressing opinions and helping each other to make yourself as clear and understandable as possible to your partners in the interactional group work activities lends itself to the exertion of efforts by all those involved in these activities. Moreover, in well-designed and conducted group work activities by the EFL teachers, it was reported that there was the role-modeling advantage of active participants for the lower level students. Finally, the presence or inclusion of information-gap during the group work was also reported to be correlated with the degree of persistence shown in learning English. One student pointed out this idea of information-gap during group work for her persistence in EFL by saying as in the following:

> In group work, different minds get together. As my partners may know something I do not know and I may know something they do not know, there appears a discussion and information-sharing atmosphere. We feel that we five are hand in hand together, and this feeling helps me continue to learn more English.

To summarize, the main characteristics of the communicative language teaching approach such as a focus on all four language skills, communication and meaning over grammar, the use of language games and communicative activities appear to be facilitative of students' persistence in learning English.

4.3.3.4. Teacher Supportive Behaviors

The interview results showed that students mentioned understanding, helping and friendly teacher behaviors as positively associated with their persistent behaviors in learning English. When students have a friendly teacher, they reported themselves to feel more comfortable in the classroom and when they are more comfortable, they can act on their learning process better, generate more solutions for their learning problems and get more motivated towards learning English. Friendly, considerate and helping teacher characteristics were reported not to be limited to the class time. These teachers

continued their favorable interpersonal characteristics outside the language classrooms and thus students are not demoralized with any learning problems they face because they already know that the supportive teachers are always there to help them. As an example for friendly and understanding teacher behaviors encouraging students' persistence in learning English, one student said as follows:

> For instance, I look bored in some classes not feeling like studying English. The teacher comes up to me and asks what has happened and why my motivation is low that day. At that moment, I get happy by feeling that someone is thinking about me and there is a contact between us. In contrast, when your teacher pays no attention to you, you totally lose your interest in the class. I am too teacher-centered. When I have distant teachers, I have difficulty to show effort to learn something.

In line with the above statement, another student talked about his enhanced self-confidence and focused interest in English resulting from the friendly teacher behaviors as in the following:

> The more sincere relationship I have with the teacher, the more confident I get and I also gain more interest towards English. Conversely, the more serious relationship I have with the teacher, the more alienated I get from the lesson. I know seriousness is a must, but when it is at the exaggerated levels, I get lost in the class. I do not like when it is like I am the teacher and you are the student!

Some students reported that their respect and love for the teachers encourages them to abstain from disengaged behaviors in the EFL class. They reported their sustained efforts to listen to the lessons of these teachers having favorable interpersonal and communication behaviors in spite of the distractions by some of the friends inviting them to misbehave in the class. For instance, one student commented on this by saying:

> When there is a good relationship between the teacher and the student, despite the unwillingness of the student, the student may be alerted or how can I call it, may be embarrassed by saying that this teacher treats really well towards me and I should return her positive attitudes by showing more effort to learn English. It is both loving your teacher and learning at the same time.

In addition to the above favorable teacher behaviors, students also reported admonishing, strict and rude teacher behaviors to be negatively related to their level of persistence in learning English. It was reported that when students had teachers who can easily have arguments with some students in front of the class or who are easily losing control, getting tense and irritated with even some slight student misbehaviors, the students are discouraged and conceded themselves from English in such negative gloomy atmospheres created in their EFL classrooms. Furthermore, it was noted by most students that they respect the teacher authority in the classroom and teachers are welcomed to some degree to show some strictness but not at the exaggerated and extreme levels. This midway teacher behavior between serious and at the same time sincere has been reported as conducive to more persistent behaviors in EFL learning on the part of the students. When teachers keep themselves distant and pretending to be authoritative as a way to emphasize the difference between the teacher and the student status, students reported that they hold themselves back. The following exemplifies the influence of humiliating and angry teacher behaviors in class upon students' level of persistence in EFL learning:

> I had an argument with a teacher once. The teacher attempted to look down on me against a question I asked. If I knew well, I would not be here. I cannot say that my every teacher is like that. However, this experience caused me to lose my desire and enthusiasm to learn English especially when I have a class with this contemptuous teacher.

In conclusion, it was seen that understanding, helping and friendly teacher behaviors appear to be conducive to students' persistence in learning English while admonishing, strict and rude teacher behaviors in class appear to affect their persistence in the negative direction.

4.3.3.5. Feedback and Guidance on the Assessment Tasks

The interview results showed that students reported teachers' way of or attitude in giving corrective feedback as related to their persistence in learning English. That the teachers were scornful and make personal comments about the students' intelligence or capacity when they were offering feedback was

reported to be hindering for the students' level of persistence. Interestingly, students reported not to be disturbed by their friends' teasing their mistakes in the name of providing peer feedback but by their teachers. When teachers make fun of students' mistakes by exaggerating even the minute problems, the students reported that they were too demoralized and too blocked to further their attempts to learn English. About the influence of her teachers' way of offering corrective feedback on her persistence, one student stated as follows:

> Teachers can of course make corrections upon our errors. However, the teacher's style of making this correction affects us. That is, when my teachers criticizes me in a constructive way, I get happy, which results in my feeling that I can do it and want to exert more effort in learning. On the contrary, when your errors were exaggerated by the teacher, you feel bad, which results in your anxiety causing the feeling that you can do more errors.

On the contrary, when students perceived their teachers' positive valence in providing feedback, they are positively affected to show more persistent behaviors in learning English. In this regard, one student stated as follows:

> When you use a wrong word or a problematic sentence or a grammar structure, my teacher showed me that I should not make such an error- he does it in such a way that as if it is not correction- by particularly abstaining from humiliating me when doing this. Therefore, you do not hold yourself back towards learning but start to speak more and communicate more with others. In this way, you persist in English and this behavior finds a place to itself at the subconscious level of the individual.

A few students also reported the positive influence of the teacher's providing positive feedback on their persistence in learning English other than providing corrections. Appraisal or reinforcement by their teachers upon their achievements and progress enables learners to extend more efforts to fine-tune their outcomes. One student asserted as in the following:

> In the speaking activities, for example, when I tell a story, my teacher says "Well done! You should be nominated to a higher proficiency level". Then, I get really happy, which results in my more efforts to speak or to write. In brief, positive feedback makes me happy in learning English.

According to the interview results, another characteristics pertaining to the this dimension of the EFL learning environment was the teachers' guidance and ability to provide tactics and strategies for better students' performance. In other words, teachers' suggestions as to the things students could do for improvement purposes were reported to be positively associated with students' persistence in learning English. In the absence of teacher guidance about the assessment tasks, students reported their feeling like in a vacuum and hence being stressed, in a panic and less self-confident. These negative feelings were in turn reported to be leading the students to feel that they can never accomplish and this automatically causes lack of persistence on the part of the students. One student praised the tactics her teacher provided them with about an assignment for facilitating her persistence in learning English by saying:

> Before the assignments, we are frequently given information as to how to best prepare the assignment and what type of answers are expected from us and how they should be integrated into the assignment. This often helps. When I do the assignment properly, I gain more passion towards learning English.

Students reported that when they are offered feedback against clear and meaningful criteria about assessment tasks, they get more motivated to expand effort to learn English. In other words, students reported that they would like their performance to be compared to a clear standard. Moreover, students mentioned that the standards or expectations from the testing tasks should be made clear to the students at the very beginning of the term or the course and thus seeing that their tests are graded in line with the pre-set criteria, students become more motivated and diligent to meet and keep up with these standards. One student pointed out the demoralizing effects of the absence of clear criteria for the assessment tasks by saying as follows:

> I do not think that the true-false questions in the reading tests are graded fairly. There is text there and you correct the false statements in accordance with the test. One of my friends lost her points as she wrote longer explanations to correct the false statement. This happens very often and we do not want to work diligently to get unexpected scores.

The interview results finally showed that students reported indirect corrective feedback compared to direct one as facilitative for their level of persistence and motivation in learning English. In students' views, teachers' inviting students to correct their own errors themselves makes them more motivated compared to teachers' correcting their errors directly. Upon finding the correct answer by their own efforts, they feel they really accomplished something. The satisfaction from this accomplishment drives them to try more without conceding each time they have made mistakes. Instead of teacher's correcting their errors, students mentioned their preference for the teachers' provision of the hints about how to correct their errors or for teachers' shaping the way to the correct answer. In this way, students reported better likelihoods of exerting more effort in reaching the correct form. One student mentioned her self-discovery of the correct form following the teacher's signaling the presence of an error:

> I say a sentence. The teacher says "again", I repeat the sentence. The teacher says "again, please". Seeing that my sentence is erroneous, I attempt to correct it myself. This little challenging act by the teacher helps me maintain effort until I find the correct form. If the teacher corrects it directly, it is neither motivating for me nor lasting in my mind.

To summarize, a positive valence in providing feedback, indirect corrective feedback over direct feedback, feedback against clear and meaningful criteria and provision of some strategies and tactics regarding the assessment tasks appear to possess a positive influence upon students' persistence in learning English.

4.3.3.6. Authenticity and Congruence with Reality of the Assessment Tasks

The interview results showed that student mentioned assessment aligned with the curriculum as positively associated with their persistence in learning English. Thus, students are better motivated and get ready to put in effort when they perceive no discrepancy between what they cover in the classroom and what they are tested from in the tests. The interviewees mostly reported the

lack of alignment especially in terms of the shares of the language skills in the exam paper. One student favoring the positive influence of alignment between testing and teaching shared her experience in the exams by saying as in the following:

> I like the quizzes at my school as I could answer them and while answering I feel that we have already learned it in the class. I say to myself that if I cannot answer something that we have already seen in the class, there is a problem with me. I then become more ambitious and diligent to answer the test questions. However, in the midterm exams, the test questions are independent of the things we do in the classroom. There is a focus on grammar in the class but there are no grammar questions but more listening questions. When I cannot understand the questions, I get angry and do not want to sustain effort in trying to do the questions that I cannot understand.

Parallel to the lack of alignment between the curriculum practice and testing situations, the lack for transparent criteria in testing was repeatedly mentioned as discouraging for the students' level of persistence in learning English. Students mentioned that they could exert effort towards something that they are clearly aware and knowledgeable of. They would like to have standards in terms of the content of testing and measurement and grading. In case of no clear criteria about these main dimensions of testing, students may feel suspicious, stressed and thus discouraged to do more in the tests. One other student pointed out the lack of transparent standards as hindering for her zest in studying for the tests by saying:

> A day before the exam day, I feel really stressed because I do not know exactly from what I am going to be tested. That is, you do not know what to see the next day in the exam. You do not want to study hard for something that you are not sure about. This discourages my mood of learning.

Some students emphasized their needs for concurrent feedback as is normally provided in real-life to foster their efforts during the testing situation. That is, some interviewees reported that in real life, when they do not understand something asked to or required from them, they have the chance to ask some elaboration of clarification questions to adjust themselves to answer or do something more correctly. With the help of this corrective instant

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feedback from their interlocutors, they strive to do their bests to perform and finalize the activities they are involved in. Moreover, if testing is to analogous to real-life situations, it was reported that there should be some interaction taking place between the assessor and assessee either in the form of concurrent feedback or in the form of a simple chat. In normal life or real classroom practice, students reported the help provided by their peers or teachers so as to perform a question, exercise or an activity and this encourages them to try more in English. At this point, one student stated her rationale in swerving from the activity she is dealing with as in the following:

> My English teacher knows me and the progress I have made very well. However, in the speaking test, a teacher who is a total stranger to me and who has no idea about me comes to test my speaking performance. At this moment, I feel nervous and sometimes I cannot understand the test question well. I need help to adjust myself towards the main thing questioned, but; there is no help. I then give up!

Parallel to the above statement, one student criticized the lack of interaction between the test proctor and her in the speaking test by saying as follows:

> As I am already bad at speaking, sometimes I freeze up in the speaking test. When I am in this condition, the speaking proctor just looks at my face, which makes me freeze up more at that moment. I mean, these teachers do not help and just waits. They wait for you to save yourself; but, I do not know what to do. This situation blocks me towards English because I hold back, I hold back ever.

Another frequently mentioned assessment characteristics that students reported to be positively related to their persistent behaviors in English was the presence of multi-stage tasks in assessment. When a testing situation is perceived to be one-time, stiff and unchangeable, the students reported their being discouragedbecause assessments from only their short and one-time test performance brings some pressure and stress upon their shoulders mostly with the fear that they would fail in their must English program, which, in turn may negatively influence their persistent acts in learning English. Assessment tasks that are analogous to students' real life were also praised as being facilitative for their motivated and passionate behaviors towards learning English. At this

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point, one of the students mentioned a testing situation in which they were assigned a multistage task also by their English teacher as in the following:

> One of our English teachers gave us a project and she was going to grade this project as our midterm score. It took some weeks for us to complete the project because there were a lot of little tasks to do and we discussed the problems we have with the teacher. The end result was to prepare a hotel brochure and describe it to a group of travel agency people (in reality, to my class friends) in English by preparing a presentation. I really liked it and wanted to work more on such activities.

In conclusion, when the assessment is perceived to align with the curriculum practices in class, to be similar to students' real-life practices and to have a process rather than a product emphasis, students are likely to show more efforts to learn English.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

This chapter presents discussions and implications relevant to the study. In this essence, the results of each of the research questions are briefly reviewed and then they are discussed in the light of the existing literature and earlier research background. Following this discussion, implications for educational practice and further educational research are provided especially for the purposes of teaching EFL.

5.1. Discussion of the Results

The main purpose of this study was to investigate the construct of EFL persistence as a new motivational or attitudinal outcome in the literature through exploration of its associations with the EFL learners' perceptions regarding the EFL learning environment and certain student background variables. A secondary purpose was also to investigate the associations between the EFL learning environment and student persistence in respect to the student-related background characteristics. The data concerning students' persistence in EFL were collected through an 18-item one-dimensional EFL persistence scale (PS) which was administered to 1365 English preparatory program students at the seven universities located in the seven different geographical locations of Turkey. The data concerning the students' EFL learning environment perceptions were gathered by means of a Questionnaire on EFL Learning Environment (QEFL-LE). Multiple linear regression analyses were employed to analyze the relationship of a number of independent variables, that is, EFL learning environment dimensions and student background characteristics, to EFL learners' persistence. The regression analyses were also used to examine the variance of the relationship between persistence and EFL class environment factors by student background

characteristics. Therefore, the following first will attempt to provide possible explanations regarding the overall results of the study and then to recommend some pedagogical implications and research venues as revealed by the results of this study.

5.1.1. Relationships between the EFL Learning Environment, Student Background Variables and Persistence in EFL

When the relationship between the six EFL learning environment dimensions, a) course planning and organization, b) materials environment, c) communicative approach-oriented implementation practices, d) teacher supportive behaviors, e) feedback and guidance on the assessment tasks and f) authenticity and congruency with reality of the assessment tasks, and students' persistence in EFL learning was examined, students' EFL learning environment perceptions significantly predicted their persistence scores. This finding suggests that students' persistence is related to the characteristics of an EFL classroom. The phenomenological interviews provided explanations to this relationship. Therefore, the integration of the results from the qualitative and quantitative phases revealed convergence to a great extent.

The results concerning the associations confirmed both by the qualitative and quantitative tools is consistent with the general tenor of learning environments research in respect to the investigations into the attitudinal or affective outcomes and their possible links with the learning environment perceptions. Such positive associations were also found with the previous research conducted in both several other disciplines (Arısoy, 2007; Dorman et al., 2006; Koul et al., 2006; Harbaugh & Cavanagh, 2012; Kim et al., 2000; Meriläinen, 2014, Telli et al., 2006; Vermeulen & Schmidth, 2008; Wubbels & Brekelmans, 1998) and foreign languages (Maulana et al., 2011; Chua et al., 2009; Wei & Elias, 2011).

When the unique predictive abilities of each of the six EFL learning environment characteristics upon students' EFL persistence was sought, the

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highest contribution was noted for the materials environment dimension in predicting students' persistence followed by the authenticity and congruence with reality dimension. Both EFL learning environment dimensions were further found to be positively associated with the EFL learners' persistence. The results of the previous research also produced similar results. Given the authenticity and congruence with reality dimension, the qualitative and quantitative results of this study produced similar results to those found by Koul and his associates (2006) who also reported that the scales of congruence with planned learning, authenticity and transparency showing positive associations in relation to the two affective outcomes they included in their analyses, attitude to science and academic self-efficacy. Likewise, in the interviews, students reported that alignment with real life and real context of learning and the presence of transparent and demystified criteria were associated with student persistence. It is seen that the sub-scales of congruence with planned learning, authenticity and transparency were respectively in line with the "alignment with real life", "alignment with the real context of learning (curriculum and classroom practice)" and "transparent criteria for assessments" which composed the qualitative codes generated in the qualitative phase of this study.

Furthermore, these findings are consistent with the study conducted by Dorman and his associates (2006) who found indirect effects of the dimension of authenticity as an aspect of assessment upon attitude by the mediatory effects of academic efficacy. However, only one of the sub-scales of the instrument they used, the congruence with planned learning showed a direct effect on students' attitude to science. The research related to the links between approaches to learning and assessment methods also mirrors some similar results to the current study. Slater (1996), for instance, has reported that when students are exposed to alternative assessment methods (including here the authentic assessment procedures), they exert more effort and persistence in the process of understanding and making sense of the material that is asked or

studied through the alternative assessment procedures. Similarly, Segers and Dochy (2001) reported several forms of alternative assessment as facilitative of deep-level learning approaches to learning on the part of the students. Given the surface approaches to learning, on the other hand, Trigwell and Prosser (1991) found that it was more likely for the students to induce a surface level approach over deep level to learning when they perceive that the assessments are based upon and measure rote learning. Thus, persistence that could be assumed to be a by-product or indicator of deep learning approach could be stipulated when students have more authentic and alternative assessment procedures measuring meaningful learning in their EFL classrooms, which has been already revealed by the findings of this current study.

Given the results concerning materials environment dimension of a classroom learning environment, Atbaş (2004) found a significant predictive ability of the satisfaction with the course materials in an EFL class upon students' level of class participation which was operationalized as an affective outcome from the perspective of engagement. The results from the materials environment sub-dimension of the QEFL-LE used in this study align with the results gained from similar sub-scales of the popular learning environment instruments in the literature. For instance, Henderson, Fisher and Fraser (2000) examined the science laboratory environment and its links to student attitudes to laboratory work by means of The Science Laboratory Environment Inventory which also includes a subscale devoted to materials environment perceptions. The results of their study indicated that student attitudes were associated with the students' perceptions on the materials environment. Similarly, Newby (1998) and Newby and Fisher (2000), in their investigations into the associations between attitude towards computing and computing courses an student perceptions on the computer laboratory environment found that student perceptions about the environment was related to the all five subscales of the Computer Laboratory Environment Inventory used in the studies including among others a materials environment subscale particularly

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entitled as technology adequacy subscale. Parallel to the technology focus of the above study, the qualitative results of this study also showed that EFL learning environment that were enhanced with the use of technology (the use of videos and the adequacy of technological materials etc.) were predictive of students' level of persistence in EFL learning.

The results on the materials environment are also consistent with the Gardner's (2006) assumption that classroom learning motivation is influenced by several classroom factors including the course materials and physical environment offered in the class. Contributing to what Gardner put forth and the results of this study above pertaining to classroom materials and physical conditions, Filardo (2008) asserts the negative effect of poorly designed school buildings upon students' cognitive and non-cognitive outcomes. In their attempt to review the literature on the impact of school environments, Higgins, Hall, Wall, Woolner and McCaughey (2005) have concluded that physical environment characteristics have significant effects on individuals' comfort, wellbeing, attitude and thus on their achievement. Similarly, when the notion of persistence is thought to be related to sustainability or more specifically to the sustainable-self terminology, it will be also wise to consider it as an indicator or category of well-being. Thus, the results of this study on the associations between classroom materials and physical environment and students' persistence also support Higgins and his colleagues' conclusion. However, in investigating the variability in the students' persistence in EFL, the results revealed the presence of a shared variance explained in combination by all of the six EFL learning dimensions. That is, apart from the two significant and unique predictor dimensions, course materials and authentic assessment procedures, the remaining four dimensions appear to have contributions only when they are assessed in combination with the others. Such a finding may purport a further question: "Do the remaining dimensions possess indirect effects as having mediatory roles between the student persistence and two main predictors above?" In this regard, it would be wise to

conclude that the link between persistence and EFL learning environment is not always direct but somehow indirect and conditional.

Given the dimension of teacher supportive behaviors included in the QEFL-LE, both the qualitative and quantitative (though somehow indirectly) data revealed that teacher supportive behaviors in the form of friendly, understanding and encouraging teacher behaviors in the EFL preparatory classes are positively related to students' level of persistence in learning English. There are two main constructs (affiliated to two main instruments, WIHIC and QTI) studied in relation to the learning environments research in the literature which are teacher support and teacher interpersonal behavior. The results especially pertaining to these two constructs in the literature are particularly associated with the results found in the current research. Studies using QTI in the literature consistently showed that when students reported their teachers as friendly, understanding as opposed to admonishing, strict and disciplined, they also reported that their affective outcomes are higher. Parallel to the affective outcome of this study, student persistence in learning English, Wubbels (1993) working on the attitudes towards physics classes found that there is a positive relationship between the students' attitudes towards Physics and cooperation scales of the Interpersonal Teacher Behavior Model including helpful/friendly behavior and understanding behavior. In contrast, the opposition scales of the Interpersonal Teacher Behavior Model including strict behavior, admonishing behavior and dissatisfied behavior were reported to be negatively associated with student attitudes. Another study conducted by Chua et al. (2009) employing the WIHIC instrument and its relevant subscale of teacher support found that the teacher support scale of their instrument was positively related to students' motivation in learning Chinese. den Brok (2001) conducted a study with the English as a Second Language (ESL) learners and found a positive and strong effect of teacher proximity (realized in cooperation and dominance) on subject specific motivation for English measuring four aspects which are pleasure, relevance, confidence and effort.

The qualitative and quantitative (though indirectly again) results on the teacher guidance and feedback on the assessment tasks showed positive associations between this EFL learning environment dimension and student persistence in EFL. These results aligned with results from the studies using the Student Perceptions of Assessment Questionnaire. Earnest and his colleagues (2006) reported positive associations between transparency in assessment tasks and student attitude to science and student academic self-efficacy. Moreover, the transparency sub-scale of this instrument include such items as "I am told in advance on what I am being assessed," "I know what is needed to successfully complete a science assessment task," and "I am clear about what my teacher wants in my assessment tasks" and these items were in line with the code of "teacher providing tactics" (with respect to the assessment tasks and assignments) generated in the qualitative data analysis of this study. When students were interviewed for their perceptions on the feedback and guidance on the assessment tasks in the English class and its links to their persistence in EFL study, they indicated their need for feedback against transparent and appropriate criteria so that the more effort they would be willing to show for learning English. In other words, the more they find the test content reasonable, relevant and appropriate, the more they will be persistent towards learning English. This leads us to remember another testing issue, that is, face validity. Anastasi (1998, as cited in Wiggings, 1993) mentioned the importance of face validity for "rapport and public relations." That is, when the tests seem irrelevant and inappropriate to those who are taking it, then they would criticize the results harshly. Similarly, this criticism was also mentioned by the interviewees of this study as hindering for their motivated behaviors towards English.

The quantitative results showed that though course planning and organization has no unique contribution to the explanation of the variance in students' persistence in EFL, it has an indirect effect and is included in the shared variance. However, given the standardized coefficient (B) values in the

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regression analyses, it appeared that the direction of the relationship between this predictor and the outcome variable was negative. The qualitative results, on the other hand, showed that students evaluated the course planning more at the institutional level but not at the teacher level as the items related to this dimension in the QEFL-LE require. However, they also reported the existence of a text book based course planning as affiliated to their teachers and that they mostly had negative views on the too much dependency to the text book plan. At this point, it appears that the qualitative results align with the negative direction of the relationship between this dimension of the EFL learning environment and student persistence revealed by the quantitative findings. In this regard, this study offered parallel results to Paige's (1979) study in Indonesia. This researcher also reported that the affective variable of individual modernity negatively relates to the dimension of order and organization in the classroom. Qualitative results from this study revealing that text-book based planning of the teacher is boring and repetitive for the students align with Wong's (1993) results from the qualitative instruments of his study. While the students from his sample indicated teachers' active behavior in providing order and discipline as an important factor of a positive learning environment, they also mentioned that teachers should make this in an atmosphere that is neither boring nor too serious. However, in some other studies, this dimension or its similar constructs (task organization sub-scale in WIHIC scale, order and organization sub-scale in Classroom Environment Scale etc.) were found to be positively associated with the student attitudinal outcomes (Fraser & Fisher, 1982; Hunus & Fraser, 1997; Kerr, Fisher, Yaxley, & Fraser, 2006; Koul & Fisher, 2006; Telli et al., 2006; Wright & Cowen, 1982). One of the reasons for the negative-direction of a relationship found in the current study could be due to the possibility that the items in the course planning and organization dimension have been written in a teacher-dominated way to have more focus on teacher planning skills. However, in the other similar instruments, the items appear to be focusing more on the tasks or classroom activities' being orderly and clear for the students. Thus, students might have judged this dimension as

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teacher strictness or pressure and this might have influenced their perceptions in the negative direction.

Given the dimension of communicative approach oriented implementation practices, quantitative results again explained no unique but somehow indirect contribution (as shared variance) to the explanation of the regression model variance in the students' persistence scores. Qualitative results also showed that communicative approach-oriented implementation practices in the form of group work activities, focus on all four language skills in an integrated manner, focus on language games and communicative and interactional activities were facilitative for students' persistence in EFL. It is known that this dimension basically investigated the degree to which students participate and take active role in the class activities and the shared results from the qualitative and quantitative data appear to be in line with the involvement and cooperation sub-scales of the widely used learning environment instruments. The results from this study replicate the findings from earlier studies (Allen, 2003; Fraser & Fisher, 1982; Hunus & Fraser, 1997; Kerr et al., 2006; Telli et al., 2006; Wahyudi, 2004). For example, in parallel to the results of this study, Kerr and his associates (2006) also found that student learning environment perceptions on the cooperation and involvement dimensions accounted for variance in the three groups of affective outcomes, attitude towards science, attitude towards computer usage and student academic efficacy. Similarly, Dorman (2001) reported increased levels of involvement as associated with students' academic efficacy in the mathematics classrooms.

According to the results from the qualitative analyses, individual work was also favored over group work by some interviewees. Communicative language teaching has no rejection against the use of individual work in class in spite of its more particular focus on group work. Savignon (2002) warns teachers against the one size fits all idea in planning for communicative language teaching in that in classroom activities students may prefer group work, pair work or even individual work over others. Thus, Savignon (2002) contends that

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"the wider the variety of communicative, or meaning-based activities, the greater the chance for involving all learners" (p. 13). However, from the students' accounts, it is also understood that they criticize the way the group work has been organized in the classrooms rather than the group work itself. It could be expected that if these students were subjected to well-organized group work activities, they may have reported more positively for the group work activities as conducive to their persistence in EFL. Their negative experiences with the group work might have influenced their perceptions about its effectiveness upon students' persistent behaviors in the language learning process. This result regarding this dimension also replicates the results from the studies employing the Constructivist Learning Environment Survey, especially concerning the two relevant sub-scales of this instrument which are entitled as shared control and student negotiation both of which are directly aligned to the idea of communicative EFL classroom. Kim, Fisher and Fraser (1999) reported statistically significant relationships between high school students' perceptions of the constructivist science learning environment and their attitudes towards science for the scales of shared control and student negotiation in Korea. Similarly, Dethlefs (2002) found a significant predictive ability of shared control and student negotiation dimensions upon the attitudes of high school students' enrolled in Biology and Algebra classrooms in Nebraska.

A comment should be made here about the degree of variance explained by the EFL learning environment characteristics and implications of this finding for the schools and teachers. The explained degree of variance in student persistence in EFL learning by the learning environment characteristics was low. However, the main purpose was already to link these two constructs and and thus the presence of associations shown by both quantitative and qualitative methods deserves more attention. Therefore, the results from this study would mean that if teachers and schools attempt to improve the classroom conditions related to the main characteristics reported in this study, they are more likely to have more persistent and passionate learners of English.

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Persistence could be a complex phenomenon especially in the learning of foreign languages and there could be many factors at work to compose and characterize such a constructs. In this sense, knowing that it is partially related to the EFL classroom characteristics identified in this study could be important to teachers and schools to take precautions or act on some strategies to satisfy the student perceptions lacking in these dimensions.

Given the patterns of variation in student persistence by student background characteristics, it was revealed that student background variables significantly predicted the students' persistence in EFL. When the two unique sets of predictor variables, that is, EFL learning environment dimensions and student background characteristics were compared, the explained degree of variance were marginally higher on behalf of the student background variables. When the unique contributions of the each of student background variables were examined, it was seen that the three variables (in an order from the highest to the lowest contributor), outside exposure to English via books and magazines, family income level and perceived English proficiency at graduation significantly predicted student persistence. Given the directions of relationships, it was indicated that only family income level is negatively associated with students' persistence. A probable and logical explanation for this result is that students coming from families with lower income levels may be more accustomed to dealing with the harsh conditions they may face in their lives. That is, they may have more practice with facing with difficulties and problems in their life experiences and more relevantly in the matters that may even relate to their attending schools or paying for the educational expenses. Likewise, with their already present supply of tactics and strategies, such students with lower economic backgrounds may be acting as survivors in putting more effort in and dealing with problems in learning English. Supporting my above justification, Gottfried, Fleming and Gottfried (1998, p. 1457) also put forth the positive influence of parental motivational practices on students' intrinsic motivation and task endogeny (i.e. pleasure in and activation

towards learning) which also encompasses such attributes as mastery, curiosity and persistence. Based on the above claim, a simple implication or prediction could be that the students coming from lower income families were perhaps encouraged by their families to be more involved in learning English and looking for sources to learn English like English books or magazines, which, in turn, makes these students more persistent during the foreign language learning process. Moreover, the importance of or support for being persistent in the Turkish culture and family life might have played a significant role on the students' intrinsic motivation and task endogeny.

The results also showed perceived high school proficiency in English as a significant predictor of persistence. Previous research on grit also revealed similar results. Duckworth and her friends (2007) investigated the differences in grit by educational attainment (completed degree) on their grit level. They found that more educated adults reported more grit compared to their less educated peers when the age was controlled for with post-college graduates showing higher levels of grit among others. Though the variable in the present research is a perceived and no-documented (just perception-based) proficiency attainment, it may still give some insights about the associations between earlier attainments and persistence. Similarly, there is another piece of evidence provided by the same researchers. That is, in testing associations between grit and cumulative GPA among undergraduate students, Duckworth and her friends (2007) found a positive relationship between students' grit scores and their GPAs. Though the predictor of the current study was a high school English proficiency score based on students' own perceptions but not on an exact grades reported in students' transcripts, it may still give some clues to link persistence to students' earlier achievement gains.

The results pertaining to the significant predictive ability of the variable of outside exposure (through the reading of books or magazines) on student persistence in EFL find supporting evidence from the previous research on psychological constructs in language learning. Though there is no research

available particularly on the construct of persistence as an affective outcome in learning a language, there is some research on the associations between exposure and motivation (Barbee, 2013; Hui-hua, 2005). It is known that the construct of persistence is directly associated with motivation. This association has found supporting evidence from MacDonough (1981, p. 143) who said "the term motivation has been used as a general cover term – a dustbin – to include a number of possible distinct concepts, each of which may have different origins and different effects and require different classroom treatment." Accordingly, Barbee's (2013) study revealed parallel results with the results of this current study here. He found that exposure through books and magazines were positively correlated with the students' level of motivation. Similarly, Hui-hua (2005) found that the there is a significant positive relationship between the amount of exposure to English gained from the extracurricular English classes and motivation in Taiwan.

Apart from the research supporting the results from this study, there is this common sense implication which would refer to the correlation between the amount of exposure to the target language and the student persistence, that is, the students' continuing to learn English when they almost want to give up. It is likely that when they have exposure, they may be showing more attempts to understand the source of the exposure. For example, they may be trying to exert more effort in better understanding the English book that is interesting to them. That is, their personal motivations may influence their choices of the sources of outside exposure or even the amount of exposure they will have. At this point, Crookes and Schmidt (1991) implies the mediator role of exposure in that it is first related to motivation and then also related to student learning. They explain it by saying: "the link between motivation and learning in informal contexts is due to the importance of opting in or out of opportunities for learning, which is greater than in formal instruction, in which attendance may be forced" (p. 494). Based upon this assumption, it would be meaningful to assume that for more exposure through books, magazines or other media,

learners should show more effort in the form of more reading, more listening or speaking attempts so as to be exposed to the target language, which in turn results in achievement.

Given a more holistic look at the results concerning the three main predictors of persistence, the implication would be that when students come from lower-income families, higher levels of outside exposure through the reading of books or magazines in English and higher proficiency in English at the high school, they are more likely to persist more to learn English. Hence, it would be easy to speculate on an existence of interplay between these characteristics and this was further supported by the presence of shared variance by the all background variables in accounting for variance in students' persistence in EFL. In other words, it would be appropriate to expect that those students feeling themselves more proficient with regard to their earlier proficiency in English may easily find resources to read in English and they may also feel more comfortable in such attempts because of their so-called perceived advanced proficiency levels.

Conversely, one would normally expect that those with lower-family incomes might find less resources or opportunities to read in English. However, it is also normal these days for university students coming from lower income families to have an easy access to such resources because of the public libraries and supplementary and extra materials provided by their teachers, friends or the books they are currently studying at the preparatory programs, which might have been the case with the students involved in this study. In addition, Gottfried and his colleagues (1998) reported the predictive effect of stimulating home environment on intrinsic motivation when the effects of socio-economic status was controlled, which means that home environment may differ within the families though they may belong to the same socio-economic status and the effects of home environment is a significant predictor of intrinsic motivation beyond the effects of socio-economic status. As is also supported by the findings of the research conducted

by Gottfried and his colleagues (1998), the students from lower-income families perhaps are provided with such home environments by their parents as that have a greater emphasis on learning opportunities and activities which foster further benefits for students to develop their competencies, inquisitiveness and exploration. Likewise, Orozco (2014) found that students with lower socio economic status have higher grit than high socio-economic status students. In conclusion, this study revealed that children from low socio-economic families are not necessarily doomed to skill gaps and low levels of motivation.

5.1.2. Variations in the Relation between EFL Learning Environment Perceptions and Student Persistence in EFL in respect to Several Student Background Variables

Given the disparities between boys and girls, the results showed that in both groups materials environment and teacher supportive behaviors were uniquely and statistically associated with the students' level of persistence. The results on the materials environment and teacher supportive behaviors replicates the results reported in the learning environments research performed with males and females together (Henderson et al., 2000; Newby, 1998; Newby & Fisher, 2000). Authenticity and congruence with reality as related to the assessment tasks, however, uniquely predicted only the male students' persistence in EFL study. The basic implication could be that males stereotypically seem to be more realists by their nature. At this point, Su, Rounds and Armstrong's (2009) meta-analysis study on sex differences in vocational interests supports this socially accepted conception. Using Holland's (1959, 1997, as cited in Su et al., 2009) interest categories (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional), they reported that males were found to possess stronger realistic and investigative interests while the females had stronger artistic and conventional interests. Using Prediger's (1982, as cited in Su et al., 2009) Things–People and Data–Ideas interest dimensions, they also found that men prefer working with things and women prefer working with

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people. Thus, it is assumed that the male English preparatory program students with their more realistic preferences in life and career may have showed more interest towards the assessment in English class being more real and analogues to real-life and real-context of learning (curriculum and classroom practices). In addition, their natural interest in things (over people) pertaining to the classroom atmosphere might have led them to pay more attention to the more technical matters in the English class such as assessment and alignment with the curriculum. The females, on the other hand, perhaps by being less detail-but relationship-oriented may have disregarded this dimension as effective in their level of persistence in learning English.

The comparison of the three levels of perceived high school proficiency in terms of the links between EFL learning environment perceptions and persistence in EFL study showed that while the materials environment dimension was a significant unique predictor of persistence in each and every level of proficiency level, the authenticity and congruence with reality dimension uniquely contributed to the levels of persistence reported by the students with poor proficiency levels only. Similarly, the dimension of teacher supportive behaviors was a unique predictor of the students' persistence only for those students with reported good and very good proficiency levels. In short, the dimensions of authenticity and congruence with reality make a difference for the persistence of poor level students and teacher supportive behaviors made a difference for the persistence level of those with reported good level proficiency levels. A similar finding was reported by Koul and his associates (2006) who investigated the year level differences in students' perception of the assessment tasks in the science classrooms. They reported that Year 8 students had statistically significant higher means when compared to Year 9 and Year 10 students for the congruence with planned learning scale of the Student Perceptions of Assessment Tasks instrument used. Though these researchers used the actual grade level at school, this may still give some insights for the perceived proficiency level variable of this study.

In the same vein, using the report card grades as an indicator of achievement, Levy, Wubbels and Brekelmans (1992) found positive associations between report card grades and influence and proximity dimensions of the teacher behavior. Thus, it is implied that when students belong to higher proficiency grades, they perceive their teachers more positively. Another implication could be that students with lower proficiency levels in English may wish to exert more effort in learning English only when they perceive that the assessment tasks are similar to those they have done in the classrooms or in their real lives because their poor level in English may be detracting their ability in looking for some other social factors or reasons to be more effortful in English. On the other hand, those students with higher reported proficiency levels are more oriented towards looking for more social factors or motives to be more effortful in learning English. Thus, the relationship or communication with the teachers may be more important for their persistent behaviors in English than the tests or other assessment tools as with their higher levels of readiness and proficiency in English, they already rely on themselves to manage the tests and do not care about such assessment matters. It could be also thought in this way that students who are more successful in class would think that their teachers are accomplished communicators, friends and helpers.

This study indicated that when younger and older students were compared in terms of the predictors for their level of persistence, teacher supportive behaviors and authenticity and congruence with reality were found to be significantly predicting the younger students' (aged below 20) persistence in EFL learning. The EFL classroom dimension of materials environment mattered for the prediction of levels of persistence in EFL in both age sub-groups. Based on these results, it could be interpreted that older students care more for technical matters such as books, physical conditions or technology used in the classroom. As being more experienced peers in classrooms and more mature in life, these older students may be taking for the granted of the effects of supportive teachers and real-life-analogues testing situations. They

may be simply thinking that exams are only for receiving grades and teachers are there only to teach and manage the classes and these two factors have no influence on their personal acts and behaviors like showing effort or passion for English. For younger students, however, assessment tasks aligned to real life and real conditions of learning and teacher communication or interpersonal behaviors in the classrooms may be important in that as younger and less mature individuals in life and in classrooms, they may be paying more attention and care to such psychological and technical matters in the classroom. In contrast to their older classmates who may be viewing such matters as more superficial and less effective in learning English, the younger peers may be thinking that they may show their ultimate performance and effort in English because they may be psychologically believing that they may achieve English only when the assessment tasks that are similar to those practiced in the classrooms.

Alternatively and conversely for the effects of teacher supportive behavior, it could be also related to Levy, Wubbels, Brekelmans and Morganfield's (1997) finding that older students perceive more teacher dominance compared to the younger students in the classroom. Similarly, Levy, den Brok, Wubbels and Brekelmans (2003) also found that older students perceive their teachers stricter compared to their younger classmates. Hence, the alternative interpretation could be that when the students are older, they see their teachers as a dominating figure perhaps partly stemming from their seeing themselves having the same or similar capacities with the teachers. Thus, the students of older ages may have seen no influence of their teachers and their supportive behaviors for their persistent behaviors in learning English. Students of younger ages, on the other hand, who may perceive the teachers more helpful and friendly (over strict), might have reported that such teacher support is related to their increased levels of persistence in learning English.

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Excluding the predictive ability of materials environment EFL dimension upon students' persistence in EFL common to students from both social-sciences and science-related university subject domains, teacher supportive behaviors and authenticity and congruence with reality dimension were found to be predictive of persistence in EFL only for those students from science-related university subject domains but not for those from social-sciences-related university subject domains. These results may be related to the different thinking styles possessed by the students studying in each of these domains. Based on the theory of mental self-government (Sternberg, 1998), the two group of students may be influenced differently from the EFL classroom characteristics because they have different thinking styles peculiar to each group. At this point, the basic common-sense comparison of social-sciences students and science students could reveal several differences that may be even known to common people. That is, the science students are known to be more analytic and critical thinkers who pay more attention to details. In contrast, social science students may be known as more linguistic and intuitive people. Thus, the basic inference would be that science students may have paid more attention to details in the EFL classroom such as the content of testing or its analogy with the real classroom practice when they were reporting their persistent behaviors in learning and studying for English. Similarly and more academically, science-related students may be thought to possess more of a logical-mathematical intelligence category of the most known Multiple Intelligences Theory and those with this intelligence type are known to think analytically with a particular interest in understanding patterns, categories and relationships while the social science students who are generally thought to be more lenient to have verbal-linguistic type of intelligence are drawn to think in words with a particular interest in the use of language (Gardner, 1993). Thus, based on this theory and the intelligence types in question, with their interest in understanding the degree of relationship between the classroom practice and testing situations or simply between the life and the classroom, science students might have perceived the authenticity dimension as related and important to

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their persistent behaviors in learning English. Though Gardner & Hatch (1989) notes the need for "a blend of intelligences" (p. 5) given one's occupations with an existence of a dominant but no specifically one type of intelligence in a person (humans displaying a range of intelligences), it was thought to be meaningful to crudely categorize the participants of this study as mostly displaying logical-mathematical and verbal-linguistic type of intelligences based on the polarized majority of engineering and humanities faculties' students involved. Moreover, Gardner himself also contends that only two intelligences (linguistic and logical-mathematical) has a place in modern schools with the conception of language-logic combination as "academic" or "scholarly intelligence" (Davis, Christodoulou, Seider & Gardner, 2011, p. 485).

In addition, in their investigations into the differences related to learning environment perceptions in the subjects taught, den Brok (2001), Fisher, den Brok and Rickards (1998) and Wubbels and Levy (1993) found that students perceived their science, physics and mathematics teachers as showing more cooperative behaviors when compared to teachers from other subjects. Based on their results, it could be inferred that students from science-related departments (e.g. science, physics or mathematics teachers) may hold similar beliefs (overgeneralization or direct transfer of ideas about the main class figures) for their foreign language teachers as well and thus they may again perceive that the English teachers' cooperative behaviors would be effective upon their persistent behaviors in English.

Given the results based on the two subsets of family income level, apart from the contribution of materials environment dimension shared by the two of the subsets, teacher supportive behaviors and authenticity and congruence with reality dimensions were found to be positively but the course planning and organization dimension to be negatively associated with the persistence scores reported by students with a higher income level only. For the lower level income students, it was only the communicative approach oriented implementation practices that uniquely contributed to their levels of persistence

but this was in the negative direction. In this essence, the above findings align with those from Waldrip and Fisher's (1999) study in which students from rural areas and those from metropolitan areas were compared in terms of the reported teacher-student interpersonal behavior. The researchers found rural area students to be more likely to report the negative aspects of the teacher interpersonal behavior over positive ones. If we consider the rural area students to be mostly coming from lower income families or the participants of the current study with reported lower family income levels to be mostly coming from rural areas in Turkey, then it would be more meaningful to assume that lower income students possess negative perceptions in relation to the teacher interpersonal behavior in the classrooms. For this reason, in this study, higher family income level students (but not the lower family income ones) might have perceived teacher behavior to be positively associated with their persistent behaviors in English. Moreover, Kyriakides (2006) found that student socio-economic status (SES) was positively related to the affective outcomes of schooling (i.e. attitude towards teachers, peers, school and learning). His results might lead us to assume that when students report to have higher SES, they are expected to have more positive attitudes to the teachers. Thus, the higher family income students of this current study might have perceived the teacher supportive behaviors more positively than the lower family income level students, which in turn results in significant positive contribution of teacher behavior to student persistence in EFL. Moreover, these students with their positive attitudes towards their teachers might have polarized the course planning and organization dimension (against their teacher support perceptions) and thus reporting negative perceptions for the contribution of this dimension to their persistent behaviors in English. As is put forth earlier in this discussion part of the dissertation, the items included in the course planning and organization dimension were more related to the teacher control and organizational behaviors of instruction. Hence, these students might have perceived that teacher behavior questioned in this dimension to be more related to teacher strict or admonishing behavior which in fact has a contradictory

stand to their expectations of a supportive and helping teacher in order to be more persistent in English. It could be also possible that those students with reported higher family incomes could have had better school experiences in terms of learning a foreign language. For instance, it could be more likely for them to attend private schools with better facilities or to attend state schools at the metropolitan areas with better facilities than the average, to attend private language courses, or even to have private tutors. It is a known fact that higher SES may bring about better life and educational conditions. Thus, it would be meaningful to assume that those students may have more detailed and critical views of the language teaching and learning process, which in turn may lead these students to have more sensitivity for the assessment practices in the language classrooms. Being more experienced learners with more frames of references in evaluating the EFL learning environments, higher family income students may be looking for conditions analogues to the real life in their classrooms so as to maintain their motivation to learn English in their classrooms.

Lastly, the results on the significant negative contribution of the communicative approach oriented implementation to the lower family income students' level of persistence in EFL could be presumably related to again their experiences with the communicative language teaching. Those students with their reported lower family incomes might have had fewer opportunities in the EFL classrooms to experience communicative language teaching the implementation of which may be further difficult for several socio-economic conditions such as fewer facilities at schools, large class size, heterogeneous language skills groupings of the students and lack of effective and experienced teachers (Ansarey, 2012; Koosha & Yakhabi, 2013; Rahman & Karim, 2015; Roy, 2016). Thus, these students by probably being not accustomed to the communicative approach-oriented practices might have developed negative attitudes towards communicative approach-oriented practices in the preparatory classrooms by frequently thinking that these classrooms look chaotic and noisy (Koosha & Yakhabi, 2013). Similar barriers may also be in

the English preparatory classroom contexts, and these types of barriers could be negatively influential upon their persistence in EFL. Especially, the nomination of students of heterogeneous language skills into the same classes often reported in the qualitative part of this study might have negatively influenced the lower family income students' perceptions to communicatively-based language activities who may be suffering also from the lower self-efficacies to be active and show their ultimate potentials in the communicative classrooms. The construct of self-efficacy might have played a hampering role on the part of the students with lower family income levels with its empirical positive relations to students SES found in several studies (Alldred, 2013; Ariani & Ghafournia, 2016; Kormos & Kiddle, 2013).

As the results pertaining to the two subsets of exposure through television and internet showed, no matter of their degree of outside-class exposure to English is, the students perceive themselves to be more persistent in learning English when they perceive better materials environment conditions and higher analogy between real life or real classroom practices and the testing situations in the EFL preparatory programs. A basic implication of this result could be that though these two group of students reported differing degrees of exposure to English outside the English class, they both might have perceived the materials environment to be influential upon their persistence in EFL study because this dimension is more or less the same and common to both group of students. That is, this EFL dimension may be the one that is less open to contradictory views by the students as the conditions of the classrooms and materials are quite obvious by clear indicators. In the same vein, the contribution of the authenticity and congruence with reality dimension may be having a similar effect on students as these two groups of students being used to the authentic contents provided by the internet or television sources (though in different degrees) might have valued this dimension by considering it important to develop more persistent behaviors in the English learning process. Furthermore, the descriptive results on the exposure also reveals that both groups had similar degrees of exposure and they both are more or less

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accustomed to be exposed to English through internet and television in their real life experiences. However, according to the results, it was also indicated that higher exposure level students, though being autonomous in their outside-class activities related to the target language (i.e. as self-guided learners), might need their teachers' support to be more persistent in English. Aligning with this result, King (2011, p. 258) also believes that "effective support for learners, be it from a classroom teacher or a learning advisor, is critical to the success of self-access learning." However, these students also considered course planning and organization EFL dimension as negatively influential upon their persistence in EFL presumably because these students contemplated the course planning dimension as contingent with the teacher strict behaviors, which, in turn, may be perceived as contradictory to the teacher supportive and helpful behaviors in class. That is to say that it would be logical to accept the contradictory stance between teacher supportive behaviors and teacher course planning skills and strategies. Accordingly, these students may have perceived teacher helping and support behaviors to be positive and conversely course planning to be negative to their levels of persistence.

As the results pertaining to the two subsets of exposure to English through books and magazines showed, both group of students perceived materials environment dimension uniquely and significantly associated with the students' persistence scores in learning English. Apart from the only predictive ability of this EFL characteristics common to both subsets, those in the lower reported exposure group also perceived teacher supportive behaviors and congruence with reality dimensions to be positively and uniquely predictive and course planning dimension to be negatively and uniquely predictive of their levels of persistence in EFL. Thus, a practical implication would be that for those with more levels of exposure through books and magazines, they may be only considering and valuing the books and magazines in the whole materials environment of an EFL classroom perhaps because of their being fond of following such sources so as to strive for learning English more. Those in the

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lower reported exposure group, however, may be looking for other means such as teacher support or real-life analogy for testing situations in addition to the materials environment sources available to guide and encourage them in the learning process as their low level of exposure through the print materials might have detracted them from their persistent and passionate behaviors for learning English. That is, teacher support or real-life analogy for testing situations may be compensating for their low levels of exposure on the way to be more persistent learners in English.

The results regarding the negative predictive ability of course planning and organization EFL dimension upon students' persistence in EFL may be again related to the polarization of course planning (i.e. as teacher strictness) and teacher support in the opposite directions. It is important to note here that the regression results revealed the same results in terms of the unique and significant predictors of the students' persistence for both the students reporting higher outside exposure through television and internet and those reporting lower outside exposure through books and magazines. These results may be pertaining to the source and degree of exposure. That is, it is possible that lower exposure through books and magazines in fact reflects not a really low level of exposure to the target language as the chances to be exposed to print materials may be higher when compared to the audio-visual materials. Alternatively, it is important to note again that the subsets were composed by merging the responses in terms of the reported levels of outside exposure and lower exposure group includes the level of exposure ranging from sometimes to never degree. Students seem to have better opportunities to receive the print target language materials to use outside the English class through the school libraries, materials copy centers around the school campuses, their teachers or peers. Thus, it could be expected that print materials lower exposure group and audiovisual materials higher exposure group may share common characteristics especially in terms of an expectation of a support for their self-guided learning (King, 2011) as part of the total English learning process.

Given the analyses on the two subsets of students' prior knowledge of English by means of attending any English courses previously, it was indicated that for those with a prior English knowledge, only the classroom materials environment was predictive of their persistence. On the other hand, for those with no prior English knowledge and experience, in addition to the course materials dimension, teacher supportive behaviors and authentic assessment procedures were also found to be predictive of persistence in EFL study. Those with no prior knowledge of English, by being more novice learners of English, might have paid attention to the other possible extra sources or details around in the EFL classrooms such as teachers or authenticity of assessment practices in order to maintain their motivation in learning English. On the other hand, those with a prior knowledge of English as being more experienced learners of English might have skipped such other details but only focused on the quality of the classroom materials environment that is perhaps the most obvious and objectively judged criteria in the classrooms by only looking at the presence or fulfillment of main physical conditions within the classrooms. Moreover, Prosser, Trigwell, Hazel and Waterhouse (2000) contended that students reporting higher degrees of prior knowledge of a subject area appear to pay attention to those classroom characteristics or dimensions in the learning environment context that encourage deep approaches to learning. The results from this study (i.e. the results on the general cases in RQ1 and selected cases in RQ2) consistently showed that the good classroom materials environment conditions were already found to be the strongest predictor of students' persistence which itself could be seen as a category or indicator of deep approach to study. Thus, it would be meaningful to understand that students with a prior knowledge of English focused solely on the materials environment characteristics because this dimension evoked their deep approaches to learning in the form of more persistent behaviors.

Similarly, not only those with the most developed prior knowledge but also those students with no prior knowledge in English in this study also perceived classroom materials environment to be associated to their deep approach to

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study English in the form of more persistent acts in the learning process. Hence, these consistent results at the two subsets of the prior knowledge variable shows clear evidence for the effect of materials environment on persistence as a category of deep approach to learning. These shared results regarding the predictive ability of materials environment may be also related to students' taking a rational approach to learning with no respect to their prior knowledge of a subject area. In this regard, Laurillard (1997, p. 144) states: "Students consider what is required of them, they decide on priorities, and they act accordingly." Thus, perceiving that materials environment dimension taps to more persistent behaviors to learn English, the students at the both subsets might have opted for the materials environment dimension. However, the results also revealed that those with no prior subject knowledge probably needed other effective supports (e.g. teacher help or authentic testing procedures) to show more persistent behaviors.

5.2. Implications of the Results

The discussion of the results regarding the links between students' EFL learning environment perceptions and their levels of persistence in EFL learning was presented in the above account. The following presents the important implications drawn for educational practice and research based upon the results of this study.

5.2.1. Implications for Educational Practice

Firstly and fundamentally, the main outcome of this study was perhaps its indication and verification of the links between students' perceptions of the EFL learning environment dimensions and their level of persistence in the study of EFL. In the quantitative analyses, particularly the materials environment dimension appeared to be the strongest unique predictor of students' perceived level of persistence in EFL over and beyond the effects of other EFL classroom characteristics. Therefore, with the empirical evidence provided by this current study, policy makers, educational administrative

bodies and teachers should pay more attention to provide satisfying and favorable physical conditions and course materials to the students. Therefore, regular investigations into the students' needs in relation to the course books, technological equipment or physical conditions perhaps in the form of needs-assessment studies are recommended. Besides the direct effects of classroom materials environment on the student persistent scores, it is noteworthy to see that all other dimensions operationalized for the purposes of this study were found to be associated with the outcome variable despite in somehow indirect ways. Thus, these results would appear to suggest that provision of good learning environments including all of the dimensions is the place to invest if the aim is to make a positive difference in the students' persistence towards English. In other words, a particular attention should also be devoted to the improvement of the other five dimensions of the EFL learning environment in order to boost more persistent EFL learners.

The qualitative analyses also provided some critical conclusions and implications in relation to the following skills on the part of the teachers: providing indirect corrective feedback, criterion-referenced feedback, managing effective group work, effective teacher communication with the students, providing authentic instruction and employing authentic assessment practices. In addition, as enriched by the quantitative data, the shared results signified the importance of several teacher interpersonal behaviors and some teaching-related skills. That is, such interpersonal behaviors as friendly behaviors, helpful behaviors and understanding behaviors were most favorable for students' persistence in EFL learning. In contrast, admonishing and strict teacher behaviors were the least favorable ones. Therefore, pre-service and in-service teacher training programs should be enriched or improved to include the above instructional practices and secondly teachers should be informed about the influences of their interpersonal behavior with the students. Qualitative analyses also signified some implications or details to be taken into consideration at administrative and institutional levels such as the allocation of the students to the classrooms based on their proficiency levels and the

provision of well-working equipment and physical conditions for language teaching and learning. Hence, the classrooms which are used for language teaching should be provided with such facilitates as proper speakers, smart boards or other necessary technological devices to effectively and properly use the CDs or DVDs accompanied with the main course materials.

The results of the current study also showed that perceptions as to the relationships between EFL learning environment and student persistence may vary as a result of students' background characteristics investigated with respect to the designated subsets of the study data. Furthermore, it was also interesting to find out that several student background characteristics (out-of-class exposure via print materials and family income level) were found to be more associated with student persistence among others. Based on these results, it is important that teachers and curriculum developers should be reminded that EFL classroom environment characteristics are perceived differently by students with different backgrounds and experiences. When informed by such background knowledge about the students, teachers may affirm diversity or individual differences in their classrooms and they could develop student background-responsive strategies. These student background-responsive strategies are believed to be put into use in case of class compositions or allocations based on the characteristics that have been investigated in this research. In addition, teachers should be trained about these student background-responsive strategies or at least should be made aware of the connections between the student background characteristics and student affective outcomes and more specifically the EFL persistence introduced by this study. The effects of student background characteristics upon the perceived links between learning environment and student perceptions should be also taken into consideration in the management and arrangement of classroom conditions and characteristics by also the policy makers and school administrations. The analyses of the associations between the learning environment perceptions and student persistence by the student background data subsets in addition to the direct analyses performed between these two

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main variables contributed to and verified the notion that learning environment perceptions possesses a complex and interactive nature varying in relation to some environmental, dispositional or student-related variables (i.e. student-related in relation to psychological, social or personal or environment-related by different dimensions of one particular learning environment). That is to say that the results gained from the current attempt reinforced the notion that complicated mix of factors could be at work in shaping the students' perceptions of the learning environment.

The EFL teachers in particular or all language teachers in general may employ the EFL learning environment instrument, QEFL-LE, developed for the first time for the purposes of this study, with diagnostic purposes to guide improvements in their EFL classrooms. In this regard, when gaps were diagnosed between the actual and preferred perceptions of the students or between the teachers' themselves actual and ideal perceptions of their classrooms, teachers may be trained to improve these lacking dimensions of the EFL classroom environment. In short, QEFL-LE may and should serve as a valuable feedback tool for teachers' professional development. Moreover, according to the results about the associations between EFL learning environment characteristics and EFL learners' persistence in EFL study, not only the in-service teacher training programs but also the pre-service teacher education programs should put more emphasis on training the teachers in terms of acting upon or providing the specified EFL classroom characteristics. At this point, clearly almost all six dimensions deserve consideration by the teachers in their EFL classrooms. In other words, teacher candidates should gain skills to create the classroom characteristics that have been empirically linked in this study to student persistent behaviors in learning a foreign language. Hence, in more explanatory terms, in translating the research results from both quantitative and qualitative analyses, it seems all the more necessary that teachers should be informed to provide and organize better course materials environment provided by the use of good course materials which include real-life and up-to-date content, appropriate and sufficient level of difficulty in

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relation to the proficiency and maturity levels of students and the accompanying technological and visual materials to be used in the classrooms in line with the units in the hard copy books. In addition to the course materials used, the provision of optimal physical conditions in the language classrooms should be afforded considerable attention. As was already pointed out earlier above, the control or management of the class environment conditions could be more attributed to the school administrations or school policy makers, but teachers should also be trained how to better arrange the physical conditions for the students' maximum benefits or how to better cope with the lack or insufficiencies of these optimal physical conditions.

Apart from the fundamental result about the predictive ability of the course materials environment on persistence found in the study, the other learning environment characteristics (with their direct or indirect effects on the whole data set or on the subsets delineated), deserves consideration in the training of teachers. Teacher supportive dimension as being related to the broader theoretical and research venue of teacher interpersonal behavior characteristics or profiles (studied within learning environments research again) should be emphasized more in the teacher training programs. This study delineated this dimension as composing helpful, friendly, democratic, fair and considerate teacher behaviors, which were then found to be related to students' level of persistence in EFL. Therefore, teachers should be informed that when they exhibit friendly, democratic, fair, considerate and helpful behaviors in their communications with their students, they are more likely to contribute to the favorable affective and automatically cognitive student outcomes. The instruments assessing the teachers' interpersonal behaviors have composed an important component of training portfolios prepared by teacher candidates in Netherlands or Australia (Telli, 2010). Similarly, teacher candidates may be trained to make use of such valid and reliable instruments including the QEFL-LE of this study to test and see how they are evaluated or perceived by their students for their pre-service practicum tasks or for their future real classroom teaching practices.

Another unique contributor to the explanation of variance in the outcome variable of persistence was the authenticity and congruence with reality for the assessment tasks dimension. Based on the related statistical and interview data results, a particular attention should be devoted to make improvements regarding this dimension. That is, as is more clearly stated in the qualitative data, teachers often were lacking the abilities to properly implement the authentic assessment practices and assessment practices aligning with the real classroom practice. Thus, it should be recommended that teacher pre-service or in-service training programs should include aspects about how to better conduct the assessment tasks that are analogues to the real-life in terms not only of their content but also of the implementation strategies as different from the traditional ways of assessments often used by the teachers. At this point, as another problematic assessment methodology reported in the interviews, teacher behaviors in giving feedback received criticism for being hindering to the students' level of persistence in EFL. The reported positive correlates of an effective feedback included the presence of clear-evidence for feedback, indirect rather than direct corrective feedback or error correction, good valence or positive attitudes in giving the feedback and the existence of immediate feedback during the task given and therefore such aspects pertaining to the feedback should be placed within the teacher training curricula to increase the likelihood that teachers have more persistent and thus more successful EFL students.

Mainly in the quantitative analyses (conducted in the subsets of a student background variable) and partly in the qualitative analyses, planned and organized EFL lessons were found to be negatively linked with the student persistence. As is further supported by the qualitative data, it has been understood that students showed satisfaction with the organized and planned lessons in the presence of a rough and sometimes flexible course book-based scheduling. Therefore, EFL teachers can be recommended to follow a concrete course pacing aligning with the textbook used in the classrooms, but they should be open to changes in their progress through the units or chapters

depending on the student needs. It should be firmly emphasized that when course planning was equated with teacher strictness or admonishing behaviors in the class, it may result in a detrimental effect on the students' level of persistence in EFL. Thus, balance and flexibility as needed should be the key points of the course planning in English language teaching.

The quantitative analyses revealed a direct negative effect of communicative approach-oriented implementation practices upon student persistence only in relation to the analyses by the lower family income level subsets. In contrast, qualitative analyses indicated satisfaction for the use of such practices. Therefore, it could be remembered that lower income students as normally being more used to less communicative practices in their earlier school experiences might have disliked communicative practices for their levels of persistence. Therefore, teachers should know that for the novice and lower SES EFL learners, communicative approach-oriented language activities could be a myth at the very beginnings of the language education, and at this point it appears that the EFL teachers should be tolerant with the unmotivated and easily discouraged students at the earlier stages of teaching and learning at least until the students gain familiarity with the implementation strategies by their teachers. In short, the educational implications made earlier for the effects of all other student background characteristics in relation to learning environment perceptions will repeat here. That is, it should be recommended again that teachers should develop their own student-background-responsive strategies or be trained to develop those especially when they face and teach to class compositions based upon such background characteristics.

5.2.2. Implications for Further Research

Based on the results and limitations of this current study, there are a number of avenues for further research to be conducted on learning environments and psycho-linguistic constructs in language acquisition and learning. The following presents the implications for future educational research.

To begin with, this study by the available literature to the researcher is the first to provide associations between students' persistence in EFL study and perceptions on the QEFL-LE in the tertiary level English preparatory classes in Turkey. Therefore, it has provided the first development and validation data for the study instruments, QEFL-LE and PS in English preparatory classes in Turkey and thus it is expected that the results from this study may serve as a starting point for future studies. That is, the small, yet significant results in relation to the associations between the study variables are worthy of more careful investigation for further studies. Therefore, subsequent work on EFL learning environments should attempt to replicate such relationships found in this study perhaps with other foreign languages, and different groups of students especially from different grade levels and international settings.

The percentage of variance accounted for by the EFL learning environment dimensions in this study were low. This could have been related to the fact that some critical variables related to persistence were not included in the investigations. Part of this results from the conceptualization and development of persistence in EFL for the first time. However, further research should seek to address such attitudinal constructs as self-efficacy (as found related to grit by Duckworth et al., 2007), academic efficacy (as found a mediator variable for learning environment perceptions by Dorman et al., 2006) or course satisfaction (as found related to deep learning approach and learning environment perceptions by Ramsden, 1992) that may be mediators or confounding variables between EFL learning environment perceptions and student persistent behaviors in learning English. Worthy of further investigation could be the inclusion of motivational constructs as mediators or confounding variables as qualitative data though not needed and thus not analyzed within the aim of qualitative research question in this study implied that students' different motivational (intrinsic or extrinsic; instrumental or integrative) or goal-related orientations (performance or mastery) might be influential upon their persistence levels in studying and learning EFL or even in their learning environment perceptions. Hence, there is a need for future

investigations into the relationship between student persistence and some other possible variables not included in the current study. Moreover, there is a need to vary the sample based on some other student characteristics not included in this study. For example, students in this study were not grouped according to their levels of persistence to conduct further analyses. Therefore, a study with students having high level of persistence or low level of persistence only or students from private universities only (not from the state universities only as is the case with the curreny study) could be interesting. In this way, it could be possible to detect the possibility of new associations or to gain increased levels of explained variance in the outcome variable.

It has been also verified with this study that the new theoretical frame conceptualized, created and termed as *EFL learning environment* based on the assumption that language classrooms have different and unique characteristics of themselves as different from other discipline classrooms worked well as an attempt to conduct investigations into the different learning environments than the science-related ones. Thus, it is recommended that future research should test the effectiveness of this newly suggested theoretical frame and presumably the particular instrument developed to elicit the perceptions on the new theoretical framework. On the other hand, for further research, it is important to note here the slight concern with respect to the validity of the QEFL-LE in this study that was developed and utilized for the first time in this study. Although the scale reliabilities were high across the six dimensions of the EFL learning environment, factor analyses indicated a minor dislocation or cross loading of some of the items in the instrument in contrast to the assumption-wise grouping of the items based on the extensive literature and expert opinion supports. Therefore, it is firmly suggested that further studies should perform further validation of this instrument so as to warrant more trustworthy results. This may include student interviews again to find and improve alternative or cross loading meanings of items or even testing additional sets of items.

Another application of results from the learning environment instruments in past studies has been for the purposes of classroom action research or small-scale practical applications in that the results from the students' perceptions with regard to the differences in actual and preferred environments could be used as a basis for the identification of the most serious discrepancies upon which further systematic procedures have been administered or necessary precautions have been taken to improve the actual classroom conditions (Aldridge, Fraser, & Sebela, 2004; Aldridge et al., 2009; Fraser & Fisher, 1986; Thorp, Burden & Fraser, 1994; Yarrow et al.,1997). Therefore, the newly developed instrument in this study may be used for classroom action research purposes by the EFL teachers or practitioners.

Given the statistical analyses used in the current study, multiple regression analyses were conducted at the student level only which was considered sufficient to offer first and rough indication for the effects of certain variables. However, multilevel analysis (Bryk & Raudenbush, 1992; Goldstein, 1987) techniques could have given stronger or more detailed and more diversified results regarding the predictive ability of the independent variables on the students' persistence scores because this analysis takes the nested structure of the classrooms settings into consideration. That is, students belong to classes and the classes belong to the schools, which, in turn, shows an inherent hierarchical nature of the learning environment perceptions elicited from the students. Thus, it may be better to test and compare the classroom environment data at the student, class and then the institutional (school) level to control the problems of "aggregation bias" (Fraser, 1998a). Hence, further studies are encouraged to employ analyses in a multi-level manner to make stronger, more comparative and trustworthy claims in terms of the associations sought in this study.

The results showed that some EFL characteristics uniquely and significantly predicted the outcome variable of student persistence while others appeared to have indirect effects on the outcome variable. This may related to the use of a particular regression technique used. However, the results from this study

pointed out the direct or perhaps the mediating role of one particular dimension for the indirect effects of others. Thus, further research is needed to employ more detailed qualitative methods or quantitative analysis such as path analysis, mediator analyses or multi-level analysis approaches so as to sort out these subtleties and the possibility of interdependent associations and thus also providing a more complete picture of the EFL learning environment.

A comment should also be made regarding the inability of this study offer causal relationships between the learning environment perceptions and students' level of persistence in EFL in the present study. In a correlational study of this type, the results may only inform the degree to which the two variables (EFL learning environment and persistence) are related without any reference to the existence of causal associations or cause-effect relationships. Therefore, the results from this present study may serve as the focus or a fruitful step for further experimental research to test if the associations found are indeed causal. Thus, interventions should be implemented based on the results of this current attempt to better explain what could cause more student persistence in EFL study by going beyond the description and prediction of associations found by this study. At this point, course materials environment may be proposed as the area for initial intervention as the results consistently displayed that the better the EFL dimension has been perceived by the students, the more persistent they get in the EFL learning process. Furthermore, changes to be performed in this EFL dimension appear easier, more practical, more concrete or shortly more lenient to success when compared to other EFL class dimensions.

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APPENDICES

APPENDIX A

PERMISSION FROM METU ETHICS COMMITTEE

29 ARALIK 2015

Gönderilen: Prof.Dr. Ali YILDIRIM

                Eğitim Bilimleri-Eğitim Programları ve Öğretim

Gönderen: Prof. Dr. Canan SÜMER

                İnsan Araştırmaları Komisyonu Başkanı

İlgi: Etik Onayı

Sayın Prof.Dr. Ali YILDIRIM danışmanlığını yaptığınız Gülçin MUTLU' nun "Sınıf Öğretmen-Öğrenme Etkinliklerinin İngilizce Öğrenmede Sebat Etme Davranışı üzerindeki Yordama Yeteneği" başlıklı araştırması İnsan Araştırmaları Komisyonu tarafından uygun görülerek gerekli onay 10.04.2016-31.12.2015 tarihleri arasında geçerli olmak üzere verilmiştir.

        Bilgilerinize saygılarımla sunarım.

Prof. Dr. Canan SÜMER

Uygulamalı Etik Araştırma Merkezi

İnsan Araştırmaları Komisyonu Başkanı

Prof. Dr. Meliha ALTUNIŞIK

İnsan Araştırmaları Komisyonu

Üyesi

Prof. Dr. Mehmet UTKU

İnsan Araştırmaları Komisyonu

Üyesi

Prof. Dr. Aydan BALAMİR

İnsan Araştırmaları Komisyonu

Üyesi

Prof. Dr. Ayhan SOL

İnsan Araştırmaları Komisyonu

Üyesi

APPENDIX B

PERSISTENCE SCALE (in Turkish)

İngilizce Öğrenmede Sebat Etme Ölçeği
(Persistence Scale for Language Learning)
(ESL/EFL) © G. Mutlu, 2016

Yönerge
İngilizce öğrenme sürecinde yılmadan devam etme (sebat etme) durumunu ölçen bu ölçek İngilizceyi bir yabancı dil ya da ikinci dil olarak öğrenen öğrenciler için geliştirilmiştir. Aşağıda İngilizce öğrenme ya da İngilizce çalışmanızla ilgili ifadeler bulunmaktadır. Lütfen **HER BİR İFADENİN SİZİ NE DERECEDE YANSITTIĞINI** gösteren rakamı işaretleyerek belirtiniz.

1- Beni hiç yansıtmıyor
2- Beni çok az yansıtıyor
3- Beni kısmen yansıtıyor
4- Beni çok yansıtıyor
5- Beni tamamen yansıtıyor

Gülçin MUTLU
Doktora Öğrencisi
Orta Doğu Teknik Üniversitesi

Örnek kodlama ● ⊗

	Beni hiç yansıtmıyor	Beni çok az yansıtıyor	Beni kısmen yansıtıyor	Beni çok yansıtıyor	Beni tamamen yansıtıyor
1. İngilizce öğrenme sürecinde karşılaştığım başarısızlıklar beni yıldırmaz.	①	②	③	④	⑤
2. İngilizce öğrenme ile ilgili ise, yorgun bile olsam, başladığım her işi bitiririm.	①	②	③	④	⑤
3. İngilizce öğrenirken, kendimi diğer insanlara oranla daha fazla çalışmaya zorlarım.	①	②	③	④	⑤
4. İngilizce ile ilgili herhangi bir noktada kendimi zayıf hissedersem, o konuda daha çok pratik yaparım.	①	②	③	④	⑤
5. Bana birçok sorun yaratsa da İngilizce öğrenme hedefime ulaşma konusunda ısrarcıyım.	①	②	③	④	⑤
6. İngilizce öğrenirken öğretmenlerimin benden beklediklerinin daha fazlasını yaparım.	①	②	③	④	⑤
7. İngilizce dil becerilerimden biri zayıf ise, onu güçlendirinceye kadar çaba sarf ederim.	①	②	③	④	⑤
8. İngilizce dersinde düşük bir not aldığımda, bir sonraki sınav için daha sıkı çalışırım.	①	②	③	④	⑤
9. Sıkı çalışma ve sabır gerektirse de, İngilizce öğrenmek için gerekli zamanı ve çabayı harcamaya devam ederim.	①	②	③	④	⑤
10. İngilizce öğrenme ile ilgili bir etkinlikle uğraşıyorsam, çevrede dikkatimi dağıtan unsurlar olsa bile o etkinliği bitirmeye çalışırım.	①	②	③	④	⑤
11. İngilizceyi iyi öğrenme amacım, karşılaştığım güçlükleri aşarken bana önemli bir motivasyon sağlar.	①	②	③	④	⑤
12. İngilizce öğrenmek için yapabileceğimin en iyisini yapmaya çalışırım.	①	②	③	④	⑤
13. İngilizce bir beceriyi kazanmak ne kadar zor ise, bu beceriyi başarma konusunda o kadar kararlı olurum.	①	②	③	④	⑤
14. İngilizce öğrenme konusunda belirlediğim hedeflere ulaşıncaya kadar çaba gösteririm.	①	②	③	④	⑤
15. İngilizce öğrenirken karşılaşılan ve başkalarının çoktan yıldığı sorunlarla başa çıkmak için çabalarım.	①	②	③	④	⑤
16. Bir dil ödevinde karşılaştığım bir zorluğu aşamasam bile, sonunda aşacağımı düşünerek tekrar tekrar denerim.	①	②	③	④	⑤
17. Bir İngilizce dil becerisini öğrenirken yaptığım çalışma planlarına uymak için çaba gösteririm.	①	②	③	④	⑤
18. İngilizce öğrenmek için sıkı çalışırım.	①	②	③	④	⑤

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APPENDIX C

PERSISTENCE SCALE (in English)

1. I am not discouraged by setbacks I face in my English learning process.
2. When it comes to learning English, I finish whatever I begin though I feel tired.
3. I force myself to study more than other people when learning English.
4. When I have trouble with a language point, I practice it more.
5. I insist on reaching my goal of learning English even if it involves considerable trouble.
6. I do more than what is expected of me by my teachers when learning English.
7. If I am not good at a skill in English, I keep struggling to master it.
8. When I get a poor mark in my English class, I work harder next time.
9. I continue to invest time and effort in language activities in spite of the hard work and patience they require.
10. When working on a language learning activity, I try hard to finish it in spite of the distractions around.
11. My ultimate goal of mastering English motivates me to overcome day to day difficulties.
12. I try my best to do all I can to learn English
13. The more difficult a language activity is, the more determined I am to finish it.
14. Once I decide to do something when learning English, I do not give up until I reach my goal.
15. I continue a difficult language activity even when the others have already given up on it.
16. If I fail to solve a problem I faced in a language assignment, I try again and again in the hope that I will be successful
17. I make an effort to follow through with the plans I make for my studying when learning a language skill.
18. I work hard to learn English.

APPENDIX D

OVERVIEW OF SOME WIDELY-USED LEARNING ENVIRONMENT SCALES

Instrument	Scales classified according to Moos's scheme		
	Relationship Dimensions	Personal Development Dimensions	System Maintenance and System Change Dimensions
Learning Environment Inventory (Walberg & Anderson & Fraser, 1982)	Cohesiveness Friction Favouritism Cliqueness Satisfaction Apathy	Speed Difficulty Competitiveness	Diversity Formality Material environment Goal direction Disorganization Democracy
Classroom Environment Scale (Moos &Trickett, 1995)	Involvement Affiliation Teacher Support	Task orientation Competition	Order and organization Rule clarity Teacher control Innovation
School-Level Environment Questionnaire (Fisher & Fraser, 1990)	Student support Affiliation	professional interest	Staff freedom Participatory decision-making Innovation Resource adequacy Work pressure
Individualized Classroom Environment Questionnaire (Fraser, 1990)	Personalization Participation	Investigation Independence	Differentiation
My Class Inventory (Fisher & Fraser, 1981)	Cohesiveness Satisfaction Friction	Difficulty Competitiveness	
College and University Classroom Environment Inventory (Treagust & Fraser, 1986)	Personalization Involvement Student cohesiveness Satisfaction	Task orientation	Innovation Individualization
Questionnaire on Teacher Interaction (Wubbels & Levy, 1993)	Helpful/friendly Understanding Dissatisfied Admonishing		Leadership Student responsibility and freedom Uncertain Strict

Constructivist Learning Environment Inventory (Taylor, Fraser & Fisher, 1997)	Personal relevance Uncertainty	Critical Voice Shared Control	Student negotiation
What is Happening in This Classroom Questionnaire (Aldridge & Fraser, 2000)	Teacher Support Involvement Student Cohesiveness	Task orientation Cooperation Investigation	Equity
Questionnaire on Instructional Behavior (Lamberigts & Bergen, 2000)*		Clarity Classroom management Strong teacher control Shared teacher control Loose teacher control	
Learning Environment Scale (Cavanagh & Waugh, 2012)*		Self-educational values Self-learning Outcomes Classroom/peer learning attitudes and behaviors Classroom/peer, support, Classroom/peer discussion Classroom planning Teacher support and expectations Parental involvement	

Note. * no categorization according to Moos is available.

QUESTIONNAIRE ON EFL LEARNING ENVIRONMENT
(QEFL-LE; in Turkish)

İNGİLİZCE ÖĞRENME-ÖĞRETME ETKİNLİKLERİ ANKETİ

Değerli Öğrenciler,

Bu anket ile İngilizce derslerindeki öğrenme ve öğretme etkinliklerinin değerlendirilmesi amaçlanmaktadır. Elde edilen veriler sadece bilimsel amaçla kullanılacaktır ve cevaplarınız kesinlikle gizli tutulacaktır. Ankete isim ya da kimlik belirtecek bir bilgi yazmanıza gerek yoktur. Lütfen her soruyu dikkatle okuyunuz ve gerçeğe uygun yanıtlar veriniz. **Soruların 'doğru' ya da 'yanlış' bir yanıtı yoktur, önemli olan yanıtlarınızın sizin gözleminizi en doğru biçimde yansıtmasıdır.** Anketi yanıtlamanız araştırmaya katılım için onay verdiğiniz biçiminde yorumlanacaktır. Yanıtlarınızı ilgili seçenek üzerinde ● ya da ⊗ şeklinde belirtiniz ve sadece bir seçeneği işaretleyiniz. Katkınız için teşekkür ederim.

Gülçin MUTLU
Doktora Öğrencisi
Orta Doğu Teknik Üniversitesi

1.BÖLÜM: KENDİNİZLE İLGİLİ BİLGİLER

1. Yaşınız?: ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ○ ...

2. Cinsiyetiniz?: Kadın Ⓚ Ⓔ Erkek

3. Üniversitedeki bölümünüzün adı? (yazınız):
....

4. Ailenizin ortalama aylık geliri:
○ 2000 TL'den az
○ 2001 TL-5.000 TL
○ 5000 TL'den fazla

5. Daha önce herhangi bir İngilizce hazırlık ya da kurs programı öğrenimi aldınız mı?
○ Evet
○ Hayır

6. Liseden mezun olduğunuzda İngilizce seviyeniz ne düzeydeydi?
○ Zayıf
○ Orta
○ İyi
○ Çok iyi

7. Şu anda İngilizce dersi dışında İngilizce TV ya da internet yayınlarını ne sıklıkla izlersiniz?
○ Her zaman
○ Sık sık
○ Bazen
○ Nadiren
○ Hiç

8. Şu anda İngilizce dersi dışında İngilizce kitap ya da dergi gibi basılı yayınları ne sıklıkla takip edersiniz?
○ Her zaman
○ Sık sık
○ Bazen
○ Nadiren
○ Hiç

2.BÖLÜM: ÖĞRENME-ÖĞRETME ETKİNLİKLERİ

Bu bölümde, İngilizce derslerindeki öğrenme ve öğretme etkinliklerine ve ortamına ilişkin maddeler yer almaktadır. Şu anki İngilizce derslerinizi düşünerek, bu maddelere ilişkin gözlemlerinizi sağ tarafta verilen sıklık ölçeği üzerinde (hiç=1, nadiren=2, bazen=3, sık sık=4, her zaman=5) belirtiniz. **Maddeleri yanıtlarken genel olarak İngilizce dersi sınıf ortamını ve en çok dersinize giren İngilizce öğretmeninizi düşününüz.**

2.1. Ders Planı ve Organizasyonu **Bu derste**	Hiç	Nadiren	Bazen	Sık sık	Her zaman
1. öğretmen derse iyi hazırlanmış olarak gelir.	①	②	③	④	⑤
2. öğretmen ders zamanını etkili kullanır.	①	②	③	④	⑤
3. öğretmen bir konuyu önceki ve sonraki derslerle ilişkilendirir.	①	②	③	④	⑤
4. öğretmen dersin amaçlarını açık ve anlaşılır bir şekilde açıklar.	①	②	③	④	⑤
5. öğretmen dil becerileri (okuma, konuşma, yazma, dinleme, kelime, telaffuz ve dil kullanımı) arasında akıcı geçiş sağlar.	①	②	③	④	⑤
6. öğretmen dersin sonunda öğrendiğimiz becerileri geliştirmemiz için ek çalışmalar önerir.	①	②	③	④	⑤

2.2. Ders Materyalleri ve Fiziksel Ortam **Bu derste**	Hiç	Nadiren	Bazen	Sık sık	Her zaman
7. ders kitabının İngilizce öğrenmemize önemli bir katkısı vardır.	①	②	③	④	⑤
8. öğretmen dersin daha iyi anlaşılmasına katkı verecek ek materyaller (worksheets, grammar handouts vb.) kullanır.	①	②	③	④	⑤
9. gerçek yaşamla ilgili kullanılan kaynakların öğrenmemize önemli bir katkısı vardır.	①	②	③	④	⑤
10. kullanılan teknoloji destekli materyallerin (kitabın ekrana yansıtılmış akıllı yazılımı, videolar, online egzersiz platformları vb) İngilizce öğrenmeme kayda değer bir katkısı vardır.	①	②	③	④	⑤
11. sınıf ortamı (ışıklandırma, sıralar, tahta, sınıf akustiği vb.) rahattır.	①	②	③	④	⑤

2.3. Ders İşlenişi **Bu derste**	Hiç	Nadiren	Bazen	Sık sık	Her zaman
12. öğrencilerle etkileşime önem veren etkinlikler yapılmaktadır.	①	②	③	④	⑤
13. grup etkinliklerine yer verilmektedir.	①	②	③	④	⑤
14. öğretmen öğretim yöntemlerini çeşitlendirmektedir.	①	②	③	④	⑤
15. etkinliklerin belirlenmesinde öğrenciler söz sahibidir.	①	②	③	④	⑤

2.4. Öğrencilerle İletişim ve Ortam **Bu derste**	Hiç	Nadiren	Bazen	Sık sık	Her zaman
16. öğretmen farklı ve sıradışı fikirlere açık bir sınıf ortamı oluşturmaktadır.	①	②	③	④	⑤
17. soru sormanın rahat olduğu bir ortam vardır.	①	②	③	④	⑤
18. öğretmen öğrencilerle bireysel olarak ilgilenir.	①	②	③	④	⑤
19. öğrenciler öğretmen ile iletişim kurmada sorun yaşamaz.	①	②	③	④	⑤
20. öğretmen bana ve arkadaşlarıma adil davranır.	①	②	③	④	⑤
21. öğretmen derse katılma konusunda öğrencileri teşvik eder.	①	②	③	④	⑤

2.5. Değerlendirme **Bu derste**	Hiç	Nadiren	Bazen	Sık sık	Her zaman
22. öğretmen etkinlik ve ödevlerdeki performansıyla ilgili her öğrenciye dönüt verir.	①	②	③	④	⑤
23. öğretmen sınavların sonuçları ile ilgili bireysel olarak geri bildirim verir.	①	②	③	④	⑤
24. öğretmen bir ödevi başarı ile tamamlamak için taktik ve tavsiyeler verir.	①	②	③	④	⑤
25. öğretmen sınava iyi hazırlanma konusunda taktik ve tavsiyelerde bulunur.	①	②	③	④	⑤
26. sınavlar derste öğrenilenlerle doğrudan ilgilidir.	①	②	③	④	⑤
27. verilen ödevler gerçek yaşamla ilişkilidir.	①	②	③	④	⑤
28. sınav soruları gerçek yaşamda kullanılan dil becerilerinden oluşmaktadır.	①	②	③	④	⑤

Katkılarınız için teşekkürler.

APPENDIX F

QUESTIONNAIRE ON EFL LEARNING ENVIRONMENT
(QEFL-LE; in English)

1. The teacher comes to the class well-prepared.
2. The teacher efficiently uses the class time.
3. The teacher relates the lesson to the previous or later lessons.
4. The teacher clearly explains the objectives of the lesson.
5. The teacher fluently manages to pass through the language skills. (reading, speaking listening vocabulary, pronunciation and grammar)
6. The teacher recommends some extra study at the end of the lesson for us to reinforce the class.
7. The textbook is very supportive of my learning.
8. The teacher uses additional materials supporting the class to be well-learned.
9. Real-life materials used are very supportive.
10. The technology-enhanced materials used are very supportive of my learning.
11. The physical class atmosphere is comfortable. (lighting, desks, board, class acoustics etc.)
12. The activities centering on communication have been performed.
13. Group activities are performed in the class.
14. The teacher diversifies methods and techniques.
15. The students have a say in the determination of the activities.
16. The teacher creates a class atmosphere which is open to different and extraordinary ideas.
17. There is a class atmosphere where students may comfortably ask questions.
18. The teacher deals with students individually.
19. The students face no problems with communicating with the teacher.
20. The teacher treats equally to me and to my friends.
21. The teacher encourages students for active participation in the lesson.
22. The teacher provides feedback to every student about their performances on the activities and assignments.
23. The teacher provides tactics and advice on how to successfully complete an assignment.
24. The teacher provides tactics and advice on how to well prepare for tests.
25. The teacher provides feedback to every student individually about the test results.
26. The exams are related to the real content of the lessons.
27. The assignments given are related to real-life.
28. Test questions involve the language skills used in real life.

INTERVIEW SCHEDULE (in Turkish)

Görüşme Formu

Tarih:_____ / _____ /2016   Saat (başlangıç-bitiş): _____ / _____ Görüşmeci: Gülçin Mutlu

GİRİŞ

Merhaba, benim ismim Gülçin Mutlu. Necmettin Erbakan Üniversitesi İngilizce hazırlık programında öğretim görevlisi olarak çalışmaktayım ve aynı zamanda Orta Doğu Teknik Üniversitesinde doktora öğrencisiyim. İngilizce öğrenmede sebat etme ile sınıf ortamındaki çeşitli değişkenler arasındaki ilişki üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili olarak konuşmak istiyorum. Bu görüşmede amacım, öğrencilerin bu olası ilişki ile ilgili olarak ne düşündüklerini ortaya çıkarmaktır. Bu araştırmada ortaya çıkacak sonuçların İngilizce hazırlık programlarının öğrencilerin sebat etme davranışları artırmak üzere sınıf ve öğrenme ortamına yönelik yapılabilecek değişiklikler ve alınabilecek tedbirler hususunda katkıda bulunacağını ümit ediyorum.

a. Yaptığım tüm görüşmelerde verilen bilgiler sadece bu araştırma için kullanılacak ve verdiğiniz tüm bilgiler kesinlikle gizli tutulacaktır.

b. Görüşmeye başlamadan sizin bana sormak istediğiniz bir soru ya da herhangi bir isteğiniz varsa önce bunu öğrenmek istiyorum.

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c. İzin verirseniz görüşmeyi kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?

d. Görüşmenin yaklaşık 30 dakika süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

GİRİŞ SORULARI

1. Hangi lisans programına kayıtlısınız?
2. Daha önce herhangi bir İngilizce kursu ya da hazırlık eğitimi aldınız mı?
   a. Ne zaman?
   b. Ne kadar süre ile?
3. Lise de iken İngilizce seviyeniz nasıldı?
4. Kendinizi sebat etme (yılmadan devam etme) açısından nasıl görüyorsunuz?
5. İngilizce öğrenme konusundaki duygularınızı açıklar mısınız? Hoşunuza gitmesi, verdiğiniz önem, günlük yaşamına girmesi, vb.
6. İngilizce tv-film izleme, internette ingilizce kullanımı gibi ders dışı İngilizce ile etkileşiminiz var mıdır?

İÇERİK İLE İLGİLİ SORULAR

1. Dün katıldığınız son dersi anlatabilir misiniz? (Sınıf ortamı, yapılan etkinlikler, arkadaşlar, öğretmen vb.)
2. Bu derste sınıf öğrenme ortamındaki çeşitli faktörlerden en çok hangisi ya da hangilerinin sebat etmende etkili olduğunu düşünüyorsun? SONDA: Hangisi/Hangileri olumlu olarak etkilemiştir?

   Hangisi/Hangileri olumsuz olarak etkilemiştir?

3. Senin için sebat etme düzeyini artıracak ideal olan sınıf ortamını tanımlar mısın? SONDA: Şu anki sınıf ortamın böyle mi?

Neler aynı? Neler farklı?

Neler olmalı? Neler olmamalı?

4. İngilizceyi karşılaştığın sıkıntılara rağmen yılmadan devam ederek
    öğrenmeye çalıştığın herhangi bir ders anı hatırlıyor musun?

SONDA: Ne yapıyordun? Öğrenmeye çalıştığın konu ya da soru neydi?

Karşılaştığın sıkıntı ne idi?

Bu ders anını senin için özel kılan neydi?

Öğrenmeye çalıştığın o dakikada ne ya da neler senin sebat
etmene destek oldu?

5. Dersin düzenli, sistemli ve planlı olması, İngilizce öğrenirken sebat
    etmeni, kararlı olmanı etkiliyor mu?

SONDA: Ne şekilde etkiliyor?

ALT S1. İngilizce dersinin düzenli ve sistemli olduğu ve bunun senin
İngilizce öğrenme sürecini olumlu etkilediği ve İngilizce öğrenmeyi daha
çekici hale getirdiği bir ders olayı ya da anı anlatabilir misin?

6. Bana biraz İngilizce dersinin işlenişinden bahsedebilir misin? Ders
    nasıl işlenir? Derste neler yapılır?

SONDA: En çok hangi tür etkinlikler yapılır?

Öğrencilerin söz hakkı ya dersteki aktif rol alma durumu nedir?

ALT S2. İngilizce dersinin işlenişi ve derste yapılan etkinlikler ve sınıf
ortamı senin İngilizce öğrenirken sebat etmeni ve istekli olmanı nasıl
etkiliyor?

7. Sence İngilizce dersi öğretmeninin sınıftaki her türlü davranışının senin
    İngilizce öğrenirken pes etmene ya da etmeyip devam etmene herhangi
    bir etkisi var mıdır?

SONDA: Eğer varsa, ne şekilde? Örnek verebilir misin?

Kesinlikle hiçbir etkisi yoktur diyebilir misin?

ALT S3. Öğretmenin ne tür davranışları senin sebat etmene katkıda bulnur? Hangi tür öğretmen davranışları seni İngilizce öğrenme sürecinde daha da yıldırır? Neden?

8. Sınıfın fiziksel durumunun ve şartlarının İngilizce öğrenme sürecinde karşılaştığın zorlukları aşmanda bir etkisi var mıdır?
SONDA: Eğer varsa, ne şekilde? Neler hissedersin? Örnek verebilir misin?

Kesinlikle hiçbir etkisi yoktur diyebilir misin?

9. Sence kullandığınız basılı ders materyallerinin (kitaplar, worksheetler vb.) ya da teknolojik olanların İngilizce öğrenirken yılmadan devam etmende bir etkisi olabilir mi?
SONDA: Eğer varsa, ne şekilde? Neler hissedersin? Örnek verebilir misin?

Kullanılan materyaller içerik olarak ne tür materyallerdir? Gerçek yaşamla ilişkili midirler?

Kesinlikle hiçbir etkisi yoktur diyebilir misin?

10. İngilizce dersinin değerlendirilmesi sürecine baktığında verilen ödevlerin ve yapılan sınavların ive bunlara ilişkin çeşitli süreçlerin senin İngilizce öğrenirken yılmadan devam etme davranışına bir etkisi var mıdır?
SONDA: Ne şekilde? Neler hissedersin? Örnek verebilir misin?

11. Doğrudan sınıf içi ve sınavlar yoluyla değerlendirmenin hangi unsurları İngilizce öğrenme şevkini ya da heyecanını olumlu ya da olumsuz etkiliyor? Neden?
SONDA: Verebileceğin örnekler?

INTERVIEW SCHEDULE (in English)

Interview Schedule

Date:_____ / _____ /2016   time (start-finish): _____ / _____   Interviewer: Gülçin Mutlu

INTRODUCTION

Hello, my name is Gülçin Mutlu, from Necmettin Erbakan University and at the same time I am a Phd candidate at METU. I have been conducting research on the possibility of links between classroom learning environment characteristics and student persistence in English learning and I am here to talk to you about your perceptions about this topic. My hope is to investigate what the student perceptions are in relation to the possible associations. I hope findings from such an investigation may contribute to the changes to be made and precautions to be taken regarding the classroom and learning environment in order to increase the levels of persistence in learning English.

a. What you say to me is completely confidential. We do not pass on anything people tell us. We do not use names of individuals and school sites in anything we write.

b. Are there any further questions I can answer?

c. I'd like to tape our conversation. Is it OK with you?

d. And you are free for the next hour and a half, right? If you are OK, I would like to start.

BACKGROUND QUESTIONS

1. What is your university department?

2. Have you ever taken an English course before?

      a. When?

      b. How long?

3. How was your English when you were at the high school?

4. How would you assess yourself about being persistent?

5. Can you please talk about your opinions about learning English? (You like it or not, the importance you give to it and its being a daily activity for you and so on).

6. Are you exposed to English outside the English class such as through watching English TV and films and using English on the internet?

QUESTIONS ABOUT CONTENT AND PROCESS

1. Can you talk about the last class you attended yesterday? (Class atmosphere, the activities performed, friends and teachers etc.)

2. In this class, what do you think was the most influential factor or factors present in the classroom learning environment upon your persistence in learning English?

PROMPT: Which one/ones affected you positively?

      Which one/ones affected you negatively?

3. Can you please describe the ideal classroom environment that can increase your levels of persistence in learning English?

 PROMPT: Is your current class like this?

Which things are the same? Which things are the different?

What should be? What should not be?

4. Do you remember any English class time when you continue to learn English in spite of some difficulties you face?

PROMPT: What were you doing? What was the topic or exercise that you were trying to understand?

What was the difficulty you face?

What made this class special for you?

At the moment when you were striving to learn, what thing or things supported your learning?

5. Does the class being orderly and planned affect your persistence and decisiveness in learning English?

PROMPT: In what ways?

ALT Q1. Can you tell an instance when the English lesson was orderly and planned and this affected your English learning process positively and thus learning English became more interesting to you?

6. Can you please talk about the implementation of the English lesson? How does the lesson proceed? What is done in the lesson?

PROMPT: What is the degree of students' having a say and being active in the lesson?

 ALT Q2. How does the implementation of the English lesson and the activities performed in the English class and all classroom environment influence your persistence and motivation in English?

7. Do you think there is an effect of all types of behavior of your English teacher upon your swerving from or persevering in learning English?

PROMPT: If yes, in what ways? Can you give examples?

Can you say there is definitely no effect?

ALT Q3. What type of teacher behavior facilitates your persistence in learning English? What type of teacher behavior discourages you more in the process of learning English? Why?

8. Are there any effects of classroom physical conditions on your facing difficulties in learning English?

PROMPT: If yes, in what ways? How do you feel? Can you give examples?

Can you say there is definitely no effect?

9. Do you think the course materials (books, worksheets etc.) or technological materials you use have an influence upon your persistence in learning English?

PROMPT: If yes, in what ways? How do you feel? Can you give examples?

What is the type and content of the materials used? Are they related to real life?

Can you say there is definitely no effect?

10. Given the assessment procedures in the English class, do you think the assignments given and the tests administered or all other relevant procedures have an influence on your persistence in learning English?

PROMPT: In what ways? How do you feel? Can you give examples?

11. What elements or characteristics of the direct in-class and test-driven assessment affect your zest and excitement of learning English positively or negatively? Why?

PROMPT: Any examples?

APPENDIX I

INFORMED CONSENT FORM

ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU (INFORMED CONSENT FORM)

Bu araştırma, ODTÜ Eğitim Bilimleri Bölümü öğretim elemanlarından Prof. Dr. Ali Yıldırım danışmanlığında Eğitim Programları ve Öğretim Programı öğrencisi Gülçin Mutlu tarafından yürütülen, doktora çalışmasıdır. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Çalışmanın Amacı Nedir?

Araştırmanın amacı, katılımcıların İngilizce öğrenmede yılmadan devam etme durumları ve İngilizce sınıf ortamındaki eğitim-öğretim etkinliklerine ilişkin gözlemleri hakkında bilgi toplamaktır ve bu iki temel değişken arasındaki ilişkiyi araştırmaktadır.

Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?

Araştırmaya katılmayı kabul ederseniz, sizden beklenen, ilgili bir ankette ve de bir ölçekte yer alan bir dizi soruyu derecelendirme ölçeği üzerinde yanıtlamanız ve ilgili demografik bilgi edinmek için eklenmiş soruları cevaplamanızdır. Bu çalışmaya katılım ortalama olarak 10-12 dakika sürmektedir.

Sizden Topladığımız Bilgileri Nasıl Kullanacağız?

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Ankette, sizden kimlik veya kurum belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak, sadece araştırmacılar tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler toplu halde değerlendirilecek ve bilimsel yayımlarda kullanılacaktır. Sağladığınız veriler gönüllü katılım formlarında toplanan kimlik bilgileri ile eşleştirilmeyecektir.

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Katılımınızla ilgili bilmeniz gerekenler:

Anket, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır.

Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Eğitim Bilimleri Bölümü öğretim üyelerinden Prof. Dr. Ali Yıldırım (E-posta: aliy@metu.edu.tr) ya da doktora öğrencisi Gülçin Mutlu (E-posta: gmutlu@konya.edu.tr) ile iletişim kurabilirsiniz.

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad   Tarih   İmza

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CURRICULUM VITAE

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EDUCATION

Degree	Institution	Year of Graduation
MA	Bilkent University, MA TEFL	2008
BA	Dokuz Eylül University, ELT	2006
High School	Savaştepe Anatolian Teacher Trainee High School	2002

WORK EXPERIENCE

Year	Place	Enrollment
2012- Present	Necmettin Erbakan University, Konya	Lecturer
2011-2012	Osmangazi University, Eskişehir	Research Assistant
2006-2011	Dumlupınar University , Kütahya	Instructor

AWARDS & HONOURS

1-The first on the list of honor at graduation from the high school, Balıkesir Savaştepe Anatolian Teacher Trainee High School, 2002

2 -The first on the list of honor in the University Entrance Exam, Department of English Language Teaching, D.Eylül University, 2002

3-The first on the list of honor at graduation both from the Department and Faculty, D.Eylül University (graduated summa cum laude), 2006

4- The first on the list of honor at graduation from the MA TEFL program (graduated summa cum laude), 2008

5- TÜBİTAK National Scholarship Program for PhD Students Grantee, 2012

6- 2011-2012 Academic Year METU Graduate Course Performances Award, 2013

PUBLICATIONS

Berkil, G. (2009). *A Closer Look at Pronunciation Learning Strategies*. Saarbrücken, Germany: Verlag Dr Müller.

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İNGİLİZCE ÖĞRENME ORTAMI ÖZELLİKLERİ İLE İNGİLİZCE ÖĞRENMEDE SEBAT ETME DAVRANIŞI İLİŞKİSİ: BİR KARMA DESEN ÇALIŞMASI

Giriş

"Sebat Etme" herhangi bir işi ya da etkinliği yapmaya devam etmek anlamına gelmektedir. Çeşitli disiplinlerde sebat etme, anlam ya da göstergeleri bakımından farklı bakış açılarıyla ele alınmıştır. Birçok çalışmada sebat etme davranışı bir eğitim kurumuna devam etme ve okulda kalma olarak ele alınmaktadır (Hu, McCormick, & Gonyea, 2011; Wolniak, Mayhew, & Engberg, 2012; Gardner, Smythe, Clement, & Gliksman, 1976; Joo, Lim, & Kim, 2011; Ramage, 1990). Bu çalışmalarda ders ya da okula devam etme ya da bir programın bir üst düzeyine ya da bir sonraki yıla geçme gibi veriler sebat etme davranışına ait göstergeler olarak kullanılmışlardır (Poellhuber, Chomienne, & Karsenti, 2008). Ancak alan yazında sebat etmeyi bir öğrenci özelliği ya da öğrenim çıktısı olarak ele alan çalışmaların yetersiz olduğu görülmektedir. Sebat etmeye ilişkin bu bakış açısı öğrencilerin bir disiplin ya da konuyu öğrenmede karşılaştıkları engel ve sorunlara rağmen o sürece devam etmede gösterdikleri çaba olarak tanımlanabilir. Bu alandaki ulaşılabilir tek çalışma Duckworth ve arkadaşlarına (Duckworth, Peterson, Matthews, & Kelly, 2007) aittir ve araştırmacılar İngilizce "grit" adını verdikleri sebat etme kavramını genel bir yetenek gibi ele almış ve bu kavramı "uzun vadeli hedefler için tutku ve sebat olarak" tanımlamışlardır. Duckworth ve arkadaşları "grit" adını verdikleri sebat etme kavramına bir disiplin alanına vurgu yapmaksızın genel ve bilişsel olmayan bir yaşam becerisi olarak bakmışlardır ve bu kavramın başarı ile olan ilişkisini farklı profillere sahip örneklemler üzerinde

de ortaya koyan çalışmalar yapmışlardır. Bulunan en çarpıcı bulgu çalışmalarının sebat etme (grit) değişkeninin zekâ katsayısının etkisinin ötesinde başarılı olmak için daha anlamlı ve belirleyici bir faktör olduğudur.

Çalışma olarak en sıkıntılı alanlardan biri olarak görülebilecek yabancı dil öğreniminde de bu kavram bir üst düzeye ya da bir sonraki aşamaya devam etme yönündeki bakış açısıyla araştırılmıştır. Bu alandaki çalışmaların çoğu güdüsel ve tutumsal faktörleri ele almıştır ve bu faktörlerin Japonca ya da Fransızca gibi yabancı dilleri öğrenmede yılmadan devam etme durumuyla ilgili olduğu bulunmuştur (Erler & Macaro, 2011; Gardner et al., 1976; Ramage, 1990). Fakat adı geçen bu faktörlere ek olarak yabancı dil öğrenmede sebat etmeyi açıklayabilecek daha farklı faktörler ve değişkenler de söz konusu olabilir. Daha da önemlisi, yabancı dil olarak İngilizce öğrenmede sebat etmeyi ne bir üst basamağa devam durumu ne de bir öğrenci özelliği ve duyuşşsal bir öğrenim çıktısı olarak ele alan bir çalışma bulunamamıştır.

Eğitim araştırmaları çatısı altında öğrenme ortamı araştırmaları olarak adlandırılan özel bir araştırma alanından söz edilmektedir. Öğrencilerin öğrenme ortamına ilişkin algıları ile çeşitli bilişsel ve duyuşsal öğrenci ve öğrenme çıktıları arasındaki olası ilişkilerin araştırılması bu araştırma alanının en geleneksel yöntemini oluşturmaktadır (Fraser, 2002). Üstelik bu yöntem hem uluslararası alan yazında (örn. Chang, Hsiao & Chang, 2011; Dorman, Fraser, & Mcrobbie, 1997; Dorman, Fisher, & Waldrip, 2006; Taylor & Fraser, 2013; She & Fisher, 2002) hem de ulusal alan yazında (e.g. Arısoy, 2007; Pamuk, 2014; Rakıcı, 2007; Yerdelen, 2013) daha çok ortaokul düzeyi ve fen bilimleri alakalı disiplinlere ait sınıflarda kullanılmıştır. Bu bağlamda, öğrenme ortamı çalışmaları açısından yeni değişkenlerle, disiplin alanlarıyla, öğrenci gruplarıyla ve de yeni bağlamlarda ve de yeni yöntemlerle çalışılmış araştırmalara ihtiyaç olduğu ortaya çıkmaktadır.

İkinci dil öğrenme bakış açısıyla baktığımızda ise, Gardner'ın (2006) kültür ve eğitim ortamın ikinci dil öğrenmede motivasyonu ve motivasyonla alakalı diğer değişkenleri etkilediğine dair öne sürdüğü ve çok ses getiren bir modeli (İkinci Dil edinimin Sosyal-Eğitimsel Modeli) vardır ve bu model sebat etme ve öğrenme ortamı arasındaki olası ilişkinin varlığından açıkça bahsetmektedir. Benzer bir şekilde, yabancı ve ikinci dil öğrenimi ile ilgili bir takım araştırmacılarda gelecekteki çalışmaları diğer akademik disiplinlerdes sözü geçen motivasyona benzer kavramları ve özelliklede de eğitim psikolojisine ait olanları ikinci dil öğrenimi alan yazınına taşımaları ve böylece yeni kavramlar kazandırmaları hususunda teşvik etmektedir.

Yukarıdaki açıklamalar ışığında, bu çalışma İngilizce öğrenmede sebat etme konusunu bir öğrenci özelliği ya da bilişsel olmayan bir beceri bakış açısıyla, sebat etme ile ilişkili olabilecek hem kişisel hem de çevresel değişkenleri de (İngilizce dersi öğrenme ortamına ait çeşitli özellikler) ele alarak farklı bir disiplin alanında incelemeyi amaçlamaktadır. İngilizce dersi öğrenme ortamını oluşturan değişkenler a) ders planı ve organizasyonu, b) materyal ortam, c) iletişimsel yaklaşım-kaynaklı ders uygulamaları, d) öğretmen destek davranışları, e) değerlendirme uygulamaları hakkında geribildirim ve yönlendirme ve f) değerlendirme uygulamalarının gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu gibi kategoriler altında gruplandırılmıştır. Bu çerçevede, her bir boyutun öğrencilerin İngilizce öğrenmede sebat etme tutumlarıyla ilişkilerini açıklamak ilk amaç olarak ele alınmıştır. Bu amaca bağlı olarak, 3 temel araştırma sorusu çalışmaya yön vermiştir:

1. İngilizce dersi öğrenme ortamının hangi özellikleri, öğrenciye ait hangi özellikler ve bu sözü geçen her iki değişken bir arada kullanıldığında İngilizce öğrenmede sebat etme düzeyini ne oranda yordamaktadır?
2. İngilizce dersi öğrenme ortamını özellikleri ile İngilizce öğrenmede sebat etme düzeyi arasındaki ilişki bir takım öğrenci özelliklerine göre değişmekte midir?

3. Üniversite hazırlık programı öğrencilerinin İngilizce dersi öğrenme ortamının özellikleri ile İngilizce öğrenmede sebat etme düzeyi arasındaki ilişkiye yönelik görüşleri nelerdir?

Çalışmanın Önemi

Bu çalışma, sebat etme kavramını bir öğrenci özelliği ya da bilişsel olmayan bir beceri olarak inceleyerek ve de bu kavramı çeşitli çevresel değişkenler ile ilişkilendirerek, sebat etme kavramı ve onu etkileyebilecek çeşitli faktörlere kapsamlı bir bakış açısı sunmaktadır. Alan yazın sebat etme kavramına bir üst seviyeye devam durumunun bir göstergesi ve de bu göstergenin diğer bir takım duyuşsal değişkenlerle olan ilişkileri bakımlarından bir açıklama getirmektedir. Ancak, alan yazında bu kavram bir duyuşsal öğrenci çıktısı olarak ele alınmakta ve de bu açıdan bakıldığında çeşitli çevresel faktörlerle olan ilişkileri açıklamakta yetersiz kalmaktadır. Bu ilişkiler özellikle yabancı dil öğretimi açısından yeterli düzeyde ele alınmamıştır. Bu nedenle, bu çalışma yeni bir duyuşsal değişken üzerinde çalışması ve ikinci dil edinimine motivasyon tabanlı bir kavram ile bakması yanında, bu kavramı öğrenme ortamı özellikleri ile ilişkilendirmesi açısından önem taşımaktadır. Sebat etme ile öğrenme ortamı arasındaki ilişki bu kapsamda farklı bir kültürel ortamda, farklı bir okul düzeyinde ve farklı bir disiplin alanında ele alınacaktır. Bu çalışma sözü geçen iki temel değişken arasındaki ilişkiyi hem nitel hem de nicel yöntemlerle (karma araştırma deseni ile) araştırmaya çalışacaktır ve bu da bu alandaki alan yazına katkılarda bulunacaktır çünkü öğrenme ortamı araştırma alanında nicel ve özellikle de korelasyonel tabanlı çalışmalar daha baskındır (Fraser, 2002). Bu açıdan, yeni yöntemlerin ve özellikle nicel ve nitel verilerin birbirini tamamlamasına ve sonuçları daha da zenginleştirmesine katkı sağlayan karma desen çalışmalarının yapılması ayrı bir önem taşımaktadır.

Yukarıda belirtilenlere ek olarak, çalışmada kullanılan veri toplama araçları araştırmacı tarafından geliştirilmiş ve alan yazının kullanımına sunulmuştur. Özellikle öğrenme ortamına ilişkin veri toplama aracı program değerlendirme ve eylem araştırması amaçlarıyla kullanılabilmesi açısından önem taşımaktadır. Öğrenme ortamına ilişkin veri toplama aracı, hizmet halindeki öğretmenlerimizin sınıflarında var olan sıkıntıların tespiti ya da istenilen ya da hayal edilen durum ve özelliklerin belirlenmesinde gerçek durum ve tercih edilen durum formatlarında ifadelendirilerek sınıf eylem araştırması amaçlarıyla kullanıldığında, yabancı dil özellikle de İngilizce sınıflarının iyileştirilmesine büyük faydalar sağlayacaktır.

Çalışmanın bulgularına dayalı olarak, İngilizcede sebat etme düzeyi ile öğrenme ortamının boyutları arasındaki olası ilişkiler, sebat düzeyi daha yüksek öğrenciler yetiştirmede hangi boyutların daha etkili olduğunu ortaya koyacaktır. Buradan elde edilebilecek kanıt ve bulgular yabancı dil öğretmeni yetiştiren programların ve de hizmete başlamış yabancı dil öğretmelerine hizmet içi olarak verilen öğretim programlarının içeriklerinin şekillendirilmesinde yol gösterici olacaktır. Özellikle öğretmen özellikleri ve öğretmenin kontrolünde olan çeşitli boyutlara ait sonuçlar öğretmen yetiştirme alanı için katkı sağlayacaktır.

Yöntem

Araştırma Deseni

Çalışmada nitel ve nicel araştırma desenlerini harmanlayan karma desen türlerinden çeşitleme deseni kullanılmıştır (the convergence model) çünkü amaç nicel ve nitel yöntemler yoluyla elde edilen bulguların birleştirilmesi, çeşitlendirilmesi ve karşılaştırılmasıdır (Creswell, 2002; Creswell & PlanoClark, 2007). Nicel açıdan bakıldığında bu bir korelasyonel çalışmadır ve İngilizce dersi öğrenme ortamı, öğrenci özellikleri ve İngilizce öğrenmede sebat etme değişkeleri arasındaki ilişkileri sorgulamaktadır. Nitel açıdan bakıldığında ise, bu çalışma bir olgubilim (fenomenoloji) çalışmasıdır çünkü çalışmanın iki

ana değişkeni arasındaki ilişkiler bu kez nitel görüşmeler yoluyla incelenmektedir.

Evren ve Örneklem

Araştırma evrenini Türkiye'deki devlet üniversitelerinin yabancı diller yüksekokulları ya da bölümlerine bağlı İngilizce hazırlık programlarında öğrenim görmekte olan, tüm A1 yeterlik düzeyine sahip hazırlık öğrencileri oluşturmaktadır. Bu evrene dayalı örneklem, kümeleme tekniği kullanılarak belirlenmiştir. Kümeler öncelikle üniversitelerin bulunduğu coğrafi bölgeler ve sonrasında da üniversitelerin kuruluş yılları dikkate alınarak belirlenmiştir. İkinci bir örneklem belirleme kriterini ya da basamağını öğrencilerin hazırlık programlarının durumu (zorunlu ya da seçmeli) ve de öğrencilerin yeterlik düzeyleri oluşturmaktadır. Çalışmaya Türkiye'nin yedi coğrafi bölgesindeki en eski hazırlık okullarının sadece zorunlu ve A1 düzey sınıflarına kayıtlı öğrenciler dâhil edilmişlerdir. A1 düzeyindeki öğrencilerin İngilizce öğrenme sürecinin başında olmaları ve bu sebeple öğrenme çabası içerisinde olmaları ve akademik yılın başından beri ortalama en az iki aydır hazırlık programlarına kayıtlı olmaları sebebiyle program, öğrenme ve sınıf ortamındaki öğelere ilişkin yeterli deneyime ve bilgiye sahip oldukları düşünülerek çalışmanın örneklemini oluşturmalarına karar verilmiştir. Bu şekilde, çalışmaya 1365 İngilizce hazırlık programı öğrencisi katılmıştır. Çalışmanın nitel kısmına ise anketleri cevaplamış olanlar arasından 20 gönüllü öğrenci maksimum çeşitlilik örneklemesini (Patton, 2002) sağlayacak şekilde özellikle üniversitedeki bölümleri ve cinsiyetleri göz önünde bulundurularak seçilmiştir. Nitel bölüme katılan öğrenciler sadece Gazi ve Karabük Üniversiteleri'ne kayıtlı öğrencilerdir ve araştırmacıya en elverişli olacak şekilde bu örnekleme karar verilmiştir.

Veri Toplama Araçları

Çalışmada iki temel veri toplama aracı kullanılmıştır: a) İngilizce Öğrenmede Sebat Etme Ölçeği ve b) İngilizce Öğretme-Öğrenme Etkinlikleri

Anketi. Her iki veri toplama aracı da konularla ilgili alan yazın taramaları, alan yazında var olan ölçek ve anketlerin incelenmesi ve ölçme aracı geliştirmede dikkat edilmesi gereken teorik bilgiler dikkate alınarak hazırlanmıştır. Madde havuzlarının oluşturulmasını takiben, uzman görüşleri alınmıştır ve uzman görüşlerine göre araçlarda gerekli düzenlemeler yapılarak pilot çalışma aşamasına geçilmiştir. İngilizce Öğrenmede Sebat Etme Ölçeği için iki adet ön pilot çalışma yapılmış ve faktör yapıları Temel Bileşenler Analizi ve Açımlayıcı Faktör Analizleri ile belirlenmiştir. Esas çalışmada ise faktör ve madde yapısı doğrulayıcı faktör analizi ile doğrulanmıştır. İngilizce Öğretme-Öğrenme Etkinlikleri Anketi içinse sezgisel-rasyonel veri geliştirme yaklaşımından (Fraser, 1986, aktaran Waldrip, Fisher & Dorman, 2008; Hase & Goldberg, 1967) yola çıkılmış ve faktör yapısı ve maddelerin toplandıkları ana çatılar hem uzman görüşleri hem de Temel Bileşenler Analizi sonuçlarına göre belirlenmiştir. Öğrenci özelliklerini öğrenmek amacıyla bir de öğrenci özellikleri bilgi toplama sayfası oluşturulmuştur. Pilot uygulamalar sonrasında bir kez daha uzman görüşüne sunulan araçlar son hallerini aldıktan sonra ODTÜ Uygulamalı Etik Araştırma Merkezi'ne başvurulmuş ve buradan çalışmada kullanılacak araçların etik açıdan uygun olduğunu gösterir bir onay belgesi alınmıştır.

Veri Toplama Süreci

Araştırmacı Türkiye'nin yedi coğrafi bölgesindeki yedi farklı hazırlık okulundan veri toplamıştır. Uygulamalara geçmeden önce araştırmacı uygulama yapılacak kurumların idarecileri ve sonrasında bu idarecilerin yönlendirdikleri birim ve bölüm sorumluları ya da anket ve uygulamalardan sorumlu öğretim elemanları ile bizzat iletişime geçmiştir ve öğrenci sayısı, gruplar ve öğrenci düzeyleri gibi uygulamanın hedef kitlesini sağlamak üzere temel bilgileriedinmiştir. Böylece, kurumların uygulama açısından müsaitlikleri belirlenmiş ve hedef katılımcı kitlesiyle uygulama yapmak için kurumların uygunluk durumlarına göre tarih ve saat içeren bir çizelge hazırlanmıştır. Araştırmacı bu takvime göre çoğu uygulamaya şahsen iştirak

etmiştir. Araştırmacının uygun olmadığı hallerde kullanmak üzere, veri toplamaya ilişkin detaylı ve bilgilendirici bir doküman hazırlamıştır ve araştırmacının imkânı dâhilinde ulaşamadığı yerlerdeki ilgili kişilere bu formlar iletilmiş ve bu formların yönlendiriciliğinde veri toplamaları rica edilmiştir.

Anket uygulamalarını takiben, iki üniversitede (Karabük ve Gazi Üniversiteleri) gönüllü olan katılımcılarla kurumlarda sorumlu öğretim elemanları aracılığıyla iletişime geçilmiş ve öğrencilerin uygun olduğu saatlerde ortalama 20-25 dakika süren görüşmeler yapılmıştır. Görüşmelerde katılımcıların izinleri alınarak ses kayıt cihazı kullanılmış ve görüşmeler kurumlardaki öğretim elemanlarının izniyle odalarını kullanmak suretiyle ya da boş çalışma salonu ya da derslik gibi ortamlar için kurum idarecilerinden izin alınarak, gürültüsüz ve rahat ortamlarda gerçekleştirilmiştir.

Verilerin Analizi

Çalışmaya ait nicel verilerin analizi için SPSS programı kullanılmıştır. Verilerin temizlenmesini takiben veri toplama araçlarına yönelik geçerlik ve güvenirlik çalışmaları yapılmıştır ve bu bağlamda faktör analizleri (açımlayıcı ve doğrulayıcı), Cronbach Alpha testleri uygulanmıştır. Araştırma sorularına bağlı olarak nicel veriler üzerinde regresyon analizleri yapılmıştır ve her bir regresyon analizinden önce gerekli varsayımlar test edilmiştir. Çalışmaya ait nitel veriler içinse içerik analizi yöntemi kullanılmıştır. Araştırmacı araştırmanın özelliklerini dikkate alarak, nitel veri kodlama stratejisini önce alan yazına dayalı genel kodları belirlemek ve sonrasında da verileri analiz ettikçe ortaya çıkan ek kodları da bu listeye eklemek olarak belirlemiştir (bknz. "midway approach", Miles & Huberman, 1994, p. 61).

Bulgular

Katılımcı Özellikleri

Katılımcılardan cinsiyet, yaş, aile gelir düzeyi gibi demografik bilgilerin yanı sıra, eğitim durumlarını ve eğitim geçmişlerine ilişkin ve de İngilizce dersleri dışında İngilizce ile meşgul olma durumlarını sorgulan bilgilerde toplanmıştır. Bu veriler ışığında, öğrencilerin yarıdan fazlasını erkek öğrenciler oluşturmaktadır (% 54.4) ve öğrencilerin çoğu aylık ortalama geliri 5000 TL ve daha düşük olan ailelerden gelmektedir. Yaş dağılımı dikkate alındığında öğrencilerinin çoğunun 18 (% 40.1) ve 19 (%32.2) yaş gruplarına ait olduğu gözlemlenmektedir. Eğitim verilerine bakıldığında ise, öğrencilerin çoğunun fen bilimleri ağırlıklı bölümlere kayıtlı oldukları görülmektedir (% 79.5). Öğrencilerin büyük bir çoğunluğu daha önce bir İngilizce hazırlık eğitimi ya da kursu almadığını belirtmiştir (% 82.1). Benzer bir şekilde, öğrencilerin çoğu liseden mezun olduklarındaki İngilizce düzeylerini zayıf olarak nitelendirmiştir (% 45.3), ve bu oranı % 38.3 ile lise mezuniyet düzeyini orta düzey olarak tanımlayan öğrenciler takip etmektedir. Ders dışı İngilizce ile meşgul olma durumlarına bakıldığında, tüm öğrencilerin üçte birinin sıklıkla (% 32.2), %9.6' sının daima ve geriye kalan üçte birinin ise bazen sıklık derecesinde (%33.2) televizyon veya internetle ilişkili İngilizce bir kaynağı takip ettiği belirlenmiştir. Bu şekilde bir görsel ve işitsel kaynağı nadiren (% 15.9) ve hiç (% 4.8) olarak yanıtlayan öğrencilerin oranı tüm öğrencilerin beşte birini geçmemektedir. Diğer ders dışı İngilizce ile meşgul olma durumunu sorgulayan değişkene, İngilizce olarak basılı yayınları (kitap ya da dergi) takip etme oranlarına bakıldığında ise, öğrencilerin çoğunun daima (% 1.8) ya da sıklıkla (% 8.6) oranlarda değil de bazen sıklık derecesinde (% 33.3) İngilizceyi takip etme durumları olduğu belirlenmiştir. Basılı İngilizce kaynaklarla ders dışı meşgul olmadurumu katılımcılarca daha çok nadiren (% 30.8) ya da hiç (% 20.6) olarak yanıtlanmıştır.

Öğrenci özellikleri ya da öğrenci geçmişi değişkenleri olarak kabaca tabir edilebilecek bu değişkenlere ek olarak öğrencilerin sebat düzeyleri ve İngilizce dersi öğrenme ortamı özelliklerine karşı olan algılarına ilişkin veriler de toplanmıştır. Bu bağlamda, öğrencilerin İngilizce hazırlık programlarındaki öğrenim süreçlerindeki sebat etme düzeyleri 1'den (beni asla yansıtmıyor) 5' e (beni tamamen yansıtıyor) uzanan ölçek üzerinde, orta düzey olarak tespit edilmiştir ($M = 3.26$, $SD = . 79$). Öğrenme ortamına ilişkin veriler incelendiğinde ise, 1'den (asla) 5'e (daima) uzanan ölçek sıklığı üzerinde, ortalama değerlerin en yüksek ders planı ve organizasyonu alt ölçeğinde ($M = 4.23$, $SD = . 77$) ve en düşük değerlendirme etkinliklerinin otantikliği ve gerçek durumla uyumu ($M = 3.45$, $SD = . 93$) boyutunda görülmektedir. Özetle, İngilizce hazırlık programı öğrencileri öğrenme ortamına ilişkin altı ana boyut için en azı ortadan-yükseğe düzeyde olmak üzere, genellikle olumlu algılara sahiptir.

Araştırma Sorularına Ait Bulgular

İngilizce Hazırlık Programı Öğrencilerinin Kişisel Özelliklerinin ve İngilizce Sınıf Ortamına ilişkin Algılarının Onların İngilizce Öğrenmede Sebat Etme Düzeylerini Yordayıcılığı

Çalışmanın bu ilk araştırma sorusunda ele alınan bu iki ana grup değişken ve öğrencilerin İngilizcede sebat etme düzeyleri arasındaki olası ilişkileri belirlemek için Regresyon Analizi yapılmıştır. Bu bağlamda, regresyon analizleri üç basamakta test edilmiştir: a) sadece öğrenci özelliklerin ve sebat etmenin olduğu model, b) sadece İngilizce öğrenme ortamına ait altı değişken ve sebat etmenin olduğu ikinci model ve de son olarak c) hem öğrenci özellikleri hem de öğrenme ortamı değişkenlerinin bir arada olduğu son model olmak üzere toplam üç adet ayrı regresyon modeli elde edilmiştir. Tüm analizlerden öncesinde, istatistik varsayımlar test edilmiştir ve regresyon analizlerini yapmak için herhangi bir varsayımın ihlal edilmediği görülmüştür.

Araştırma sonuçları hem öğrenci özelliklerinin hem de öğrenme ortamına ait değişkenlerin öğrencinin sebat etme düzeyi ile ilişkili olduğunu göstermiştir. Ancak kullanılan üçüncü basamak regresyon analizi sonuçları bu iki ana grup değişkenin birlikte kullanıldığında çalışmanın bağımlı değişkeni olan öğrencilerin sebat etme düzeyi üzerinde yordayıcılık güçlerinin arttığını göstermiştir. Hem öğrenci özellikleri hem de öğrenme ortamı değişkenlerinin bir arada olduğu son modele ait sonuçlar oluşturulan modelin anlamlı olduğunu, $F(14, 1009) = 26.50$, $p < .001$ ve model tarafından açıklanan toplam varyansın (R^2) % 26 düzeyinde olduğunu ortaya koymuştur. Üçüncü basamaktaki sekiz öğrenci değişkeni ve altı İngilizce dersi sınıf ortamına ait boyutları içeren regresyon analizinin sonuçları Tablo 1'de verilmiştir.

Tablo 1

Öğrenci Özellikleri ve Sınıf Ortamı Değişkenlerinin Birlikte Sebat Etme Düzeyini Yordadığı Regresyon Analizi Sonucu

Değişkenler	B	SE B	ß	t	p
1. ders planlama ve organizasyon	-0.32	0.12	-.10	-2.66	.008
2. materyal ortamı	0.81	0.13	.24	6.39	.000*
3. öğretmen destek davranışları	0.35	0.12	.12	2.97	.003
4. iletişimsel yaklaşım-kaynaklı ders uygulamaları	-0.13	0.17	-.03	-.77	.440
5. geribildirim ve yönlendirme (değ.)	0.09	0.18	.02	.53	.597
6. gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluk (değ.)	0.56	0.18	.11	3.10	.002
7. cinsiyet	-1.22	0.79	-.04	-1.54	.124
8. yaş	0.58	0.27	.06	2.12	.035
9. üniversite bölüm alanı	0.56	1.06	.02	0.53	.596
10. aile gelir düzeyi	-3.16	0.62	-.14	-5.15	.000*

Tablo 1 (devamı)

11. daha önce alınan İngilizce dersler	0.04	1.10	.00	0.03	.974
12. Algılanan lise mezuniyet İngilizce düzeyi	1.35	0.54	.07	2.51	.012
13. görsel-işitsel kaynaklara dayalı ders dışı meşgul olma	-1.05	0.44	-.08	-2.40	.017
14. görsel-basılı kaynaklara dayalı ders dışı meşgul olma	-3.91	0.45	-.27	-8.74	.000*

Not. R^2 = .26 (p < .001).

Tabloda görüldüğü üzere, aile gelir düzeyi, İngilizce öğrenme ortamının materyal ortamı boyutu ve görsel-basılı kaynaklara dayalı ders dışı İngilizce ile meşgul olma olmak üzere üç değişken İngilizce öğrenmede sebat etme düzeyi ile anlamlı olarak ilişkilidir. İlişkilerin yönüne bakıldığında ise, aile gelir durumu dışındaki diğer iki değişkenin İngilizce öğrenmede sebat etme davranışı ile olumlu olarak ilişkili olduğu görülmektedir.

Öğrenme Ortamı ve Sebat Etme Arasındaki İlişkinin Öğrenci Özgeçmiş Değişkenlerinin Alt Boyutlarının Ayırt ediciliğine Göre İncelenmesi

Çalışmanın bu ikinci araştırma sorusunda İngilizce hazırlık programı öğrencilerin İngilizcede sebat etme düzeyleri ile onların İngilizce dersi öğrenme ortamının altı boyutuna ilişkin algıları arasındaki ilişki öğrenci özellikleri diye adlandırılan sekiz adet değişkenin ayırt ediciliği gözetilerek incelenmiştir. Diğer bir deyişle, bu araştırma sorusu araştırılan iki temel değişken arasındaki ilişkinin öğrenci özelliklerine ait alt gruplarda farklılaşıp farklılaşmadığını incelemeyi amaçlamaktadır. Söz konusu ilişkiyi incelemek amacıyla regresyon analizlerinin yapılmasının öncesinde, öğrenci özellikleri diye belirtilen sekiz değişkenin her biri var olan alt boyutlarına ayrılmış ve böylece regresyon analizlerini yapmak için her bir öğrenci özelliğinin alt grubu olan veri setleri elde edilmiştir. Örneğin cinsiyete ait öğrenci değişkeni kızlar ve erkekler olarak iki ayrı veri setine ayrılmıştır. Diğer öğrenci özellikleri değişkenleri ise istatiksel olarak mevcut analiz yapılabilecek sayıyı dikkate

almak üzere kimi zaman seçeneklerin birleştirilmesi yoluyla farklı sayılarda veri setlerine bölünmüşlerdir. Oluşturulan veri setleri üzerinde ayrı ayrı regresyon analizleri yapılmıştır. Bu analizlerde amaç bir öğrenci özelliğine ait alt gruplar karşılaştırıldığında öğrenme ortamına ait hangi boyutlar hangi alt grupta etkilidir ya da farklılaşmaktadır sorusuna cevap aramaktır.

Her bir öğrenci özelliği alt boyutunda yapılan regresyon analizleri öğrenci özelliklerinin etkisi dahil edildiğinde bile İngilizce dersi öğrenme ortamı ile öğrencilerin İngilizcede sebat etme düzeyleri arasında anlamlı bir ilişkinin varlığını doğrulamıştır. Ancak her bir öğrenci özelliğine ait belirlenen alt gruplarda yapılan regresyon analizleri İngilizce öğrenme ortamı özelliklerinin yordayıcılığının bir öğrenci özelliğinin alt gruplarında farklılaştığını göstermektedir. Öğrenci özelliğine ait alt veri setlerinde gerçekleştirilen regresyon analizlerine bağlı olarak öğrencilerinin İngilizcede sebat etme düzeylerindeki varyansı anlamlı olarak açıklayan İngilizce öğrenme ortamı yordayıcılarına ait sonuçlar her bir öğrenci özelliği alt grubuna göre özetlenerek Tablo 2'de sunulmuştur.

Tablo 2

İngilizcede Sebat Etme Düzeyini Anlamlı Olarak Yordayan İngilizce Dersi
Öğrenme Ortamı Değişkenlerinin Her Bir Öğrenci Özelliği Alt Veri Seti İçin
Sonuçları

Öğrenci Özellikleri (alt gruplar bazında)	Manidar Olan İngilizce Öğrenme Ortamı Özellikleri
Cinsiyet	
Kız	Materyal ortamı (+)
	Öğretmen destek davranışları (+)
Erkek	Materyal ortamı (+)
	Öğretmen destek davranışları (+)
	Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu (+)
Üniversite Bölüm Alanı	
Fen bilimler alakalı	Materyal ortamı (+)
	Öğretmen destek davranışları (+)
	Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)
Sosyal bilimler alakalı	Materyal Ortamı (+)
Aile Gelir Düzeyi	
2000 TL'den fazla	Dersi planlama ve organizasyon(-)
	Materyal ortamı (+)
	Öğretmen destek davranışları(+)
	Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)
2000 TL'den az	Materyal ortamı (+)
	İletişimsel yaklaşım-kaynaklı ders uygulamaları (-)

Tablo 2 (devamı)

Algılanan lise mezuniyet İngilizce düzeyi	
Zayıf	Materyal ortamı (+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu (+)
Orta	Materyal ortamı (+)
İyi & Çok İyi	Materyal ortamı (+) Öğretmen destek davranışları (+)
Daha önce alınan İngilizce dersler	
Evet	Materyal ortamı (+)
Hayır	Materyal ortamı (+) Öğretmen destek davranışları(+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)
Görsel-işitsel kaynaklara dayalı ders dışı meşgul olma	
Her zaman & Sık sık	Dersi planlama ve organizasyon (-) Materyal ortamı (+) Öğretmen destek davranışları (+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu (+)
Bazen ve daha az	Materyal ortamı (+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)
Görsel-basılı kaynaklara dayalı ders dışı meşgul olma	
Her zaman & Sık sık	Materyal ortamı (+)
Bazen ve daha az	Dersi planlama ve organizasyon(-) Materyal ortamı (+) Öğretmen destek davranışları (+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)

Tablo 2 (devamı)

Yaş	
20 yaş altı	Materyal ortamı (+) Öğretmen destek davranışları (+) Değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu(+)
20 yaş ve üzeri	Materyal ortamı (+)

Not. (-) negatif yöndeki ilişkiyi; (+) pozitif yöndeki ilişkiyi temsil etmektedir.

Sonuçlara bakıldığında, İngilizce öğrenme ortamının materyal ortamı boyutunun öğrenci özelliklerinin her bir alt boyutunda öğrenci sebat düzeyini manidar ve olumlu yönde yordayan bir değişken olduğu gözlemlenmektedir. Bir öğrenci özelliğine ait alt boyutlar karşılaştırıldığında ise bazı öğrenme ortamı değişkenlerinin aynı öğrenci özelliği değişkenin alt boyutlarına farklılık gösterip anlamlı olma durumunu yitirdiği gözlemlenmektedir. Örneğin, erkek ve kız öğrenciler için İngilizce öğrenmede sebat etme düzeyini hem materyal ortamı hem de öğretmen destek davranışları anlamlı ve olumlu yönde yordamakta iken, öğrenme ortamının diğer bir boyutu olan değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutu sadece erkek grubu için İngilizce öğrenmede sebat etme düzeyini olumlu yönde etkileyen bir değişkendir. Aynı boyut, kızlar grubu üzerinde sebat düzeyi ile ilişkilendirilebilecek anlamlı bir etkiye sahip değildir. Benzer bir şekilde, öğrenme ortamına ait iki özellik olan öğretmen destek davranışları ve değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutları fen ağırlıklı üniversite bölümlerinden gelen öğrenciler için onların sebat etme düzeyini etkileyen anlamlı bir değişken iken, sosyal bilimler alakalı bölümlerden gelen öğrenciler için herhangi bir etkileri söz konusu değildir.

Aile gelir durumu değişken alt gruplarına bakıldığında ise, daha yüksek aile gelir durumuna sahip öğrencilerden oluşan grup için sebat düzeyi ve öğrenme ortamı arasındaki ilişki araştırıldığında, öğrenme ortamının ders planlama ve organizasyon, sınıfa ait materyal ortamı, öğretmen destek davranışları ve de

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değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutlarının anlamlı bir etkisi olduğu görülmektedir. Daha düşük gelir durumuna sahip ailelerden gelen öğrencilerde ise sebat etme düzeyinin öğrenme ortamının materyal ortamı ve iletişimsel yaklaşım-kaynaklı ders uygulamaları ile ilişkilendirebileceği görülmektedir. Algılanan lise mezuniyet İngilizce düzeyi alt gruplarına bakıldığında, öğrenme ortamının değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutunun öğrenci sebat düzeyini mezuniyet düzeyini sadece zayıf olarak yorumlayan grup için anlamlı olarak yordadığı görülmektedir. Öğrenme ortamının öğretmen destek davranışları boyutu ise mezuniyet yeterlik düzeyini iyi ya da çok iyi olarak tanımlayan gruplar için anlamlı bir yordayıcıdır. Benzer bir farklılaşma daha önce İngilizce eğitimi alan ve almayanlar arasında da gözlemlenmektedir. Öğretmen destek davranışları ve değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutları daha önce hiç İngilizce ders deneyimi olan grupta değil de bir İngilizce ders deneyimi olan grubun sebat etme düzeyi için anlamlı bir yordayıcıdır.

İngilizce dersi öğrenme ortamının ders planlama ve organizasyon ve öğretmen destek davranışları boyutlarının görsel-işitsel kaynaklara dayalı ders dışı İngilizce ile meşgul olma durumlarını daha yüksek olarak tanımlayan öğrenci grubu için İngilizce sebat etme düzeyi ile anlamlı olarak ilişkili olduğu bulunmuştur. Bu iki boyut ders dışı İngilizce ile meşgul olma durumlarını daha düşük seviyelerde olarak tanımlayan öğrencilerin sebat düzeyi ile anlamlı bir ilişkiye sahip değildir. Görsel-işitsel kaynaklara dayalı ders dışı İngilizce ile meşgul olma durumu değişkenine ait iki alt gruba bakıldığında ise, yukarıdaki ders dışı İngilizce ile meşgul olma durumunu tersi bir durum söz konusudur. Dersi planlama ve organizasyon, öğretmen destek davranışları ve değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutlarının İngilizce sebat etme düzeyi ile anlamlı olarak ilişkili olduğu, bu kez görsel-basılı kaynaklara dayalı ders dışı İngilizce ile meşgul olma

durumlarını daha düşük seviyelerde tanımlayan öğrenci grubu için söz konusudur.

Son olarak, yaş değişkenine ait iki alt veri setinde yapılan analizlerde, öğretmen destek davranışlarıvedeğerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutlarının daha büyük yaş gruplarındaki değil de daha düşük yaş gruplarındaki öğrenciler için onların sebat etme düzeylerini açıklamada anlamlı bir yordayıcı olduğu sonucuna varılmıştır. Burada yukarıda bahsi geçen varyansı açıklamada tek başlarına anlamlı olan yordayıcıların yanında, kullanılan regresyon tekniği sebebiyle, modele dahil edilen tüm bağımsız değişkenlerin birlikte açıklayacağı ortak varsayansın varlığını da hatırlatmak gerekmektedir. Ancak araştırma sorusunun amacına yönelik olarak açıklanan özel ya da ortak varsayansa ait derece ve oran değerlerine tek tek değinilmemiştir; çünkü, bu soru hangi yordayıcılar tek başlarına hangi öğrenci özelliği alt gruplarında etkili olabilmektedir onu sorgulamaktadır.

İngilizce Hazırlık Programı Öğrencilerinin İngilizce Dersi Sınıf Ortamına ait Çeşitli Özelliklerile Onların İngilizce Öğrenmede Sebat Etme Düzeyleri Arasındaki Olası İlişkiye Yönelik Görüşleri

Bu çalışmanın üçüncü araştırma sorusu ilk iki araştırma sorusu ile nicel olarak test edilen İngilizce dersi sınıf ortamının altı boyutu ile İngilizce öğrenmede sebat etme düzeyi arasındaki ilişkiyi bu kez nitel olarak araştırmayı ve böylece nicel sonuçların nitel sonuçlarla örtüşüp örtüşmediğini tespit etmeyi amaçlamaktadır. Öğrencilerin İngilizce dersi sınıf ortamına ait altı boyut ile onların İngilizce öğrenme sürecinde gösterdikleri sebat davranış arasındaki olası ilişkiye ait görüşleri görüşmeler yoluyla araştırılmıştır. Sonuçlar çalışmanın nitel bölümüne katılan üniversite İngilizce hazırlık programı öğrencilerinin her bir altı sınıf öğrenme ortamı özelliğini kendilerinin İngilizce öğrenirken gösterdikleri sebat düzeyi ile ilişkilendirdiklerini göstermektedir. Ayrıca öğrenciler her bir boyuta ait ne gibi alt özelliklerin onların sebat düzeyi

üzerinde etkili olduğuna dair araştırmanın dayandığı temel araştırma problemini daha da aydınlatıcı bilgiler vermişlerdir.

Ders planı ve organizasyonu öğrenme ortamı boyutu, öğrencilerce ankette sorgulanan öğretmen-odaklı plan ve organizasyon yapısın aksine daha kurumsal bir bakış açısıyla algılanmış ve bu şekliyle İngilizce öğrenmede sebat düzeyi ile ilişkilendirilmiştir. Bu bağlamda, en çok tekrar eden temalardan biri hazırlık programı sınıflarındaki hatalı seviyelendirme problemleridir. Özetle, öğrenciler kendi seviyelerine uygun sınıflara yerleştirilmediklerinde sebat etme düzeylerinin düştüğünü ve daha çabuk yıldıkları dile getirmişlerdir. Sıklıkla bahsedilen ve öğrencilerin sebat etme düzeyini olumsuz olarak etkileyen diğer bir planlama ve organizasyon özelliği ise kimi İngilizce öğretmenlerinin ders kitabı ve onun sağladığı programı ısrarla ve harfiyen takip etme arzusudur. Bu şekilde öğrenciler dersin sanki öğretmenin kontrolünde olmadığı, ders planının ne öğretmeni ne de öğrencileri dikkate almadığı ve de dersin hiçbir esneklik sunmadığı gibi kafalarında oluşturdukları negatif algılarla sebat etme isteklerinin engellediğini dile getirmişlerdir.

Fiziksel şartlar ve ders materyalleri olarak iki ayrı grupta incelenen İngilizce dersi materyal ortamı boyutuna ilişkin nitel sonuçlar, sıraların büyüklüğü ve rahatlık derecesi, ışıklandırma, tavan seviyesi, ısınma gibi olumsuz fiziksel şartların öğrencilerin sebat etme düzeyini olumsuz olarak etkilediğini göstermiştir, ve bu olumsuz etkiaslında bu olumsuz koşulların verdiği uyku hali, umutsuzluk ve depresif ruh halinin aracılığında gerçekleşmektedir. İngilizce öğrenmede sebat etme düzeyini olumlu yönde etkileyen fiziksel şartlar arasında kullanılan teknoloji destekli materyaller ve bunların düzgün çalışması sıkça bahsedilmiştir. Kullanılan ders materyallerine bakıldığında ise, katılımcılar gerçek yaşamı konu alan ve gerçek yaşamda uygulanabilirliği olan içeriklerin onların İngilizce öğrenme güdülerini ve şevkleri artırdığı yönünde görüş bildirmişlerdir. Ders materyallerine ilişkin görüşünü bir öğrenci şöyle belirtmiştir:

Ders kitabımızda sunulan konulardan genel olarak memnunum. Fakat gerçek yaşamda daha çok ihtiyaç duyabileceğimiz konuların olmasını beklerdim. Şimdi kitabımızda ulaşım konusu var ve bu konu gerçekten güzel çünkü biz yurt dışına gittiğimizde böyle bir içerik işimize yarayabilir. Ben gerçek yaşantımıza uygulayabildiğimiz içerikleri seviyorum. Eğer bir şeyi seversem de daha da çok öğrenmek ve daha çok denemek istiyorum.

İletişimsel yaklaşım-kaynaklı ders uygulamaları boyutuna bakıldığında, öğrenciler dört dil becerisinin bir arada sunulduğu iletişimsel yaklaşıma dayalı öğretimi İngilizce öğrenmede sebat etme açısından faydalı bulduklarını ve özellikle de konuşma becerisi üzerine yapılan etkinliklerin sebat etme düzeylerini olumlu yönde etkilediğini belirtmişlerdir. Buna karşılık dilbilgisine dayalı öğretim ise sebat etme düzeyi açısından tam tersi olumsuz bir etkiye sahiptir. Öğretmenin derste İngilizce konuşması, dil oyunlarına ve iletişime dayalı aktivitelere yer verilmesi de öğrencilerin sebat etme ve motivasyon düzeylerini artırıcı bir role sahiptir. Her ne kadar daha çok öğrenci grup çalışmasının sebat etme düzeylerini artırdığını belirtse de, bazı öğrenciler bireysel çalışmanın grup çalışmasına kıyasla sebat etme düzeylerini artırmada daha etkili olduğu belirtilmiştir.

Öğretmen destek davranışları boyutunda, öğrencilerce anlayışlı, yardımsever ve samimi öğretmen davranışlarının öğrencilerin İngilizce öğrenmede sebat etmelerini olumlu yönde, disiplinli, mesafeli ve kaba öğretmen davranışlarının ise olumsuz yönde etkilediği belirtilmiştir. Bu bağlamda, sebat düzeyini artırıcı öğretmen davranışı hem disiplinli hem de samimi olabilecek boyutta ve bu iki uç arasında seyretmektedir. Samimi ve anlayışlı bir öğretmen davranışının sebat düzeyini olumlu yönde etkilediğine örnek olacak şekilde, bir öğrenci söyle demiştir:

Ben bazı derslerde sıkılmış bir görüntü çizerim ve canım pek bir şey yapmak istemez. Öğretmenim bana yaklaşır ve ne olduğunu ve neden motivasyonumun o gün özellikle düşük olduğunu sorar. O anda, birinin beni düşündüğünü ve aramızda bir şeklide bir bağ olduğunu düşünürüm. Tam aksine, öğretmenin sana hiç dikkat etmiyorsa, sen o derste ilgini tamamen kaybediyorsun. Ben çok öğretmen odaklı biriyim. Eğer mesafeli ve soğuk bir öğretmenim varsa, herhangi bir şeyi öğrenmek için çaba göstermek istemem ve zorlanırım.

Öğrenme ortamına ait değerlendirme etkinlikleri hususunda yapılan geribildirim ve yönlendirme etkinliklerine bakıldığında, görüşme sonuçları öğretmenin geribildirim vermedeki tavır ve tutumun öğrencilerin sebat düzeyini etkilediğini göstermiştir. Öğrencinin bilişsel kapasitesi, algılama düzeyi gibi konularda hakarete benzer ya da dalga geçme tarzındaki geribildirim sunma biçimleri öğrencilerce sebat etmeleri açısından olumsuz bir tablo çizmektedir. Tam tersine öğrenci başarısını öven ya da pekiştiren pozitif geribildirim bçimleri, öğretmenin öğrencilerin daha başarılı olması için taktik ve tavsiyeler vermesi, verilen geribildirimin açık ve anlaşılır kriterlere dayalı olması ve geribildirimin dolaylı olarak yani öğrenciye hatalarını buldurtma ve düzelttirme gibi yöntemler kullanarak yapılması İngilizce öğrenmede sebat etme düzeyini artırıcı olarak bildirilmiştir. Bir öğrenci bu boyuta ait düşüncelerini şöyle aktarmıştır:

> Mesela ben bir cümle söylerim. Öğretmenim "lütfen tekrarla" der ve ben cümleyi tekrar ederim. Öğretmenim tekrar "lütfen tekrarla" der. İşte bu şekilde cümlemin hatalı olduğu anlayarak, cümlemi kendim düzeltmeyi denerim. İşte bu öğretmenin verdiği bu küçücük zorlayıcı hareket benim doğru yapıyı bulana kadar yılmadan çabalamamı sağlar. Eğer öğretmenim hatamı direkt olarak düzeltirse, bu beni hem motive etmez ve hem de öğrendiğim şey aklımda kalıcı olmaz.

Son olarak İngilizce dersi öğrenme ortamına ilişkin değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutuna bakıldığında, öğrenciler ders müfredatıyla uyumlu ve derste ne öğrenildi ise onu sınayan sınav ve buna benzer diğer değerlendirme yöntemlerinin İngilizce öğrenmede sebat etme düzeylerini olumlu olarak etkilediğinden bahsetmişlerdir. Bunun yanı sıra, değerlendirmede açık ve şeffaf kriterlerin olmaması, gerçek yaşamdakinin tam aksine test anında öğretmenlerinden anlık bir geribildirim alamamaları ve değerlendirmede çok aşamalı değilde tek anlık değerlendirme biçimlerinin kullanılması gibi durumlar katılımcılarca sık sık tekrar edilmiş ve öğrencilerin sebat düzeyleri üzerinde olumsuz bir etkiye sahip oldukları belirtilmiştir. Değerlendirme durumlarının gerçek sınıf ortamındaki deneyimleri ile uyuşmamasını konusunu bir öğrenci, şöyle dile getirmiştir:

Okulumda quizleri seviyorum çünkü onları yapabiliyorum ve yaparken de biz bunları zaten öğrenmiştik diye düşünüyorum. Kendi kendime eğer sınıfta zaten gördüğümüz bir şeyi yapamayacaksam o zaman sorun bendedir diyorum. Böylece sınav sorularını cevaplamak için daha hırslı ve azimli oluyorum. Vize sınavlarında ise, sınav soruları derste gördüklerimizden tamamen bağımsız oluyor. Derste her şey dilbilgisi ağırlıklı ama sınavlarda hiç dilbilgisi yok fakat dinleme soruları var. Ben soruları anlayamadığımda, kızıyorum ve anlayamadığım soruları yapmaya çalışmak için boşuna çaba sarf etmek istemiyorum.

Tartışma ve Öneriler

Bu araştırma esas olarak İngilizce dersi öğrenme ortamına ilişkin farklı özellikler ile İngilizce öğrenmede sebat etme kavramı arasındaki ilişkilerin İngilizce hazırlık programı öğrencilerinin görüşlerine dayalı olarak incelenmesini amaçlamıştır. Öğrenci özelliklerinin bu ilişkideki yeri ve önemi de diğer bir cevap aranan sorudur. Araştırma sonunda elde edilen nicel ve nitel bulgular incelendiğinde İngilizce dersi öğrenme ortamının farklı boyutları ile İngilizce öğrenmede sebat etme kavramı arasında bir ilişkinin var olduğu sonucuna varılmıştır. Öğrenci özellikleri diye adlandırılan demografik, eğitimi geçmişi ve İngilizce ile ders dışı meşgul olma gibi durumları kapsayan sekiz değişkenin de hem İngilizce öğrenmede sebat etme hem de sebat etme ve öğrenme ortamı arasındaki ilişkide anlamlı bir role sahip olduğu da bulgular arasındadır. Bu bağlamda, bu bölümde, elde edilen bulgular ışığında sonuçlar tartışılacak ve de gelecekteki araştırma ve uygulama alanlarına ilişkin bir takım önerilerde bulunulacaktır.

Öncelikle nitel ve nicel bulgular birleştirildiğinde, bulguların büyük oranda örtüştüğü ve İngilizce dersi öğrenme ortamı ve İngilizce öğrenme sürecinde sebat etme davranışı arasında bir ilişkinin var olduğuna dair elde edilen sonuç, öğrenme ortamı araştırma alanında, duyuşsal ve tutumla alakalı değişkenlerle öğrenme ortamı arasındaki bağlantıyı sorgulayan önceki çalışmaları destekler niteliktedir. Öğrenme ortamı ve duyuşsal öğrenci çıktıları arasında bir ilişkinin var olduğunu hem yabancı diller (Maulana vd., 2011; Chua vd., 2009; Wei & Elias, 2011) hem de diğer disiplinlerde (Arısoy, 2007; Dorman vd.., 2006;

Koul vd., 2006; Harbaugh & Cavanagh , 2012; Kim vd., 2000; Meriläinen, 2014, Telli vd., 2006; Vermeulen & Schmidth, 2008; Wubbels & Brekelmans, 1998) yapılan çalışmalar açıkça ortaya koymaktadır.

Sonuçlar daha ayrıntılı incelendiğinde ise, İngilizce dersi öğrenme ortamının sınıfın fiziksel şartları ve kullanılan ders materyallerini içeren boyutu olan materyal ortamı boyutunun İngilizcede sebat etme düzeyini en yüksek oranda yordayan değişken olduğu gözlemlenmektedir. Materyal ortamı boyutunu, değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutu takip etmektedir. Alan yazında öğrenme ortamı araştırma alanında daha önce yapılmış olan çalışmalarda aradaki ilişkilere dair benzer bulgular ortaya konmuştur. Öncelikle, materyal ortamına ilişkin sonuçlara bakıldığında, Atbaş (2004) ders materyallerine karşı olan memnuniyet değişkeninin öğrencilerin derse katılımını anlamlı olarak yordadığını bulmuştur. Benzer bir şekilde, daha önceki öğrenme ortamı araştırmalarında sıklıkla kullanılan öğrenme ortamı veri toplama araçlarının materyal ortamını içeren alt ölçeklerinin de derse karşı tutum değişkeni ile ilişkili olduğu gözlemlenmektedir (Henderson, Fisher & Fraser, 2000; Newby, 1998; Fisher & Newby, 2000). Dorman, Fisher ve Waldrip (2006) ve de Koul, Fisher ve Earnest (2006) tarafından yapılan çalışmalarda değerlendirmenin gerçek yaşam ve gerçek öğrenme ortamı ile uyumluluğu boyutunu çağrıştıran ölçek alt boyutlarıyla derse karşı tutum ve özyeterlik gibi değişkenler arasında anlamlı ilişkilerin varlığına dair bulgular elde edilmiştir. Slater (1996) öğrencilerin değerlendirmeye dair gerçek yaşam ve gerçek öğrenme ortamı kavramlarını kapsayan alternatif değerlendirme yöntemleriyle meşgul olduklarında bu yöntemler vasıtasıyla kendilerine sunulan materyali anlamaya ve anlamlandırmaya çalışırken daha da çok sebat edip çaba gösterdiklerini ileri sürmüştür. Bundan dolayı, yabancı dil sınıflarında yordayıcılık gücü en yüksek bu iki İngilizce sınıf ortamı özelliği hususlarında gereken önem ve özen gösterilmelidir. Nitel analizlerde de eksikliği ya da sıkıntılı olduğu alanlar özellikle vurgulanan alternatif değerlendirme yöntemleri hakkında İngilizce öğretmenlerine hizmet içi ya da

hizmet öncesi eğitim etkinlikleri vasıtasıyla bu yöntemlere ve sınıf uygulamalarına ilişkin yeterli bilgiler verilmelidir. Materyal ortamına ilişkin sınıfın fiziksel şartları ve de derste kullanılan basılı ve teknoloji destekli kaynaklar ders öğretmenleri, idareciler ve ilgili eğitim uzmanları tarafından öğrencilerin rahat edebileceği ve memnun kalabileceği en uygun düzeye getirilmeye çalışılmalıdır. Öğrenci memnuniyeti ve koşulların ve kaynakların durumlarına ilişkin öğrenci algılarının ihtiyaç analizi çalışmaları vasıtasıyla sık sık kontrol edilmesi önerilmektedir. Bu sayede, öğrencilerin mümkün düzeyde İngilizce öğrenme ve İngilizce öğrenmek için gayret gösterebilmeleri için dikkatlerini dağıtacak ve heveslerin kıracak olumsuz durumların önüne daha kolay ve hızlı bir şekilde geçilebilecektir.

Kullanılan analizler sonucu tüm öğrenme ortamı boyutlarının bir arada açıkladığı ortak (paylaşımlı) varyans da aslında İngilizce öğrenmede sebat etme durumu üzerinde her bir öğrenme ortamı boyutunun direkt ya da dolaylı yollardan olsun bir şekilde etkili olduğunu göstermektedir. Nitel ve nicel sonuçlar birbirini desteklemekte ve aradaki ilişkinin varlığını daha da pekiştirmektedir. Alan yazında yukarıda söz edilen iki ana anlamlı yordayıcı dışında kalan dört İngilizce öğrenme ortamı boyutu ile duyuşsal öğrenci çıktıları arasındaki ilişkilerin varlığını destekleyen yeterli sayıda calışma mevcuttur. Bu bağlamda, öğretmen destek davranışı olarak adlandırılan öğrenme ortamı boyutuna ilişkin bu çalışmanın bulgularını destekleyen ve daha çok öğretmenin kişilerarası davranışları adı altında toplanan olumlu öğretmen davranışları ve duyuşsal öğrenci çıktılarına dair çalışmalar vardır (Chua & Chen, 2009; den Brok, 2001; Wubbels, 1993). Diğer boyutlara ilişkin sonuçlara bakıldığında ise değerlendirme ana çatısına bağlı diğer bir özellik olan geribildirim ve yönlendirme boyutunda (Koul, Fisher & Earnest, 2006; Wiggins, 1993), ders planı ve organizasyonu boyutunda (Kerr, Fisher, Yaxley & Fraser, 2006; Paige, 1979; Wong, 1993; Wright & Coven, 1982); ve de iletişimsel yaklaşım-kaynaklı ders uygulamaları boyutunda (Allen, 2003; Hunus & Fraser, 1997; Kerr vd., 2006; Wahyudi, 2004) yürütülen çalışmalar,

bu boyutlara ilişkin öğrenci algıları ile çeşitli duyuşsal öğrenci çıktıları arasındaki ilişkilere dair yeterli bir alan yazın desteği sunmaktadır. Bu şekilde, bu üç boyuta ilişkin uygulamalarda yine İngilizce öğretmenlerine önemli roller düşmektedir. Özellikle geribildirim ve yönlendirme boyutu başta olmak üzere diğer boyutlara ilişkin öğretmenlere yine hizmetçi ve hizmet öncesi olanaklar dâhilinde eğitimler verilmeli ve daha çoksebat eden, azimli ve zorluklar karşısında yılmayan öğrencilere sahip olabilmeleri için yapılması gerekenler özetlenmelidir.

Diğer bir çalışma sonucuna göre, öğrenci özellikleri diye adlandırılan çeşitli sekiz değişkenin de analizlere dâhil edilmesiyle bu değişkenlerin de İngilizcede sebat etme değişkeni ile alakalı olduğu bulunmuş, ve hatta öğrenme ortamı boyutları ile birlikte dâhil edildikleri analizlerde, öğrenci özelliklerinin öğrenme ortamının altı ana özelliğine kıyasla daha güçlü bir yordayıcı olduğu sonucuna varılmıştır. Öğrenci özellikleri diye adlandırılan bu değişkenlerden, ders dışı İngilizce basılı-görsel kaynaklarla meşgul olma, algılanan lise mezuniyet İngilizce düzeyi ve de aile gelir düzeyi tek başlarına ve de anlamlı olarak sebat etme değişkenini yordamaktadır. Örneğin, aile gelir durumu ve sebat etme arasında olumsuz yönde bir ilişki var iken, diğer iki değişken ve sebat etme arasında olumlu bir ilişki olduğu tespit edilmiştir. Bu bağlamda, sınıflarda farklı özelliklere sahip öğrencilerin varlığı kaçınılmazdır ve bundan dolayı öğretmenler bu durumun varlığından ve sınıf ortamına olan etkilerinden hizmet içi ya da hizmet öncesi süreçlerle haberdar edilmelidirler.

Belirtilenlere ek olarak, bu çalışma ayrıca bu sekiz öğrenci özelliği değişkenine ayırdedici özellikler olarak bakmış ve çalışma sonuçları bu özelliklerin alt boyutları dikkate alınarak tekrar oluşturulan veri setleri üzerinde yapılan analizler de sebat etme ve öğrenme ortamı arasındaki ilişkinin belirli öğrenci özelliklerine göre farklılık gösterdiğini ortaya koymuştur. O halde, öğretmenler ve program geliştiriciler farklı eğitim geçmişi, demografik ve akademik özelliklere sahip öğrencilerin aynı öğrenme ortamını farklı şekillerde algılayabileceği hususunda bilgilendirilmelidirler. İngilizce öğretmenleri farklı

özelliklere ve deneyimlere sahip öğrencilerin olduğu sınıflarda öğrencilerin daha azimli ve sebatkâr olmaları adına nasıl bir yol takip etmeleri konusunda eğitilmeli ya da en azından böyle bir durumun ya da bulgunun varlığı hususunda bilgilendirilmelidirler. Öğrenci özellikleri değişkenlerinin İngilizce öğrenmede sebat etme ve İngilizce dersi öğrenme ortamı arasındaki ilişkideki etkisi ayrıca okul idarecileri ya da eğitim açısından karar verme ve politika geliştirme görevinde olanlarca da dikkate alınmalıdır.

Bu çalışmada öğrenme ortamı araştırma alanını fen bilimleri dışındaki diğer disiplin alanlarına taşımak amacıyla İngilizce dersi öğrenme ortamı adı altında yeni bir teorik çerçeve ya da kavram geliştirilmiştir. Araştırma bulgularına göre bu yeni teorik çerçeve duyuşsal öğrenci özellikleri ile bağ kurmak adına etkili bulunmuştur. Bu çerçeveyi incelemek için de yeni bir veri toplama aracı geliştirilmiştir. Geliştirilen bu aracın İngilizce öğretmenleri tarafından eylem araştırması amacıyla kullanılması ve sınıf ortamında aksayan ya da geliştirilmesi gereken yönlerin bu şekilde tespit edilmesi önerilmektedir. Aynı veri toplama aracı İngilizce sınıflarında program değerlendirme amaçlı da kullanılabilir. İlgili veri toplama aracı vasıtasıyla hakkında bilgi toplanan İngilizce dersi öğrenme ortamına ait özellikler, alınacak sonuçlara bağlı olarak iyileştirildiği oranda öğrencilerin İngilizce öğrenme sürecinde sebat etme düzeyleri de artacaktır. Sebat etme düzeyi ile doğru orantılı olarak öğrenci başarısının da artacağı gözden kaçırılmaması gereken bir gerçektir (Duckworth vd., 2007).

APPENDIX L

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü

Sosyal Bilimler Enstitüsü ☒

Uygulamalı Matematik Enstitüsü

Enformatik Enstitüsü

Deniz Bilimleri Enstitüsü

YAZARIN

Soyadı : Mutlu

Adı : Gülçin

Bölümü : Eğitim Bilimleri Bölümü (Eğitim Programları ve Öğretim)

TEZİN ADI (İngilizce) :

Linking EFL Learning Environment Characteristics and Persistence in EFL Learning: A Mıxed Design Study

TEZİN TÜRÜ : Yüksek Lisans ☐   Doktora ☒

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. ☒

TEZİN KÜTÜPHANEYE TESLİM TARİHİ:

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