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Factors Affecting Students' Learning Motivation

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Abstract

The purpose of this study is to identify overall learning motivation of primary and middle school students. In this research study, the effect of such variables as gender, parents' educational status, academic achievement, and grade level on primary and middle school students' intrinsic and extrinsic motivation levels were investigated. This study has a descriptive model as it aims to reveal and explain the current situation in detail. The participants of this study were primary and middle school students from different schools in Isparta. The Motivation Level Detection Scale was administered to determine overall learning motivation of the participants. Mann Whitney U and Kruskal Wallis T tests were used to compare the mean scores with respect to variables. According to the results of the study, it was found out that the intrinsic and extrinsic motivation levels of the primary school students who participated in this study did not differ by their gender, academic achievement and their parents' educational status.

Keywords: primary school education, learning, learning motivation.

1. Introduction

Learning is a phenomenon that provides people with information about particular topics, affects value systems and beliefs, and that determines the perspective of life in all areas. Therefore, learning is a significant process beginning from the birth and proceeding till the end of life. As the learning phenomenon has such a great importance for human life, research studies concerning how to succeed in learning have been carried out in international arena (Akbaba, 2006; Hassandra et al., 2003; Jalongo, 2007; Marsh et al., 2005; Özer, 2005; Ryan, Patrick, 2001). In educational environment, while some of the students try to find solutions to emergent problems, some of them abstain from struggling with emerging problems since they are indifferent to lessons. In this regard, student motivation has a remarkable place in succeeding in learning because motivation is a driving force that enables students to be more eager to learn and that energizes individuals. Moreover, motivation determines the direction, level, and consistency of students' behaviors, and the speed of achieving the desired goal in an educational environment (Martin, 2001; Meece, Glienke, Burg, 2006; Pintrich, Schunk, 1996; Wigfield, Eccles, 2000). Thus, in order for students to have a high level of learning motivation, it is essential to know how to motivate students towards lessons, maintain students' motivation, and establish an efficient and enjoyable educational environment for students (Acat, Demiral, 2002; Akbaba, 2006). In many studies conducted in the field of education, motivation for learning was indicated to be effective on the rise in students' level of academic achievement (İspir et al., 2011; Koka, 2013; Masitsa, 2008; Tseng, Tuan, Chin, 2009;

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Wang, Reeves, 2006). Furthermore, it is known that students' level of motivation for learning differ according to manner of teacher and type of lessons (Alam, Farid, 2011; De Meyer et al., 2013; Guthrie et al., 2006; Teoh, Koo, Singh, 2010).

There are internal and external conditions that affect the motivation focusing on process rather than outcome (Logan, Medford, 2011; Martin, 2001). Intrinsic motivation refers to the reactions individuals develop against their internal needs. Intrinsic motivation can be exemplified as the need to know, understand and to be competent in a subject matter. On the other hand, extrinsic motivation is something/a situation that emerges through the effect of external reinforcers. The fact that a student studies in order to receive the teacher' appreciation is an example of external motivation. In educational environments, students' intrinsic and extrinsic motivation can be enhanced by use of proper strategies, methods and techniques; thereby, students can become autonomous learners (Akbaba, 2006; Hynd, Holschuh, Nist, 2000; Hasandra et al. 2003; Logan, Medford, 2011; Nurmi, Aunola, 2005; Phakiti, 2003; Wigfield et al., 2004; Wilson, 2001).

In the studies (Çavaş, 2011; Ekici, Kaya, Mutlu, 2014; Teoh, Koo, Singh, 2010; Tsenget al., 2009) related to learning motivation whose significance is acknowledged by everyone nowadays, the importance of identifying the factors affecting motivation for learning is emphasized. On the basis of the need for the research studies that contribute to the fact that primary school students are educated as individuals who can control and guide their own learning process, the aim of this study is to determine primary school students' overall learning motivation. In line with this purpose, the primary school students' intrinsic and extrinsic motivation for learning was examined according to their gender, parents' educational status, students' level of academic achievement, and grade level. The findings of this study in which the factors that have bearings on students' motivation were investigated are considered to encourage educators' efforts to raise level of learning. In this regard, the results of this study are expected to guide educators in terms of organizing learning environment, content of the courses, the materials used in the courses, instructional methods, and environmental factors in such a way that there is an increase in motivation for learning.

2. Method

In this section, the research model, the working group, the data collection tools and data analysis will be described.

Model of research

The study has a descriptive model as it aims to reveal and explain the current situation in detail (Çepni, 2005). More specifically, it was designed as a cross-sectional survey research that identifies the primary and middle school students' overall learning motivation (Karasar, 2005: 77).

Working group

The participants of this study were primary and middle school students from different schools in Isparta. The students' grade levels varied from second grade to eighth grade. The participants' demographic information was presented in the Table 1.

Table 1. Frequency and percentage distributions of the participants' demographic information

Variables	Categories	F	%
Gender	Female	297	50.9
	Male	287	49.1
Mother's educational status	Primary school and below	204	35.9
	Middle school	80	14.1
	High school	149	26.2
	University and above	135	23.8
Father's educational status	Primary school and below	138	24.6
	Middle school	78	13.9
	High school	173	30.9
	University and above	171	30.5

Academic achievement level	Normal	76	13.0
	Good	255	43.7
	Very good	253	43.3
	2nd grade	78	13.5
	3rd grade	23	4.0
Grade level	4th grade	134	23.2
	5th grade	75	13.0
	6th grade	83	14.4
	7th grade	94	16.3
	8th grade	91	15.7

Data collection tools

The motivation level detection scale which was developed by Lepper et al. (2004) and adapted to Turkish by Özkip (2009) was used as the data collection instrument in the study to determine the participants' overall learning motivation. The scale is used to measure intrinsic and extrinsic motivation relevant to learning. It is a five point likert scale ranging from 1 (Never) to 5 (Always). The number of the items in each sub-scale and the maximum and minimum scores children can get from these subscales as well as the mean scores obtained in this study were presented in [Table 2](#).

Table 2. Descriptive information related to subscales

Information about the subscales	Subscales	
	Intrinsic motivation	Extrinsic motivation
The number of the items	17	13
The minimum score for each subscale	17	13
The maximum score for each subscale	85	65
The mean scores of current participants (X±SD)	67.04±10.9	36.14±11.3

While the participants' scores on intrinsic motivation subscale were slightly higher than the mean score, participants got mean level scores on extrinsic motivation subscale.

Data Analysis

In order to analyse the data collected for this study, SPSS 15.0 for Windows Package Program was used. In the first phase of the analysis, reliability analysis was performed. On the basis of the reliability analysis, the value for Cronbach's Alpha was found to be 0.82. This value shows that this scale is quite reliable ([Tavşancıl, 2002](#)). This value was found to be 0.89 in the study carried out by Özkip (2009). In order to check whether the data collected from the sample has normal distribution, One Sample Kolmogorov-Smirnov test was conducted. Since the data for subscales did not have a normal distribution, non-parametric tests were used as a statistical analysis method. In order to compare the means of intrinsic and extrinsic motivation according to gender, Mann Withney U test; according to parents' educational status, academic achievement and grade levels, Kruskal Wallis H test was performed. Since there was a significant difference between the groups based on the Kruskal Wallis H test performed, Mann Whitney U test was performed as the post hoc test to identify which group accounts for the difference.

3. Results

The results of the study carried out to identify the overall learning motivation of primary school students were presented in tables below, and they were interpreted.

Table 3. Comparison of sub-dimensions of motivation according to demographic variables

Variables	Sub-variables	Intrinsic motivation X±SS	Extrinsic motivation X±SS	Level of significance	
				Intrinsic motivation	Extrinsic motivation
Gender	Felame	66.3±11.	35.9±11	Z= -	Z= -.736
	Male (n=287)	67.7±10. 6	36.4±11 .3	1.22 P= .220	P= .462
Mother's educational status	Primary school	67.1±10.	37.2±1	X ² = .383 P= .944	X ² = 4.55 P= .207
	Middle School	66.4±12.	35.8±1		
	High school	66.9±11.1	34.6±11		
	University and	67.7±10.	36.2±11		
Father's educational status	Primary school	66.7±10.	36.0±1	X ² = 2.41 P= .492	X ² = .481 P= .923
	Middle school	65.8±11.	36.1±11		
	High school	67.8±10.	35.6±11		
	University and	66.8±11.	36.3±11		
Academic achievement level	Normal (n=76)	66.9±9.5	37.6±13	X ² = .801 P= .670	X ² = 3.84 P= .146
	Good (n=255)	66.6±11.	36.4±1		
	Very good	67.4±11.	35.3±11		
Grade level	2nd grade	68.3±11.	36.1±11	X ² = 3.53 P= .739	X ² = 13.9 P= .030
	3rd grade	66.4±9.3	30.3±6.		
	4th grade	67.1±11.0	35.6±11		
	5th grade	66.3±11.	38.4±11		
	6th grade	65.8±10.	35.9±1		
	7th grade	67.6±10.	34.8±1		
	8th grade	67.0±12.	38.1±12		

Z = Mann Whitney U test; X² = Kruskal Wallis H test; P = Level of significance

When the Table 3 was examined, it was seen that the participants' mean scores of internal and external motivation did not differ statistically according to their gender, their mothers' educational status, fathers' educational status and their academic achievement level ($p > 0.05$). In addition to this, it was observed that there was not a significant difference in the participants' intrinsic motivation levels according to their grade level ($p > 0.05$), and that there was only a significant difference in their extrinsic motivation levels according to their grade level ($p < 0.05$). 3rd grade students were found to have the lowest level of extrinsic motivation. On the basis of the results of the post hoc test conducted to identify which grade levels differ from each other, it was determined that 3rd grade students' mean scores of extrinsic motivation was significantly lower than those of the students in 2nd, 4th, 5th, 6th and 8th grades ($p < 0.05$). Moreover, it was observed that both 5th and 7th grade students' mean scores were significantly higher than those of 7th grade students ($p < 0.05$).

4. Discussion

In this study, it was found out that primary school students' intrinsic and extrinsic motivation for learning did not differ statistically according to their gender. Bağçeci (2004) also

found out that the variable gender does not have an influence on learning motivation. On the other hand, it is known that primary school students' motivation for some courses differs according to their gender (Acat, Demiral, 2002; Logan, Medford, 2011; Marsh et al., 2005; Nurmi, Aunola, 2005; Özkal et al., 2004; Phakiti, 2003). Therefore, it is needed to identify what type of motivation students have for each course in addition to their overall learning motivation. That is because, students' negative attitudes and motivation levels for some courses can affect their overall learning motivation negatively over time.

It was determined that the extrinsic and intrinsic motivation levels of the primary school students did not differ significantly by their mothers' and fathers' educational status. It was also stated in a variety of studies in literature that parents' educational status does not affect students' attitude and motivation for learning (Bağçeci, 2004; Öner, Gedikoğlu, 2007). However, it is known that parents have an important role as their teachers to improve students' motivations for learning, need to develop new strategies to improve their children's academic success, and that they need to exhibit positive attitudes to their children about education (Akbaba, 2006; Edmunds, Bauserman, 2006). Thus, no matter what the parents' educational status is, motivating their children for education is highly critical for parents in terms of students' academic success. The reason that there was no significant difference according to parents' educational status in this study can be the similarities in parents' socio- economic background, and that they motivate their children in similar levels.

It was found out that there was not a statistically significant difference in primary school students' intrinsic and extrinsic motivation according to their academic success. Some other researchers also found out that the increase in students' motivation for learning is closely related to academic success (Ekici et al., 2014; Erdem, Gözükcük, 2013; Marsh et al., 2005). In this regard, it can supposed that students' motivation for learning differ by their academic success, but in this study, the level of overall motivation for learning was investigated rather than that of motivation for a specific course. The variables such as course content, teacher's attitude, friends in the classroom environment can affect the motivation for courses. Of course, the students who have high academic success can have high level of motivation for courses, and similarly the students who have low level of academic performance can have low level of motivation for courses. However, it should not be expected that there is a parallelism between motivation for a course and motivation for learning. Nevertheless, the relation between motivation for learning and motivation for a course can be investigated and contributed to the literature.

It was found out that there was not significant difference in primary school students' intrinsic motivation levels according to their grade level, but that there was a significant difference in their extrinsic motivation levels according to their grade level, and that the 3rd grade children had the lowest level of extrinsic motivation. Moreover, it was found out 5th grade and 8th grade students' children's mean scores of extrinsic motivation are significantly higher those of 7th grade students. The main factor that that influence students' level of extrinsic motivation is to know one's own abilities and to use them effectively as well as to perceive external stimulus properly. It is known that primary school students' motivation for learning may sometimes decrease, as well (Akbaba, 2006; Spinath, Spinath, 2005). 3th grade students have the lowest level of extrinsic motivation, which can be thought to be the result of the fact that they are not aware of their ability to learn, and have not adapted to school environment and learning climate fully. It can also be said that the differences in extrinsic motivation among students from other grades result from the fact that their interests and needs in learning differ by their grade and age levels. Furthermore, regarding that teachers use different teaching methods depending on course content in different grades, and some methods that are used influence students' motivation positively and negatively, this can be a factor increasing the likelihood that students from different grade levels have different levels of extrinsic motivation. That is because, it is seen that similar results revealing that learning motivation differs by grade level were found out in many research studies (Bağçeci, Yaşar, 2007; Güvercin, 2008; Ryan, Patrick, 2001; Uzun, Keleş, 2012).

5. Conclusions

Motivation is an important variable that can be affected from many factors. In this research study, the effect of such variables as gender, parents' educational status, academic achievement, and grade level on primary and middle school students' intrinsic and extrinsic motivation levels

were investigated. According to the results of the study, it was found out that the intrinsic and extrinsic motivation levels of the primary school students who participated in this study did not differ by their gender, academic achievement and their parents' educational status. It was also found that while the students' intrinsic motivation levels do not differ by their grade level, their extrinsic motivation level does. How and why these factors effect students' motivation is another issue that needs to be questioned. Hence, why and how these variables affect students' motivation can be investigate deeply in future qualitative researches.

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