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UNDERSTANDING METACOGNITIVE KNOWLEDGE OF TURKISH EFL STUDENTS IN SECONDARY EDUCATION

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Abstract: This article reports on a study that investigated metacognitive knowledge or beliefs about language learning of 470 Turkish EFL learners in secondary education. The primary aims of the study were to explore what beliefs Turkish students in secondary education held about learning English as a foreign language (EFL), how their belief systems were organized and whether there were significant differences in belief systems among learner groups according to variables such as social and school contexts, gender, age and grade level. Popular conceptions of language learning were collected using a structured questionnaire based on Horwitz's Beliefs About Language Learning Inventory (BALLI) (1987). An exploratory factor analysis was performed to identify Turkish EFL learners' patterns of beliefs about language learning. Subsequently, various statistical tests were carried out to find out intra- and inter-group variability in belief categories. The results of this study demonstrated that Turkish EFL learners have a broad range of conceptions both similar to and different from those reported in the current literature. It is further evident that learners' metacognitive knowledge or beliefs about language learning have variability in terms of social and educational contexts, age, gender, and stages of language learning. The study also suggested that curriculum designers and decision-makers as well as language instructors attend to the accumulation of metacognitive knowledge or learner beliefs.

Keywords: metacognition, metacognitive knowledge, beliefs about language learning, individual differences, Turkish EFL learners, second language learning, second language instruction

Özet: Bu çalışma, orta öğretimde İngilizceyi yabancı dil olarak öğrenen 470 Türk öğrencinin dil öğrenimi hakkındaki inanç ya da bilişötesi bilgisine dair yürütülen araştırmanın bulgularını sunmayı amaçlamaktadır. Çalışmanın ana amaçlarını oluşturan konular; orta öğretimde İngilizceyi yabancı dil olarak öğrenen Türk öğrencilerinin sahip olduğu inaçları, bu konudaki inanç sistemlerinin nasıl yapılandığını ve sınıf, yaş, cinsiyet, okul ortamı ve sosyal ortam gibi değişkenlere göre öğrencilerin inanç sistemlerinde farklılıklar olup olmadığını araştırmaktır. Dil öğrenimine dair görüşler, Horwitz'in Dil Öğrenme Hakkında İnançlar Envanteri (BALLI) (1987) temel alınarak hazırlanmış olan, yapılandırılmış bir anket aracılığı ile toplanmıştır. Öğrencilerinin dil öğrenimiyle ilgili inanç yapılarını belirlemek amacı ile açıklayıcı faktör analizi yapılmıştır. Daha sonra, inanç türlerindeki grup içi ve gruplar arası değişkenliği bulmak amacı ile çeşitli istatiksel testler tamamlanmıştır. Araştırma sonuçları göstermiştir ki, İngilizce öğrenen Türk öğrenciler, günümüz alanyazında aktarılanlara kıyasla hem benzer hem de farklı olan geniş bir görüş yelpazesine sahiptir. Ayrıca görülmektedir ki, öğrencilerin dil öğrenimi ile ilgili bilişötesi bilgileri ya da inançları sosyal ortam, eğitim ortamı, yaş, cinsiyet ve dil öğrenme aşamasına bağlı olarak çeşitlilik göstermektedir. Sonuçlara göre, dil öğretmenleri kadar eğitim programı yapanlar ve ilgili konularda karar veren kişiler de bilişötesi bilgisi ya da öğrenci inancı oluşumunda etkili olmaktadır.

Anahtar Sözcükler: Bilişötesi, bilişötesi bilgi, dil öğrenimi hakkında inanç, kişisel farklılıklar, İngilizceyi yabancı dil olarak öğrenen Türk öğrenciler, ikinci dil öğrenimi, ikinci dil öğretimi

1. INTRODUCTION

Language instructors have long acknowledged that second/foreign language (L2) learners bring to the language classroom a complex set of characteristics such as learning styles and strategies, attitudes, experiences, and expectations. Among various individual variables that

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influence and maybe condition learners' approach to the learning process are theories or beliefs they hold about the nature of language and language learning. There is a growing body of literature suggesting that understanding learners' beliefs plays a crucial role in understanding learner strategies and designing appropriate language instruction (Bernat, 2004; Bernat & Gvozdenko, 2005; Horwitz, 1987, Richards and Lockhart, 1996; Horwitz, 1999; Wenden, 1987b; Wenden, 1998; Wenden, 1999; Cotterall, 1995; Yang, 1999).

In second language acquisition research the term *learner beliefs***,** from a cognitivist perspective, points to a component of metacognition and has become an *alternate term* used for metacognitive knowledge (Victori and Lockhart, 1995; Victori, 2004; Wenden, 1998; Wenden, 1999). Further, learner's naïve psychology of learning (Wenden, 1987b) and learner representations (Holec, 1987; Gremmo & Riley, 1995) are the other two conceptualizations of metacognitive knowledge, as cited by Wenden (1998). In the contexts of foreign/second language learning, it seems plausible to assert that metacognitive knowledge refers to the common assumptions that learners hold about themselves as learners, about the nature of language learning, the learning process, and variables influencing their learning. Wenden (1998; 1999) refers to this complex set of *knowledge or beliefs* as "specialized portion of a learner's acquired knowledge base" and asserts that it is: a prerequisite for the self-regulation of learning: it informs planning decisions taken at the outset of learning and the monitoring processes that regulate the completion of a learning task, such as self-observation, assessment of problems and progress, and decisions to remedy it; it also provides the criteria for evaluation made once a learning task is completed. (1998, p. 528)

Metacognitive knowledge exists in learners of all ages and it is assumed that as part of learners' stored knowledge it is relatively stable (Brown & Palinscar, 1982, cited in Victori, 2004) and at the same time statable, that is, available as a result of "a deliberate, conscious memory search, for example, for an effective strategy" (Flavell, 1979, p. 907). Learners could acquire this knowledge unconsciously by observing and imitating at any age. It also holds true that learners may acquire it consciously by listening to others such as teachers, parents, or peers giving advice about how to learn (Wenden, 1999). As they mature cognitively, they can carry it to consciousness and speak of it. Conscious or not, metacognitive knowledge may influence the way learners approach language learning and types of learning tasks that are likely to produce problems or difficulties instead of helping to achieve goals, as they build up misconceptions about language learning.

Undoubtedly, an investigation into language learners' metacognitive knowledge can produce important pedagogical implications that language educators will employ to enable learners to have a good understanding of their language learning process. Furthermore, there is also a growing body of evidence that points to the essential role of learners' cognition in recognizing their strategies and designing effective language instruction for formal as well as autonomous contexts (Cotterall, 1999; Cotterall, 1995; Horwitz, 1988; Wenden, 1999; Richards & Lockhart, 1996). It is useful to investigate metacognitive knowledge so that language teachers can be provided with an awareness of differing types of learners in the teaching process and a better understanding of their students' expectations of, commitment to, success in, and satisfaction with their language classes (Horwitz, 1988, p. 283).

2. REVIEW OF LITERATURE

The literature reviewed indicates that research on the belief systems or metacognitive knowledge of foreign/second language learners has largely focussed on university level students in varying learning contexts and different purposes in mind. The major areas of focus have been on classification of learners' metacognitive knowledge about their language learning experiences (Wenden, 1986a, 1987a, 1986b); different dimensions of language learning beliefs; (Horwitz, 1985; Horwitz, 1987; Horwitz, 1988; Sakui & Gaies, 1999; Cotterall, 1995); gender-related differences in beliefs (Bacon & Finnemann, 1992; Tercanlioglu, 2005; Siebert, 2003; Bernat & Lloyd, 2007); differences between social contexts and cultural backgrounds (Horwitz, 1988; Tumposky, 1991; Siebert, 2003; Bernat, 2006); the relationship between learner beliefs and foreign language anxiety (Kunt, 1997; Banya & Cheng, 1997; Tsai, 2004); the influence of beliefs on language learning (Abraham & Vann, 1987; Horwitz, 1988; Victori & Lockhart, 1995); and the link between beliefs and language proficiency (Mantle-Bromley, 1995; Wen & Johnson, 1997).

2.1. Classification of Learners' Metacognitive Knowledge

Using semi-structured interviews with thirty-four adult L2 learners in the USA, Wenden (1986a) explored learners' explicit beliefs about how to learn a second language and reported that those beliefs influenced adult learners' personal attempts at helping themselves to learn. Wenden (1986b) also proposed a set of modules for helping language learners "to think about learning in order to discover their own beliefs and consider alternative views" (p. 3). Furthermore, Wenden (1986b) explored and categorized learners' metacognitive knowledge related to their language learning experiences through interviews with 25 adult learners of English as a second language (ESL) about their learning in different social settings, i.e. multi-ethnic communities in the USA. Apart from learners' language learning strategies, Wenden (1986b) identified five dimensions of their language learning from their retrospective accounts: (1) language (designating), i.e., grammar, phonology, vocabulary, discourse, and function; (2) language proficiency (diagnosing), i.e., language level and progress in the language, areas of difficulty, and comparisons with others; (3) outcome of using selected strategies (evaluating), i.e., perceived merit and demerit of their strategies; (4) personal factors (self-analysing) i.e., learners' reactions to particular learning processes and their views related to their language aptitude, learning style, age, and personality; and (5) their explicit and implicit beliefs about how best to learn a second language (theorizing).

2.2. Dimensions of Language Learning Beliefs

Horwitz (1985, 1987, 1988) developed a survey instrument, *the Beliefs About Language Learning Inventory* (BALLI) to investigate learners' beliefs about language learning and produced five logical categories, including (1) foreign language aptitude, (2) the difficulty of language learning, (3) the nature of language learning, (4) learning and communication strategies, and (5) motivations expectations. Subsequent studies often used or adapted BALLI to explore metacognitive knowledge or beliefs of language learners (e.g. Horwitz, 1987; Kern, 1995, Kunt, 1997; Sakui & Gaies, 1999) and some analyzed questionnaire data on the basis of a statistical procedure called factor analysis and reported empirical categories. For example, Sakui and Gaies (1999) reported four categories of beliefs of Japanese English as foreign language (EFL) learners: (1) a contemporary (communicative) orientation to learning English, (2) a traditional orientation to learning English, (3) the quality and sufficiency of classroom instruction for learning English, and (4) foreign language aptitude and difficulty.

With a different purpose in mind, Cotterall (1995) emphasized the need to determine learners' readiness for autonomy and investigated the relationship between ESL learners' beliefs about language learning and their autonomous language learning behaviour, i.e. their readiness for autonomy. Cotterall (1999) expanded her previous study and elicited learners' beliefs about six dimensions: the role of the teacher, the role of feedback, the learner's sense of self-efficacy, important strategies, dimensions of strategy-related behaviour, and the nature of language learning.

2.3. Gender-Related Differences in Beliefs

The impact of gender on learner beliefs has also been studied. As early as 1992, Bacon and Finnemann surveyed nearly 940 adult foreign language learners to explore gender-related differences in beliefs, strategies, attitudes, and experiences. They found out that female learners reported more motivation and use of strategy in language learning than male learners, greater use of global strategies in dealing with authentic language and a higher level of social interaction with Spanish as the target language. Thus, Bacon and Finnemann's (1992) research showed that it is possible to predict foreign language learning beliefs by gender. In addition, Siebert (2003, cited in Bernat, 2006) employed the Beliefs about Language Learning Inventory (BALLI) (Horwitz, 1987) to conduct a study of 156 language learners (64 females and 91 males) of mixed ethnic backgrounds studying English at a higher education institution in the U.S. Siebert reported a number of significant differences in beliefs among male and female language learners in relation to language learning and strategy use, using descriptive statistics in the form of percentages. Findings showed that male students were more likely than female students to rate their abilities highly. Not long ago, Tercanlioglu (2005) investigated 118 EFL teacher trainees' beliefs and the relationship between beliefs and gender. She demonstrated that categories or dimensions of students' beliefs were strongly correlated and that motivations and expectations were more important among other things. However, she did not find any significant difference between belief categories and gender, assuming that maybe the similarity between male and female beliefs indicates "recent educational practices that tend to give emphasis to education of females" (p. 158) in Turkish context.

Very recently, Bernat and Lloyd (2007) investigated the relationship between beliefs about language learning and gender, using the Beliefs about Language Learning Inventory (BALLI) (Horwitz, 1987) administered to 262 (155 females and 107 males) EFL students enrolled in an academic English program in Australia. Their findings revealed that overall males and females held similar beliefs about language learning with the exception of two items. One item concerned the relationship between multilingualism and intelligence with female learners being more likely to think that intelligence plays a greater role in language learning than males. Another item related to the degree of enjoyment both males and females reported in practicing English with native speakers, with females being slightly less likely than males to enjoy practicing English with the Australians they meet. Since researchers such as Bacon and Finnemann (1992), Siebert (2003) Tercanlioglu (2005), and Bernat and Lloyd (2007) report different findings on the relationship between gender and beliefs, it might be useful to consider whether these differences may be due to, in part, the varying methods of statistical analyses employed by the researchers.

2.4. Contextual and Cultural Differences

It seems that different social settings and cultural backgrounds too have a bearing and influence on learners' cognitions of language learning. Using BALLI in the Intensive English Program at the University of Texas at Austin, Horwitz (1987) studied the beliefs of 32 ESL students from different cultural backgrounds. Horwitz (1988) also reported a descriptive study exploring the extent and impact of certain common beliefs on learning strategies and language achievement among three target language groups of first semester at the University of Texas at Austin. The findings in her study indicated that students hold a variety of beliefs with different degrees of validity and confirmed that "students arrive at the task of language learning with definite preconceived notions of how to go about it" (p. 293). In another investigation of the differences between the belief systems of Soviet and American students, Tumposky (1991, cited in Richards & Lockhart, 1996, pp. 56-57) found that social contexts of language learning influence learner beliefs and there are thus cultural differences among learners of distinct cultural backgrounds. Likewise, Siebert (2003) also reported striking cultural differences between the beliefs of Middle Eastern learners (e.g. UAE, Qatar, Kuwait, Syria) and Asian learners (e.g. Japan, China, Korea) using the BALLI. In a recent review of cross-cultural differences, however, Horwitz (1999) asserted that some BALLI-based data did not show "any unambiguous differences in the groups examined. Therefore, it seems premature to conclude that beliefs about language learning vary by cultural group" (p. 575) despite a number of intriguing group differences. Very recently, Bernat (2006) compared the data from 262 English for Academic Purposes (EAP) language learners at an Australian University with an American study of 156 EAP learners (Siebert, 2003). Bernat's (2006) data analysis using frequency statistics indicated that beliefs about language learning reported by both study groups were similar in all categories, and she drew the same conclusion and emphasized that "they are due to the effects of individuals' complex metacognitive structure (as affected by a number of social, cultural, contextual, cognitive, affective, and personal factors) that is responsible for the nature and strength of these beliefs (p. 202).

2.5. The Relationship between Learner Beliefs and Foreign Language Anxiety

With respect to the belief-anxiety relationship, Kunt (1997), who also employed BALLI as a research instrument, explored the relationship between the beliefs about language learning of Turkish-speaking university students of EFL and their foreign language anxiety levels. For anxiety, Kunt reported a significant relationship between "self-efficacy/confidence in speaking" and foreign language anxiety; that is to say, Turkish EFL learners with confidence in English ability held less foreign language anxiety. In addition, Kunt's dissertation revealed that Turkish-speaking university students learning English in the preparatory schools of two universities in North Cyprus held a range of language learning beliefs different from those of other studies reviewed in the literature. Banya and Cheng (1997) conducted an extensive study on the relationship of beliefs about language learning and such variables as *motivation, attitude, motivational intensity, strategy use, anxiety,* and *English achievement*. Data from 224 Taiwanese EFL learners were collected for statistical analysis based on participants' responses to several instruments. Banya and Cheng's research demonstrated that learners' beliefs influenced abovementioned variables, with attitude being the variable most greatly affected by beliefs, while anxiety was negatively related to beliefs. Very recently, Tsai (2004) investigated foreign language anxiety and beliefs about language learning of college students learning English as a foreign language (EFL) in Taiwan. Data from 338 first and second year college students were collected for statistical analysis, based on participants' responses to the Beliefs about Language Learning Inventory (BALLI) (Horwitz, 1987) and Foreign Language

Classroom Anxiety Scale (FLCAS) (Horwitz, 1983, 1987). The findings of Tsai's dissertation revealed that the participants did experience a high level of foreign language anxiety.

2.6. The Influence of Beliefs on Language Learning

Some researchers (Abraham and Vann, 1987; Horwitz, 1987, 1988; Wenden, 1986a, 1987a; Victori & Lockhart, 1995) investigated the behavioural impact of learners' beliefs and conducted studies suggesting that there are links between students' metacognitive knowledge or language learning beliefs and their use of selected strategies. Abraham and Vann (1987) found that learners' beliefs or preconceptions about language learning might affect the variety and flexibility of the language learning strategies they utilize. Horwitz (1987, 1988) conducted surveys with foreign language students at a university and asserted that preconceptions of learners may limit students' variety of strategy use. In another study, Wenden (1987a) investigated adult L2 learners' "explicit prescriptive beliefs" and found that there was consistency between their selection of learning strategies and their descriptions of explicit prescriptive beliefs about language learning. Wenden (1986a) demonstrated that the rationale for these learners' choice of learning strategy seemed to depend upon their explicit beliefs about how best to learn a language. Victori and Lockhart (1995) conducted a study into metacognitive knowledge of language learners in self-directed language learning with an emphasis on students' beliefs about the effectiveness of strategy use and concluded that "enhanced metacognition presumably leads to more autonomy through improved self-knowledge, use of *more efficient strategies* and a wider variety of resources and increased contact with the language (p. 232, emphasis added).

Sakui and Gaies (1999), who employed both Horwitz's (1987) *Beliefs About Language Learning Inventory* (BALLI) and interviews, explored the learning beliefs of about 1300 Japanese EFL learners at tertiary level about their communicative and traditional orientation to learning, the quality and sufficiency of classroom instruction, and foreign language aptitude and difficulty. They stated that most learner beliefs correspond to the distinction between traditional and contemporary views of language teaching and learning. Similarly, Yang (1999) also used BALLI and Oxford's (1990) *Strategy Inventory for Language Learning* (SILL) to explore the relationship between the beliefs about language learning of 505 EFL learners at private and public universities and their use of learning strategies. His study demonstrated a strong relationship between students' self-efficacy beliefs about learning English and their use of all learning strategies. Thus, he came to the conclusion that educators should address L2 learner beliefs, including metacognitive and motivational aspects.

2.7. The Link between Beliefs and Language Proficiency

Mantle-Bromley (1995) investigated the link between the beliefs and attitudes of Spanish and French learners and found that many young learners bring to the language classroom misconceptions or erroneous beliefs likely to impede their learning progress. Likewise, Wen and Johnson (1997) examined the relationship between L2 learner variables and English achievement and reported strong and consistent influence of beliefs on strategies.

3. PURPOSE

An increasing body of research has confirmed that understanding student cognition about language learning is central to recognizing learner strategies and designing appropriate

language pedagogy (Horwitz, 1999). Notwithstanding some opposing findings, research in the field of metacognitive knowledge has provided important insights into our understanding of L2 learners' belief systems or metacognitive knowledge. As also recommended by Wenden (1999), "intra- and inter-group differences" in learner beliefs and knowledge are among the topics that need further investigation. Furthermore, the studies conducted so far have examined adult language learners or university-level students, who can be viewed as individuals with more metacognitive maturity than younger learners in primary and secondary education. To date, however, there have been very few studies carried out into ESL or EFL learners in secondary education (Graham, 2006; Kuntz, 1999; Mantle-Bromley, 1995). Although educators in Turkey have long been interested in learners' English learning outcomes, no study has been conducted to explore learner's beliefs about language learning in secondary education.

The central purpose of this study was to investigate the metacognitive knowledge, or language learning beliefs of Turkish EFL students in secondary education. To that end, the following research questions were posed:

1. What beliefs do Turkish EFL learners in secondary education hold about language learning, and how are these beliefs organized?

2. Do they have language learning beliefs that differ according to social context, school settings (i.e. types of high schools in secondary education), gender, age and grade levels? If so, how do their beliefs vary?

4. RESEARCH METHOD

4.1. Participants and the School Program

A total of 470 Turkish EFL students voluntarily participated in the study in 2005. As Table 1 illustrates, the participants were from two different social contexts, one in central Turkey (55.1 %), the capital, and the other in western Turkey (44.9%), located in a tourist region with over five million people in contact with foreign travellers and visitors. Of the 470 participants, the great majority were female (81.7%). They ranged in age from 16-17 (36.4%), 18 (34.7%), and 19-20 (28.9%). The minimum and maximum ages of the participants were respectively 16 and 20, with a mean of 18.

The sample of the study came from three different grade levels: tenth grade, eleventh grade and graduates. Beginning at fourth grade at primary education (8 years of compulsory education), all the participants had studied English for eight or nine years and chosen English as a foreign language as their major at tenth grade in secondary education so that they could enter language departments at universities. The great majority of the participants (87.7%) would take the national EFL proficiency examination that would be administered in June of 2005 by Student Selection and Placement Centre of Higher Education Council. Of these participants, 204 students (43.4 %), who had already graduated from secondary education but not been placed at any language program previously, would take the university entrance examination again with those eleventh grade students also attending English classes regularly at their high schools. A small number of the participants at tenth grade (12.3 %) were also English majors at their schools and would take the university entrance examination to be administered the following year.

The Turkish system of secondary education includes all of the general, vocational and technical education institutions that provide at least three years of education after primary education. The sample of this study consisted of participants from five distinct school settings of the Turkish secondary education system that lasts for 3 years excluding technical and some vocational high schools after an 8-year compulsory primary education. These schools of the participants included (1) *Foreign Language High School* (FLSH), (2) *Anatolian High School* (AHS), (3) *Anatolian Teacher Preparation High School* (ATPHS), (4) *Private High School* (PHS), and (5) *General High School* (GHS). Except general high schools, the other four kinds of secondary education include a one-year foreign language preparatory education followed by a three-year secondary education. All the participants involved in the study had chosen English as their major in their second year and were attending an EFL test preparation program in two different cities referred to as Context A and Context B.

Table 1: Profile of the Participants (N = 470)

	n	%
Social Context		
Context A	259	55.1
Context B	211	44.9
Total	470	
Gender		
Male	86	18.3
Female	384	81.7
Total	470	
Age Groups		
16-17	171	36.4
18	163	34.7
19-20	136	38.9
Grade Level		
Tenth Graders	58	12.3
Eleventh Graders	208	44.3
Graduates	204	43.4
School Context		
Foreign Language High School (FLHS)	220	46.8
Anatolian High School (AHS)	72	15.3
Anatolian Teacher Preparation High School (ATPHS)	37	7.9
Private High School (PHS)	47	10.0
General High School (GHS)	94	20.0

4.2. Instrument

Studies carried out into learners' metacognitive knowledge or language learning beliefs have often employed interviews and questionnaires. Since structured questionnaires in particular are easier to administer and more convenient to elicit information from a large number of learners at the same time, this study adapted Horwitz' (1987) *Beliefs About Language Learning Inventory* (BALLI), the most widely used research instrument to elicit L2 learners' beliefs about language learning. BALLI originally consisted of 34 items to examine learners' beliefs in five logical areas: foreign language aptitude, the difficulty of language learning, the

nature of language learning, learning and communication strategies, and motivations and expectations. As cited by Yang (1999), Horwitz revised the ESL version of the questionnaire by adding one more item related to the role of memorization in language learning. In addition to BALLI items, the researcher also adapted some items from another study by Sakui and Gaies (1999), who had previously used BALLI too as a research instrument and investigated language learning beliefs of Japanese EFL learners.

Prior to the actual implementation of the questionnaire, three experienced Turkish colleagues fluent in English checked the first draft of the questionnaire and made suggestions to improve the quality of the items. Based on their recommendations, some modifications were made in the items. This was followed by a pilot study conducted to further validate the instrument, to determine the variety of participant responses to the statements in English and to check whether there was any confusion or ambiguity to Turkish students. A group of forty-two students with similar background in another institution completed the questionnaire. The researcher used the oral feedback in order to make slight modifications in English questionnaire items. Based on questionnaire data Cronbach's alpha coefficients were obtained. In the pilot study, Cronbach's alpha was 0.657.

The instrument used in this study consisted of an English quantitative self-report questionnaire that examined fifty different learner beliefs. Some items were slightly customized for use in Turkish context. The participants were asked to read a statement and decide if they (1) strongly agree, (2) agree, (3) neither agree or disagree, (4) disagree, or (5) strongly disagree with each statement.

4.3. Procedures

Data were collected at two different institutions in two different social contexts. The participants were from 29 English classes ranging in person 8 to 20 and voluntarily participated in the study. There were 470 volunteers among about 800 students. Class instructors in two cities administered the questionnaire without the assistance or presence of the researcher in November and December 2004. After the implementation of the questionnaire data were fed into the computer for all the statistical analyses. The reliability value of the questionnaire was found as 0.631. This Cronbach alpha was less than that found in the pilot study but similar to the values obtained in other similar studies (Kunt, 1997; Yang, 1992; Truitt, 1995; Park, 1995).

4.4. Analyses

In this study, based on principal components analysis method, factor analysis was first used to identify factor groups. Using Varimax rotation method, the researcher identified five distinct factors that constitute students' beliefs about language learning. These factors (see section 6.2) confirmed the original 5 BALLI categories in Horwitz (1987). In addition, the correlation coefficients among factors were found and the linear correlation power and direction among factors were examined.

Statistical analyses are either parametric or non-parametric depending on the normality distribution of data. Therefore, Kolmogorov-Smirnov test was used to determine whether the data obtained from questionnaire were normally distributed variables. In analyzing data, when variables were normally distributed, T test (independent-samples T test) was used in all statistical tests related to the comparison of two groups (e.g. gender), whereas Mann-Whitney

U test was employed to compare such groups if data were not found normally distributed. One-way variance analysis (one-way ANOVA) was used to compare more than two groups (e.g. school, age, gender) when variables were again normally distributed. In other cases where variables were not normally distributed, Kruskal-Wallis H test, which has a nonparametric equivalence, was used to compare more than two groups. When there were statistically significant differences in the comparison of more than two groups, multiple comparison tests were employed to identify which groups of participants were different from the others.

Multiple comparison tests are of two kinds depending upon homogeneity of variance test used to test the equality of group variances. Thus, homogeneity of variance test was exploited to decide which multiple comparison test to use. When homogeneity of group variance was assumed, Scheffe test was used while Tamhane's T2 test was otherwise used if there was not any assumption of homogeneity of group variance. Furthermore, Type-I error (alpha level for all statistical decisions) was set at 0.05 and 0.01. Therefore, the results of the analyses involved in the study have been interpreted with confidence levels of 95% and 99%. Each of the statistical tables in the study contains additional mean and standard deviation values to make easier the interpretation of statistical tests carried out. All the statistical analyses of the study were separately performed according to factors and items that yielded these factors. All the data of the study were processed using the Statistical Package for Social Sciences (SPSS) Version 13.

5. LIMITATIONS

One of the limitations of this study is that all the participants involved in the study had chosen English as their major in their second year and were attending an EFL test preparation program. Another is that the data were obtained from two cities in different parts of the country. It should also be noted that there was an imbalance of gender among participants – there were 384 females and 107 males.

6. RESULTS

This section sets out to briefly highlight some points in descriptive statistics and present the results of factor analyses on the questionnaire items, followed by the results of Pearson correlation analysis as well as those of two and multiple comparison analyses.

6.1. Descriptive Statistics

Table 2, which is primarily intended for the results of factor analysis, also includes the descriptive statistics (mean, standard deviation-SD, and response frequency) of the 50 items in the questionnaire that all the participants responded. A close examination of the items and their means confirm that the respondents had a vast variety of beliefs about language learning. Due to lack of space, it does not seem reasonable to examine the results of all the items here; however, some items with small and great means are worth underlining. The two items (27, 50) with which the participants most strongly disagreed (items which had means of 4.02 and 3.96) relate to their beliefs about the quality of English education at schools. Indeed, the

majority of the respondents held that EFL instruction in secondary education fell short to provide them the opportunities to learn English in all skill areas.

A vast majority of the students either strongly agreed or agreed with the items with a mean of 2 or lower. As it can be seen in Table 2, the great majority of them strongly expressed their desire to learn to speak English well and the instrumental benefit of English in the future. More importantly, some items with which they most strongly agreed point to a variety of beliefs: the belief that some languages are easier to learn than others, the belief that language learning involves a lot of memorization, and the belief that some people have a special ability for learning foreign languages. Finally, some items yielded higher values of SD (e.g. item 20, 1.446; item 26, 1.360; item 31, 1.299), indicating that the respondents also held a broad range of language learning beliefs.

6.2. Factor Analysis

A factor analysis was performed to identify unique patterns in the participants' responses to the questionnaire items and thus reduce the number of variables by grouping the items connected with the similar beliefs about language learning. Principal components analysis, followed by Varimax rotation, produced five factors that best constitute Turkish EFL learners' beliefs about language learning, namely:

1. Beliefs about social interaction and learning spoken English
2. Beliefs about structural language learning
3. Beliefs about quality and adequacy of EFL instruction
4. Beliefs about difficulty and perceived value of language learning
5. Beliefs about foreign language aptitude

These factors include all of the 50 items in the questionnaire designed without any supposition regarding the variety and number of factors in advance. Table 2 shows descriptive statistics, response frequency for questionnaire items, these five factors, and item loadings on each factor. In this study, the researcher excluded items with factor loadings below 0.30 from the analysis. These items are listed in Table 2 as "Others" for reference purposes.

6.2.1. Beliefs about Social Interaction and Learning Spoken English

Eleven items loaded on Factor 1. Five of these items (13, 8, 37, 42, 45) relate to the dimension of social interaction (i.e. communication with English-speaking people and instrumental or communicative value of learning English), whereas the other six items (5, 7, 36, 39, 44, 48) deal with learning spoken English (i.e. speaking ability, importance of pronunciation and audio-video input, and the enjoyment obtained from studying English). When these 11 items are taken as an empirical category, Factor 1 can be described as reflecting Turkish EFL learners' "beliefs about social interaction and learning spoken English".

A close examination of Factor 1 reveals several important results. Almost all of the participants (97%) felt that they wanted to speak English very well. Similarly, the overwhelming majority of them (94%) believed that one day they would learn to speak English very well. On the other hand, the greater *SD* values of items 8, 36 and 37 show that the participants differed in their beliefs regarding the necessity of knowing about English-

speaking countries, the enjoyment of studying English in relation to time, and the wish to learn English in order to get to know English-speaking people better, though each of these three items (item 8, 57%; item 36, 71%; item 37, 45%) yielded more agreements disregarding the learners who could not make clear decisions.

6.2.2. Beliefs about Structural Language Learning

Factor 2 includes 8 items. Four of these items (24, 31, 35, 41) are connected with the role of translation and grammar in language learning. Items 14 and 25 deal with the use of L1 in the L2 classroom. Of the other two, item 47 refers to the ease of reading and writing skills compared to oral language, and item 32 deals with embarrassment caused by speaking English. It may be stated that although these last two items that loaded on Factor 2 may be logically placed in other patterns such as "difficulty of language" and "communication strategy", they may also point to the earlier tradition of teaching and learning foreign languages in Turkey, as reading and writing were more emphasized and oral language less. When these eight items considered altogether, Factor 2 can be referred to as Turkish EFL learners' "beliefs about structural language learning".

The results of the item loadings on Factor 2 indicate that there seemed to be a striking difference in response frequencies between traditional-structural and communicative-contemporary views of language learning and teaching. For example, almost half of the learners (42%) agreed with item 31, "To say something in English, I think of how I would say it in Turkish and then translate it into English", whereas forty-six percent of them disagreed and thirteen percent neither agreed nor disagreed with the same statement. While only twenty-eight percent of the participants believed that "The most important part of learning English is learning how to translate from Turkish", almost half (46%) rejected this statement in item 41. Similarly, half of the participants (51%) had disagreement with item 24, "To understand English, students must first translate it into Turkish". Furthermore, more than half of the participants (57%) viewed grammar as the most important part of learning a foreign language (item 35).

With regard to the use of L1 in the L2 classroom, half the students agreed that "In English classes, I prefer to have my teacher provide explanations in Turkish" (item 14). Interestingly enough, the majority of them (67%) said that "If my teacher is a native speaker, he/she should be able to speak Turkish when necessary" (item 25). Finally, fifty-four percent rejected the belief that "I would feel embarrassed to speak in front of other people" (item 32) and half believed that "It is easier to read and write English than to speak and understand it" (item 47).

Table 2: Descriptive Statistics and Response Frequency for Questionnaire Items that Constitute Each Factor

Item	Item Description	Mean[a]	SD	1	2	3	4	5
Factor 1 - Beliefs about social interaction and learning spoken English								
45	I would like to have English-speaking friends. (0.588)[b]	1.76	0.997	243	146	43	27	11
42	If I learn to speak English very well, I will have many opportunities to use it. (0.504)	1.52	0.693	266	175	21	5	3
37	I would like to learn English so that I	2.86	1.221	66	145	89	127	43

	can get to know English-speaking people better. (0.481)							
5	I believe that some day I will learn to speak English very well. (0.469)	1.34	0.681	351	92	17	7	3
13	I enjoy practicing English with the foreigners I meet. (0.456)	1.64	0.868	257	151	39	18	5
7	It is important to speak English with an excellent pronunciation. (0.451)	1.57	0.865	285	132	25	25	3
48	English speaking lessons should be enjoyable. (0.445)	1.70	0.802	215	200	39	11	5
36	The longer I study English, the more enjoyable I find it. (0.424)	2.12	1.062	157	175	73	56	9
44	I want to learn to speak English very well. (0.424)	1.17	0.509	406	52	9		3
8	It is necessary to know about English-speaking countries in order to speak English. (0.419)	2.45	1.194	126	140	90	96	18
39	In learning English, it is important to listen to tapes and watch English programs on television. (0.374)	1.70	0.836	221	195	31	18	5
Factor 2 - Beliefs about structural language learning								
24	To understand English, students must first translate it into Turkish. (0.701)	3.29	1.163	36	96	99	174	65
41	The most important part of learning English is learning how to translate from Turkish. (0.691)	3.21	1.091	32	99	122	172	45
31	To say something in English, I think of how I would say it in Turkish and then translate it into English. (0.691)	3.11	1.299	48	148	60	133	81
14	In English classes, I prefer to have my teacher provide explanations in Turkish. (0.516)	3.02	1.214	54	119	121	116	60
32	I would feel embarrassed to speak English in front of other people. (0.469)	3.40	1.252	36	97	84	147	106
25	If my teacher is a native speaker, he/she should be able to speak Turkish when necessary. (0.364)	2.36	1.066	95	208	88	60	19
47	It is easier to read and write English than to speak and understand it. (0.362)	2.58	1.171	97	146	110	92	25
35	The most important part of learning a foreign language is learning the grammar. (0.322)	2.51	1.144	96	172	82	104	16
Factor 3 - Beliefs about quality and adequacy of EFL instruction								
27	In order to speak and understand English very well, English education at school is enough. (0.748)	4.02	1.096	20	35	53	171	191
50	In order to learn to read and write English very well, English education at school is enough (0.707)	3.96	1.147	21	43	63	149	194

20	I am satisfied with the English education I receive at my school. (0.677)	2.98	1.446	91	125	56	100	98
6	People in Turkey are good at learning foreign languages. (0.465)	3.14	0.936	16	91	212	113	38
28	When I think of the amount of time I have studied English, I am satisfied with my progress. (0.422)	2.77	1.102	60	150	121	117	22
16	If someone spent one hour a day learning a language, how long would it take them to speak the language very well?[c] (0.304)	3.13	1.282	43	127	129	68	103
Factor 4 - Beliefs about difficulty and perceived value of language learning								
23	In learning English, it is important to repeat and practice a lot. (0.556)	1.28	0.578	360	97	7	4	2
29	People in Turkey feel that it is important to speak English. (0.502)	1.88	0.930	179	213	43	25	10
21	If I learn to speak English very well, it will help me get a good job. (0.439)	1.37	0.671	335	107	21	4	3
30	Language learning involves a lot of memorization. (0.403)	1.57	0.758	260	169	26	13	2
1	It is easier for children than adults to learn a foreign language. (0.345)	1.32	0.710	367	73	16	11	3
17	You can learn to improve your English only from native speakers of English. (-0.339)	3.12	1.169	56	92	95	192	35

6.2.3. Beliefs about Quality and Adequacy of EFL Instruction

Factor 3, consisting of six items, deals with the adequacy of EFL instruction in developing English skills (items 27, 50), the learners' satisfaction with English instruction in secondary education (items 20, 28), and the ability of the Turkish to learn foreign languages (item 6) as well as the difficulty of language learning (item 16). This factor had greater means unlike the means of the items in the previous factors.

The majority of the participants (77%), for instance, disagreed with item 27, "In order to speak and understand English very well, English education at school is enough", while merely fourteen percent felt that "In order to learn to read and write English very well, English education at school is enough" (item 50). In response to their satisfaction with English instruction, less than half of the students (42%) thought that "I am satisfied with the English education I receive at my school" (item 20), but about one-third of them (30%) reported that "When I think of the amount of time I have studied English, I am satisfied with my progress" (item 28). Regarding Turkish people's capability of language learning, twenty-one percent believed that "People in Turkey are good at learning foreign languages" (item 6), but forty-five percent neither agreed nor disagreed with the statement. In addition, the participants involved in the study indicated great differences as to the time spent learning a foreign language. As the item loadings on Factor 3 reflect quality, drawbacks and insufficiencies of EFL instruction, this factor may be considered as Turkish students' "beliefs about quality and adequacy of EFL instruction."

Table 2: Descriptive Statistics and Response Frequency for Questionnaire Items that Constitute Each Factor (Continued)

Item	Item Description	Mean	SD	1	2	3	4	5
Factor 5 - Beliefs about foreign language aptitude								
2	Some people have a special ability for learning foreign languages. (0.675)	1.47	0.812	310	125	12	18	5
46	Everyone can learn to speak a foreign language (-0.522)	2.73	1.179	78	142	113	105	32
18	I have a special ability for learning foreign languages. (0.510)	2.44	0.984	79	183	142	54	12
11	People who are good at mathematics or science are not good at learning foreign languages. (0.433)	3.42	1.241	46	63	113	145	103
26	Girls are better than boys at learning foreign languages. (0.426)	3.08	1.360	84	70	136	85	95
3	Some languages are easier to learn than others. (0.330)	1.84	0.893	198	175	75	17	5
Others[d]								
4	English is[e] (difficulty scale) (F2, 0.295)	2.97	0.767	15	90	269	86	10
9	You shouldn't say anything in English until you can say it correctly. (F4, -0.292)	3.62	1.185	28	73	67	185	117
10	It is easier for someone who already speaks a foreign language to learn another one. (F4, 0.219)	1.92	0.963	179	199	53	29	10
12	It is best to learn English in an English-speaking country. (F1, 0.286)	1.45	0.787	327	95	30	17	1
15	It's OK to guess if you don't know a word in English. (F4, 0.265)	2.29	1.019	94	227	88	41	20
19	The most important part of learning a foreign language is learning vocabulary words. (F2, 0.266)	1.87	0.967	200	184	39	43	4
22	I can improve my English by speaking English with my classmates. (F1, 0.230)	2.42	1.068	91	191	103	68	17
33	If you are allowed to make mistakes in the beginning, it will be difficult to get rid of them later on. (F2, 0.245)	2.94	1.273	65	134	99	107	65
34	I should be able to learn everything I am taught. (F1, 0.276)	2.10	0.897	123	220	88	36	3
38	It is easier to speak than understand a foreign language. (F4, -0.290)	3.35	1.163	38	84	90	192	66
40	Learning a foreign language is different from learning other academic subjects. (F5, 0.272)	1.92	0.903	172	197	72	24	5
43	People who speak more than one language are very intelligent. (F5,	2.61	1.166	91	149	104	103	23

	0.296)							
49	I make mistakes because I don't study enough. (F3, -0.235)	2.96	1.245	64	132	84	140	50

[a] Means are based on a five-point scale: 1, Strongly agree; 2, Agree; 3 Neither agree nor disagree; 4, Disagree; 5, Strongly disagree.
[b] Factor loading of the item on the factor is given in parentheses.
[c] 1, less than a year; 2, 1-2 years; 3, 3-5 years; 4, 5-10 years; 5, You can't learn a language in one hour a day.
[d] Items with factor loadings below 0.30 were excluded from *Principle Components Analysis*. Such items are listed as "Others" for reference purposes. Their respective factor loadings are given in parentheses with their corresponding factors. F1, Factor 1; F2, Factor 2; F3, Factor 3; F4, Factor 4; F5, Factor 5.
[e] 1, a very difficult language; 2, a difficult language; 3, a language of medium difficulty; 4, an easy language; 5, a very easy language.
n=470.

6.2.4. Beliefs about Difficulty and Perceived Value of Language Learning

Factor 4 consists of six items. Four of these items (1, 17, 23, 30) deal with the difficulty of language learning, and the other two items (21, 29) refer to the learners' perceived value of learning English. These six items considered as a group, Factor 4 can be described as characterizing Turkish learners' "beliefs about difficulty and perceived value of language learning".

As far as the difficulty is concerned, some items (1, 23, 30) had means of less than 2, indicating an overwhelming agreement with these statements. As a case in point, almost all the students (94%) believed that "It is easier for children than adults to learn a foreign language" (item 1). More importantly, 77% of the participants strongly agreed and about 20% agreed that "In learning English, it is important to repeat and practice a lot" (item 23). Similar to this result, a significant number of respondents (91%) believed that "Language learning involves a lot of memorization" (item 30).

As to their perceived value of learning English, the results of the analyses in Factor 4 revealed that ninety-four percent of them agreed with the statement "If I learn to speak English very well, it will help me get a good job" (item 21). Likewise, over four-fifth of the participants (83%) strongly agreed (38%) or agreed (45%) with the statement that "People in Turkey feel that it is important to speak English" (item 29). These two items reveal that they had strong belief as to the value of learning English.

6.2.5. Beliefs about Foreign Language Aptitude

Six items loaded on Factor 5. This factor may be described as the learners' "beliefs about foreign language aptitude" since all the items (2, 3, 11, 18, 26, 46) refer to foreign language learning variables such as foreign language learning aptitude, gender, and aptitude in math and science. Turkish EFL learners generally held a strong belief about a special ability for learning foreign languages. It is remarkable that 93% of the participants either strongly agreed (66%) or agreed (27%) with the statement that "Some people have a special ability for learning foreign languages" (item 2). When inquired about their abilities, however, only about

half of them (56%) strongly agreed or agreed with the statement that "I have a special ability for learning foreign languages" (item 18). On the other hand, only twenty-three percent of the participants strongly agreed or agreed with the belief that "People who are good at mathematics or science are not good at learning foreign languages" (item 11). In addition, over three quarters (79%) believed that "Some languages are easier to learn than others" (item 3). Lastly, the participants held beliefs that differed when they responded to the question whether girls or boys are good at learning foreign languages. Approximately, one-third of the students were neutral when responding to this statement (item 26).

6.3. Comparisons of Factors According to Social Context, School Context, Gender, Grade Level, and Age

The Pearson product-moment correlations between the factors were obtained to offer some insights into the interpretation of the test results prior to the comparison of the factors (See Table 3).

Table 3: Pearson Correlations among Factors

Factor	*Factor 2*	*Factor 3*	*Factor 4*	*Factor 5*
Factor 1	-0.133**	0.001	0.252**	0.208**
Factor 2		-0.061	0.175**	0.040
Factor 3			-0.017	0.063
Factor 4				0.107*

*p<0.05; **p<0.01

As Table 3 shows, among the five belief factors, Factor 1, *Beliefs about social interaction and learning spoken English*, did not correlate with Factor 3, *Beliefs about quality and adequacy of EFL instruction*. On the other hand, Table 3 indicates that Factor 1 was found to be positively correlated with Factor 4, *Beliefs about difficulty and perceived value of language learning*, and Factor 5, *Beliefs about foreign language aptitude* ($p<0.01$). There was a negative correlation between Factor 1 and Factor 2, *Beliefs about structural language learning* ($p<0.01$). The Pearson correlations analysis between factors indicated that Factor 2 was not correlated with Factor 3 and Factor 5 but that Factor 2 was positively correlated with Factor 4 ($p<0.01$). In addition, Factor 3 did not yield any significantly positive correlation with Factor 4 and Factor 5, but Factor 4 positively correlated with Factor 5 ($p<0.05$).

6.3.1. Social Context

When two distinct social contexts were compared for the variety of language learning beliefs, the results demonstrated that there existed some differences between the groups (see Table 4). There were statistically significant differences in Factor 1, *Beliefs about social interaction and learning spoken English* ($p<0.05$), Factor 3, *Beliefs about quality and adequacy of EFL instruction* ($p<0.01$) and Factor 5, *Beliefs about foreign language aptitude* among two social settings ($p<0.05$). As Table 4 reveals, the participants in Context A more strongly agreed with the statements in Factor 1 than those students in Context B. On the other hand, the means of Factor 3 and Factor 5 indicate that the participants in Context B more strongly agreed with the statements in these two factors than those students in Context A.

Table 4: Comparison of Factors by Social Context

Factor	*Social Contexts*	*N*	*Mean*	*SD*	*P*
Factor 1	Context A	259	1.7634	0.4206	0.031*
	Context B	211	1.8539	0.4465	
Factor 2	Context A	259	2.9146	0.6544	0.434
	Context B	211	2.9621	0.6541	
Factor 3	Context A	259	3.4511	0.6631	0.000**
	Context B	211	3.1864	0.7303	
Factor 4	Context A	259	1.7297	0.4152	0.058
	Context B	211	1.7899	0.3867	
Factor 5	Context A	259	2.5412	0.5134	0.028*
	Context B	211	2.4415	0.4528	

*p<0.05; **p<0.01

More specifically, all the participants in Context A held stronger beliefs and agreed more strongly with the statements “If I learn to speak English very well, I will have many opportunities to use it” (item 42), "The longer I study English, the more enjoyable I find it” (item 36), and "It is necessary to know about English-speaking countries in order to speak English" (item 8) than those participants in Context B. In contrast to these findings, the participants in Context B held stronger beliefs and agreed more strongly with the statements “In order to speak and understand English very well, English education at school is enough” (item 27), “In order to learn to read and write English very well, English education at school is enough” (item 50), “I am satisfied with the English education I receive at my school” (item 20), “People in Turkey are good at learning foreign languages” (item 6), “If someone spent one hour a day learning a language, how long would it take them to speak the language very well?” (item 16), and “I have a special ability for learning foreign languages” (item 18) than those participants in Context A.

6.3.2. School Context

Table 5 shows the results of the test performed to explore whether school means were different from one another.

Table 5: Comparison of Factors by School Setting

	FLHS		*AHS*		*ATPHS*		*PHS*		*GHS*		
Factor	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	*P*
Factor 1	1.7847	0.4392	1.9444	0.4379	1.6634	0.3661	1.7176	0.4303	1.8404	0.4219	0.008**
Factor 2	2.9165	0.5968	2.8889	0.7278	3.0946	0.7147	3.3351	0.6722	2.7553	0.6055	0.000**
Factor 3	3.4341	0.6397	3.3704	0.6767	3.3739	0.7184	2.6667	0.7323	3.3812	0.6933	0.000**
Factor 4	1.7333	0.3516	1.7454	0.3975	1.7568	0.4608	1.8227	0.5422	1.7872	0.4201	0.661

Factor 5	2.4621	0.4696	2.5810	0.4440	2.6532	0.5334	2.4504	0.4490	2.4734	0.5543	0.079

*p < 0.05; **p <0 .01

There were statistically significant differences between schools in terms of Factors 1, 2 and 3 (p<0.01). A multiple comparison test was performed to identify which schools were pairwise different from each other (See Tables 6 – 8).

In the multiple comparisons of schools for Factor 1 (see Table 6), *Beliefs about social interaction and learning spoken English*, the participants at ATHPS and PHS had significantly different (i.e. stronger) beliefs about the dimension of social interaction and learning spoken English than those at AHS (p<0.05). These results demonstrated that schools with more intensive EFL instruction positively contributed to learner beliefs about the aspects of social interaction and spoken English.

Table 6: Multiple Comparisons for Factor 1 - Scheffe Test

School (I)	*School (J)*	*Mean Difference (I-J)*	*Std. Error*	*P*
FLHS	AHS	-0.1597	0.0583	0.113
	ATPHS	0.1213	0.0763	0.640
	PHS	0.0671	0.0690	0.918
	GHS	-0.0557	0.0529	0.893
AHS	ATPHS	0.2811	0.0869	0.035*
	PHS	0.2268	0.0805	0.096*
	GHS	0.1040	0.0673	0.664
ATPHS	PHS	-0.0542	0.0944	0.988
	GHS	-0.1770	0.0833	0.343
PHS	GHS	-0.1228	0.0767	0.634

*p < 0.05; **p < 0.01

It is also necessary to look at the items of this factor more closely to interpret the significant differences. For example, the students at FLHS, ATPHS, PHS, and GHS more strongly agreed with the statement “It is necessary to know about English-speaking countries in order to speak English” (item 8) than those at AHS. Furthermore, when asked to demonstrate their beliefs about the statement “The longer I study English, the more enjoyable I find it” (item 36), the students at FLHS held stronger beliefs than those at AHS and GHS, just as the participants at ATPHS agreed with the same statement more strongly than those students at AHS.

As to the comparison of Factor 2 (see Table 7), *Beliefs about structural language learning*, the students of FLHS, AHS, and GHS reported significantly stronger beliefs about this pattern than the participants at PHS (p<0.01). For example, the participants at FLHS, AHS and GHS more strongly agreed with the statement “In English classes, I prefer to have my teacher provide explanations in Turkish” (item 14) than those at ATPHS and PHS. The participants at FLHS and AHS strongly agreed with the statement “To understand English, students must first translate it into Turkish” (item 24) than those at ATPHS. Likewise, the students at GHS held stronger beliefs about the same statement than those at ATPHS and PHS. The participants at FLHS, AHS and GHS agreed more strongly with the statement “To say

something in English, I think of how I would say it in Turkish and then translate it into English" (item 31) than those at PHS. Similarly, the students at GHS held stronger beliefs about the same statement than those at ATHPS. Also, not surprisingly, the students at GHS agreed with the statement "The most important part of learning English is learning how to translate from Turkish" (item 41) more strongly than those at the other school contexts. When asked about whether a native teacher "should be able to speak Turkish when necessary" (item 25), the students at PHS agreed with the statement less than those at the other high schools. Furthermore, the students at FLHS, AHS, ATPHS and GHS more strongly agreed with the statements "I would feel embarrassed to speak English in front of other people" (item 32), and "It is easier to read and write English than to speak and understand it" (item 47) than those at PHS. On the whole, these findings suggested that ATPHS and PHS in particular employed more contemporary or communicative methodologies than the other schools settings.

Table 7: Multiple Comparisons for Factor 2 - Tamhane's T2 Test

School (I)	*School (J)*	*Mean Difference (I-J)*	*Std. Error*	*P*
FLHS	AHS	0.0276	0.0865	1.000
	ATPHS	-0.1781	0.1132	0.822
	PHS	-0.4186	0.1024	0.002**
	GHS	0.1612	0.0785	0.273
AHS	ATPHS	-0.2057	0.1289	0.828
	PHS	-0.4462	0.1195	0.009**
	GHS	0.1336	0.0998	0.906
ATPHS	PHS	-0.2405	0.1401	0.722
	GHS	0.3393	0.1237	0.127
PHS	GHS	0.5798	0.1139	0.000**

*p<0.05; **p<0.01

In the multiple comparison of Factor 3 (see Table 8), *Beliefs about quality and adequacy of EFL instruction*, the findings demonstrated that the participants at PHS held significantly stronger beliefs than those at FLHS, AHS, ATHPS, and GHS (p<0.01). In general, the results of the multiple comparison for Factor 3 suggested that the students at PHS more strongly agreed with the statements than those in the other school settings.

Table 8: Multiple Comparisons for Factor 3 - Scheffe Test

School (I)	*School (J)*	*Mean Difference (I-J)*	*Std. Error*	*P*
FLHS	AHS	0.0637	.0913	0.975
	ATPHS	0.0602	0.1194	0.993
	PHS	0.7674	0.1080	0.000**
	GHS	0.0529	0.0828	0.982
AHS	ATPHS	-0.0035	0.1360	1.000
	PHS	0.7037	0.1260	0.000**
	GHS	-0.0108	0.1053	1.000
ATPHS	PHS	0.7072	0.1477	0.000**
	GHS	-0.0073	0.1304	1.000

PHS	GHS	-0.7145	0.1201	0.000**

*p < 0.05; **p < 0.01

A close examination of the items will help to interpret the results more specifically. For example, the students at AHS, PHS and GHS agreed with the statement "People in Turkey are good at learning foreign languages" (item 6) more strongly than did their peers at ATPHS. When asked about their satisfaction with the English education at their school, the participants at AHS more strongly agreed with this statement (item 20) than those at FLHS. Similarly, the students at PHS more strongly agreed with the same statement than their peers at AHS, ATPHS, FLHS, and GHS. Furthermore, those at AHS and ATPHS had significantly more positive beliefs than those at GHS, indicating that the learners at general high schools had the least satisfaction with the English education at their public high schools. Similar results were found for items 27 and 50. That is to say, the participants at PHS more strongly agreed with the statements "In order to speak and understand English very well, English education at school is enough" (item 27) and "In order to learn to read and write English very well, English education at school is enough" (item 50) than did their peers at all the other high schools.

6.3.3. Gender

In the comparison of gender (see Table 9), there were statistically significant differences between female and male participants in terms of three factors: Factor 1, *Beliefs about social interaction and learning spoken English*; Factor 4, *Beliefs about the quality and adequacy of EFL instruction,* and Factor 5, *Beliefs about foreign language aptitude*. The results indicated that female students held stronger beliefs than male students about (i) social interaction and learning spoken English ($p<0.05$), (ii) the quality and adequacy of EFL instruction ($p<0.05$), and (iii) foreign language aptitude ($p<0.01$).

Table 9: Comparison of Factors by Gender

Factor	*Gender*	*N*	*Mean*	*SD*	*P*
Factor 1	Female	384	1,7815	0,4322	0.017*
	Male	86	1,9049	0,4316	
Factor 2	Female	384	2,9382	0,6565	0.875
	Male	86	2,9259	0,6466	
Factor 3	Female	384	3,3229	0,7217	0.554
	Male	86	3,3740	0,6319	
Factor 4	Female	384	1,7352	0,3918	0.018*
	Male	86	1,8527	0,4409	
Factor 5	Female	384	2,4553	0,4735	0.001**
	Male	86	2,6802	0,5178	

*p < 0.05; **p < 0.01

There are some interesting differences between females and males in terms the above-mentioned factors. Concerning the enjoyment derived from studying English in relation to time, for instance, female participants agreed more strongly with the statement that *The longer I study English, the more enjoyable I find it* (item 36) than males. Another striking difference was found in the importance that females attached to excellent pronunciation (item

7) and audio and audiovisual materials (item 39). Thirdly, female students wished to have foreign friends more than male students (item 45). As for foreign language aptitude, female students more strongly agreed with the statement that "Girls are better than boys at learning foreign languages" (item 26) than male students.

6.3.4. Grade Level

As Table 10 shows, the participants from different grade levels held different beliefs in terms of Factors 1, 2, and 5. Multiple comparisons were made to identify which groups of students differed according to these factors (See Table 11).

Table 10: Comparison of Factors by Grade

Factor	*Graduate*		*Eleventh Graders*		*Tenth Graders*		*P*
	Mean	SD	Mean	SD	Mean	SD	
Factor 1	1.8743	0.4250	1.7609	0.4349	1.7116	0.4345	0.002**
Factor 2	2.8058	0.6153	3.0198	0.6686	3.0927	0.6608	0.001**
Factor 3	3.3913	0.6416	3.2668	0.7680	3.3592	0.6788	0.326
Factor 4	1.7337	0.3924	1.7780	0.4316	1.7615	0.3320	0.660
Factor 5	2.5711	0.5112	2.4231	0.4651	2.4971	0.4615	0.020*

*p < 0.05; **p < 0.01

Tenth graders and eleventh graders held stronger beliefs than graduates as to Factor 1 ($p<0.05$). In terms of Factor 2, there was a significant difference between the participants' beliefs. Graduates had stronger beliefs about structural language learning (Factor 2) than both tenth graders ($p<0.05$) and eleventh graders ($p<0.01$). For Factor 5, there is a significant difference between only graduates and eleventh graders ($p<0.01$). Accordingly, eleventh graders more strongly agreed with the statements related to foreign language aptitude than graduates (See Table 11).

Table 11: Multiple Comparisons for Factors 1, 2 and 5 - Scheffe Test

Factor	*Grade (I)*	*Grade (J)*	*Mean Difference (I-J)*	*Std. Error*	*P*
Factor 1	Graduates	Eleventh Graders	0.1134	0.0424	0.029*
		Tenth Graders	0.1627	0.0641	0.041*
	Eleventh Graders	Tenth Graders	0.0493	0.0639	0.743
Factor 2	Graduates	Eleventh Graders	-0.2141	0.0636	0.004**
		Tenth Graders	-0.2869	0.0960	0.012*
	Eleventh Graders	Tenth Graders	-0.0728	0.0958	0.749
Factor 5	Graduates	Eleventh Graders	0.1480	0.0478	0.009**
		Tenth Graders	0.0740	0.0722	0.592

	Eleventh Graders	Tenth Graders	-0.0740	0.0721	0.590

*p <0 .05; **p < 0.01

When compared with each other, eleventh graders more strongly agreed with the statement "I enjoy practicing English with the foreigners I meet" (item 13) than graduates, whereas tenth graders agreed with the statement "I would like to learn English so that I can get to know English-speaking people better" (item 37) more strongly than eleventh graders and graduates. On the other hand, graduates did not agree with the statement that "I would like to have English-speaking friends" (item 45) as much as tenth and eleventh graders. As far as structural language learning (Factor 2) is concerned, graduates held stronger beliefs about this dimension than tenth graders; they agreed with items 14, "In English classes, I prefer to have my teacher provide explanations in Turkish " and item 24, "To understand English, students must first translate it into Turkish" more strongly. Similarly, these high school graduates more strongly agreed with the statement that "To say something in English, I think of how I would say it in Turkish and then translate it into English" (item 31) than tenth and eleventh graders, and that "The most important part of learning a foreign language is learning the grammar" (item 35) than eleventh graders. As to foreign language aptitude (Factor 5), tenth graders tended to assert that "Some languages are easier to learn than others" (item 3) than graduates, and tenth and eleventh graders significantly differed from graduates in their belief that "I have a special ability for learning foreign languages" (item 18). All these findings demonstrated that learners' beliefs about language learning differed in varying grade levels.

6.3.5. Age

As it can be seen in Table 12, the comparison of factors by age groups yielded significant differences in terms of Factors 1, 2 and 5. Multiple comparisons were made to identify which age groups differed according to these factors (See Table 13).

Table 12: Comparison of Factors by Age Groups

	Age 16-17		*Age 18*		*Age 19-20*		
Factor	Mean	SD	Mean	SD	Mean	SD	P
Factor 1	1.7347	0.4285	1.8132	0.4285	1.8803	0.4378	0.006**
Factor 2	3.0753	0.6716	2.9080	0.6219	2.7941	0.6389	0.001**
Factor 3	3.2885	0.7287	3.2761	0.7593	3.4547	0.5902	0.124
Factor 4	1.8119	0.4093	1.7239	0.3824	1.7267	0.4156	0.060
Factor 5	2.4552	0.4944	2.4560	0.4592	2.5968	0.5062	0.021*

*p < 0.05; **p < 0.01

According to the results of the multiple comparisons, the group of participants at age 16-17 responded more positively to Factor 1, *Beliefs about social interaction and learning spoken English*, than those at age 19-20. These same students at age 16-17 agreed with the statements in Factor 2, *Beliefs about structural language learning*, less than those at age 19-20. For Factor 5, *Beliefs about foreign language aptitude*, the students at age 16-18 more strongly agreed with the statements in Factor 5 than those who were 19-20.

Table 13: Multiple Comparisons for Factors 1, 2 and 5 - Scheffe Test

Factor	*Age (I)*	*Age (J)*	*Mean Difference (I-J)*	*Std. Error*	*P*
Factor 1	Age 16-17	Age 18	-0.0784	0.0472	0.252
		Age 19-20	-0.1456	0.0495	0.014 *
	Age 18	Age 19-20	-0.0672	0.0501	0.407
Factor 2	Age 16-17	Age 18	0.1673	0.0706	0.061
		Age 19-20	0.2812	0.0741	0.001 **
	Age 18	Age 19-20	0.1139	0.0749	0.316
Factor 5	Age 16-17	Age 18	-0.0009	0.0532	1.000
		Age 19-20	-0.1416	0.0558	0.041 *
	Age 18	Age 19-20	-0.1408	0.0564	0.045 *

*p < 0.05; **p < 0.01

A close examination of these results showed that younger adults favored more communicative and contemporary language instruction and believed the notion of special abilities for language learning more than older participants. For example, the students at age 16-17 reported more confidently than all the others that "I believe that some day I will learn to speak English very well" (item 5). Similarly, the participants at age 16-17 as well as at age 18 expressed more significantly than those at the age of 19-20 that "I enjoy practicing English with the foreigners I meet" (item 13). Again, those at age 16-17 more strongly agreed with the statement "I would like to have English-speaking friends" (item 45) than those at the age of 19-20. On the other hand, the participants at age 18 and 19-20 believed more strongly than those at age 16-17 that "*If my teacher is a native speaker, he/she should be able to speak Turkish when necessary*" (item 25). Another interesting result was that the participants at age 18 and 19-20 believed more strongly than those at age 16-17 that "*To say something in English, I think of how I would say it in Turkish and then translate it into English"* (item 31). Those participants at the age of 19-20 agreed with the statement "I would feel embarrassed to speak English in front of other people" (item 32) more strongly than those at 16-17 and 18. Finally, all the participants at age 16-17 and 18 agreed with the statement "I have a special ability for learning foreign languages" (item 18) more strongly than those at age 19-20.

7. DISCUSSION AND CONCLUSIONS

The major aims of this study were to investigate what beliefs Turkish students in secondary education held about learning English as a foreign language, how their belief systems were organized and whether there were significant differences in belief systems among learner groups according to variables such as social and school contexts, gender, age and grade level. As the present study demonstrates, Turkish EFL learners in secondary education have a broad range of language learning beliefs both similar to and different from those in the current literature. On the other hand, their metacognitive knowledge or beliefs have variation

depending on societal and instructional circumstances as well as stage of learning, gender and age.

The participants involved in this study responded differently to the statements about a variety of language learning beliefs. Nevertheless, there are certain notions that instructors and administrators should attend to. These younger students in secondary education seem to have acquired the view that knowing a foreign language is very important in the country and thus believe that they will learn to speak English very well. On the other hand, there seems to exist a striking difference in their response frequencies between structural and communicative images of language learning and teaching because half the participants regard translation, vocabulary, and grammar as important parts of language learning. This may be due to the fact that these students prepare for a university entrance examination with more structural focus. Alternatively, it may also hold true that they have acquired a strong view and awareness of grammar and translation from the current instructional approaches in certain contexts. Their belief that language learning involves a lot of memorization may lead to "poor cognitive performance" (Reid & Hresko, 1981). It also is interesting to note that these younger EFL learners in secondary education are more convinced of the "core belief" in the literature (Horwitz, 1999) that children learn a foreign language more easily than adults. Finally, they more forcefully tend to believe the notion of special abilities for language learning while only half the students perceived themselves to have such abilities.

One of the important findings of the present study is the evidence that learners' beliefs have variability in certain social contexts. The comparison of two cities as social contexts reveals that there exist differences in the learners' perceptions of (i) beliefs about social interaction and learning spoken English, (ii) beliefs about the quality and adequacy of EFL instruction, and (iii) beliefs about foreign language aptitude. While the participants in one context (Context B) perceive the Turkish to be good at learning foreign languages and feel that EFL instruction in secondary education is adequate enough to provide them with the opportunities to learn English, the students in another context (Context A) at the heart of the country feel pessimistic as to the quality and sufficiency of EFL education in question. More interestingly, the pessimistic group of students in the Context A support the necessity of knowing about the target culture in learning English but at the same time feel more strongly that they can improve their English only by engaging with native speakers of English. In the first place, it is likely that educational practices and instructional methodologies account for the variability in their perceptions of the quality and sufficiency. Second, it is also possible to assert that the students in the social setting who are frequently in close contact with foreign visitors have acquired a more realistic sense of the target language and feel less dependent on the belief of learning English only from native speakers.

In addition to previous studies (Kern, 1995; Horwitz, 1987; Horwitz, 1999), the present study has also demonstrated more thoroughly that instructional settings play a crucial role in the learners' acquired knowledge or awareness of language learning and teaching. The multiple comparisons carried out into the dimensions of language learning beliefs point out that Turkish EFL learners in secondary education significantly differ in their conceptions of social interaction and learning spoken English and structural language learning. Of all the types of high schools, private high schools seem to hold strong beliefs in the value of communication, whereas the students at GHS indicate the smallest amount of agreements with this pattern of beliefs about language learning. The other high school participants mediate between PHS and GHS, though. On the other hand, only the students from ATPHS and PHS settings hold less

"misconceptions" about the assumptions concerning the structural view of language learning. These students with more contemporary or communicative ideas of the learning process appear to be less dependent on structural thought of the process, but there still seem to exist inter- and intra-group differences among public schools, namely, general high schools in favor of stronger beliefs about this aspect of the learning process than the other state schools. By the same token, the students from GHS seem to more strikingly be dissatisfied with the quality and adequacy of EFL instruction at their schools. As another case in point, it is those participants enrolled in private high schools that have much more positive notions of quality and adequacy of EFL education.

It is never the purpose of this study to open up a dichotomy between private and public institutions in secondary education in the Turkish context. With respect to "Beliefs about quality and adequacy of EFL instruction" (Item 27 in Factor 3) the population from state schools seem to possess, albeit variability, most dissatisfaction and traditional/structural feelings of language learning. These conceptions may be signs of the current practices in the instructional settings. Alternatively, it may also be asserted that they reflect a store of knowledge and beliefs acquired from the teachers themselves in action as well as their peers and the society. In any case, curriculum designers and decision-makers as well as language instructors may attend to this accumulation of learner beliefs for more effective planning and more appropriate foreign language instruction.

This study also investigated the differences in learner beliefs between female and male students in secondary education. Female participants hold stronger beliefs about not only social interaction and learning spoken English but also foreign language aptitude. Females tend to derive more enjoyment from studying English and talking to native speakers, and attach more importance to vocabulary and pronunciation as well as audio and audio-visual input. Female students also theorise that women are better language learners than men. In a recent study into EFL teacher trainees' beliefs, Tercanlioglu (2005) did not come across any difference between gender and belief dimensions. However, this study supports Bacon and Finnemann's (1992) prediction of foreign language beliefs by gender in that female learners feel a higher level of social interaction. Further, the study indicates that female learners perceive themselves to be superior learners than their male peers in addition to their stronger tendency to learning spoken English.

As a significant contribution to research in language learners' beliefs, the study has also demonstrated that grade level can be an important variable in the development of language learning beliefs. In her article on cultural and situational influences on foreign language learners' beliefs, Horwitz (1999) states that beliefs may vary according to stages of learning. More specifically, the present study supports that the learners at varying grade levels differ in their beliefs about social interaction, structural orientation to the language learning process and foreign language aptitude. It may be stated that the lower the learners' grade level, the stronger conceptions they have about communication and language aptitude. The higher their grade level, the more they value formal structural language learning. These conceptions of foreign language learning at certain grades seem to bear similarities with those of other learners at differing ages. As the results indicate, younger learners in secondary education have a stronger feeling of social interaction and a more dominant belief about foreign language aptitude as well as less anxiety than older EFL students of secondary education.

On a pedagogical level, the identification of learner beliefs and reflection on their potential impact on language learning and teaching can be useful for syllabus designers and ESL/EFL teachers. In fact, syllabus designers and decision-makers as well as language instructors should attend to the accumulation of metacognitive knowledge or learner beliefs for more effective planning and more appropriate foreign language instruction. Some students may come to the foreign language classroom "with certain attitudes, beliefs, and expectations that may actually prove harmful to their success in the classroom" Mantle-Bromley (1995, p. 383). In addition, Schultz (2001) suggested that "teachers explore their students' perceptions regarding those factors believed to enhance the learning of a new language and make efforts to deal with potential conflicts between student beliefs and instructional practices (p. 244).

The results of this study demonstrated that Turkish EFL learners have a broad range of conceptions both similar to and different from those reported in the current literature. Therefore, researchers should exercise caution in generalizing the findings of the current study beyond the Turkish population. Further research could be conducted on young learners in primary education to investigate language learners' beliefs and their relationship between factors such as age, language proficiency, motivation, anxiety, attitude, and self-efficacy; as well as the impact of learner beliefs on learning practices. Above all, there is such a growing body of literature and research findings on metacognitive knowledge or language learning beliefs that it could be interesting to conduct research on a meta-analysis of related studies that address second / foreign language education.

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REFERENCES*

Abraham, R. G. & Vann, J. V. (1987). Strategies of two language learners: A case study. In A. Wenden & R. Rubin (Eds.), *Learner strategies in language learning* (pp. 85-102). London: Prentice Hall.

Bacon, S. & Finnemann, M. (1992). Sex differences in self-reported beliefs about foreign-language learning and authentic oral and written input. *Journal of Educational Psychology*, *92(4)*, 818-825

Banya, K. & Cheng, M. (1997). *Beliefs about foreign language learning: A study of beliefs of teachers' and students' cross-cultural settings.* Research Report. ERIC Document Reproduction Service No. ED 411 691

Bernat, E. (2004). Investigating Vietnamese ESL learners' beliefs about language learning. *EA Journal, 21(2)*, 40-54.

Bernat, E. (2006). Assessing EAP learners' beliefs about language learning in the Australian context. *Asian EFL Journal, 8*(2). Retrieved August 5, 2007, from http://www.asian-efl-journal.com/June_06_eb.php

Bernat, E. & Gvozdenko, I. (2005). Beliefs about language learning: current knowledge, pedagogical implications, and new research directions. *TESL-EJ 9*, 1-21. Retrieved May 6, 2005, from http://tesl-ej.org/ej33/a1.html

Bernat, E. & Lloyd, R. (2007). Exploring the gender effect in EFL learners' beliefs about language learning. *Australian Journal of Educational and Developmental Psychology, 7*, 79-91. Retrieved August 5, 2006, from http://www.newcastle.edu.au/group/ajedp/Archive/Volume_7/v7-bernat_lloyd.pdf

Brown, A. L. & Palinscar, S. (1982). Inducing strategic learning from texts by means of informed, self-control training In D. K. Reid & W. P. Hresko (Eds.), *Metacognition and learning disabilities: Topics in learning and learning disabilities* 2-1 (pp. 1-18). Rockville: Aspen Publication.

Cotterall, S. (1995). Readiness for autonomy: Investigating learner beliefs. *System, 23(2)*, 195-205.

Cotterall, S. (1999). Key variables in language learning: What do learners believe about them? *System 27(4)*, 493-513.

Flavell, J. H., 1979. Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34*, 906-911.

Graham, S. (2006). A study of students' metacognitive beliefs about foreign language learning and their impact on learning. *Foreign Language Annals, 39(2),* 296-309.

Gremmo, M. J. & Riley, P. (1995). Autonomy, self-direction and self-access in language teaching and learning: The history of an idea. *System, 23(1)*, 151-164.

Holec, H. (1987). The learner as manager: Managing learning or managing to learn? In A. Wenden & R. Rubin (Eds.), *Learner strategies in language learning*. (pp. 145-157). London: Prentice Hall.

Horwitz, E. K. (1983). *Foreign language classroom anxiety scale*. Unpublished manuscript.

Horwitz, E. K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals, 18(2)*, 333-340.

Horwitz, E. K. (1987). Surveying student beliefs about language learning. In A. Wenden & R. Rubin (Eds.), *Learner strategies in language learning*. (pp. 119-129). London: Prentice Hall.

Horwitz, E. K. (1988.) The beliefs about language learning of beginning university foreign language students. *Modern Language Journal, 72(3)*, 283–294.

Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners' beliefs about language learning: A review of BALLI studies. *System, 27(4)*, 557-576.

Kern, R. G. (1995). Students' and teachers' beliefs about language learning. *Foreign Language Annals, 28(1)*, 71-92.

Kunt, N. (1997). *Anxiety and beliefs about language learning: A study of Turkish-speaking university students learning English in North Cyprus*. Unpublished doctoral dissertation, The University of Texas, Austin, TX.

Kuntz, P. S. (1999). *Secondary Students' Beliefs about Language Learning.* ERIC Document Reproduction Service, No. ED 427 514

Mantle-Bromley, C. (1995). Positive attitudes and realistic beliefs: Links to proficiency. *Modern Language Journal 79*, 372-386.

Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Boston, MA: Heinle & Heinle.

Park, G. P. (1995). *Language learning strategies and beliefs about language learning of university students learning English in Korea*. Unpublished doctoral dissertation, The University of Texas, Austin, TX.

Reid, D. K. & Hresko, W. P. (1981). *A cognitive approach to learning disabilities*. New York, NY: McGraw Hill.

Richards, J. C. & Lockhart, C. (1996). *Reflective teaching in second language classrooms*. Cambridge: Cambridge University Press.

Sakui, K. & Gaies, S. J. (1999). Investigating Japanese learners' beliefs about language learning. *System, 27(4)*, 473-492.

Schultz, R. A. (2001). Cultural differences in student and teacher perceptions concerning the role of grammar instruction and corrective feedback: USA-Columbia. *Modem Language Journal, 85(2),* 244-258.

Siebert, L. L. (2003). Student and teacher beliefs about language learning. *The ORTESOL Journal, 21*, 7-39

Tercanlioglu, L. (2005). Pre-service EFL teachers' beliefs about foreign language learning and how they relate to gender. *Electronic Journal of Research in Educational Psychology 5-3*, 145-162.

Truitt, S. N. (1995) *Anxiety and beliefs about language learning: A study of Korean university students learning English*. Unpublished doctoral dissertation, The University of Texas, Austin, TX.

Tsai, C. I. (2004). Anxiety and beliefs about language learning: A study of Taiwanese students learning English. *Dissertation Abstracts International, A: The Humanities and Social Sciences, 64,* 3936-A

Tumposky, N. (1991). Student beliefs about language learning: A cross-cultural study. *Carleton Papers in Applied Linguistics, 8*, 50-65.

Victori, M. (2004). *Eliciting and fostering learners' metacognitive knowledge about language learning in self-directed learning programs: A review of data collection methods and procedures*. Barcelona: Autonomous University of Barcelona.

Victori, M. & Lockhart, W. (1995). Enhancing metacognition in self-directed language learning. *System, 23(2)*, 223-234.

Wen, Q. & Johnson, R. K. (1997). L2 learner variables and English achievement: A study of tertiary-level English majors in China. *Applied Linguistics, 18(1),* 27-48.

Wenden, A. L. (1986a). Helping language learners think about learning. *ELT Journal, 40(1)*, 3-12.

Wenden, A. L. (1986b). What do second-language learners know about their language learning? A second look at retrospective accounts. *Applied Linguistics, 7(2)*, 186-205.

Wenden, A. L. (1987a). How to be a successful language learner: Insights and prescriptions from L2 learners. In A. Wenden & R. Rubin (Eds.), *Learner strategies in language learning*. (pp. 103-117). London: Prentice Hall.

Wenden, A. L. (1987b). Metacognition: An expanded view on the cognitive abilities of L2 learners. *Language Learning 37*, 573-598.

Wenden, A. L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics 19(4)*, 515-537.

Wenden, A. L. (1999). An introduction to metacognitive knowledge and beliefs in language learning: Beyond the basics. *System 27(4)*, 435-441.

Yang, N.-D. (1992). *Second language learners' beliefs about language learning and their use of learning strategies: A study of college students of English in Taiwan*. Unpublished doctoral dissertation, The University of Texas, Austin, TX.

Yang, N.-D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System 27(4)*, 515-535.

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