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EXAMINATION OF SELF-REGULATED ONLINE LEARNING SKILLS IN FACULTY OF SPORTS SCIENCES STUDENTS

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Abstract:
In this study, it was aimed to examine the self-regulated learning skills used by sports science faculty students in online learning environments according to some variables. The universe of the study consists of undergraduate students who continue their education in the field of sports sciences, and the sample consists of 209 volunteer students who were selected by the random sampling method in the 2020-2021 academic year at Ondokuz Mayıs University Yaşar Doğu Faculty of Sport Sciences. It was used personal information form and Jansen et al. (2017) "The Self-Regulated Online Learning Questionnaire" (SOL-Q) scale, adapted to Turkish by Yavuzalp and Özdemir (2020) as data collection tool. In the statistical analysis of the data, the independent samples t test and one-way analysis of variance (ANOVA) tests were used to determine the difference between groups. When the comparison was made according to gender, significant difference was observed in the sub-dimensions of Metacognitive Skills, Environmental Structuring, Persistence, Help Seeking and the total scale ($p<0.05$). On the other hand, time management sub-dimension did not differ significantly ($p>0.05$). There was no significant difference in self-regulated online learning according to the variable of the education department ($p>0.05$). As a result, while the self-regulated learning skills used by sports science students in online learning environments differ according to the gender variable, they are similar to the variables of the department they study and the type of high school they graduate. It is recommended to carry out such studies to graduate level sports science students, with studies involving more sports science students and examining different variables.

Keywords: self-regulated, online learning, sports sciences faculty student

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1. Introduction

The emergence of the New Type of Coronavirus (COVID-19) in Wuhan, China on December 1, 2019 (Wikipedia, 2020) and on March 11, 2020; with the announcement of the World Health Organization as a global pandemic (WHO, 2020), it has had significant effects on many areas such as health, economic, social activities and education at the global level, and changes in practices were needed to minimize the effects in these areas. One of the most important issues affected by the pandemic has been the continuation of education. During the pandemic period, the proposal to close educational institutions was accepted in order to minimize the risk of transmission and reduce the spread of infectious diseases (Wheeler et al., 2010; De Luca, 2018) and in many countries, educational institutions were temporarily closed and in order to manage the process in our country, the High Education Board quickly decided that the education-training process should continue with distance education (YÖK, 2020).

In this context, online learning systems are very important for students to continue the education they need during the pandemic process (Bozkurt, 2015; Demirci, 2014; Yavuzalp and Özdemir, 2020). For those who receive education in order to provide education and training in online learning systems; features such as self-learning, motivation, and setting their own goals are very important (Berigel and Çetin, 2019). Considering that there are features similar to these features in individuals with self-regulation skills (Akınoğlu and Sarı, 2009), it is seen that there is a harmony between these two concepts. The concept of self-regulation has been defined in different ways by many theorists (Pintrich, 2000; Yavuzalp and Özdemir, 2020). Based on these definitions, the concept of self-regulated learning is briefly expressed as individuals with self-regulation skills transform from dependent learners to independent learners in their educational processes (Aydın and Demir, 2014).

Since the online learning system was used in theoretical trainings before the pandemic, it was a bit difficult to apply in applied courses (Kahraman, 2020). In addition, the fact that the scale used was applied for the first time in the field of sports sciences shows the importance of the research.

It is thought that sports science faculty students will contribute to the development of relevant programs by determining their positions and attitudes towards self-regulated online learning. In the study, it was aimed to examine the self-regulated learning skills used by sports science faculty students in online learning environments according to various variables.

2. Material and Method

2.1 Participants and Procedure

The universe of the study is undergraduate students who continue their education in the field of sports sciences, and the sample is Coaching Education Department (CED), Physical Education and Sports Teaching (PEST), Sports Management (SM) and

Recreation Education (RE) under Ondokuz Mayıs University Yaşar East Sports Sciences Faculty in the academic year 2020-2021. Two hundred nine volunteers participated. In this descriptive study, the simple random sampling method was used.

2.2 Data Collection Tool

It was used personal information form and Jansen et al. (2017) "The Self-Regulated Online Learning Questionnaire" (SOL-Q) scale, adapted to Turkish by Yavuzalp and Özdemir (2020) as data collection tool. The research data were applied to sports science students taking courses over the distance education system due to Covid 19. The online scale was answered in 2 weeks. SOL-Q includes 5 sub-dimensions: "Metacognitive Skills", "Time Management", "Environmental Structuring", "Persistence", "Help Seeking". This scale, consisting of five sub-dimensions, includes 36 items in total. The SOL-Q scale was developed to be scored in a 7-point likert structure. According to this format, 1 means "not suitable for me at all" and 7 means "very suitable for me".

2.3 Statistical Analyzes

The SPSS version 22.0 (SPSS Inc., Chicago, IL) program was used for statistical analyzes. The data were expressed as the mean, standard deviation, and confidence interval. The Kolmogorov-Smirnov test was used to check normality of the data. To determine the difference between groups independent samples t test and one-way analysis of variance (ANOVA) were used. Significance was defined as $p < 0.05$.

3. Results

Table 1: Analysis of self-regulated online learning by gender variable

Sub-Dimension	Gender	N	Mean	S.D.	p
Metacognitive Skills	Male	143	76.95	25.41	**0.008**
	Female	66	86.98	23.98	
Time Management	Male	143	9.70	2.46	0.265
	Female	66	10.09	2.01	
Environmental Structuring	Male	143	4.71	1.58	**0.001**
	Female	66	5.48	1.35	
Persistence	Male	143	4.52	1.50	**0.025**
	Female	66	5.02	1.47	
Help Seeking	Male	143	21.75	7.91	**0.004**
	Female	66	25.17	7.63	
Total	Male	143	151.93	41.74	**0.002**
	Female	66	170.94	38.54	

Note: S.D. = standard deviation

When the comparison was made according to gender, significant difference was observed in the sub-dimensions of Metacognitive Skills, Environmental Structuring, Persistence, Help Seeking and the total scale ($p < 0.05$). On the other hand, time management sub-dimension did not differ significantly ($p > 0.05$).

Table 2: The analysis of self-regulated online learning according to the variable of the department of education

Sub-Dimension	Academic Department	N	Mean	S.D.	95% CI		p
					LB	UB	
Metacognitive Skills	PEST	49	88.46	25.70	81.07	95.83	0.051
	CED	42	79.89	25.99	71.69	88.09	
	SM	49	75.13	24.52	68.08	82.17	
	RE	69	77.86	24.59	71.95	83.76	
	Total	209	80.11	25.41	76.63	83.58	
Time Management	PEST	49	10.07	2.10	9.46	10.67	0.786
	CED	42	9.74	2.49	8.95	10.52	
	SM	49	9.59	2.65	8.82	10.35	
	RE	69	9.84	2.18	9.31	10.36	
	Total	209	9.82	2.33	9.49	10.13	
Environmental Structuring	PEST	49	5.38	1.42	4.97	5.79	0.130
	CED	42	4.98	1.82	4.40	5.55	
	SM	49	4.66	1.66	4.18	5.13	
	RE	69	4.87	1.37	4.54	5.19	
	Total	209	4.96	1.56	4.75	5.17	
Persistence	PEST	49	4.99	1.61	4.52	5.44	0.217
	CED	42	4.35	1.53	3.86	4.83	
	SM	49	4.55	1.60	4.08	5.00	
	RE	69	4.75	1.33	4.43	5.07	
	Total	209	4.68	1.51	4.47	4.88	
Help Seeking	PEST	49	24.96	7.85	22.70	27.21	0.194
	CED	42	22.41	8.55	19.71	25.11	
	SM	49	22.38	8.61	19.90	24.85	
	RE	69	21.88	7.13	20.16	23.59	
	Total	209	22.83	7.99	21.73	23.92	
Total	PEST	49	170.14	40.93	158.38	181.90	0.122
	CED	42	154.81	43.20	141.17	168.44	
	SM	49	151.62	47.30	138.03	165.20	
	RE	69	155.54	35.93	146.90	164.17	
	Total	209	157.91	41.72	152.20	163.61	

Note: S.D. = standard deviation; CI = confidence of interval; LB = lower bound; UB = upper bound; CED = Coaching Education Departments; PEST = Physical Education and Sports Teaching; SM = Sports Management; RE = Recreation Education.

There was no significant difference in self-regulated online learning according to the variable of the education department ($p > 0.05$).

Table 3: Analysis of self-regulated online learning by type of high school graduated from

Sub-Dimension	High School Type	N	Mean	S.D.	95% CI		P
					LB	LB	
Metacognitive Skills	AHS	85	78.54	25.13	73.1205	83.9628	0.757
	VHS	66	81.08	23.38	75.3295	86.8239	
	Other	58	81.35	28.02	73.9869	88.7193	
	Total	209	80.12	25.35	76.6652	83.5795	
Time Management	AHS	85	10.03	2.43	9.5070	10.5541	0.215
	VHS	66	9.41	2.25	8.8552	9.9630	
	Other	58	10.00	2.26	9.4069	10.5931	
	Total	209	9.83	2.33	9.5078	10.1439	
Environmental Structuring	AHS	85	4.95	1.55	4.6186	5.2873	0.960
	VHS	66	4.93	1.62	4.5312	5.3294	
	Other	58	5.01	1.51	4.6118	5.4055	
	Total	209	4.96	1.56	4.7491	5.1733	
Persistence	AHS	85	4.63	1.49	4.3114	4.9561	0.868
	VHS	66	4.67	1.59	4.2746	5.0572	
	Other	58	4.77	1.46	4.3861	5.1518	
	Total	209	4.68	1.51	4.4756	4.8873	
Help Seeking	AHS	85	22.51	8.17	20.7528	24.2766	0.892
	VHS	66	23.06	7.87	21.1218	24.9919	
	Other	58	23.05	7.91	20.9729	25.1305	
	Total	209	22.83	7.97	21.7482	23.9217	
Total	AHS	85	156.94	42.75	147.7136	166.1575	0.894
	VHS	66	157.31	41.19	147.1805	167.4334	
	Other	58	160.13	41.05	149.3406	170.9281	
	Total	209	157.94	41.62	152.2650	163.6160	

Note: S.D. = standard deviation; C = confidence of interval; LB = lower bound; UB = upper bound; AHS = Anatolian High School; VHS = Vocational High School

When self-regulated online learning is analyzed according to the type of high school graduated from, there is no statistically significant difference ($p > 0.05$).

4. Discussion and Conclusion

In this study, it was aimed to examine the self-regulated learning skills used by sports sciences faculty students in online learning environments according to the variables of gender, the department they studied and the type of high school they graduated from. As a result of the research, 3 main findings were obtained. a) Self-regulated online learning skills of female were found to be higher than male b) Although the result was not statistically significant, students in the PEST department had higher self-regulated online learning skills than other departments c) Self-regulated online learning was found to be similar to the type of high school they graduated from.

When the domestic studies are examined, it is understood that the number of studies on self-regulation skills in online learning environments is limited. The fact that

no such study has been conducted in the field of sports sciences reveals the importance of the research.

Considering the changing definition of educator, student roles and self-regulation skills in online learning environments and distance education environments, it is seen that self-regulation skills are among the roles that students are expected to perform in online learning environments. For this reason, advanced self-regulation skills in online learning is an important factor in students' success (Vardar and Aslan, 2014; Yavuzalp and Özdemir, 2020).

Online learning environments and distance education provide time and space independence for both learners and educators. In this respect, online learning environments can be very important in reaching the education that societies need when properly conducted (Bozkurt, 2015; Sarıdaş and Deniz, 2018; Yavuzalp and Özdemir, 2020). However, in order to achieve the goals set in online learning environments, there are some features that students should have. These features include self-learning, self-motivation, self-determination and working towards this goal. are features (Berigel and Çetin, 2019).

When the analysis was made according to the gender variable, a significant difference was observed in the sub-dimensions of Metacognitive Skills, Environmental Structuring, Persistence, Help Seeking and the total scale ($p<0.05$). Time Management sub-dimension, on the other hand, did not differ significantly ($p>0.05$). Although there was no significant difference ($p> 0.05$) in self-regulated online learning, the self-regulated online learning skills of the students in the PEST section were higher than the other departments. When self-regulated online learning was analyzed according to the type of high school graduated from, no statistically significant difference was found ($p>0.05$). There are studies where there is a difference between self-regulation skills and gender (Üredi and Üredi, 2005; D'Ambrosio et al., 2008) and not (Gömleksiz and Demiralp, 2012; Özdemir, 2018).

In conclusion, while the self-regulated learning skills used by sports science students in online learning environments differ according to the gender variable, they are similar to the variables of the department they study and the type of high school they graduate. Research can be done on more sports science faculty students. It is recommended that similar studies should be conducted on academic achievement and Self-Regulated Online Learning styles of under graduate students and graduate students.

Conflict of Interest Statement

The authors declare no conflicts of interests.

Authors' Contribution

M. Hakan Mayda designed the study, wrote and revised the manuscript, and carried out the statistical analysis.

Serhat Erail collected the data, performed the processing and wrote part of manuscript.

Emre Karaduman prepared the manuscript and searched the literature.

References

Akınoğlu, O., & Sarı, A. (2009). Self-Regulated Learning: Models and Applications, M. U. Atatürk Faculty of Education Journal of Educational Sciences, 29: 139-154.

Aydın, S., & Demir, T. (2014). Self-regulated learning. Ankara: Pegem Academy, 1-35.

Berigel, M., & Çetin, İ. (2019). Teacher and learner roles in open and distance education. In E. Tekinarslan, & M. D. Gürer (Eds.), Open and distance learning (p. 125–144). Ankara: Pegem A Publishing

Bozkurt, Ö. A. (2015). Massive Open Online Courses (MOOCs) and lifelong learning opportunity in the digital information age. Journal of Open Education Applications and Research, 1 (1), 56-81.

Council of Higher Education (YÖK) (2020). Press release, https://www.yok.gov.tr/Sayfalar/Haberler/2020/, Access date: 26.03.2020.

D'Ambrosio, L. A., Donorfio, L. K., Coughlin, J. F., Mohyde, M., & Meyer, J. (2008). Gender differences in self-regulation patterns and attitudes toward driving among older adults. Journal of Women & Aging, 20(3-4), 265-282.

De Luca, G., Van Kerckhove, K., Coletti, P., Poletto, C., Bossuyt, N., Hens, N., & Colizza, V. (2018). The impact of regular school closure on seasonal influenza epidemics: a data-driven spatial transmission model for Belgium. BMC infectious diseases, 18(1), 1-16.

Demirci, N. (2014). What are mass open online courses (how many)? And what does it promise us for learning? Review-evaluation article about how many d's. Necatibey Faculty of Education Electronic Journal of Science and Mathematics Education, 8 (1), 231-256.

Hero, M. E. (2020). The Effect of COVID-19 Outbreak on Applied Courses and Conducting These Courses Through Distance Education: Basic Design Lesson Example. Medeniyet Art Journal, 6 (1), 44-56.

Jansen, R. S., Van Leeuwen, A., Janssen, J., Kester, L., & Kalz, M. (2017). Validation of the self-regulated online learning questionnaire. Journal of Computing in Higher Education, 29(1), 6–27.

Özdemir Y. (2018). Adaptation of Self-Regulated Online Learning Scale to Turkish and Examining Self-Regulation in Terms of Various Variables. Master Thesis, Institute of Educational Sciences.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In Handbook of self-regulation (pp. 451-502). Academic Press.

Sarıdaş, G., & Deniz, L. (2018). Çevrimiçi Öğrenme Topluluklarının Öğretmenlerin Mesleki Gelişimine Etkisine Yönelik Öğretmen Görüşleri. Çağdaş Yönetim Bilimleri Dergisi, 1(5), 11-41.

Shirtsiz, M. N., & Demiralp, D. (2012). Evaluation of pre-service teachers' views on self-regulated learning skills in terms of various variables. Gaziantep University Journal of Social Sciences, 11 (3).

Üredi, I., & Üredi, L. (2005). The predictive power of primary school 8th grade students' self-regulation strategies and motivational beliefs on mathematics achievement. Mersin University Journal of Education Faculty, 1 (2), 250-260.

Vardar, A. K., & Arsal, Z. (2014). The Effect of Self-regulation Strategies Teaching on Students' English Achievement and Attitudes. Journal of Mother Tongue Education, 2 (3), 32-52.

Wheeler, C. C., Erhart, L. M., & Jehn, M. L. (2010). Effect of school closure on the incidence of influenza among school-age children in Arizona. Public health reports, 125(6), 851-859.

Wikipedia (2020). 2019 coronavirus pandemic. https://tr.wikipedia.org/wiki/COVID-19_pandemic was obtained on December 16, 2020 from the web address.

World Health Organization (WHO). Q&As on COVID-19 and related health topics, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-andanswers-hub was obtained on May 12, 2020 from the web address.

Yavuzalp, N., & Özdemir, Y. (2020). A study of adapting the self-regulated online learning scale to Turkish. Journal of Higher Education, 10 (3): 269-278.