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## The Effects Of The Professional Maturity Levels Of Secondary School Students On Their Academic Motivations

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### Abstract

This study focused on the analysis about the effects of secondary school students' professional maturity levels on their academic motivations. The sampling consisted of 607 secondary school students studying at high schools in Ankara. The data were collected through the "Academic Motivation Scale" developed by Bozanoglu (2004) along with the "Professional Maturity Scale" developed by Kuzgun and Bacanli (1991). The findings obtained were used to evaluate the changes in the academic motivation levels of secondary schools students in terms of their grade levels as well as the effects of their professional maturity levels on their academic motivations. The Cronbach alpha reliability coefficient of the Academic Motivation Scale was found to be .86 and the reliability coefficient value for the Professional Maturity Scale was .89.

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### 1. Introduction

Motivation is the determiner of the amount of energy required for cognitive and behavioral activities (Bozanoglu, 2005). Academic motivation, defined as the "production of required energy for academic activities" (Bozanoglu, 2004; Onen & Ulusoy, 2012) requires various factors (Lawrence & Brown, 1975; Pajares, 1996; Bozanoglu, 2004; Zimbicki, 2007), one of which is thought to be the choice of profession. Professions in the modern society enable individuals to attain a position and status within their environment, while accessing them to financial freedom, helping them in realizing themselves and adding a meaning to their lives. Individuals need to make effective

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decisions to choose these important activities of their lives. The main aim of career choice as the turning point of an individual's life is to plan a satisfying future (Gulbahce, 2009). In order individuals to make their choices of profession, they should have the adequate professional maturity levels (Oguz, 2008, s. 2; URL-1). Professional maturity was defined by Kİng (1989) as an individual's ability to choose a profession that is appropriate and realistic for him/her. When professions are chosen according to an individual's interests, skills, values, expectations and personality traits, the spiritual health, professional and personal life of the individual would be affected positively; and this would also contribute to the individual's life quality and standards. (Seligman, 1980; Savickas, 1990).

Individuals with adequate professional maturity levels should also be aware that in order to reach their planned goals in the future, they are required to have the academic competence. An individual at this awareness state would be able to motivate him/herself to be successful. According to Marzano (2003: 144), there is a positive relationship between motivation and achievement. If a student is motivated to learn a topic, then his/her achievement at that topic would increase. A student with increased achievement would be one step closer to his/her future profession. This study analyzed whether secondary school students had the professional maturity and thought structure to decide on their future professions and the effects of their professional maturity levels on their academic motivations.

## 2. Method

### 2.1. Sampling

The sampling of the study consisted of 607 students studying at the secondary schools within the 2011 – 2012 academic year in Ankara. The sampling of the study was determined according to the convenience sampling model.

### 2.2. Data collection tools

#### 2.2.1. Academic motivation scale (AMS)

The data collection tool used for determining secondary school students' academic motivations was the Academic Motivation Scale developed by Bozanoglu (2004). The scale consisted of 20 statements and was in 5-point Likert-type. The reliability coefficient of the scale was calculated as 0.86. The minimum score to be obtained from the scale was 20, where the maximum score was 100. High scores indicated the strength of academic motivation.

#### 2.2.2. Professional maturity scale (PMS)

In order to determine secondary school students' professional maturity levels, Professional Maturity Scale developed by Kuzgun and Bacanlı (1991) was used. The reliability and validity assessments of the scale concluded with a Cronbach Alpha value of .89. The scale, which consisted of 40 statements, was prepared in 5-point Likert-type. As the scores obtained from the professional maturity scale increased, professional maturity levels of individuals also increased. Scores below 143 in the scale stands for the lack of professional maturity; scores between 143 and 155 means that the individual needs to develop his/her professional maturity levels; and scores above 155 means that the professional maturity level is reached.

## 3. Findings

### 3.1. Analysis of secondary school students' academic motivations in terms of their professional maturity levels

The average scores of students at the Academic Motivation Scale and their standard deviations were calculated in order to determine secondary school students' academic motivations in terms of their professional maturity levels. To find out whether secondary school students' academic motivations differed according to their professional maturity levels, single-direction variance analysis ANOVA **was applied. The results were displayed on Table 1.**

Table 1. Analysis of secondary school students' academic motivations in terms of their professional maturity levels and ANOVA analysis

<b>Professional maturity level</b>	<b><math>\bar{x}</math></b>	<b>sd</b>	<b>F</b>	<b>P</b>
Low	72,90	10,800	5.044	.007
Medium	75,80	10,966		
High	77,95	10,565		
<b>Total</b>	<b>73,42</b>	<b>10,869</b>		

N = 607

Table 1 shows that there were differences between students' average scores obtained from the Academic Motivation Scale. While students with low professional maturity levels had low academic motivation scores, students with high academic motivations were observed to have high academic motivation average scores.

In order to determine whether this difference between the academic motivation scores was significant, variance analysis was applied. Analysis results showed that academic motivation score averages of students differed according to their professional maturity levels and this difference was statistically significant [ $F_{(2-607)} = 5.044$ ,  $p < .01$ ]. In other words, students average academic motivation scores significantly increased as their professional maturity levels improved.

With the aim of identifying students with professional maturity levels with differences in their academic motivation scores, Tukey test was applied and the results were displayed on Table 2.

Table 2. Tuket test results on secondary level students' professional maturity levels

<b>(I) Professional maturity level</b>	<b>(J) Professional maturity level</b>	<b>Difference between scores (I-J)</b>	<b>P</b>
Low	Medium	-2,905	,222
	high	-5,049	,014*
Medium	Low	2,905	,222
	high	-2,144	,648
High	Low	5,049	,014*
	Medium	2,144	,648

\* $p < .01$

Table 2 shows that the difference between academic motivations of students with high and low professional maturity levels was significant while the difference between the academic motivations of students with low and medium professional maturity levels was found to be insignificant.

### 3.2. Analysis on the relationship between secondary school students' academic motivations and their professional maturity levels

Correlation analysis and Pearson Correlation Coefficient were used to determine a potential significant relationship between secondary school students' professional maturity levels and academic motivations. Prior to the correlation analyses, definitive statistical methods were used, where the Skewness and Kurtosis values were found to be between (-1 – 1) for variables. In other words, the statistical analysis showed that the parameters displayed a normal distribution and the Pearson correlation test was applied to determine the relationship between the variables. Data obtained were displayed on Table 3.

Table 3. Pearson Multiplication Moment Correlation Analysis results for academic motivations and professional maturity levels of secondary school students

	<b>Professional maturity</b>	<b>Academic motivation</b>
<b>Professional maturity</b>	<b>r 1</b>	<b>.147*</b>
	<b>p</b>	<b>.000</b>
<b>Academic</b>	<b>r .147*</b>	<b>1</b>

<b>motivation</b>	p	<b>.000</b>
*p < .01 , N= 607		

Table 3 shows that there was a positive significant relationship between professional maturity levels and academic motivations of secondary school students, who participated in the study ( $r = .147$ ,  $p < .01$ ).

#### 4. Conclusion and Discussion

Single-direction variance analysis ANOVA was applied in this study to determine whether the professional maturity levels of secondary school students were effective on their academic motivations and a portantial relationship between their professional maturity levels and academic motivations was sought for. Determination of students' professional maturity levels was followed by the analysis of their academic motivations according to these levels. The analysis results showed that students with low professional maturity levels had low academic motivations, while students with high professional maturity levels had high academic motivations. In the light of these findings, students' professional maturity levels were found to be effective on their academic motivations. In other words, students with high professional maturity levels were found to be aware of the fact that academic success was also required for them to achieve their future goals (profession) and they were able to motivate themselves accordingly. Sekmenli (2000), in his study, concluded that students perceiving their academic success as high had high professional maturity levels. Additionally, studies on the relationship between academic achievement and professional maturity levels concluded with findings on significant relationship (Luzzo,1993; Akbiyik, 1996). Students with low professional maturity levels and students with high professional maturity levels had differences in their academic motivations, while no difference was observed for the students with medium or high professional maturity levels in terms of their academic motivations. The study concluded that professional maturity levels of participating students were related to their academic motivations. Although there were no studies on the relationship between professional maturity levels and academic motivation in the literature, there were studies found to focus on the relationship between professional maturity levels and logical decision making strategy, self-competence, academic achievement, inspection focus and ruminative thinking skills (Akbiyik, 1996; Coban, 2005; Oguz, 2008; Akintug & Birol, 2011; Onen & Kocak, 2012).

As a result, this study revealed the fact that professional maturity levels were effective factors in increasing their academic motivations of students and their academic achievement levels accordingly. It was also found that most of the students had low academic motivations of students. Parents and teachers as role models of students play an important part in improving students' professional maturity levels. For students to motivate themselves academically, their future is required to be planned in their own ways. They should also be supported by their parents and teachers within this process. Students should be acknowledged about professions, know themselves well and recognize their competencies along with their special skills. While choosing their professions, today's students value financial factors as well as social competencies that the profession would provide them. There are also students who would like to choose the profession that they would succeed or feel satisfied. No matter what criteria students have for choosing their professions, students with professional maturity levels to determine their future professions are found to motivate themselves more easily and would achieve better than the students with low professional maturity levels. This study, which aimed to determine secondary school students' professional maturity levels and their effects on students' academic motivations, is thought to have effective contirbutions to other studies in the field.

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