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# The interplay between academic motivation and academic achievement of teacher trainees

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**Abstract**

The aim of this study was to research the relationship between academic motivation and academic achievement. In this regard, the Academic Motivation Scale (Vallerand et al, 1992) and a student background questionnaire were administered to 195 Turkish teacher trainees of English at a foundation university in Ankara, Turkey. Descriptive results showed that prospective teachers were mainly extrinsically motivated, followed by intrinsic motivation. Moreover, they rated quite low on amotivation scores. Significant gender differences were revealed in introjected regulation and intrinsic motivation for accomplishment with prospective female teachers reporting significantly higher levels on both. A negative correlation was found between GPA and amotivation and a positive one between GPA and intrinsic motivation for knowledge. Furthermore, the multiple regression analysis uncovered amotivation as the only predictor of GPA.



***Keywords:*** Motivation, intrinsic motivation, extrinsic motivation, amotivation

## 1. Introduction

Individual characteristics or differences have been a popular and illuminating area of research in higher education over the past decades. This was mainly due to the widespread belief that studying individual differences and gaining an in-depth understanding about them can either aid creation of more productive learning and teaching processes or assist in adapting less efficient ones. Researches have shown the extent to which demographic and cognitive factors predicted college performance (Betts & Morell, 1999; Cohn, Cohn, Balch, & Bradley Jr., 2004; Saele et al., 2016). Even though previous studies (Hodara & Lewis, 2017; Saunders-Scott, Braley, & Stennes-Spidahl, 2017) identified high school academic performance and higher education entrance exam scores as some of the best determinants of college success, others have identified psychosocial factors as predictors of academic performance in college (Krumrei-mancuso, Newton, Kim, & Wilcox, 2013; Noftle & Robins, 2007). Among these, motivation is one of the most popular concepts that has been caught the attention of scholars and is

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considered amongst key predictors of achievement in higher education (Robbins, Allen, Casillas, Peterson, & Le, 2006; Wigfield, Tonks, & Klauda, 2016).

Motivation is considered as an abstruse concept due to its complex nature (Dörnyei, 1998) and there exist multiple definitions of the construct. Broadly defined, it is the impetus or energizer that lie behind actions (Cabot, 2016; Ryan & Deci, 2002). Similarly, Schunk, Pintrich, & Meece (2008) see it as a process through which goal-oriented activities are triggered, directed, and resumed. In other words, it is the actuator of any given action. On the other hand, academic motivation is a more specific type of motivation. According to Zimmerman (1989), it is what evokes learning behavior. For Vallerand and Bissonnette (1992), it is motivational styles of students towards academic endeavors whereas Clark and Schroth (2010) put it as drives that prompt a person to study and get a degree. In general terms, it can be described a type of motivation specific to educational domain that acts as a fuel to academic undertakings.

Even though research to date has established the interaction between academic motivation and educational performance, most studies have centered around primary and secondary education contexts (Komarraju, Karau, & Schmeck, 2009). Moreover, studies undertaken in the Turkish higher education context are few and, as argued by Yütük (2018), an in-depth analysis of prospective English teachers' motivation is essential. Thus, by investigating the relationship between academic motivation and academic achievement as predicted by students' grade point average (GPA) in the Turkish undergraduate context, this study aims to contribute to the existing line of literature on this affective factor.

## 2. Review of literature

### *2.1. Academic Motivation*

Motivation as an affective factor is considered a causal agent in pursuing academic endeavor. To date, there have been many conceptualizations of the concept, and Self-Determination Theory (SDT; Deci and Ryan, 1985) is one of the most prominent frameworks offered among these. According to SDT, there are many distinct drives connected to multifarious grounds and goals, which stimulate a person to act. According to SDT (Deci & Ryan, 1985, 2002; Deci, Vallerand, Pelletier, & Ryan 1991) these stimulators or motives are grouped under three main types of motivation that are intrinsic motivation, extrinsic motivation, and amotivation. According to Deci & Ryan (2008), intrinsic motivation refers to engaging in an endeavor because it is interesting and satisfying like learning a new foreign language because it is fun and enjoyable. On the other hand, extrinsic motivation involves carrying out an activity because it causes a separate end result like learning a foreign language to get a better job . Amotivation on the other hand, expresses absence of any intention to act.

According to Ryan & Deci (2000a), intrinsic motivation is an innate tendency fostering cognitive, social, and physical development as humans are active, curious, and merry beings who are in readiness to learn and discover without exterior incentives. Vallerand, Blais, Brieré, and Pelletier (1989) and Vallerand et al. (1992) assert that the construct has three types that are intrinsic motivation to know, intrinsic motivation towards accomplishment, and intrinsic motivation to experience stimulation. Intrinsic motivation to know remarks taking part in an activity for the joy and satisfaction that one acquires on the course of learning, investigating, or trying to comprehend something new; intrinsic motivation towards accomplishment refers to being involved an act for joy and satisfaction experienced while trying to succeed, to reach a new level, or to devise something new; and intrinsic motivation to experience stimulation refers to engagement in an endeavor to experience joy, thrill, and positive emotions (Vallerand et al. 1992).

Just like intrinsic motivation, extrinsic motivation is also an important type of motivation in that after infancy, social demands and various roles undertaken necessitate people to pursue tasks that are not intrinsically driven. According to Vallerand et al. (1989) and Vallerand et al. (1992), extrinsic motivation is also conceptualized as a tripartite construct composed of external regulation, introjected regulation, and identified regulation. External regulation expresses engagement in an act to earn rewards or elude punishment; introjection regulation is attributed to taking part in activities with internalized aims; and lastly identified regulation represents executing an act because it is valued and perceived as self-determined (Vallerand et al. 1992).

Amotivation, on the other hand, is postulated as a third type of motivation to have a complete understanding of human behavior (Deci & Ryan, 1985). According to this state of neither being intrinsically nor extrinsically motivated (Vallerand, 1997) is actualized when one cannot discern eventualities between their actions and their outcomes (Vallerand et al., 1992). According to Vallerand and Bissonnette (1992) there is a sense of incompetence and lack of self-determination surrounding amotivated actions; there are no rewards attached to them and are purposeless, which eventually lead to discontinuation and termination of the activity.

### *2.2. Academic motivation & academic performance*

Over the past couple of decades, several studies revealed that academic motivation predicted academic performance in higher education (Amrai, Motlagh, Azizi, & Parhon, 2011; Önder, Beşoluk, İskender, Masal, Demirhan, 2014; Öz, 2016; Robbins et al., 2004). However, mixed results are evident regards the type of motivation that relates to achievement in higher education. In another study that included 277 participants, Prospero and Vohra-Gupta (2007) found that extrinsic motivation contributed to GPA for only first generation college students studying at a U.S. community college. In a research undertaken with 230 preservice English language teachers in Turkey, Arıoğul (2009)

established a procured a positive connection between intrinsic motivation and GPA and a negative relationship between amotivation and academic performance. On the other hand, Komarraju et al. (2009) found intrinsic motivation as a significant predictor of student GPA among 308 undergraduate students in the U.S. In a study carried out with undergraduate students of psychology, Turner, Chandler, and Heffer (2009) revealed significant negative correlations between only amotivation and GPA. The results of Önder et al. (2014) showed positive correlations between intrinsic motivation, extrinsic motivation and cumulative GPA and a negative relationship between amotivation and cumulative GPA for 1343 Turkish undergraduate students from different departments. On the other hand, Almalki's (2019) study revealed that neither intrinsic nor extrinsic motivation correlated with undergraduate students' GPAs. Similarly, Taşkesen (2019) who carried out a study with 127 preservice visual arts teachers found no correlations between any dimension of motivation and GPA.

Studies that included subcategories of motivation types also revealed contradictory findings. For instance, Baker (2003) found no correlations between any dimension of motivation and GPA in a study that included 104 first year undergraduate psychology students in the United Kingdom. In a study carried out with 687 students from three public colleges Cokley (2003) determined that intrinsic motivation towards accomplishment and external regulation as positive correlates of GPA, whereas amotivation was a negatively correlated with student achievement. On the other hand, Komarraju et al. (2009) found intrinsic motivation in the three-factor model and intrinsic motivation for accomplishment in the seven-factor model as significant predictors of student GPA. In a research conducted with 168 Turkish preservice chemistry teachers, Eymur and Geban (2011) attained positive relationships between intrinsic motivation to know, extrinsic motivation to experience stimulation and academic achievement. In an investigation executed with 256 Turkish teacher trainees of English language Erten (2014) found a negative association between amotivation and student GPA and positive relationships between GPA and extrinsic identified regulation, intrinsic motivation for knowledge, and intrinsic motivation toward accomplishment where amotivation was determined to be the only predictor of GPA. Moreover, findings of Önder et al. (2014) established intrinsic motivation towards accomplishment and intrinsic motivation to experience stimulation as significant predictors of cumulative GPA. In another study undertaken in the Turkish context with the involvement of 98 students at an English language teaching department, Öz (2016) concluded that all sub-dimensions of intrinsic and extrinsic motivation were predictors of GPA, but the link between amotivation and GPA was found to be insignificant. Kırkağaç & Öz (2017) similarly carried out a study with 200 preservice English language teachers at a public Turkish university and found out that all types of extrinsic motivation and intrinsic motivation to know and intrinsic motivation to accomplish correlated positively with academic achievement. The same study also uncovered a negative connection between amotivation and GPA. Among these

variables only amotivation and external regulation were significant predictors of GPA. In a study that involved 114 freshman college students in the U.S., Anderson, Woods-Wells, Amal, Bass, and Simpson (2018) determined that intrinsic motivation, external regulation, and identified regulation positively correlated with academic achievement. They also ascertained a negative relationship between amotivation and student achievement. In the study of Sivrikaya (2019), which involved 500 students from the Physical Education and Sports College of a public university in Turkey, introjected regulation was determined to be the only predictor of GPA. Lastly, in Taşkesen's (2019) aforementioned study no correlations were evident between motivation any types and GPA using the seven-factor model either.

### *2.3. Academic motivation & gender*

Literature on academic motivation also presents an ambiguous picture with respect to gender differences in academic motivation profiles of undergraduate students. In the studies carried out by Arıoğul (2009), Şahin and Çakar (2011), Titrek, Çetin, Kaymak, and Kaşıkçı (2018) no gender differences were established in any dimension of academic motivation. Vallerand and Bissonnette (1992), on the other hand, concluded that female undergraduate students that took part in their study scored higher on intrinsic motivation whereas males scored higher on the external regulation and amotivation dimensions. Eymur and Geban (2011) found significant gender differences for intrinsic motivation to know, intrinsic motivation to experience stimulation, and identified regulation in favor of female participants. On the other hand, Carbonneau, Vallerand, and Lafreniére (2012) found out that male undergraduate students had higher intrinsic motivations towards accomplishment. Köseoğlu (2013) revealed significant gender differences in all intrinsic and extrinsic sub-dimensions with females scoring higher whereas in the amotivation type, males scored higher. Similarly, Erten's (2014) study presented gender differences only on amotivation with male preservice teacher trainees reporting significantly higher levels of amotivation. On the other hand, İnan & Kartal (2018), found no gender differences with respect to academic motivation in their study carried out with 193 students at a physical education and sports college of a state university in Turkey. Lastly, Taşkesen (2019) identified gender differences for intrinsic motivation with female participants scoring higher in this respect.

Reflecting on mixed results obtained from previous enquiries mentioned above, it seems worthful to investigate academic motivations of Turkish prospective teachers of English language and its relationship with their GPAs. To this end, the following research questions were postulated:

1. What is the motivational make-up of the teacher trainees?

2. Do male and female teacher trainees differ in terms of their level of academic achievement as measured by their GPA?

3. Do male and female teacher trainees differ in terms of their level of academic motivation?

4. What is the relationship between academic motivation and academic achievement?

5. Can academic achievement be predicted by any dimension of academic motivation?

## 3. Method

In the following sub-sections, information related to the research design, setting, participants, data collection instruments, procedures for data collection and analysis regard the current study will be discussed.

### *3.1. Research Design*

This study adopted a cross-sectional survey research design. The cross-sectional survey research design enables researchers to investigate a construct by posing questions related to facts or opinions about it to a sample from a population via various data collection techniques such as questionnaires, interviews, and observations (Griffee, 2012) administered at one point in time (Cresswell, 2012). In this regard, a questionnaire was administered to a group of teacher trainees of English language to seek answers to the proposed research questions.

### *3.2. Setting and participants*

This study was undertaken with 195 undergraduate students enrolled in the Faculty of Education, Foreign Language Teaching Department, English Language Teaching program of a foundation university in Ankara, Turkey. Participation was on a volunteer basis and the participants did give consent for the collection of data. Participants were admitted to the program with respect to the scores they received in the centrally administered university entrance exam. For that reason, it is reasonable to suggest that the group is homogeneous with respect to their university entry levels. Among the 195 students that took part in the study, 140 (72%) of them were female whereas 55 (28%) of them were male and their ages ranged between 18 and 35 (M= 21.82, SD= 2.73).

### *3.3. Instruments*

#### *3.3.1. Demographic Information Form*

A demographic information form was devised by the researcher and included two questions that asked participants to state their gender and GPA. GPA was used as a measure of achievement as it is considered as a highly reliable measures of undergraduate academic performance (Beatty, Walmsley, Sackett, Kuncel, & Koch, 2015).

*3.3.2. Academic Motivation Scale*

The Academic Motivation Scale developed by Vallerand et al. (1992; 1993) is a scale composed of 28 items scored on a 7-point Likert scale ranging from 0 (does not correspond at all) to 7 (corresponds exactly). The items are grouped under seven subscales three of which measure intrinsic motivation (e.g. For the intense feelings I experience when I am communicating my own ideas to others), three of which assesses extrinsic motivation (e.g. In order to have a better salary later on), and one which quantifies amotivation (e.g. Honestly, I don't know; I really feel that I am wasting my time in school). Subscales for intrinsic motivation include intrinsic motivation to know, intrinsic motivation towards accomplishment, and intrinsic motivation to experience stimulation whereas subscales to survey extrinsic motivation includes external regulation, introjected regulation, and identified regulation. The reliability coefficients for intrinsic motivation to know (α=.88), intrinsic motivation towards accomplishment (α=.85), intrinsic motivation to experience stimulation (α=.81), extrinsic motivation identified regulation (α=.74), extrinsic motivation introjected regulation (α=.77), extrinsic motivation external regulation (α=.76), and amotivation (α=.80) were all at an acceptable level.

*3.4. Procedures for data collection and analysis*

In the data collection phase, printouts of the demographic information form and the Academic Motivation Scale (Vallerand, et al., 1992; 1993) were distributed to students studying in the ELT department in the Spring semester and were asked to fill them in and return them to the researcher. Out of the 211 questionnaires distributed 202 of them were filled in and returned. In this respect the return rate of the questionnaires was almost 96%. As a next step, the available data was entered to SPSS 22 and checked for entry errors and missing values. As a result of the investigation 7 entries were deleted because of missing values. Next, the normality of the data was checked via the skewness, kurtosis, Kolmogorov-Smirnov, and Shapiro-Wilk statistics as well as through histograms and normal q-q plots. These analyses showed that the data was not normally distributed. GPAs and motivation levels of the participants were examined via descriptive statistics. Due to the skewness and non-normal distribution of the data and because of the violation of equality of sample sizes in the gender categories ($n_{female}$= 140, $n_{male}$= 55), where the larger group (female) is more than 1½ times larger than the smaller group (male), gender differences with respect to GPA and motivation were analyzed using the Mann Whitney U test as suggested by Morgan, Leech, Gloeckner, and Barrett (2004). Relationships between motivational types and GPA were examined by means of Spearman correlation coefficients as the data was determined to be skewed (Morgan, Leech, Gloeckner, and Barrett, 2011). Lastly, the causal relationships between motivational variables and GPA were unearthed via regressions analysis after the data was found fit to carry out this analysis in light of the regression assumptions.

## 4. Results

This study makes an effort to reveal gender differences in GPA and academic motivation among teacher trainees of the English language to investigate the relationships between academic motivation and academic achievement, and to unveil the role played by academic motivation in predicting the academic achievement. In this context, the findings of the study are presented below.

### *4.1. Descriptive findings*

#### *4.1.1. Academic achievement*

Overall, the academic achievements of students were above average (M= 2.51, SD= .50). Furthermore, it was found that GPAs of female teacher trainees (M= 2.54, SD= .50, Md= 2.60) were higher than that of their male counterparts (M= 2.43, SD= .51, Md= 2.43).

#### *4.1.2. Academic motivation*

Descriptive statistics with respect to motivational variables were computed and are presented in Table 1.

Table 1. Descriptive statistics for motivation types with respect to gender

| | Female (n= 140) | | Male (n= 55) | |
|---|---|---|---|---|
| Dimensions of motivation | M | SD | M | SD |
| Amotivation | 2.91 | 1.34 | 2.96 | 1.29 |
| EXT: Identified regulation | 5.51 | .94 | 5.31 | 1.09 |
| EXT: Introjected regulation | 5.27 | 1.11 | 5.06 | 1.37 |
| EXT: External regulation | 5.30 | 1.01 | 5.29 | 1.02 |
| INT: Accomplishment | 5.09 | .99 | 4.84 | 1.30 |
| INT: Knowledge | 5.62 | .98 | 5.44 | 1.20 |
| INT: Stimulation | 4.99 | .98 | 4.61 | 1.23 |

As it can be seen in Table 1, intrinsic motivation for knowledge ($M_{female}$= 5.62, $SD_{female}$= .98, $M_{male}$= 5.44, $SD_{male}$= 1.20) is the highest motivator followed by three extrinsic motivation types that are identified regulation ($M_{female}$= 5.51, $SD_{female}$= .94, $M_{male}$= 5.31, $SD_{male}$= 1.09), external regulation ($M_{female}$= 5.30, $SD_{female}$= 1.01, $M_{male}$= 5.29, $SD_{male}$= 1.02), and introjected regulation ($M_{female}$= 5.27, $SD_{female}$= 1.11, $M_{male}$= 5.06, $SD_{male}$= 1.37). After these intrinsic motivation towards accomplishment ($M_{female}$= 5.09, $SD_{female}$= .99, $M_{male}$= 4.84, $SD_{male}$= 1.30), intrinsic motivation to experience stimulation ($M_{female}$= 4.99, $SD_{female}$= .98, $M_{male}$= 4.61, $SD_{male}$= 1.23), and amotivation ($M_{female}$= 2.91, $SD_{female}$= 1.34, $M_{male}$= 2.96,

$SD_{male}$= 1.29) were the least dominant types of motivational variables with respect to both female and male teacher trainees.

### *4.2. Inferential Findings*

#### *4.2.1. Gender differences with respect to Academic Achievement*

A Mann-Whitney U test was conducted to find out whether female and male teacher trainees differed with respect to their academic achievement levels of as measured by their GPAs. The results of the test are summarized in Table 2.

Table. 2 Mann-Whitney U test results for gender differences in academic achievement

| Gender | n | Mean Rank | Sum of Rank | U | z | *p* |
|---|---|---|---|---|---|---|
| Female | 140 | 102.64 | 14370.00 | 3200,00 | -1.83 | .07 |
| Male | 55 | 86.18 | 4740.00 | | | |

*p<.05

As it can be observed from Table 2 the results of the Mann-Whitney U test revealed no significant difference in the academic achievement levels of females (Md= 2.60, n= 140) and males (Md= 2.43, n= 55), U= 3200.00, Z= -1.83, p= .07.

#### *4.2.2. Gender differences with respect to academic motivation*

To determine whether female and male teacher trainees differed in relation to motivation types a Mann-Whitney U Test was run. The results of the test can be seen in Table 3.

Table. 3 Mann-Whitney U test results for gender differences in academic motivation

| Type of Motivation | Gender | Mean Rank | Sum of Rank | U | z | p |
|---|---|---|---|---|---|---|
| Amotivation | Female | 97.06 | 13588.50 | 3718.50 | -.37 | .71 |
| | Male | 100.39 | 5521.50 | | | |
| External regulation | Female | 97.56 | 13658.00 | 3788.00 | -.18 | .86 |
| | Male | 99.13 | 5452.00 | | | |
| Introjected regulation | Female | 103.29 | 14460.00 | 3110.00 | -2.09 | .03* |
| | Male | 84.55 | 4650.00 | | | |
| Identified regulation | Female | 100.47 | 14066.00 | 3504.00 | -.98 | .33 |
| | Male | 91.71 | 5044.00 | | | |
| Stimulation | Female | 99.66 | 13952.00 | 3618.00 | -.66 | .51 |
| | Male | 93.78 | 5158.00 | | | |
| Accomplishment | Female | 100.80 | 14111.50 | 3258.50 | -2.06 | .04* |

| Type of Motivation | Gender | Mean Rank | Sum of Rank | U | z | p |
|---|---|---|---|---|---|---|
| Knowledge | Male | 83.88 | 4613.40 | 3605.50 | -.69 | .49 |
| | Female | 99.75 | 13964.50 | | | |
| | Male | 93.55 | 5145.50 | | | |

N= 195, $n_{female}$= 140, $n_{male}$= 55, *p<.05

As it can be seen Table 3 the results of the Mann-Whitney U test revealed significant difference in the extrinsic motivation introjected regulation levels of females (Md= 21.50, n= 140) and males (Md= 19, n= 55), U= 3110.00, Z= -2.09, p= .03 as well as statistically meaningful differences in the intrinsic motivation for accomplishment levels of females (Md= 22, n= 140) and males (Md= 20, n= 55), U= 3258.50, Z= -2.06, p= .04.

*4.2.3. Relationship between academic achievement and academic motivation*

In order to uncloak the relationship between academic achievement and academic motivation, Spearman's correlation coefficients were computed, and the results are presented in Table 4.

Table 4. relationship between academic achievement (GPA) and academic motivation

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Academic achievement | 1 | | | | | | | |
| 2. Amotivation | -.25** | 1 | | | | | | |
| 3. EXT: External regulation | .07 | -.21** | 1 | | | | | |
| 4. EXT: Introjected regulation | -.06 | -.13 | .55** | 1 | | | | |
| 5. EXT: Identified regulation | .13 | -.46** | .52** | .44** | 1 | | | |
| 6. INT: Stimulation | .14 | -.24** | .46** | .46** | .56** | 1 | | |
| 7. INT: Accomplishment | .13 | -.22** | .48** | .58** | .51** | .57** | 1 | |
| 8. INT: Knowledge | .17* | -.39** | .53** | .46** | .71** | .67** | .70** | 1 |

*p<.05, **p<.01

As it can be observed from Table 5, GPA as the measure of academic achievement correlated negatively with amotivation ($r_s$ = -.25, p < .01) and positively with intrinsic motivation for knowledge ($r_s$ = .17, p < .05).

## 4.2.3. Motivational predictors of academic achievement

Upon determining statistically significant relationships between academic achievement and amotivation and intrinsic motivation for knowledge a regression analysis was carried out as the data was fit to carry out the analysis with respect to

normality, linearity, multicollinearity, and homogeneity of variance. The results of the regression analysis are presented in Table 5 below.

Table 5. Regression analysis for motivational predictors of achievement

| Predictor | B | SE B | B | t | p |
|---|---|---|---|---|---|
| Amotivation | -.02 | .01 | -.22 | -2.92 | .00 |
| INT: Knowledge | .01 | .01 | .10 | 1.37 | .17 |

As demonstrated in the table above, among the motivational entered in the model only amotivation was found to be a predictor of academic achievement ($F(2, 192)= 7.35$, $p< .05$) and it explained 7% of variation in GPA ($R^2= .07$).

## 5. Discussion

Studies examining the motivations of instructors and students are sizeable but the study of pre-service English teachers' motivation in relation to their academic achievement and gender are few. For this reason, this research was designed on previous studies by exploring pre-service English language teachers' academic motivations with respect to their gender and academic achievement. The findings of the study contribute not only to the literature with regards to the relationship between academic achievement and motivation (Amrai, et al, 2011; Önder et al. 2014; Robbins et al., 2004) in college education in general but also for those carried out in teacher training programs (Eymur & Geban, 2011; Erten, 2014; Kırkağaç & Öz, 2017; Öz, 2016).

The results depicted that in the overall intrinsic, extrinsic, and amotivation framework, the participants were mainly extrinsically motivated. This means that the reason they are studying in the department is something different than their interest in the act of studying and that they may somewhat feel pressure to do so, or have an external constraint to comply to (Deci & Ryan, 1985). This did not come as a surprise owing to the fact that they were studying at a foundation university, necessitating them or their parents to pay a tuition fee for their education. Within this context, difficulty in paying the tuition fee and pressure from their parents for them to pass their courses can act as a strong driver to reach their ultimate extrinsic reward which is graduation without repeating classes the prerequisite of which is academic achievement.

Despite extrinsic awards being the prime source of motivation, in depth analysis of teacher trainees motivational profile showed that intrinsic motivation to know was the most dominant motivation type, which is defined by Vallerand et al. (1992) as engaging in an act for personal pleasure and satisfaction. This in turn means that teacher trainees did enjoy their experiences related with learning, discovery, and intellectual development in the English language teacher training program. Moreover, it was found that even though female teacher trainees were descriptively more motivated in all motivation types

except for amotivation, statistically significant gender differences were only evident in introjected regulation and intrinsic motivation towards accomplishment female teacher trainees possessing higher motivations in these aspects. These results were in accord with (Vallerand, et al, 1989; Vallerand et. al, 1992). Introjected motivation relates to internal pressures such as shame, obligation, and guilt that promote behavior (Ratelle, Guay, Vallerand, Larose, & Senécal, 2007). In this spectrum, research in education have concluded that females attach more importance to academic goals (Grebennikov & Skaines, 2009), carry out their educational obligations better (Woodfield, Jessop, & McMillan, 2006; Severiens & ten Dam, 2011), and feel greater shame (Ferguson & Crowley, 1997) and guilt (Tangney & Dearing, 1998) for their educational outcomes, which can be offered as possible explanations of the finding. On the other hand, intrinsic motivation towards accomplishment refers to feelings of pleasure and satisfaction in achieving an end result Noels, Pelletier, Clément, & Vallerand (2000). The teaching profession is mainly considered as a female dominant field (Erten (2014) and more specifically, females perceive becoming an English language teacher more positively (Erten, 2009). Accordingly, the joy females experience about the prospect of becoming English language teachers after graduation was reflected significantly in the motivational make up of this study.

It was also determined that academic achievement as measured by GPA had a low positive link with intrinsic motivation for knowledge. These results are in line with Erten (2014) and Kırkağaç and Öz (2017), who also found similar a significant relationship between the two variables in the Turkish English language teacher training context. Intrinsic motivation to know, which was defined as the fact of undertaking an endeavor for the pleasure and satisfaction experienced in the process of expanding knowledge (Yeşilyurt, 2008; Clark & Schroth, 2010; Howard, Gagne, Morin, & Van den Broeck, 2016) is related to "exploration, curiosity, learning goals, intrinsic intellectuality, and intrinsic motivation to learn" (Vallerand, 1992, p. 1005). Consequently, it plays a role in fostering academic achievement.

Lastly, even though amotivation had a low negative relationship with academic achievement, it was the sole predictor of teacher trainees' GPA. In terms of the strength and direction of the relationship between the two variables and the predictive ability of amotivation, results acquired by Erten (2014) and Kırkağaç and Öz (2017) were supported. Amotivation relates to the absence of intent to engage in an activity (Ryan & Deci, 2000b) and it has been associated with student burnout (Erten, 2014), boredom and low concentration (Vallerand et al., 1993), low effort (Vallerand, Fortier, & Guay, 1997; Standage, Duda, Ntoumanis, 2006), intentions to drop out of school, lateness, and absenteeism (Legault, Green-Demers, & Pelletier, 2006), which are factors that can be considered as some pioneers of low success, making amotivation a prime predictor of academic achievement as depicted in this study.

## 6. Conclusions

The findings of the present study showed that prospective teachers of English were mainly extrinsically motivated, followed by intrinsic motivation, and amotivation. Significant gender differences were revealed in introjected regulation and intrinsic motivation for accomplishment with female preservice English teachers reporting significantly higher levels on both facets, which indicates that whereas students may be both intrinsically and extrinsically, they might as well have different motives in their academic endeavors. A negative correlation was revealed between GPA and amotivation and a positive one between GPA and intrinsic motivation for knowledge. This indicates that student differential motivational dispositions can have effects on their academic achievements. However, as amotivation was found to be the only predictor of GPA, it can be argued that intrinsic and extrinsic dimensions of academic motives may prove aidless in determining undergraduate achievement on their own in certain contexts. Results might have been different if academic motivation was taken as a single construct.

Moreover, one should bear in mind that, this study was carried out with a limited number of participants and with a unique sample of preservice English language teachers from a foundation university, which calls out for further research in both similar and distinct contexts to have a clearer picture of the interrelationship between academic motivation and academic achievement. Moreover, the results of this study, were purely based on self-report measures. Therefore, qualitative inquiries with respect to undergraduate students' motivational profiles can also reveal quality insights. All in all, academic motivation is a significant concept in all levels of education; therefore, further researches should be conducted to extend our understanding of the concept and its relationship with academic achievement.

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