An Investigation into the Effects of Demographic Factors on EFL Learners’ Self-Efficacy Beliefs

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Abstract
This study investigated the level of self-efficacy beliefs of Turkish university learners who majored in English. Moreover, the effects of demographic factors of gender, grade level, types of initial motivation to enter a university, and living circumstances on participants’ self-efficacy levels were explored. The participants were 301 undergraduate Turkish university learners who majored in English. Their self-efficacy was evaluated using a students’ self-efficacy scale, which measured their self-efficacy within the category of self-efficacy for self-regulated learning. The data were analysed quantitatively. A relatively good (moderate) level of self-efficacy for self-regulated learning was found for Turkish English as a Foreign Language (EFL) university learners. There was a significant difference between the self-efficacy of males and females in favour of females. However, the magnitude of the differences in the means was below medium. Moreover, the participants’ self-efficacy level did not vary by grade level and living circumstances (i.e., living alone, living with parents, living in a shared room/apartment, living in a dormitory) during the academic year. Additionally, there was not a significant difference in the self-efficacy levels of the group with initial intrinsic motivation and the group with initial extrinsic motivation to enter a university. The results of this research can be insightful for the field of educational psychology.

Keywords: Self-efficacy beliefs, Individual differences, Demographic factors, EFL learners

Introduction
Self-efficacy has been interpreted as the belief in one’s abilities to perform tasks or activities (Bandura, 2010). This belief is the foundation of people’s motivation, achievements, and emotional well-being (Bandura, 2006) because self-efficacy affects people’s thoughts, feelings, choices, actions, perseverance, and the amount of effort they exert (Bandura, 1977). In addition, academic self-efficacy is defined as learners’ confidence in their ability, competence and judgments about themselves to perform academic tasks (MacPhee, et al., 2013; Zajacova, et al., 2005).

Research already investigated the effect of learners’ self-efficacy on their motivation and learning outcomes (Bouffard-Bouchard, 1990; Bouffard-Bouchard, et al., 1991; Lane, et al., 2004; Pajares, 1996; Pajares & Miller, 1994; Schunk, 2003; Sun & Wang, 2020; Truong & Wang, 2019; Weda, et al., 2018; Yusuf, 2011; Zimmerman, et al., 1992) and found that self-efficacy can affect learners’ motivation and cognition by influencing their task interest, task persistence, the goals they set, the choices they make and their use of cognitive, metacognitive and self-regulatory strategies. Considering this important role, it is necessary to gain insight into the development of learners’ self-efficacy and how proper education can support this development.
As for the development of learner self-efficacy, based on social cognitive theory, people’s beliefs about their efficacy are developed from four main sources of information: (1) mastery experiences (i.e., successes), (2) social modelling (i.e., observing people similar to oneself succeed by perseverant effort), (3) social persuasion (i.e., being informed and persuaded by society that they are capable of performing activities) (Bandura, 1997, 2010). For example, when they receive positive evaluative feedback from people who learners view as knowledgeable and reliable, and the information is realistic, it enhances the self-efficacy level of the learners (Bong & Skaalvik, 2003). The 4th factor is the enhancement of physiological and mood states, which reduce stress and depression and thus contribute to alerting self-efficacy beliefs (Bandura, 1997, 2010). Among these factors, mastery experiences are known as the most powerful source of creating a strong sense of efficacy because they show learners evidence that they are capable of succeeding at the task (Palmer, 2006). In short, successes, which are achieved by overcoming obstacles and hardships through sustained effort and perseverance, build a robust sense of self-efficacy and failures decrease it, especially when failures happen before a strong sense of efficacy is established (Bandura, 1997).

Exploring factors affecting the learners’ self-efficacy helps the higher education institutes to plan and develop programs that can enhance students’ self-efficacy, and as a result, will enhance their learning process (Dinther, et al., 2011; Zhang & Ardasheva, 2019). Dinther et al., (2011) found that goal-setting, modelling, feedback, rewards, task strategies, appraisal, and self-assessment or self-control were among the factors influencing learners’ self-efficacy and could be included in the list of the main sources of self-efficacy in addition to Bandura’s four main sources. Mastery experience in Bandura’s list was also found to be the strongest source contributing to creating a strong sense of efficacy.

Based on ‘social modelling’ and ‘social persuasion’ in social cognitive theory, family, society, and culture can influence learners’ academic self-efficacy beliefs, too. For example, learners’ self-efficacy can be influenced by observing role models like peers or parents (Usher & Pajares, 2008). Parents can influence learners’ self-efficacy beliefs by their involvement and the type of support and encouragement they gave their children (Fan & Williams, 2010; Schunk, 1995). Educated parents positively affect learners’ learning processes and help them develop and enhance their self-efficacy beliefs (Schunk & Pajares, 2008).

Furthermore, research has shown a reciprocal effect between self-efficacy and interest (Cordova, et al., 2014; Silvia, 2003). Regarding the effect of gender on self-efficacy, some studies found no significant differences between males’ and females’ self-efficacy (Azar, 2010; Kahraman, et al., 2014; Koçak & Canli, 2019; Omari, et al., 2020; Vuong, et al., 2010; Yoestara & Putri, 2019). Nevertheless, some other studies showed significant differences between males and females (Altunsoy, et al., 2010; D’Lima, et al., 2014; Diseth, et al., 2014; MacPhee et al., 2013; Mills, et al., 2007; Vogt, et al., 2007; Yalçın, 2011). As for grade level and self-efficacy, some studies found significant differences (Altunsoy et al., 2010; Omari et al., 2020; Uyanık, 2016; Yalçın, 2011), whereas (Kahraman et al., 2014) did not indicate a significant difference in this regard.

Despite all the previous findings, it is crucial to note that “self-efficacy is task-specific and differs from context to context” (Raoofi, et al., 2012). Therefore, all the previous sources of self-efficacy beliefs should be investigated and measured based on the specific contexts and settings (Gaffney, 2011; Zajacova, et al., 2005; Zimmerman, 2000).

**Review of Literature**

Omari et al. (2020) explored factors affecting students’ self-efficacy. They found that Moroccan students’ level of self-efficacy was moderate. Moreover, he found significant differences in terms of grade-level; students’ self-efficacy increased as their class levels increased. However, gender did not cause a significant difference in self-efficacy. Additionally, students’ living circumstances during the academic year and their initial motive for going to university had significant effects on their self-efficacy beliefs.

In Turkey, several researchers explored the effect of demographic factors on teachers’ self-efficacy levels. For example, Azar (2010) compared
the levels of pre-service and in-service secondary science teachers’ self-efficacy beliefs relating to science teaching and analysed the change of these beliefs based on their gender, the graduate school type, teaching experience and major. No significant difference was found between in-service and pre-service teachers’ personal self-efficacy beliefs and outcome expectations about science teaching. Further, these self-efficacy beliefs and outcome expectations did not change as for their gender, teaching experience, yet they changed in their graduate school type and major.

Altunsoy et al., (2010) assessed the factors affecting biology teacher candidates’ levels of academic self-efficacy. Their levels of academic self-efficacy were above the medium level, and the male teacher candidates had statistically significant higher levels of academic self-efficacy than females. Additionally, the level of academic self-efficacy significantly increased as the grade level increased. Moreover, general academic achievement also changed the level of academic self-efficacy. In a somewhat similar study, Yağıc (2011), who explored science-teacher candidates’ science teaching self-efficacy beliefs according to grade level and gender, found that science-teacher candidates’ self-efficacy beliefs of science teaching were considerably firm. However, statistically significant differences in science-teacher candidates’ self-efficacy beliefs of science teaching regarding both grade level and gender; females had higher levels of self-efficacy beliefs. Kahraman et al., (2014) duplicated Yağıc’s (2011) research with another group of science teachers, yet the results were the opposite.

Regarding EFL learners in Turkey, Genç, et al., (2016) explored the relationship between Turkish EFL undergraduate learners’ beliefs about language learning and their sense of self-efficacy. The EFL learners had medium scores in their English self-efficacy. They believed that motivation has a big role in their learning process. Their beliefs about language learning were also influenced by their English self-efficacy.

More recently, Mutlu, et al., (2019) investigated the relationship between Turkish English as a Foreign Language (EFL) learners’ self-efficacy level and their opinions about their use of compensatory strategies. It was found that the self-efficacy level among Turkish EFL learners was high and that the learners’ strategy use was not related to their degree of self-efficacy.

Present Study
To the best knowledge of the researcher of the present study, no paper has been published which investigated the effects of demographic factors on EFL university learners in Turkey. Therefore, the current study addressed the following questions:
1. What is the level of Turkish EFL university learners’ self-efficacy beliefs?
2. Do male and female Turkish EFL university learners significantly differ in their levels of self-efficacy beliefs?
3. Does the level of Turkish EFL university learners’ self-efficacy beliefs significantly vary by grade level?
4. Is there a significant difference between the self-efficacy levels of the group with initial intrinsic motivation and the group with initial extrinsic motivation to enter a university?
5. Do Turkish EFL university learners’ living circumstances affect their academic self-efficacy?

Method
Participants
The participants were 301 undergraduate Turkish EFL university learners from several cities in Turkey. Purposeful sampling was used. Table 1 provides a summary of participants’ demographic information.

Table 1: Participants’ Demographic Information

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>156</td>
<td>51.8</td>
</tr>
<tr>
<td>Male</td>
<td>145</td>
<td>48.2</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prep (Preparatory) University</td>
<td>48</td>
<td>15.9</td>
</tr>
<tr>
<td>Prep (Preparatory) University</td>
<td>64</td>
<td>21.3</td>
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<td>Prep (Preparatory) University</td>
<td>82</td>
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</tr>
<tr>
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<td>58</td>
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</tr>
<tr>
<td>Prep (Preparatory) University</td>
<td>49</td>
<td>16.3</td>
</tr>
</tbody>
</table>
EFL University learners’ self-efficacy was evaluated using a students’ self-efficacy scale, which measured their self-efficacy within the category of self-efficacy for self-regulated learning. The first section included demographic information questions based on the aims of the current study (i.e., Gender, Age, Grade Level, Living Circumstances, Initial motives to enter a university). In contrast, the second section included the items of self-efficacy scale, which was already administered by Omari et al., (2020). Before the study was carried out, the questionnaire was piloted with a similar group of 10 learners. The reliability of the questionnaire, estimated via Cronbach Alpha, was .820, indicating a good level of internal consistency (Pallant, 2013).

The items which investigated the learners’ self-efficacy for self-regulated learning are listed in the Results section. Participants answered the scale of self-efficacy on a 5-point Likert-type scale, which included (1) ‘not well at all’, (2) ‘somewhat well’, (3) ‘well’, (4) ‘pretty well’, and (5) ‘extremely well’.

As Table 2 indicates, all the items ranged between ‘somewhat well’ to ‘well’. A relatively good (moderate) level of self-efficacy for self-regulated learning was found for Turkish EFL university learners (M = 2.7140, SD = .52250).

### Effect of Gender on Levels of Self-Efficacy Beliefs

The 2nd research question probed whether male and female Turkish EFL university learners significantly differ in their levels of self-efficacy beliefs. An independent-samples t-test was conducted to compare the self-efficacy levels for Turkish male and female EFL university learners.

As the significance level of Levene’s test was .904, larger than .05, the variances for the two groups (males/females) were the same. There was a significant difference in mean scores for males (M = 2.6317, SD = .49479, N = 145) and females (M = 2.7904, SD = .53735, N = 156; t (299) = 2.659, p = .008) in favor of females. However, the magnitude of the differences in the means (mean difference
= .15866, 95% CI: .04123 to .27609) was below medium (Cohen’s d = 0.30) (Cohen, 1988).

Effect of Grade Level on Levels of Self-Efficacy Beliefs

The 3rd research question investigated whether the levels of Turkish EFL university learners’ self-efficacy beliefs significantly vary by grade level. A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of class level (i.e., preparatory year, 1st year, 2nd year, 3rd year, 4th year) on Turkish EFL university learners’ levels of self-efficacy beliefs.

As the Sig. Value for Levene’s test was .003, less than .05, the assumption of homogeneity of variance was violated; therefore, Robust Tests of Equality of Means (Welch and Brown-Forsythe) were consulted (Pallant, 2013).

Table 3: Robust Tests of Equality of Means

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch</td>
<td>.352</td>
<td>4</td>
<td>139.053</td>
</tr>
<tr>
<td>Brown-Forsythe</td>
<td>.310</td>
<td>4</td>
<td>269.769</td>
</tr>
</tbody>
</table>

a. Asymptotically F distributed.

As Table 3 shows, there was no statistically significant difference at the p < .05 in levels of self-efficacy beliefs for the five groups.

Effect of Initial Motivation to Enter a University on Levels of Self-Efficacy Beliefs

The 4th research question explored whether there was a significant difference between the self-efficacy levels of the group with initial intrinsic motivation and the group with initial extrinsic motivation to enter a university. The questionnaire required the learners to select their first top reason for going to university. The items included ‘interested in this subject’, ‘Advised by a teacher/family member’, ‘To achieve a higher degree’, ‘To find a good job in future’, ‘The only choice’, and ‘None of the above’. No one selected the last option. The frequency and percentage of each item are shown in Table 4.

Next, the reasons were categorised as ‘intrinsic’ and ‘extrinsic motivation’. Following that, an independent-samples t-test was conducted to compare the effects of the two types of motivation (i.e., intrinsic and extrinsic) which initially motivated Turkish EFL learners to enter the university on Turkish EFL university learners’ levels of self-efficacy beliefs. As the significance level of Levene’s test was .833, larger than .05, the variances for the two groups were the same. There was not a significant difference in the self-efficacy levels of the group with intrinsic motivation (M = 2.6908, SD = .51481, N = 87) and the group with extrinsic motivation (M = 2.7234, SD = .52650, N = 214; t (299) = -.489, p = .625.

Effect of Living Circumstances on Levels of Self-Efficacy Beliefs

The 5th research question investigated whether the Turkish EFL university learners’ living circumstances (i.e., living alone, living with parents, living in a shared room/apartment, living in a dormitory) affect their academic self-efficacy. A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of living circumstances on Turkish EFL university learners’ levels of self-efficacy beliefs.

There was not a statistically significant difference at the p < .05 in levels of self-efficacy beliefs for the four groups: F (3, 297) = 1.614, p = .186.

Discussion

This study investigated the level of Turkish EFL university learners’ self-efficacy beliefs. Moreover, the effects of demographic factors of gender, grade level, types of initial motivation to enter a university,
and living circumstances on EFL university learners’ self-efficacy levels were explored.

In this study, a medium level of self-efficacy for self-regulated learning was found for Turkish EFL university learners. In comparison to Moroccan students in Omari et al.’s (2020) study, similar results were found. This finding supports Genç et al., (2016), which indicated that Turkish EFL students have medium scores in their English self-efficacy. The level of self-efficacy among the Turkish EFL learners in Mutlu et al.’s (2019) study was high yet very close to the borderline between the mid and high levels.

In addition, this study found a difference between the self-efficacy levels of males and females in favour of females. This finding contradicts the previous studies which found no significant differences between males’ and females’ self-efficacy (e.g., Azar, 2010; Kahraman et al., 2014; Omari et al., 2020; Vuong et al., 2010; Koçak & Canli, 2019; Yoestara & Putri, 2019). Additionally, the found difference between the self-efficacy levels of males and females in this study was in favour of females, which is opposite to the findings of Vogt et al., (2007), Altunsoy et al., (2010), Diseth et al., (2014), which had found females had lower levels of self-efficacy than males. The finding of this study is consistent with what Mills et al., (2007) and Yalçın (2011) found. Mills et al. (2007) pointed out that this difference between self-efficacy beliefs of males and females may be because female learners usually spend more time doing the course work. Moreover, there were studies that indicated a change over time. For example, MacPhee et al., (2013) found that at admission to the university, females perceived themselves as academically weaker than males despite their similar academic performance. Nevertheless, by graduation, female’s academic self-efficacy beliefs were equivalent to males’, which could be an indication of the positive effect of mentoring they had received.

As for the effect of grade level (i.e., preparatory year, 1st year, 2nd year, 3rd year, 4th year) on Turkish EFL university learners’ levels of self-efficacy beliefs, no statistically significant difference was found for the five groups. It is not in line with the findings of the previous studies which found significant differences (Meece, et al., 2006; Omari et al., 2020). Moreover, this finding was not expected because it is not consistent with the concept of mastery experience based on social cognitive theory, known as the most effective way of developing a strong sense of efficacy (Bandura, 2010; Palmer, 2006), which states that learners enhance self-efficacy beliefs as they advance.

Unlike the Moroccan students in Omari et al.’s (2020) research, the initial ‘intrinsic’ and ‘extrinsic’ motivations to enter the university were not found as factors affecting the self-efficacy of the Turkish EFL university learners, although research has shown that there is a reciprocal effect between self-efficacy and interest (Cordova et al., 2014; Silvia, 2003).

Additionally, Unlike the Moroccan students in Omari et al.’s (2020) research, the factor of living circumstances (i.e., alone, with parents, in a shared room/apartment, in a dormitory) did not affect the Turkish EFL university learners’ levels of self-efficacy beliefs. Given the essential factor of social persuasion as a source of self-efficacy (Bandura, 2010), as well as the results of the previous research proving parents’ support affects students’ self-efficacy (e.g., Fan & Williams, 2010; Schunk, 1995), we can conclude that the Turkish EFL university learners most likely receive their parents’ support and encouragement even if they do not live together.

**Conclusion**

EFL Learners’ perceived self-efficacy and beliefs are important in learning the language; moreover, individual variables impact language learning (Genç et al., 2016). As a result, the present study investigated a category of individual differences, termed demographic factors, which are likely to affect the EFL learners’ self-efficacy beliefs. Based on the results, like what Koçak and Canli (2019) concluded, “it can be said that the demographic variables are not an important factor in academic self-efficacy of the students” (p. 56). The results of this study hopefully could be insightful for the field of educational psychology because as Dinther et al. (2011) argued that educational programs can improve learners’ self-efficacy, “and that educational programmes based on social cognitive theory proved to be particularly successful on this score” (p. 95).
References


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