

Examination of Studying Approaches of Students at School of Physical Education and Sports in Terms of Different Variables

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Abstract

This study aims to examine studying approaches of the students of physical education and school of physical and sports according to various variables. The data of the study conducted in the general scanning model has been collected from 478 students in 2016-2017 teaching year. Studying Approaches Scale has been used to collect data. Besides complementary statistics, t test, multidimensional variance analysis (MANOVA) and Pearson correlation coefficient has been used while analysing the data. It's seen that studying approaches of these students continue on indecision level. Additionally, it's seen that they don't show significant differences in terms of gender, grade, department according to the data collected with the scale. There hasn't been found a notable link with studying approaches and success either.

Keywords: physical education, learning styles, staying approach, Manova

1. Introduction

There is a constant increase in knowledge in many areas as a result of the increase in information and communication technologies. Teaching process has shifted from traditional to constructivist. This situation brings new roles both to the teachers and students. The traditional teaching approach in which students receive knowledge passively has been replaced with a new approach in which students re-construct the knowledge with previous experiences under the guidance of teachers. This has brought new responsibilities to the students in addition to requiring more efforts to take more responsibility in learning process (Kolburan-Geçer, 2012).

For the students adapt to changes in this process requires them to be open to life-long learning and to be able to learn what they need to learn when necessary. For this, cognitive, affective, social and physiological characteristics of students need to be taken into consideration for success teaching applications. Individual differences such as learning styles, motivation, personalities, check focus, epistemological beliefs, self-efficacy perception, and genders of students influence learning process (McCoah and Siegle, 2003; Kızılgüneş, Tekkaya and Sungur, 2009; Olpak and Korucu, 2014; Ozan and Çiftçi, 2013; Paulsen and Feldman, 2005; Rodriguez and Cano, 2007; Topkaya, Yaka and Öğretmen, 2011).

One of the factors that influence learning process is undoubtedly learning approaches (Olpak and Koruyucu, 2014). Batı, Tteik and Gürpınar (2010) emphasize learning styles to explain why some students are more successful than others. It's understood that learning approach and studying approach are used interchangeably in studies (Yıldız, 2015).

Özgür and Tosun (2012) state that learning approaches are worth caring and researching during life-long learning process because it affects success directly. The fact that students cannot use effective ways of studying and learning is pointed as one of the most important obstacles in academic success (Chung and Yip, 2002; Erdamar, 2010; Ersoy, 2003; Şen, 2006; Subaşı, 2000).

It is stated that students behave in two different in learning process; in other words, studying/learning approaches include mostly superficial and deeper dimensions (Altun, 2013; Çuhadar, Gündüz & Tanyeri, 2015; Olpak & Korucu, 2014).

It is suggested that in superficial and deep learning processes, both approaches lead to different educational consequences when the role of an individual is concerned (Entwistle, 2000). Superficial approach is an approach in which students accept their fears of failure and receive knowledge passively, focus only on what can be used in exams, ignoring goals and strategies and memorize without questioning. Deep approach; on the other hand, is an approach in which students try to understand all the dimensions of what is being studied, relate to previous experiences by re-forming knowledge and form causal links (Biggs, 1999; Entwistle, 2000; Sabzevari, Abbaszade and Borhani, 2013).

When the studies in the literature are investigated, there are studies on studying approaches of teacher candidates.

However, there isn't any direct studies on studying approaches of physical education teacher candidates. Physical education teachers bear great responsibilities in involving students in physical activities and helping them gain physical habits in school they work. The candidate teachers of this branch take theory and applied courses during their bachelor's degree education. The theory course they take can be classier as three main groups as general culture, teaching knowledge and area knowledge. Olpak and Korucu (2014) state that determining which approach students use in studying process can play a role in increasing the effectiveness of teaching environment. So, studying approaches of physical education teachers are aimed to be determined in this research.

2. Method

2.1 Method of the Study

This study is conducted using relational scanning model to determine studying approaches of students of school of physical education and sports. These models are the ones that correlations of two or more variables are inspected and deeply analysed (Karasar, 2009).

2.2 Study Group

The study group consists of 478 students of whom 296 males (61.9%) and 182 females (38.1%) that study at 4 different schools of physical education and sports. When the grades are concerned, 131 (27.4%) freshman, 135 (28.2%) juniors, 134 (28%) sophomores and 78 (16.3%) seniors have been studied. The age average of the group is 25.7 ± 3.58 , gpa average is 2.95 ± 0.336 .

2.3 Data Collecting Means (Tools)

The tools used are "Personal Information Form" and "Studying Approaches Scale" which are prepared by the researchers.

2.4 Personal Information Form

It is prepared to determine socio-demographic and personal qualities of the students who are at the study group with expert opinion and literature review. It consists of variables such as age, gender, grade, department and GPA.

2.5 Studying Approaches Scale

This scale is developed to determine studying approaches of students in different dimensions by Biggs, kemper and Leung (2001). It is adapted to Turkish by Yılmaz and Orhan (2011). It consists of 20 articles and there are two sub-versions as "superficial studying approach" and "deep studying approach". There are 5 presented options for the 5 point likert scale and these are: "never valid or barely valid (1)", "sometimes valid (2)", "half valid (3)", "often valid (4)" and "always or almost always valid (5)". For reliability, Cronbach Alpha coefficient of "deep approach" is 0.79 and it is 0.73 for "superficial approach".

In reliability analysis done for the scale "superficial studying approach" is calculated as .72, "deep studying approach" as .71 and .70 for "throughout the study". As a result, it is concluded that the scale is reliable.

2.6 Data Analysis

Percentage, frequency, arithmetic average and standard deviation which are complementary statistics have not been used in the study. T test is used for independent groups to identify the differences between gender variable and studying approaches. In multiple comparisons of the study, grade, department and multi-dimensional variance analysis (Manova) is used to identify the differences between studying approaches. Pearson Correlation Test is used to identify whether there is a correlation between GPAs of the group and studying approaches.

3. Findings

In this part of the study, the averages that students got from the studying approaches scale are given. Besides, students' genders, grades and departmental studying approaches are determined. Results regarding the relationships between grade point averages are included in this part as well.

Table 1. Findings on studying approaches

Articles	<i>M</i>	Level
1. Studying from time to time makes me feel content.	2.83	Half valid
2. I see I need to study enough to create my own comments and results to feel content.		Frequently valid
3. My main goal is to pass the course studying minimum.	2.24	Sometimes valid
4. I study hard only for the topics that are taught in the class or listed in the syllabus.	3.21	Half valid
5. I feel almost every topic is interesting when I pay close attention.	2.97	Half valid
6. I find novel topics interesting most of the time and spend extra time to research them.	2.84	Half valid
7. I don't find the course interesting therefore I don't study hard.	2.32	Sometimes valid
8. Even if I don't understand some things, I revise over and over to learn memorization .	3.33	Half valid
9. I find studying as interesting as watching films and listening to music sometimes.	2.87	Half valid
10. I test myself on important topics till I learn efficiently.	3.67	Frequently valid
11. I can pass many exams by solely memorization rather than studying for important parts.	2.67	Half valid
12. As I find studying excessively unnecessary, I limit my studies to the topics that are pre-determined.	2.73	Half valid
13. I study hard because I find what I study interesting.	2.88	Half valid
14. I spend most of my time doing further research on the topics that are discussed in different classes.	2.46	Sometimes valid
15. I don't find further studying beneficial. When you only need to familiarize with the topics , further research causes you get tired and lose time.	2.47	Sometimes valid
16. I believe that teachers shouldn't expect their students to spend time on the topics that will not be included in the exam.	2.99	Half valid
17. I come to class with questions in mind most of the time.	2.98	Half valid
18. I find it important to look in most of the resources recommended in the class.	3.25	Half valid
19. I find it unnecessary to study for a topic that is unlikely to be included in the exam..	2.65	Half valid
20. I think learning answers of the questions that are likely to be in the exam is the best way of studying.	3.20	Half valid
General Average	2.90	Half valid

According to the analysis results in Table 1, in terms of studying approaches point averages, the lowest is ($M=2.89$) for "I don't find the course interesting therefore I don't study hard." (7th article), the highest ($M=3.67$) is for "I test myself on important topics till I learn efficiently" (10th article). 14 articles in the study have concluded with "half valid" ($M=2.60 < M \leq 3.39$), 4 articles have concluded with "sometimes valid" ($M=1.80 < M \leq 2.59$). It is determined that the average throughout the scale is at the level of "half valid" $M=2.60 < M \leq 3.39$.

Findings on Gender Variable

Table 2. t Test results of the comparison of studying approaches according to gender variable

Variables	Gender	N	M	S	t	Sd	p
Deep Approach	Male	296	3.01	.637	-212	476	.832
	Female	182	3.02	.554			
Superficial Approach	Male	296	2.84	.654	2.829	476	.005
	Female	182	2.68	.545			
Total	Male	296	2.93	.458	1.897	476	.058
	Female	182	2.85	.364			

When Table 3 is examined, between the genders and studying approaches, there hasn't been found any significant difference between deep approach ($t(478) = -.212$; $p > .05$) and general ($t(478) = 1.897$; $p > .05$). So it can be said that studying approaches of the students in the study group are similar. At the superficial approach level ($t(478) = 2.829$; $p < .05$), there is a significant difference according to gender. It can be stated that this difference is for the good of males when the arithmetic average points are examined. As for this finding, it can be stated that studying approaches of males continue more positively than females at the superficial approach dimension.

Table 3. Manova results of the comparison of studying approaches according to grade variable

Variable	Grade	M	S	Sd	F	p
Deep Approach	1.Grade	3.07	.596			
	2.Grade	2.99	.593			
	3.Grade	3.00	.572	3-474	.478	.698
	4.Grade	2.99	.701			
	Total	3.01	.606			
Superficial Approach	1.Grade	2.67	.538			
	2.Grade	2.83	.699			
	3.Grade	2.90	.609	3-474	4.532	.004
	4.Grade	2.65	.569			
	Total	2.78	.619			
Total	1.Grade	2.88	.407			
	2.Grade	2.91	.433			
	3.Grade	2.95	.409	3-474	1.844	.138
	4.Grade	2.82	.463			
	Total	2.90	.425			

When Table 3 is examined, between grades and studying approaches of the students, in Deep Approach ($F(3-474) = .478$, $p > .05$) and in the comparison done throughout the scale ($F(3-474) = 1.844$, $p > .05$), there is no significant difference. However, there is significant difference in superficial approach dimension ($F(3-474) = 4.532$, $p < .05$). So, it can be concluded that grade variable is effective on studying approaches in the superficial approach of the scale while it is not in the deep approach and throughout the scale.

Table 4. Manova results of the comparison of studying approaches according to department variable

Variables	Grade	M	S	Sd	F	p
Deep Approach	Coaching Training	3.05	.532			
	Physical Education and Sports Teaching	2.99	.628			
	Sports Management	3.07	.608	3-474	1.080	.357
	Recreation	2.93	.658			
	Total	3.01	.606			
Superficial Approach	Coaching Training	2.79	.605			
	Physical Education and Sports Teaching	2.80	.624			
	Sports Management	2.75	.576	3-474	.167	.919
	Recreation	2.78	.690			
	Total	2.78	.619			
Total	Coaching Training	2.92	.402			
	Physical Education and Sports Teaching	2.90	.427			
	Sports Management	2.91	.382	3-474	.443	.723
	Recreation	2.86	.505			
	Total	2.90	.426			

When Table 4 is examined, between students' departments and their studying approaches, there is no significant difference in Deep Approach ($F(3-474) = 1.080$, $p > .05$) and Superficial Approach ($F(3-474) = .167$, $p > .05$) dimensions and average

points throughout the scale. This can be interpreted as non-occurrence of influence of department variable on studying approaches.

Table 5. Correlation between academic success variable and studying approaches

Academic success and studying approaches	Grade Average	Deep Approach	Superficial Approach	Total
Pearson Correlation	1	-.018	-.046	-.046
Sig. (2-tailed)		.699	.318	.316
N	478	478	478	478

When Table 5 is examined, there has not been found any correlation between academic success of the students in the study group and their studying approaches with the article the following articles of the scale: "deep approach dimension" ($r=-.018$, $p>.05$), "superficial approach dimension" ($r=-.046$, $p>.05$), and "throughout the scale" ($r=-.046$, $p>.05$). From this result, it can be stated that there is no significant relationship between studying approaches and academic success.

4. Discussion and Conclusion

Studying approaches of students of school of physical education and sports have been determined in the study. Moreover, it's also determined whether their approaches vary according to gender, grades and departments. The correlation between academic success of students and their approaches has also been included in the study.

To determine the results of students' efforts on education, their studying approaches need to be determined first (Abraham, Vinod, Asha and Ramnarayan, 2008). When students gain effective studying habits, this increase will influence their success positively too (Doğanay and Demir, 2011).

When the averages the students of school of physical education and sports get from studying approaches scale, it is seen that their point averages are at indecision level. Similar results have been concluded in another study conducted by Dönmezi Yazıcı and Demirez (2016). Besides, Akar (2016) has stated that she used both the superficial approach and deep approach in her study moderately. It is stated that the averages of deep approach is higher than those of the superficial approach even though they are both used moderately. Learning and studying approaches express how students approach to academic duties (Mattick, Dennis and Bligh, 2004).

In the comparison in terms of gender variable, there is no significant difference in the averages gathered with deep approach, while there is in the averages gathered with superficial approach for the good of males. Aksu and Kurtuldu (2015) stated that there are differences between students' studying approaches according to gender. It's been concluded that both female and male students' studying approaches are inclined to deep approach. This result does not agree with the results of this research. Dönmez, Yazıcı and Demirz (2016); Ozan and Çiftçi (2013); Olpak and Korucu (2014) suggest that gender variable is not an effective variable on studying approaches.

There is no significant difference determined in studying approaches of the students with deep approach and superficial approach. It can be said that these results agree with the results of the study by Dönmez, Yazıcı and Demirez (2016), Erdamar-Koç (2010) and Ozan and Çiftçi (2013). Similar results can be found in the study of Olpak and Korucu (2014). It is stated that studying approaches of the students do not vary significantly depending on their grades. However, there is significant difference between superficial approach and grade level. It is seen that superficial approaches of students at first and fourth grade are low while they are high in the students at second and third grade. Similar results have been found in the study by Geçer (2012) even though there hasn't been stated any significant difference. In similar studies by Çuhadar, Gündüz and Tanyeli, (2013); Geçer, (2012); Senemoğlu, (2011), significant differences have been found in superficial approach dimension differently than deep approach dimension.

The results show us that there isn't any significant differences between students' departments and studying approaches in at lower dimensions of the scale and throughout it. So it can be stated that departments have no influence on studying approaches. Olpak and Koruyucu (2014) have found similar results in their study as well. They all agree with each other.

Another finding in the study is about whether there is a correlation between academic success of HIGH students and their studying approaches. In the study sampling, there hasn't been such a correlation. However, Deryakulu (2004) stated that studying approaches have an influence on learning and academic performance. In another study by Şen (2006), the fact that students don't use these approaches affectively is presented as a big obstacle for their success. Yağcı (2015) has found a low but positive and significant correlation between studying approaches and academic grades in deep approach; a low, negative and significant correlation in superficial approach. It can be said that the curriculum that include applied courses of these schools has an influence on the results.

Students of school of physical education and sports need to have efficient knowledge of studying approaches in order to be successful throughout their education living. It will be helpful if they are trained on these studying approaches. In the

studying approaches of the students of school of physical education and sports are examined in terms of gender, grade, department and gpa variables. Studying approaches can be studied in further research regarding different variables and in more detail with qualitative studies.

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