Available online at:
http://dergipark.ulakbim.gov.tr/eltrj/
International Association of Research
in Foreign Language Education and Applied Linguistics
ELT Research Journal
2015, 4(2), 129-146
ISSN: 2146-9814

Age related gender differences in causal attributions of Turkish learners of English as a foreign language

İsmail Hakkı Erten[1]

Hacettepe University, Ankara-Turkey

Abstract

This study sought to elucidate how female and male learners of English tend to explain their achievement in their English classes. The study also investigated whether age exerts an impact on to what achievement in English is ascribed. To do this, a composite instrument was administered to a total of 578 learners (Mean age = 14.33, SD = 2.08) of English across five cities in Turkey. A total of 262 students were from the 6th grade while 313 were studying English at the 10th grade. Of participants, 336 were female while 238 were male. The composite instrument elicited participants' achievement attributions after the release of their latest English exam results. An analysis of the data revealed that both groups identified *the teacher input* as the most important attribution for their achievement although the 10th graders reported a much lower mean value for the teacher factor. A further multivariate analysis of variance revealed significant main and interaction effects of both gender and age (class) on majority of attributions manifested for the test performance. The results suggest that when there is a change in attributions, the change may be related mostly to changes in attributions of female participants from 6th Grade to 10th grade, implying a much stronger puberty effect on female learners of English. The results are discussed and suggestions are made in relation to current literature.

Keywords: achievement attributions; gender difference; age difference; motivation; puberty

[1] Associate Professor, Hacettepe University, ELT Department, Ankara-Turkey.
E-mail: iherten@hacettepe.edu.tr; iherten@gmail.com

Introduction

Attributions are subjective reasons and explanations given by people for why they have failed or succeeded in a given task, test, or an activity (Weiner, 1992, 2010). Insofar as they are individuals' subjective evaluation of what they did, attributions can be instrumental to better understand future motivation and/or motivated behaviour. Weiner (2010: 29) makes this clear when he comments on the possible close relationship between attributions and one's motivated behaviour in his statement "…the interpretation of the past, that is, the perceived causes of prior events, determines what will be done in the future." The link between attributions and motivation suggests that learners interpret the results of a given activity with reference to their earlier learning experiences and are often inclined to seek an explanation for the outcome of the activity by nominating a possible cause in line with their previous experiences.

Insofar as attributions are past-rooted, they are also likely to have an impact on future plans of individuals. Reflecting on the interplay between the features of a given task, the type of the outcome, and attributions generated for the task outcome, individuals will construct solutions as to what they will do about future learning tasks. In Weiner`s (1992) attribution related motivation theory, for example, if a student frequently fails in a relatively easy task and explains this result with reference to the lack of ability, it may later prove difficult for that particular student to motivate herself, possibly resulting in withdrawal from participating in the activity and development of a possible feeling of learned helplessness. Alternatively, another failing student who attributes this result to not having made enough effort may have motivational orientation with relatively increased efforts for future tasks.

Attributions, according to Weiner (1992; 2010) can be of three broad defining categories. These are *locus of causality*, *stability*, and *control*. Each of these categories has dichotomous dimensions. Different types of attributions, therefore, belong to one particular dimension in each broad category. The *locus of causality,* for example, refers to whether individuals attribute their performance to an internal or external cause. *Internal attributions* include whether students feel the outcome was because they had or lacked the ability required for the task, or perhaps because they made efforts that were necessary to succeed in the task. *External attributions*, on the other hand, contain the level of difficulty ascribed by the individuals to the task, or how lucky/unlucky individuals perceived themselves during the course of an activity. The *stability* dimension expands elaboration of attributions by providing further information as to whether these causes are alterable, and thus likely to change or remain unchanged over time. To this end, ability is an internal but relatively stable cause while effort is an internal but unstable factor. *Controllability* informs us of the amount of control an individual perceives to have over the outcome of an activity. Task difficulty and luck in performing a task, for example, are often factors over which individuals appear to manifest less control than they do over the amount of effort they made or are willing to invest in a given activity.

Attribution research in second language learning

Research in achievement attributions in the field of SLA has only recently gained proliferation (e.g. Erler & Macaro, 2011; Erten and Burden, 2014; Gobel & Mori, 2007;

Gobel & Mori, Thang, Kan, & Lee, 2011; Hsieh & Schallert, 2008; Peacock, 2009; Ushioa, 2001; Williams & Burden, 1999; Williams, Burden, & Al-Baharna, 2001; Williams, Burden, Poulet, & Maun, 2004).

Early studies endeavoured to document how language learners explained their language learning achievement or failure. Findings of these early studies often highlight the possibility that although some internal and controllable attributions were given for achievement and failure, causes cited by language learners for their performance often resembled uncontrollable attributes. Williams and Burden (1999), for example, found that British primary students studying French attributed their success mainly to their efforts, assistance from other people, and their competence. Distraction by other students, difficulty of language learning, poor teaching, and not concentrating were perceived causes of not doing so well. Erler and Macaro (2011) identified strangeness of French and not making efforts as the main causes for not doing well. In another study, Williams, Burden, and Al-Baharna (2001) inform us that their 25 participants learning English also manifested that their success was due to their effort (practice), help from others (family and teachers), seeing and listening to the language, and having a positive attitude, while the causes of failure were seen as poor teaching methods, lack of support from others, poor comprehension and negative attitude. Williams, Burden, Poulet, and Maun (2004) conducted a survey study where 285 students learning different foreign languages in the UK were asked to give reasons for their success and failure. Success was attributed to 21 different causes while failure was seen to be due to 16 different causes. A greater proportion of attributions given for both doing well and not doing well were internal.

Language learners do not appear to subscribe to internal attributions to explain their success or external causes for their failure. In some instances the reverse order seems to hold true. Several studies have identified the teacher as the main attribution for success. Tse (2000) found that those university students who felt successful credited mainly external factors (e.g. teacher or classroom environment and family or community assistance, as well as a personal drive to learn). On the other hand, those who saw themselves as less successful accounted for their lack of success by referring primarily to themselves for not studying enough or being sufficiently motivated, followed by poor teaching or the teaching method, and peer group influence. Such a self-critical approach was also observed among Chinese (Peacock, 2009), Japanese and Thai students (Gobel & Mori, 2007; Mori, Gobel, Thepsiri, & Pojanapunya, 2010) and Malaysian students (Thang, Gobel, Norl, & Suppiah, 2011). Gobel and his associates point to possible cultural differences in attributions given to achievements and failures.

Peacock (2009) investigated the attributions of 505 Chinese university students through qualitative and quantitative methods. He found that most attributions of learners were unstable and controllable, as expressed in effort. Participants also identified their teacher as a source of their success. Supporting evidence regarding teacher attribution in Peacock's study comes from three Asian studies. Gobel and Mori (2007) and Mori et al. (2010) found that both Japanese and Thai students attributed success to external factors and failure to internal factors. With Malaysian students, Thang et al. (2011) reported that most frequently mentioned reasons for success included interest for getting good marks and teacher influence while for

failure the lack of preparation and ability were to blame. Similarly, in the Turkish context, Erten and Burden (2014), too, found that 6th grade learners of English attributed their latest English test score to their teachers. These findings are explained by the highly respected status of teaching and teachers.

More recently, studies employing more robust inferential techniques of statistical analysis identified causal relationships between attributions and achievement in foreign language learning (Cochran et al., 2010; Erler & Macaro, 2011; Erten & Burden, 2014; Hashemi & Zahibi, 2011; Hsieh & Schallert, 2008; Pishghadam & Zabihi, 2011). Despite the fact that earlier descriptive studies reported attributions by language learners to more controllable/internal/unstable factors (see above), unexpectedly recent studies often reported the fact that only uncontrollable/stable attribution factors such as ability (Hsieh & Schallert, 2008); luck and mood (Pishghadam & Zabihi, 2011), task difficulty (Hashemi & Zahibi, 2011), and ability, interest, and teacher (Erten & Burden, 2014) appear to be explaining significant unique variance in learner's achievement measures, highlighting a causal relationship between these attribution factors and achievement, and a self-critical tendency in oriental cultures. Only one of the above studies (Pishghadam & Zabihi, 2011) reported that effort attribution as an internal/controllable factor entered into regression models to explain significant unique variance in achievement scores. It is beyond the scope of this study to further discuss the causal relationships between attributions and language learning achievement.

Individual differences in achievement attributions

Attributions generated by language learners are personal and may be in interaction with some other learner characteristics. To this end, descriptive studies have identified possible individual differences in language learners' attributions for their success in learning. Such differences may include cultural differences (see above), gender (e.g. Cochran et al., 2010; Peacock, 2009; Williams et al., 2004), age (e.g. Williams et al., 2004), and proficiency (Peacock, 2009). Of possible individual differences, specifically related to this study are gender and age differences. What follows is a brief review of limited research into these factors.

Gender: Research into gender effect on achievement attributions is scarce and limited to only a few studies. Limited research into gender differences does not provide all consistent results. Kang (2000) found that Korean middle school girls scored consistently higher on all attribution aspects, indicating female students are more likely to attribute their success to internal factors than male students. In a more recent study, Cochran et al. (2010) also documented significant gender differences in effort attributions, girls attributing their achievement more to their efforts than boys. In the Turkish context, Satıcılar (2006) reports that female sixth grade learners of English attributed their success in English to effort more than their male peers while his male participants resorted to ability attribution more than female participants to explain their success. However, such a finding does not hold true across other studies. Williams et al. (2004), for example, also report considerable differences. Their findings, however, highlighted boys to refer to their effort more than girls as the main cause of their effort while girls in their data referred to the use of learning strategies and their

teachers for doing well more than boys. On the other hand, for failure, girls gave lack of effort, ability, and strategies as main factors, while boys gave misbehaving as the main factor more than girls. More dominant teacher attribution by female students resonated in Peacock's (2009) findings from the Chinese context. He reports to have found seven statistically significant gender differences, and that the largest difference between male and female students was on teacher factor as an external, stable and uncontrollable causal attribution in favour of female participants. Teacher attribution was also documented by other studies from non-western contexts (e.g. Erten & Burden, 2014; Gobel & Mori, 2007; Mori et al., 2010; Thang et al. 2011). That said, however, Peacock (2009) reports that other significant differences were on personal effort attributions as the main cause for achievement in favour of female participants. Considering the possible cultural differences summarized above and limited number of research studies, there is still much room to further our understanding of gender issues in causal attributions.

Age: Another individual difference that is of special interest for this study is the age effect on attributions. Age is particularly important for attribution studies as in closely related fields it appears to constrain research findings related to motivation (see Dörnyei, 2005) and academic self-concept (Burden, 2012) where age was found to cause some degree of decrease in mean scores obtained by older learners possibly due to some maturational constraints. Age is likely to influence one's perception of what happens to her and around. Limited research into causal attributions identified age as a possible factor on what students attribute their achievement to. In maths, for example, attributions were found to undergo significant changes in a longitudinal study (Swinton, Kurtz-Costes, Okeke-Adeyanju, & Rowley, 2011) where they documented that males and females' ability attributions for math deteriorated from Grade 8 to Grade 11. More specifically in foreign language learning, Williams et al. (2004) found that their participants attributed their achievement less to their effort as they grew older. Conversely, older students thought success was a result of interest and strategies they used more than did younger students, probably reflecting a more experienced approach to language learning. In the Chinese context, Liang (2012) found that attributions of Chinese English majors at tertiary level appeared to change over the course of four years, usually decreasing in mean scores. In the Turkish context, Satıcılar (2006), in his cross-sectional study, found that sixth graders and ninth graders attribute their achievement to different causes. Internal factors were favoured by the sixth graders; effort was the most emphasized causal attribution while it was so for failure among the ninth graders implying a change of perspective. More recently, two different studies in Turkey provided indirect evidence for possible age factor on causal attributions. Erten and Burden (2014) investigated the relationship between causal attributions and success among 6th grade learners of English in 5 different cities across the country. Ability attribution emerged as the best predictor of success along with academic self-concept scores. However, employing the same set of instruments with the 10th grade learners of English, Erten (2014) reported luck attribution as the only predictor of scores from the latest English test, implying a possible age effect on the differing levels of unique variance explained by causal attributions in the test scores of students from different age groups. With a lack of coherent findings, age emerges to be an influential factor on causal attribution generated by language learners of different age groups.

It is clear from the brief review presented above that although the findings are not always all confirming, both gender and age factor appear to be likely to influence how language learners explain their language learning performance. Girls do appear to resort to internal factors for success despite the fact that they also nominate their teacher more than boys as the source of their success. However, the teacher attribution also appears to be biased by cultural perspectives. Age, another concern in this study, also appears to be a factor. However, although a tendency for a decrease in the mean scores is possible, with little evidence available, it is not possible to make any decisive conclusions. Further, both females and males grow up and experience changes in their perception of their language learning process. This is especially evident in entering adolescence and expected social roles from different gender groups. Therefore, exploring the effects of age and gender, and/or interaction effects of both variables on how language learning performance is explained by language learners may as well further our understanding of language learners' causal attributions. This study then aims to investigate whether both gender and age of learners exert an effect, individually or in an interplay with one another, on to what language learners attribute their performance in an English achievement test. To do this, the following research questions were formulated.

RQ 1: To what do the participants of this study attribute their latest exam scores?

RQ 2: Do 10th grade and 6th grade participants of this study differ in their attributions for their latest English exam scores?

RQ 3: Do female and male participants of this study differ in their attributions for their latest English exam scores?

RQ 4: Do female and male participants of this study differ in their attributions for their latest English exam scores as they grow?

Method

Setting and participants

The study is a part of a larger scale study. Parts of the data were previously used to explore causal relationships between attributions and English achievement among 6th graders (Erten & Burden, 2014). The study was conducted in five different cities across Turkey: Bayburt, Çanakkale, İstanbul, Manisa, Mersin, and Samsun. These cities were selected to provide a fairly homogenous spread and representation of the population across the country. Schools in these cities were all urban schools. A total of 578 participants (Mean age = 14.33, SD = 2.08) took part in the study. Of these, 313 were Grade 10 students while 262 attended Grade 6 at the time of data collection. Three students did not report their class, leaving a total of 575 students for age group data. Of the participants, 336 were female and 238 were male, with four students not reporting gender information and thus leaving a total of 574 participants. A listwise exclusion of missing data on dependent variables resulted in a total of 496 respondents for further multivariate statistical analysis.

The instrumentation

The data were collected through a questionnaire that was compiled to inquire about language learners' achievement attributions. The questionnaire employed a 5-point Likert scale, ranging from 'totally disagree' to 'totally agree'. The questionnaire invites students to produce a reason for their latest English test score through an introductory statement "I earned this score because" which is followed by items with which students are requested to express a level of agreement. Although the questionnaire was not designed to function as a scale, it was reported (Erten & Burden, 2014) to have a good internal consistency coefficient (Cronbach's alpha = .729). The questionnaire was constructed to reflect the locus, stability, and controllability matrix proposed by Weiner (1992; 2010). The distribution of items according to locus of causality, control and stability dimension were as follows:

Effort (internal/controllable/unstable),

Ability (internal/uncontrollable/stable),

Task difficulty (external/uncontrollable/stable),

Luck (external/uncontrollable/unstable),

Situational effort/strategy use (internal/controllable/unstable),

Interest (internal/uncontrollable/unstable)

Family support (external/unstable) (un-controllable only by others)

Teacher (external/stable) (un-controllable only by others, Weiner, 2010);

Classroom atmosphere (external/uncontrollable/unstable)

Procedures for data collection & analysis

The data were collected in May 2012. Questionnaires were posted out to previously contacted schools. The instrument was administered by school teachers in normal class hours after the announcement of the latest English exam scores and posted back to the researcher. The return rate was a satisfactory 65.3%. Analysis was carried out by means of SPSS 19. Descriptive statistics were tabulated to answer the first research question. A multivariate analysis of variance (MANOVA) was performed to explore main and interaction effects of gender and age on participants' achievement attributions.

Findings

Achievement attributions

This study initially sought to explore to what participants of this study attribute their achievement in their latest English test. Descriptive statistics revealed that students mostly attributed their achievement to their teacher. Descriptive statistics can be found in Table 1.

Table 1

Attributions of Achievement in the Latest English Test

	N	Mean	SD
Instructor	569	3.92	1.32
Interest	569	3.62	1.34
Ability	566	3.56	1.26
Effort	571	3.19	1.11
Task difficulty	560	3.14	1.33
Class atmosphere	567	3.00	1.37
Situational effort (strategies)	562	3.00	1.29
Family	571	2.83	1.41
Luck	575	2.80	1.28

Participants in this study appear to attribute their performance in their latest English exam more than other factors to their teachers' input (*My teacher teaches well*; Mean = 3.92; SD = 1.32) followed by their interest in learning English (*I like learning English*; Mean = 3.64; SD = 1.34) and their ability in learning English (*I am talented in learning English*; Mean = 3.55; SD = 1.26). Task difficulty (*Learning English is easy*; Mean = 3.14; SD = 1.33), the effect of class atmosphere (*Class atmosphere helps me learn*; Mean = 3.00; SD = 1.37), and use of learning strategies (*I have strategies*; Mean = 3.00; SD = 1.29) were only moderately given as attributes of participants' exam performance. Family support (*My parents help me learn English*, Mean = 2.83; SD = 1.41) and luck factor (*I am lucky in English exams*; Mean = 2.80; SD = 1.28) received the lowest mean values, indicating the relatively little impact attributed to these factors on their latest exam scores.

Age and gender effects on attributions

The second aim of this paper was to explore whether achievement attributions are stable across different age and gender groups. A breakdown of total scores according to age is given in Table 2.

Table 2

Achievement Attributions according to Age Groups

	6th Graders			10th Graders		
	Mean	SD	N*	Mean	SD	N*
Instructor	4.37	1.21	231	3.63	1.27	265
Ability	3.75	1.23	231	3.44	1.26	265
Interest	3.72	1.44	231	3.60	1.26	265
Effort	3.61	1.09	231	2.80	1.03	265
Class atmosphere	3.40	1.34	231	2.64	1.27	265
Situational effort	3.38	1.36	231	2.69	1.13	265

Task difficulty	3.34	1.36	231	2.98	1.30	265
Family	3.20	1.41	231	2.58	1.34	265
Luck	3.08	1.25	231	2.59	1.23	265

*Missing data were excluded listwise for MANOVA

A multivariate analysis of variance (MANOVA) identified a clear age effect on achievement attributions produced by the participants for their test performance. Using Wilk`s Lambda statistics, a significant main effect of participants' *age group* was found (Λ = .806, F= 12.98, p < .000), indicating a large effect size (partial eta squared = .194). Although the mean scores appear to fit in a similar order of magnitude for both groups, there seemed to be a sharp decrease on all attribution factors but *interest* given for participants' exam performance, with no statistical significance (6^{th} = 3.72; 10^{th} = 3.60; F = .544; p > .05). Other group differences on attribution factors achieved statistical significance (in order of size of F values): *Effort* (6^{th} = 3.61; 19^{th} = 2.80; F = 65.554; p = .000; eta squared = .111); *Instructor* (6^{th} = 4.37; 19^{th} = 3,63; F = 49.865; p = .000; eta squared = .064); *Class atmosphere* (6^{th} = 3.40; 19^{th} = 2,64; F = 38.078; p = .000; eta squared = .072); *Situational effort (strategies)* (6^{th} = 3.38; 19^{th} = 2.69; F = 29.807; p = .000; eta squared = .057); *Family* (6^{th} = 3.20; 19^{th} = 2.58; F = 20.413; p = .000; eta squared = .040); *Luck* (6^{th} = 3.08; 19^{th} = 2.59; F = 16.612; p = .000; eta squared = .033); *Task difficulty* (6^{th} = 3.34; 19^{th} = 2.98; F = 7.518; p = .012; eta squared = .015); and *Ability* (6^{th} = 3.75; 19^{th} = 3,44; F = 5.988; p = .012; eta squared = .012).

Gender, too, seemed to exert main effects on attributions given by language learners for their exam performance (Λ = .912, F = 5.21, p < .000), also with a large effect size (partial eta squared = .088). A breakdown of mean values for each attribution factor according to gender can be seen in Table 3.

Table 3

Achievement Attributions according to Gender Groups

	Female			**Male**		
	Mean	**SD**	**N***	**Mean**	**SD**	**N***
Instructor	3.98	1.299	292	3.98	1.292	204
Interest	3.78	1.344	292	3.48	1.330	204
Ability	3.68	1.232	292	3.46	1.299	204
Effort	3.36	1.126	292	2.92	1.089	204
Task Difficulty	3.17	1.362	292	3.11	1.310	204
Situational effort (strategies)	3.08	1.327	292	2.92	1.231	204
Family	3.04	1.418	292	2.62	1.357	204
Class Atmosphere	2.98	1.368	292	3.02	1.332	204
Luck	2.73	1.281	292	2.95	1.216	204

*Missing data were excluded listwise for MANOVA

Both groups attributed their achievement mostly to their teachers, this factor ranking in the first place and achieving the identical mean value for both groups. Significant gender

differences, if any, were in favour female students. Girls attributed their latest exam scores more to *Interest* (female = 3.68; male = 3.46; F = 6.301; p = .012; eta squared = .013); *Effort* (female = 3.36; male = 2.92; F = 20.360; p = .000; eta squared = .040); and *Family* (female = 3.04; male = 2.62; F = 11.153; eta squared = .022). The only attribution male participants resorted considerably more than female participants was the *Luck* factor (female = 2.73; male = 2.95; F = 3.668; p = .056). However, this difference fell slightly out of the significance threshold.

Multivariate analysis of variance also revealed significant interaction effects of age and gender on to what participants of this study attributed their latest English test score (Λ = .928; F = 4.146; p < .000), indicating a medium effect size (partial eta squared = .072). Distribution of mean scores of attribution factors according to gender and age can be seen in Table 4.

Table 4

Achievement attributions according to age and gender

	6th Graders						**10th Graders**					
	Female			**Male**			**Female**			**Male**		
	Mean	**SD**	**N***	**Mean**	**SD**	**N***	**Mean**	**SD**	**N***	**Mean**	**SD**	**N***
Ability	3.89	1.17	141	3.54	1.30	90	3.48	1.26	151	3.39	1.30	114
Task difficulty	3.43	1.34	141	3.21	1.39	90	2.93	1.34	151	3.04	1.24	114
Instructor	4.58	1.00	141	4.04	1.42	90	3.41	1.29	151	3.92	1.18	114
Interest	3.87	1.43	141	3.48	1.42	90	3.70	1.26	151	3.47	1.26	114
Effort	3.88	1.00	141	3.19	1.09	90	2.87	1.02	151	2.71	1.05	114
Class atmosphere	3.43	1.34	141	3.36	1.34	90	2.56	1.26	151	2.75	1.27	114
Family	3.47	1.34	141	2.79	1.43	90	2.64	1.38	151	2.49	1.29	114
Situational effort	3.60	1.34	141	3.03	1.32	90	2.58	1.11	151	2.82	1.15	114
Luck	3.09	1.27	141	3.08	1.22	90	2.40	1.21	151	2.84	1.21	114

*Missing data were excluded listwise for MANOVA

Significant interaction effects were on (in order of size of F values) *Instructor* (F = 22.045, p = .000; partial eta squared = .043). The interaction appeared to involve a sharp decrease mostly in the female students' perceived contribution of instructor to their exam scores between the 6th Grade and the 10th Grade (6th Grade female = 4.58; 10th Grade female = 3.41; 6th Grade male = 4.04; 10th Grade female = 3.92). It appears that relatively higher levels of teacher attribution by female students in the 6th Grade appeared to have decreased in the 10th Grade. This interaction effect of age and gender on teacher attribution can be seen in Figure 1 below.

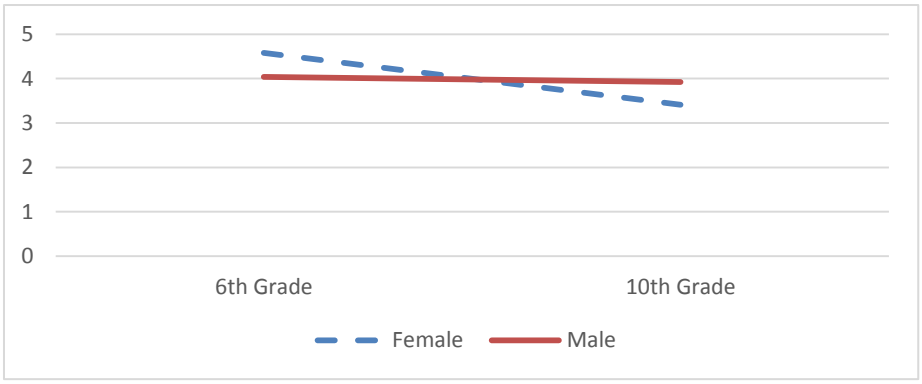

Figure 1
Age and Gender Effect on Teacher Attribution

Another interaction effect was observed on *Situational effort* (strategies) attribution (F = 12.992, p = .000; partial eta squared = .026). The interaction, too, involved a much higher decrease in the situational effort (use of learning strategies) attribution among female students from Grade 6 to Grade 10 (6th Grade female = 3.60; 10th Grade female = 2.58; 6th Grade male = 3.03; 10th Grade female = 2.82). This is illustrated in Figure 2 below.

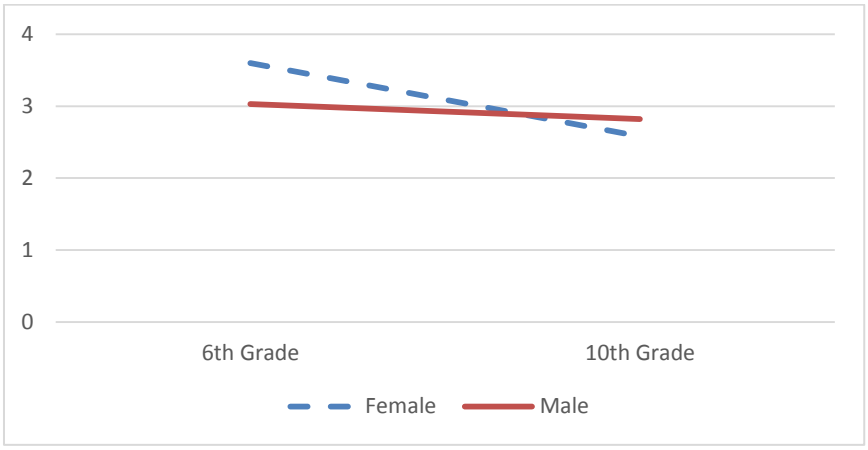

Figure 2
Age and Gender Effect on Situational Effort (Strategies) Attribution

A third interaction effect concerned participants' *Effort* Attribution (F = 7.747, p = .006; partial eta squared = .016). The gap between female and male students' effort attributions in Grade 6 appeared to have narrowed down in Grade 10 (6th Grade female = 3.88; 10th Grade female = 2.87; 6th Grade male = 3.19; 10th Grade female = 2.71). This is shown in Figure 3 below.

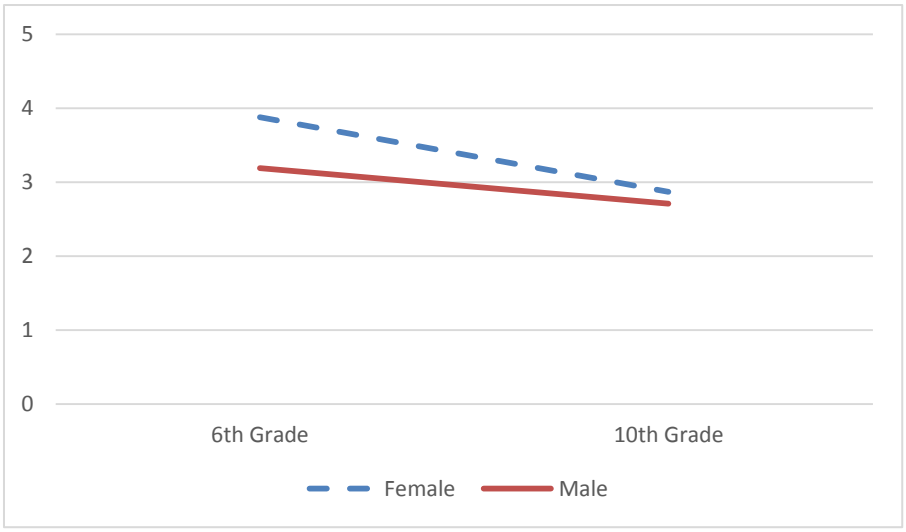

Figure 3
Age and Gender Effect on Effort Attribution

Family attribution also appeared to be influenced by the age and gender interaction (F = 4.510; p = .034, partial eta squared = .009). With this attribution factor, too, female participants appear to report a more noticeable decrease from 6th grade to 10th grade than male participants (6th Grade female = 3.47; 10th Grade female = 2.64; 6th Grade male = 2.79; 10th Grade female = 2.49). This change is given in Figure 4.

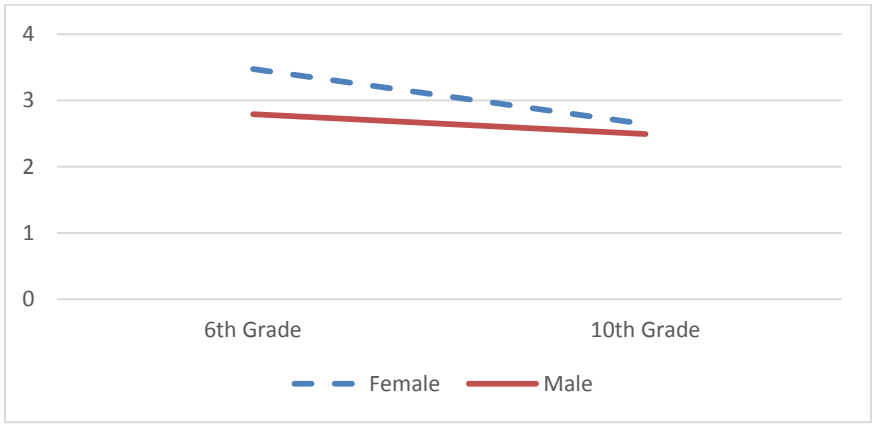

Figure 4
Age and Gender Effect on Family Attribution

Finally, the interaction between age and gender appeared to exert a slightly marginal yet statistically significant impact on students' *Luck* attribution (F = 3.922; p = .048; partial eta squared = .008). On this attribution factor, despite a general decrease on the mean scores from Grade 6 to Grade 10, male participants in Grade 10 tended to attribute their test performance to the luck factor more than their female peers (6th Grade female = 3.09; 10th Grade female = 2.40; 6th Grade male = 3.08; 10th Grade female = 2.84). This is illustrated in Figure 5 below.

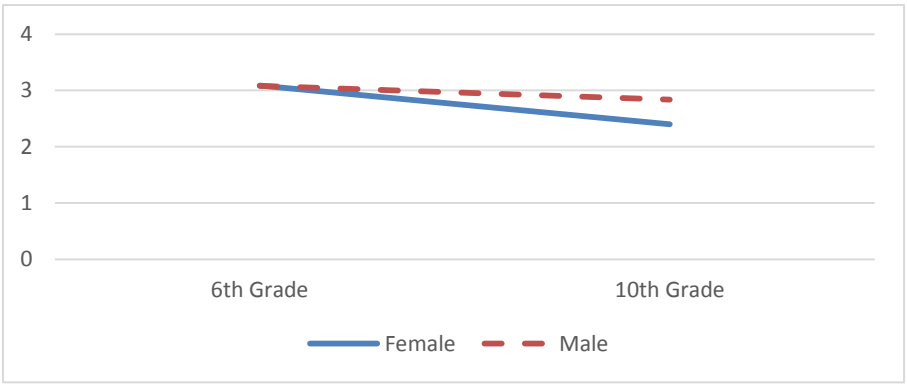

Figure 5
Age and Gender Effect on Luck Attribution

Discussion and Conclusion

This study aimed simply to explore language learners' attribution for their latest English exam scores in the Turkish context. The study was also an attempt to elucidate any possible age related gender differences on causal attributions. The main findings of this study were that 1) students in general attributed their task performance to their *teachers' input, their interest*, and *ability*; 2) attributions are likely to change over time in that, except for *interest* factor, the 10th graders in this study reported significantly lower mean scores on all other attribution items; 3) there was a clear gender effect on attributions; female students ascribed their latest test performance more than their male peers to i*nterest*, e*ffort, and family* attributions; there were no significant differences in favour of male students. Finally, this study identified clear interaction effects of age and gender on learner attributions. Female students showed much sharper declines than their male peers in their attributions between Grade 6 and Grade 10. Significant interaction effects were on *teacher, situational effort, effort, family*, and *luck* attributions.

Students' general attributional disposition indicates an inclination among Turkish language learners toward subscribing more to uncontrollable factors to explain their exam performance (see Weiner, 2010). Teacher input, for example, is an uncontrollable attribution factor. Teacher attribution is in keeping with many other non-western studies where teacher attribution was also given as one of the top achievement attributions (e.g. Gobel & Mori, 2007; Mori et al., 2010; Thang et al., 2011). This may simply be due to respect and affection non-western societies may have towards teachers and the teaching profession alike, and Turkish context is no exception to this (Kılınç, Watt, & Richardson, 2012). However, from a language learning perspective, crediting an external/uncontrollable/stable (at least not by the learners themselves) factor such as teacher is maladaptive and is unlikely to result in any heightened perseverance in cases of learner failure (Weiner, 2010).

Similarly, interest and ability as articulated by language learners are both internal factors. However they are both fairly uncontrollable. Further, these factors appear to be stable in their nature. Such prevalence of uncontrollable/stable attribution factors resonate with findings from research into causal relationships between attributions and achievement. Findings show that uncontrollable/stable attribution factors such as ability (Hsieh & Schallert, 2008); luck and mood (Pishghadam & Zabihi, 2011), task difficulty (Hashemi & Zahibi, 2011) and ability, interest, and teacher (Erten & Burden, 2014) were also identified to be the

best predictors of success. Frequent referencing to uncontrollable/unstable causal attributions is unfortunately not very promising as such a tendency may be associated with a fixed mindset (Dweck, 2006; Mercer, 2011; 2012), which itself is characterized with less control over the process of language learning and the sacrifice of possible learner autonomy.

Individual differences identified in this study are of special interest. Firstly, the main effects of age on attributions are in line with what has already been reported in the literature where a decrease was reported in mean scores of attributions as learners grow (Liang, 2012; Satıcılar, 2006; Swindon et al. 2011; Williams et al., 2004). Taking a process oriented approach to language learning motivation (Williams & Burden, 1997), this may be related to a possible motivational evolution experienced by language learners (Dörnyei, 2005; Williams, Burden, & Lanvers, 2002). It is quite possible that students may have gone through a negative experience as stated by Williams et al. (2002) which may have negatively influenced students' attributions. Another explanation can be related to effects of adolescence on students during which they become more aware of their strengths and weaknesses (Swindon et al., 2011). Young learners and adolescents, for example, may have different perceptions of ability and effort (Nicholls, 1990). Adolescents, along with their more elaborate cognitive development, may develop more realistic and self-critical evaluations of their personal properties (Keating, 1990), and their cognitive and physical efforts in their task/test/learning performances. The influence of age and motivational and attributional evolution deserves further scientific scrutiny.

More frequent resorting to i*nterest, e**ffort, and family* factors by female learners resonate with findings in the literature where female learners are often reported to ascribe their language achievement more than their male peers to internal factors (Liang, 2012) such as effort (e.g. Cohran et al., 2010; Satıcılar, 2006). Gender differences in effort attribution are in keeping with a gendered approach to learning processes. Kuh, Hu and Vespers (2000), for example, describe two types of students: hardworking grinds and social recreators. Female students are often categorized as grinds while male students are more likely to be labelled as recreators. This is because female students often come to class just on time and sit in the front row, prepare for the class, take notes, and organize their study (Zusman, Knox, & Lieberman, 2005) more than their male peers do. Similarly, Erten (2009) found that at the tertiary level, for example, female students compared to their male peers adopt a much more self-regulated approach of study towards their courses, and spend almost twice as long time on their courses.

Girls were also identified to have more positive attitudes and better motivational disposition in learning a language. Therefore, they may have attributed their achievement to their more favourable interests (or lack of it) in learning English. Finally, family attribution may be a token of appreciation by female students of their families. Erten (2009) found that female students report to receive more family support in their education.

Finally, age related gender differences in causal attributions are intriguing to interpret. Directly related literature is scarce on the interaction effects of age with gender on attributions. However, it seems that attributions of female learners of English appear to evolve much more dramatically than those of male learners. When there were considerable changes, female learners tended to become more like male learners in their perception of the causes of their achievement. This was especially discernible on *teacher, situational effort* (strategies),

effort, and *family* attributions. When male students were different from female students, they have come to believe more that their test result was because of *luck.*

One possible answer for the age related gender difference in causal attributions can be that female learners' motivation is likely to deteriorate more than male students during puberty. Only one direct study (Swinton et al., 2011) was identified in relation to possible interaction effects of age and gender on achievement attributions. Swindon and her associates were able to identify some age effects but they were unable to detect any age related gender difference in causal attributions. Indirect support for our contention is provided by Bugler (2012), who studied age related motivational changes. She found that although male students already had lower levels of motivation, female students exhibited a sharper decline in their academic motivation between early and mid-adolescence.

The data at hand do not permit the author to maintain that such age related gender differences in attributions can be developmental. However, by looking at the magnitude of changes between Grade 6 to Grade 10 and considering the fact that data were elicited from several cities across Turkeyand thus exhibit good coverage and representation of the population, it is not completely unsafe to suggest that causal attributions generated by language learners for their achievement in language learning are subject to transformation over years. It is to be expected, then, that attributions may change along with language learning experience and learners' developmental characteristics such as adolescence and cognitive development. To this end, it seems plausible to suggest that transformations can be sharper and of larger magnitude among female language learners.

Concerning the above conclusion, a word of caution is necessary. This study was cross-sectional in nature. Such a design may not readily lend itself to elucidate the genuine developmental patterns in one's motivational and attributional evolution. Further longitudinal studies are, therefore, required to better understand the developmental nature of whether and how language learners interact with their language learning experience (Dörnyei, 2005) and revise their achievement attributions; and whether female and male language learners undergo diverse developmental processes in their motivational and attributional disposition. Only with such information, will it be safe to draw more decisive conclusions concerning age related gender differences in causal attributions and offer further pedagogical implications.

Acknowledgements

Writing an article is often a joint venture. One feels the need to receive help and feedback from others. I was immensely informed by the late Professor Dr. Robert L. Burden of University of Exeter, UK, during the initial phases of this study. I owe him an expression of gratitude and appreciation for his fatherly words of encouragement and insightful comments. Sadly, he could not see the results of this endeavour. Secondly, I need to acknowledge my PhD students Kadriye Aksoy and Funda Ölmez of Hacettepe University. They read an earlier version of this paper and provided me with careful and informative feedback. Remaining inconsistencies and mistakes are obviously mine. Finally, but most importantly, I would like to dedicate this article to Professor Dr. Cem Alptekin, who passed away a year ago. Although I never was officially one of his students, his comments on my work, his friendship, and his meticulous and cutting-edge work informed me immensely throughout my academic career. I owe him greatly. May Him Rest in Peace.

References

Burden, R. L. (2012). *Handbook to the myself-as-a-learner-scale (MALS)*. Exeter: Exeter Cognitive Education Centre.

Cochran, J. L., McCallum, R. S., & Bell, S. M. (2010). Three A's: how do attributions, attitudes, and aptitude contribute to foreign language learning? *Foreign Language Annals*, *43*(4), 566–582.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale: Lawrence Erlbaum Associates.

Dörnyei, Z. (2000). Motivation in action: towards a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology*, *70*, 519–538.

Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: advances in theory, research, and applications. *Language Learning*, *53*, 3–32.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 9-42). Bristol: Multilingual Matters.

Dörnyei, Z., & Chan, L. (2013). Motivation and vision: An analysis of future L2 self images, sensory styles, and imagery capacity across two target languages. *Language Learning*, *63*(3), 437–462.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.

Erler, L., & Macaro, E. (2011). Decoding ability in French as a foreign language learning motivation. *Modern Language Journal*, *95*(4), 496-518.

Erten, İ. H. (2009). Gender differences in academic achievement among Turkish prospective teachers of English as a foreign language. *European Journal of Teacher Education*, 32(1), 75-91.

Erten, İ. H. (2014). Causal relationships between achievement attributions and English exam scores of 10th graders. Paper presented at the 8th International ELT Research Conference, 15-17 May 2015, Çanakkale-Turkey.

Erten, İ. H., & Burden, R. L. (2014). The relationship between academic self-concept, attributions, and L2 achievement. *System*, *42*, 391-401.

Gobel, P., & Mori, S. (2007). Success and failure in the EFL classroom: Exploring students' attributional beliefs in language learning. EUROSLA Yearbook 7 (pp. 149-169).

Gobel, P., Mori, S., Thepsiri, K., & Pojanapunya, P. (2010). Attributions for performance: A comparative study of Japanese and Thai university students. *JALT Journal*, *32*(1), 5-28.

Hashemi, M. R., & Zahibi, R. (2011). Learners' attributional beliefs in success or failure and their performance on the interchange objective placement test. *Theory and Practice in Language Studies*, *8*, 954-960.

Hsieh, P. P., & Kang, H. (2010). Attribution and self-efficacy and their interrelationship in the Korean EFL context. *Language Learning*, *60*(3), 606–627.

Hsieh, P. P., & Schallert, D. L. (2008). Implications from self-efficacy and attribution theories for an understanding of undergraduates' motivation in a foreign language course. *Contemporary Educational Psychology*, *33*, 513–532.

Kang, D. H. (2000). Motivation and foreign language learning in Korean EFL context. ERIC Document Reproduction Service No. ED 442 284.

Kılınç, A., Watt, H. M. G., & Richardson, P.W. (2012). Factors influencing teaching choice in Turkey. *Asia-Pacific Journal of Teacher Education, 40*(3), 199-226.

Lian, X. (2012). An empirical study on causal attribution regarding listening achievement of Chinese English majors. *Contemporary English Teaching and Learning in Non-English-Speaking Countries*, *1*(1), 23-46.

Little, A. (1985). The child's understanding of the causes of academic success and failure: a case study of British schoolchildren. *British Journal of Educational Psychology*, 55, 11-23.

Mercer, S. (2011). *Towards an understanding of language learner self concept*. London: Springer.

Mercer, S. (2012). Dispelling the myth of the natural-born linguist. *ELT Journal, 62*(1): 22-29.

Mori, S., Gobel, P., Thepsiri, K., & Pojanapunya, P. (2010). Attributions for performance: A comparative study of Japanese and Thai university students. *JALT Journal, 32*(1), 5-28.

Nicholls, J. G. (1990). What is ability and why are we mindful of it? A developmental perspective. In R. Sternberg & J. Kolligian (Eds.), *Competence considered* (pp. 11–40) New Haven, CT: Yale University Press.

Peacock, M. (2009). Attribution and learning English as a foreign language. *ELT Journal, 64*(2), 184-193.

Pishghadam, R., & Zabihi, R. (2011). Foreign language attributions and achievement in foreign language classes. *International Journal of Linguistics*, *3*(1), 1-11.

Satıcılar, U. (2006). *An investigation into the achievement attributions of different grade English language learners*. Unpublished MA Thesis, Institute of Social Sciences, Çanakkale Onsekiz Mart University, Çanakkale-Turkey.

Swinton, A. D., Kurtz-Costes, B., Rowley, S. J., & Okeke-Adeyanju, N. (2011). A longitudinal examination of African American adolescents' attributions about achievement outcomes. *Child Development, 82*(5), 1486-1500.

Thang, S. M., Gobel, P., Nor, N. F. M., & Suppiah, V. L. (2011). Students' attributions for success and failure in the learning of English as a second language: a comparison of undergraduates from six public universities in Malaysia. *Pertanika Journal of Social Sciences and Humanities, 19*(2), 459-474.

Tse, L. (2000). Student perceptions of foreign language study: A qualitative analysis of foreign language autobiographies. *Modern Language Journal*, *84*(1), 69–84.

Ushioda, E. (2001). Language learning at university: exploring the role of motivational thinking. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and Second Language Acquisition* (pp. 93-126). Honolulu: University of Hawai'i.

Vispoel, W. P., & Austin, J. R. (1995). Success and failure in junior high school: a critical incident approach to understanding students' attributional beliefs. *American Educational Research Journal*, *32*, 377-412.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. Newbury Park: Sage.

Weiner, B. (2010). The development of an attribution-based theory of motivation: A history of ideas. *Educational Psychologist*, *45*(1), 28-36.

Williams, M. D., & Burden, R. L. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge: Cambridge University Press.

Williams, M. D., & Burden, R. L. (1999). Students' developing conceptions of themselves as language learners. *Modern Language Journal, 83*(2), 193–201.

Williams, M. D., Burden, R., & Al-Baharna, S. (2001). Making sense of success and failure: the role of the individual in motivation theory. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 171–184). Honolulu: University of Hawai'i.

Williams, M. D., Burden, R., Poulet, G., & Maun, I. (2004). Learners' perceptions of their successes and failures in foreign language learning. *Language Learning Journal*, *30*, 19-29.

Williams, M., Burden, R., & Lanvers, U. (2002). 'French is the language of love and stuff': Student perceptions of issues related to motivation in learning a foreign language. *British Educational Research Journal, 28*(4), 503-528.

Zusman, M., Knox, D., & Lieberman, M. (2005). Gender differences in reactions to college course requirements or 'why females are better students'. *College Student Journal*, *39*(4), 661–66.