

# Analysis on Entrepreneurial Intentions and Motivation and Learning Strategies of University Students

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## ABSTRACT

The main purpose of the study is to carry out a research on whether “entrepreneurial intentions” and “motivation and learning strategies” of university students could be predicted according to their year of study levels. The first sub-purpose of the research is to determine whether there is a relationship between entrepreneurial intentions and their motivation and learning strategies. The second sub-purpose is to analyze whether there is a difference between entrepreneurial intentions and their motivation and learning strategies according to their year of study levels. The method of this study is quantitative, and it has been designed in the survey approach. The 'Entrepreneurship Scale for University Students' developed by Yılmaz and Sümbül (2009) was used as the data collection tool. Another scale used in the study was the "Motivation and Learning Strategies Scale", which was adapted to Turkish by Büyüköztürk, Akgün, Özkahveci et al. (2004). For the analysis of the data, multinomial logistic regression analysis, Pearson correlation analysis and one way variance analysis (ANOVA) were performed. According to the research findings, it was revealed that entrepreneurial intentions of university students and their motivation and learning strategies were predicted by their year of study levels at a low level. A weak positive correlation was obtained between entrepreneurial intentions and their motivation and learning strategies. It was concluded that motivation and learning strategies would differ according to the year of study level.

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### Keywords:

Entrepreneurial Intentions, motivation and learning strategies, university students

## INTRODUCTION

Entrepreneurial intentions of university students and their motivation and learning strategies are important in terms of obtaining new knowledge in different environments today and using these information in the solution of various problems they may experience in their lives (Smith, 2003). Accordingly, in this study aimed to examine whether entrepreneurial intentions of university students and their motivation and learning strategies could be predicted according to their year of study levels. The sub-purposes of the research were to examine whether there was a relationship between entrepreneurial intentions of university students and their motivation and learning strategies. Finally, it was examined whether there was a difference between entrepreneurship tendencies of university students and their motivation and learning strategies according to the year of study levels.

First of all, the concept of entrepreneurship has been generally defined as starting a business and taking risks. However, this concept was later expressed in different ways. The definitions have been extended as the emergence of new ideas, the development of products and their transformation into services (Zhao, 2005). Entrepreneurial intention has been explained as an activity where the individual presents his/her creativity within the process of opportunities given. In addition, entrepreneurial intention has been expressed as making a difference in the development of entrepreneurial attitudes and behaviors of individuals.

Entrepreneurs have also been defined as passionate and ambitious people who are willing to work for a specific purpose. Moreover, entrepreneurial individuals stand out with their willingness to reveal something and try to make a difference. As a result, it has become an important concept today and it has been one of the important factors with respect to a wider variety of employment opportunities and job diversity for students (Henry, Hill, & Leitch, 2005).

Other concepts within the scope of the study are motivation and learning strategies. The concept of motive has been defined as the perception of an individual about his/her own competencies including the control of his/her efforts despite they are dependent on expectations (Stipek, 1998). Motivation, on the other hand, has been explained as an intrinsic power and the direction of effort, which ensures that the student is willing to learn (Keller, 2000). This concept has been explained as the specific motivations of students towards a particular class, task or content area at a specific moment (Brophy, 1987; Keller, 1983). It has also been stated that this feature may change, increase or decrease from time to time. In addition, it has been described as the overall motivation of the student towards education or learning (Frymier, 1994).

Learning strategy, as the other concept, is defined as each of the techniques that facilitate the self-learning of the individual. Motivation and learning strategies are stated to be related concepts (Cohen and Dörnyei, 2002; Dörnyei and Skehan, 2003). It has been stated that with learning strategies, the learner is aimed to process the information and learn it permanently. In summary, it has been emphasized that students develop learning strategies to achieve their learning goals. These concepts are dynamic by nature and it has been stated that they can be developed in short periods (Zlatovic et al., 2015).

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When the literature was examined, it was interesting to see that there were many studies on entrepreneurial intentions and motivation and learning strategy. However, no research was found on the difference between entrepreneurial intentions of university students and their motivation and learning strategies according to the their year of study levels. It has been argued that the difference between the entrepreneurs was based on the existence of learning strategies (Honig, 2001). According to Bandura (1986), learning strategies are divided into two by the individuals, being comparable situations and imitation.

### Aim of the Study

In this study aimed to examine whether entrepreneurial intentions of university students and their motivation and learning strategies could be predicted according to their year of study levels. The sub-purposes of the research were to examine whether there was a relationship between entrepreneurial intentions of university students and their motivation and learning strategies. Finally, it was examined whether there was a difference between entrepreneurship tendencies of university students and their motivation and learning strategies according to the year of study levels.

### METHOD

The method of this study is quantitative, and it has been designed in the survey approach. In this approach, the main concern is how views and features are distributed in terms of the individuals in the sampling rather than their causes (Fraenkel and Wallen, 2006). The sampling of the study consists of students studying at the education faculty of a foundation university. The sampling of the study consists of 220 university students. Looking at the demographic characteristics of the teacher candidates, it was found that 62% of the participants were female and 38% were male students.

**Table 1.** Distribution of students by year of study

Year of Study	1	2	3	4	Total
n	49	65	50	56	220
%	22.3	29.5	22.7	25.5	100

When the demographic characteristics of teacher candidates were examined, it was observed that 22.3% of the participants were in their 1st year of study, 29.5% were in the 2nd year, 22.7% were in the 3rd year and 25.5% were in the 4th year. The convenient random sampling technique was used in the study. In this method, sampling was selected from the random number table created by the researcher manually, by the computer or by using an online number generator.

### Material

The 'Entrepreneurship Scale for University Students', which was a scale of 36 items developed by Yılmaz and Sümbül (2009), was used as the data collection tool. The scale was a 5-point Likert-type scale ranging from "Very often" (5) to "Never" (1). For internal consistency analysis, Cronbach's Alpha reliability analysis and factor analysis (validity analysis) were performed. As a result of the factor analysis conducted with the Principal Component Analysis, it was seen that all the items were gathered in one dimension. As a result of the reliability analyses, Cronbach's Alpha reliability coefficient of the scale was found to be 0.90.

Another scale used in the study was the "Motivation and Learning Strategies Scale", which was adapted to Turkish by Büyüköztürk, Akgün, Özkahveci et al. (2004). The scale consisted of 47 items using 7-point Likert-type scoring (1 absolutely wrong for me- 7 absolutely true for me). In this study, the Cronbach's alpha coefficients of the intrinsic motivation and extrinsic motivation sub-dimensions were found to be .78 and .68, respectively.

### Data Analyses

In this study, the data were analyzed by using SPSS 25 program. Firstly, the kolmogorov-smirnov test was carried out to analyze whether the distribution was close to normal. As a result of the analysis, it was found that the distributions of the scale mean score were close to normal. Then, the data in the study were analyzed with the help of parametric tests. For the analysis of the data, multinomial logistic regression analysis, Pearson correlation analysis and one way variance analysis (ANOVA) were performed.

### FINDINGS

First of all, multinomial logistic regression analysis was performed. In this analysis, it was analyzed whether the entrepreneurial intentions of the university students and their motivation and learning strategies were predicted according to the year of study. Model fit information and Pseudo R2 values of the estimated model are presented in Table 1.

H<sub>1</sub> Hypothesis: Entrepreneurial intentions of the university students and their motivation and learning strategies are predicted by their year of study.

**Table 2.** Model Fit Information and Pseudo R2 Values

Model	Model Fit information				Pseudo R2	
	-2LL	X <sup>2</sup>	df	P	Cox and Snell	
<b>Constant Term</b>	601.541				Nagelkerke	.052
<b>Final</b>	590.582	10.958	6	.090	McFadden	.018

According to the findings obtained from the data, the Chi/df ratio was found to be 1.82. According to Table 1, with the model fit information (X<sup>2</sup>= 10.958; df = 6; p = 0.090), it was concluded that the model was statistically significant. Pseudo R2 values of Cox and Snell and Nagelkerke refer to the amount of variance explained by the logistic model (Çokluk, 2010). In Table 3 below, it is presented whether each variable used in the study (entrepreneurial intentions and, motivation and learning strategies) explains the variable (year of study) as a whole.

**Table 3.** Likelihood-Ratio Test Values

Effect	-2 Log Likelihood of Reduced Model	Chi-Square (X <sup>2</sup> )	df	p
<b>Constant</b>	597.065	6.483	3	.090
<b>Entrepreneurial intentions</b>	592.903	2.321	3	.509
<b>Motivation and learning strategies</b>	598.922	8.339	3	.039

Likelihood-ratio test was used to measure the significance of an independent variable in logistic regression model. According to Table 3, it was observed the the independent variable of motivation and learning strategies (p=0.0 <0.05) had a significant effect on the year of study, which was determined to be the dependent variable. On the other hand, it was found that among the independent variables, entrepreneurial intentions (p=0.51>0.05) did not have a significant effect.

**Table 4.** Coefficient, Standard Deviation, Odds Ratio Estimations of the Multinomial Logistic Regression, df and Exp (β) Values

Categories	Year of study	β	Std. Error	Wald	df	P	Exp(β)
<b>1. year</b>	<b>Constant</b>	.986	1.588	.385	1	.535	
	<b>Entrepreneurial intentions</b>	-.453	.348	1.694	1	.193	.636
	<b>Motivation and learning strategies</b>	.139	.209	.443	1	.506	1.149
<b>2. year</b>	<b>Constant</b>	3.560	1.492	5.692	1	.017	
	<b>Entrepreneurial intentions</b>	-.434	.329	1.740	1	.187	.648
	<b>Motivation and learning strategies</b>	-.393	.192	4.194	1	.041	.675
<b>3. year</b>	<b>Constant</b>	1.328	1.580	.707	1	.401	
	<b>Entrepreneurial intentions</b>	-.316	.348	.828	1	.363	.729
	<b>Motivation and learning strategies</b>	-.045	.204	.048	1	.826	.956

Reference Category: 4th year of study category.

The analysis in Table 4 was made according to the multinomial logistic regression model over four categories according to the year of study. Entrepreneurial intentions of the participants according to their year of study were evaluated by considering the  $\beta$  coefficients and Wald statistics of motivation and learning strategies. According to the analysis, motivation and learning strategies of university students had no statistically significant effect according to the year of study. Entrepreneurial intentions of university students were statistically significant according to the year of study. According to the findings of the research, considering the 4th year as the reference category, it was found that there was a significant difference in motivation and learning strategies variable for the 2nd year of study. The probability of 2nd year of study category was either 0.675 times less or 1.48 times (1/0.675) more than the 4th year of study category according to the motivation and learning strategies.

H<sub>2</sub> Hypothesis: There is a relationship between the entrepreneurial intentions of university students and their motivation and learning strategies.

Then, it was analyzed whether there was a relationship between the entrepreneurial intentions of the university students and their motivation and learning strategies using the correlation test. According to this test, no significant relationship was found between the two variables. The Pearson correlation value between the two variables was obtained as 0.14. Accordingly, a weak positive correlation was obtained between entrepreneurial intentions of the university students and their motivation and learning strategies. In summary, when entrepreneurship increased, motivation and learning strategies of students increased at a low level. Finally, the differences between the entrepreneurial intentions of university students and their motivation and learning strategies according to their year of study were analyzed using the ANOVA test.

H<sub>3</sub> Hypothesis: There are differences between the entrepreneurial intentions of university students and their motivation and learning strategies according to the year of study.

**Table 5.** One-Way Analysis of Variance (ANOVA) on the difference between entrepreneurial intentions of the university students and their motivation and learning strategies according to the year of study.

Variable	Source of the Variance	Sum of Squares	Df	Mean Squares	F	p
Entrepreneurial intentions	Inter-group	.858	3	.286	.851	.468
	Intra-group	72.647	216	.336		
	Total	73.505	219			
Motivation and learning strategies	Inter-group	8.273	3	2.758	2.918	.035
	Intra-group	204.119	216	.945		
	Total	212.392	219			

Accordingly, p values obtained at the end of the analysis were found to be 0.47 and 0.04, respectively. Accordingly, it was found that motivation and learning strategies differed according to the year of study. Analysis was performed according to complementary post-hoc analysis techniques in order to determine the groups from which this significant difference originated. Firstly, the hypothesis on whether the variances of group distributions were homogeneous or not was tested with the Levene's test. As a result, variances were found to be homogeneous [ $p > .05$ ]. Then, LSD multiple comparison technique, which is frequently used in cases where the variances are homogeneous, was used.

**Table 6.** Post-hoc (LSD) Test for the differences of motivation and learning strategies according to the year of study

(I) Year of study	(J) Year of study	Mean Difference (I-J)	Std. Error	P
1. year	2nd year	.49491	.18391	.008
2. year	1st year	-.49491	.18391	.008
	4th year	-.39662	.17724	.026
4. year	2nd year	.39662	.17724	.026

According to Table 3, it was observed that there was a difference between the 1st year of study category and the 2nd year of study category. In addition, differences were found between the 2nd year of study category and the 4th year of study category.

## RESULT, DISCUSSION, AND SUGGESTIONS

In this study, a research was conducted on the variables of year of study, entrepreneurial intentions of university students, and their motivation and learning strategies. These variables are important in obtaining new information in different environments and using this information in solving different problems in life. Accordingly, it was observed that entrepreneurship tendencies and motivation and learning strategies of university students were explained at a low level according to their year of study level. The results of comparisons made according to the age range and year of

study were similar to each other. When the literature was analyzed, it was observed that the entrepreneurial intentions of the students between the ages of 24-26 were higher than the undergraduate students between the ages of 18-20 and 21-23, the results obtained are similar to the relevant literature (Lee et al., 2009; Ozaralli and Rivenburgh, 2016; Kozubíková et al., 2017; Păunescu et al., 2018). In this context, it was concluded that the awareness of students in entrepreneurship increased as they progressed to the later stages of the undergraduate education process.

The sub-purposes of the research were to examine whether there was a relationship between entrepreneurial intentions of university students and their motivation and learning strategies. Accordingly, a weak positive correlation was obtained between entrepreneurial intentions of the university students and their motivation and learning strategies. In summary, when entrepreneurship increased, motivation and learning strategies of students increased at a low level. It was determined that there was a positive relationship between innovativeness, desire for success and self-confidence sub-dimensions and entrepreneurial intention (Damar, 2015). Similarities were observed between the results of this study and the findings obtained from the research in this field.

Finally, it was examined whether there was a difference between entrepreneurial intentions of university students and their motivation and learning strategies according to their year of study. It was found that motivation and learning strategies differed according to the year of study. There was a difference between the 1st year of study category and the 2nd year of study category. In addition, differences were found between the 2nd year of study category and the 4th year of study category. It was observed that the motivation scores of the students fluctuated with increasing year of study (Çakmak et al., 2008). When the difference according to the year of study was examined, it was revealed that the results in the literature were parallel to the results obtained from the research.

In future research on this subject, entrepreneurial intentions and motivation and learning strategies could be examined in larger sampling groups according to gender and year of study. Research to be conducted in this area is important in terms of contributing to the development of students in a way to ensure their self-improvement in both cognitive and affective areas.

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