

Investigation of students' level of imagination and sport confidence studying at School of Physical Education and Sports

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Suggested Citation:

Alp, A. F., Oz, R. & Horozoglu, M. A. (2018). Investigation of students' level of imagination and sport confidence studying at school of physical education and sports. *International Journal of Learning and Teaching*. 10(2), 148-157.

Received date August 05, 2017; revised date November 26, 2017; accepted date December 22, 2017.

Selection and peer review under responsibility of Prof. Dr. Hafize Keser, Ankara University, Ankara, Turkey.

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Abstract

The aim of the study is to investigate students' level of imagination and their athletic confidence. The research group was made up of 62 female and 135 male, 197 in total, studying at the School of Physical Education and Sports, Karamanoglu Mehmetbey University. To achieve the purpose of the research, 'A Scale of Achievement Imagery Questionnaire in Sports' and 'Confidence Questionnaire in Sports' (Trait Sport Confidence-SSGO) were applied to the students who participated in the research. In the analysis and assessment of the data, Kolmogorov-Smirnov test, Kruskal Wallis H test and Mann-Whitney U test were used and significance was taken as $P < 0.05$ and in the evaluation of the data and for the determination of the calculated values, Statistical Package for Social Sciences was used. According to the results of the study, there is a significant difference in sub-dimension of athletic confidence according to the department and class variable.

Keywords: Imagination, sport confidence, student.

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1. Introduction

Sports confidence is a macro-level approach towards self confidence. It expresses the expectation levels of performance in sports events and some competitions wholly in self confidence or it may be defined as the perception of ability of being successful in sports (Tiryaki, 2000).

Sportsmen should be open for improvement physically, mentally and psychologically (Anderson, 2000). It is an obligation for sportsmen to be equipped with new capabilities. Within this, sportsmen and trainers should work a lot to develop themselves physically, mentally, kinesthetically and emotionally (Morris, Spittle & Watt, 2005).

Imagery is one of the application fields of sports psychology. Imagery studies help sportsmen develop in many fields combining technical, tactics and motoric studies; this is important in improving the performance of the sportsmen.

Imagery in sports not only helps sportsman to develop positive sense of self but also helps to overcome anxiety and develop self confidence (Hall, 2001). In sports psychology, in order to guide and direct the performance imagery known as using mental processes has an important place (Murphy, 1994).

The studies on imagery in sports and peak performance showed that imagery has an important effect on concentration, attention, self confidence, self awareness, managing psycho energy, overcoming stress, communication and setting goals and imagery makes these concepts more clear (Konter, 1998).

In order to be successful in sports, not only physical abilities but also psychological abilities are needed. When the individual pictures the ability that he wants to perform in his mind, it will be easier for him to perform better, because high performance is closely related to the emotional atmosphere of our brains.

Imagination in sports helps sportsman cope with anxiety and also, boosts his self-confidence. Within this concept, imagination which affects success psychologically is thought to be related to each other. The aim of the study is to investigate of students' level of imagination and athletic confidence of students studying at School of Physical Education and Sports.

2. Method

2.1. Research group

The research group was made up of 62 female and 135 male ($\bar{x}_{age} = 21.4607 \pm 1.8792$), 197 in total, studying at the School of Physical Education and Sports, Karamanoglu Mehmetbey University.

2.2. Data collection tools

To achieve the purpose of the research, 'A Scale Of Achievement Imagery Questionnaire in Sports' developed by Hall (1998) and adapted to Turkish by Kizildag and Tiryaki (2012) and 'Confidence Questionnaire in Sports' (Trait Sport Confidence-SSGO) developed by Vealey (1986) and adapted to Turkish by Engur, Tok and Tatar (2006) were based on and applied to the students who participated in the research

2.3. Analysis of data

In the analysis and assessment of the data, Kolmogorov–Smirnov test, Kruskal Wallis H test, Mann–Whitney U test was used and significance was taken as $P < 0.05$ and in the evaluation of the data and

the determination of the calculated values, Statistical Package for Social Sciences package program was used.

3. Findings

Table 1. According to the gender variable, Mann–Whitney U test results about the level of imagination of students studying at School of Physical Education and Sports

		<i>N</i>	Mean rank	Sum of ranks	<i>U</i>	<i>Z</i>	<i>P</i>
General cognitive imagination	Male	62	99.88	6192.50	4130.500	-0.147	0.883
	Female	135	98.60	13310.50			
Motivational imagination	Male	62	100.95	6259.00	4064.000	-0.326	0.744
	Female	135	98.10	13244.00			
Motivational cognition	Male	62	97.75	6060.50	4107.500	-0.209	0.835
	Female	135	99.57	13442.50			
Motivational alertness	Male	62	97.75	6060.50	4107.500	-0.209	0.835
	Female	135	99.57	13442.50			
General motivational professionalism	Male	62	100.04	6202.50	4120.500	-0.174	0.862
	Female	135	98.52	13300.50			
Total imagination score	Male	62	99.83	6189.50	4133.500	-0.139	0.890
	Female	135	98.62	13313.50			
Total athletic confidence	Male	62	95.06	5894.00	3941.000	-0.657	0.511
	Female	135	100.81	13609.00			

If the test results are examined in Table 1; there is no significant difference between the levels of gender sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($U = 4130.500$; $P = 0.883 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($U = 4064.000$; $P = 0.744 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($U = 4107.500$; $P = 0.835 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($U = 4107.500$; $P = 0.835 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($U = 4120.500$; $P = 0.862 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($U = 4133.500$; $P = 0.890 > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($U = 3941.000$; $P = 0.511 > 0.05$).

Table 2. According to the department variable, Kruskal Wallis H test results about the level of imagination of students studying at School of Physical Education and Sports

		<i>N</i>	Mean rank	χ^2	<i>p</i>
General cognitive imagination	Physical education and sports teaching	86	105.51	2.271	0.321
	Sports management, II. teaching	19	100.24		
Motivational imagination	Sports management, teaching	92	92.66	5.321	0.070
	Physical education and sports teaching	86	108.84		
Motivational cognition	Sports management, II. teaching	19	101.76	2.832	0.243
	Sports management, teaching	92	89.23		
Motivational alertness	Physical education and sports teaching	86	105.96	2.832	0.243
	Sports management, II. teaching	19	102.45		
General motivational professionalism	Sports management, teaching	92	91.78	4.429	0.109
	Physical education and sports teaching	86	107.47		
Total imagination score	Sports management, II. teaching	19	104.66	3.638	0.162
	Sports management, teaching	92	89.92		
Total athletic confidence	Physical education and sports teaching	86	107.15	15.280	0.000
	Sports management, II. teaching	19	101.29		
	Sports management, teaching	92	90.91		
	Sports management, II. teaching	19	99.42		
	Sports management, teaching	92	82.82		

If the test results are examined in Table 2; there is no significant difference between the levels of department sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($\chi^2 = 2.271$; $P = 0.321 > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($\chi^2 = 5.321$; $P = 0.070 > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($\chi^2 = 2.832$; $P = 0.243 > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($\chi^2 = 2.832$; $P = 0.243 > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($\chi^2 = 4.429$; $P = 0.109 > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($\chi^2 = 3.638$; $P = 0.162 > 0.05$).

There is significant difference between the levels of department sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($\chi^2 = 15.280$; $P = 0.000 < 0.05$).

Table 3. According to the grade variable, Kruskal Wallis H test results about the level of imagination of students studying at School of Physical Education and Sports

		<i>N</i>	Mean rank	χ^2	<i>p</i>
General cognitive imagination	1st grade	65	90.62	2.354	0.502
	2nd grade	57	100.63		
	3rd grade	33	106.88		
	4th grade	42	103.56		
Motivational imagination	1st grade	65	91.81	4.201	0.241
	2nd grade	57	97.36		
	3rd grade	33	116.50		
	4th grade	42	98.61		
Motivational cognition	1st grade	65	89.38	3.138	0.371
	2nd grade	57	100.75		
	3rd grade	33	103.71		
	4th grade	42	107.81		
Motivational alertness	1st grade	65	89.38	3.138	0.371
	2nd grade	57	100.75		
	3rd grade	33	103.71		
	4th grade	42	107.81		
General motivational professionalism	1st grade	65	88.23	5.053	0.168
	2nd grade	57	98.93		
	3rd grade	33	114.55		
	4th grade	42	103.55		
Total imagination score	1st grade	65	90.07	3.057	0.383
	2nd grade	57	99.79		
	3rd grade	33	110.03		
	4th grade	42	103.08		
Total athletic confidence	1st grade	65	90.45	10.668	0.014
	2nd grade	57	90.00		
	3rd grade	33	100.23		
	4th grade	42	123.49		

If the test results are examined in Table 3; there is no significant difference between the levels of grade sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($\chi^2 = 2.354$; $P = 0.502 > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($\chi^2 = 4.201$; $P = 0.241 > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($\chi^2 = 3.138$; $P = 0.371 > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($\chi^2 = 3.138$; $P = 0.371 > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($\chi^2 = 5.053$; $P = 0.168 > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($\chi^2 = 3.057$; $P = 0.383 > 0.05$).

There is significant difference between the levels of grade sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($\chi^2 = 10.668$; $P = 0.014 < 0.05$).

Table 4. According to the branch variable, Mann–Whitney U test results about the level of imagination students studying at School of Physical Education and Sports

		N	Mean rank	Sum of ranks	U	Z	P
General cognitive imagination	Team sports	156	100.88	15737.00	2905.000	-0.903	0.367
	Individual sports	41	91.85	3766.00			
Motivational imagination	Team sports	156	99.93	15589.00	3053.000	-0.447	0.655
	Individual sports	41	95.46	3914.00			
Motivational cognition	Team sports	156	100.35	15654.00	2988.00	-0.647	0.518
	Individual sports	41	93.88	3849.00			
Motivational alertness	Team sports	156	100.35	15654.00	2988.00	-0.647	0.518
	Individual sports	41	93.88	3849.00			
General motivational professionalism	Team sports	156	101.76	15874.50	2767.500	-1.327	0.185
	Individual sports	41	88.50	3628.50			
Total imagination score	Team sports	156	100.78	15721.00	2921.000	-0.853	0.394
	Individual sports	41	92.24	3782.00			
Total athletic confidence	Team sports	156	102.74	16027.50	2614.500	-1.798	0.072
	Individual sports	41	84.77	3475.50			

If the test results are examined in Table 4; there is no significant difference between the levels of branch sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($U = 2905.000$; $P = 0.367 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($U = 3053.000$; $P = 0.655 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($U = 2988.000$; $P = 0.518 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($U = 2988.000$; $P = 0.518 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($U = 2767.500$; $P = 0.185 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($U = 2921.000$; $P = 0.394 > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($U = 2614.500$; $P = 0.072 > 0.05$).

4. General discussion

The aim of the study is to investigate of students' level of imagination and athletic confidence of students studying at School of Physical Education and Sports.

If the test results are examined in Table 1; there is no significant difference between the levels of gender sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$). According to these results, both female and male university students not only use cognitive imagery but also physical abilities.

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$). There is a significant difference between the variables because physical education and sports students have higher levels of motivation. The research of Salmon, Hall and Haslam (1994), Barr and Hall (1992) and Vurgun (2010). As a result, all these research studies support our research

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($P > 0.05$). According to these results, both female and male university students not only use cognitive imagery but also physical abilities

There is no significant difference between the levels of gender sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($P > 0.05$). According to these results, both female and male university students have the same level of physical, emotional alertness and experiences.

There is no significant difference between the levels of gender sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($P > 0.05$). There is a significant difference between the variables because physical education and sports students have a strong mentality.

There is no significant difference between the levels of gender sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of gender sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($P > 0.05$).

If the test results are examined in Table 2; there is no significant difference between the levels of department sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of department sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is significant difference between the levels of department sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($P < 0.05$). In the research, students studying at the Department of Physical Education and Sports have higher levels of athletic confidence than the students studying at the Department of Sport Management evening class.

If the test results are examined in Table 3; there is no significant difference between the levels of grade sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$). There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($P > 0.05$). There is no significant difference between the levels of grade sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of grade sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($P > 0.05$). There is no significant difference between the levels of grade sub-dimensions of imagination Total Imagination Score variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is significant difference between the levels of grade sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($P < 0.05$). In the research, it is also found out that according to the class variable, the 4th class students have higher levels of athletic confidence than 1st and 2nd class students

There is no significant difference between the levels of branch sub-dimensions of imagination General Cognitive Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Imagination variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Cognition variables of students studying at School of Physical Education and Sports ($P > 0.05$). The research of Callow and Hardy (2001), Cumming and Hall (2002), Salmon, Hall and Haslam (1994) and Vurgun (2010). As a result, all these research studies support our research

There is no significant difference between the levels of branch sub-dimensions of imagination Motivational Alertness variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination General Motivational Professionalism variables of students studying at School of Physical Education and Sports ($P > 0.05$). According to these results, the students studying at School of Physical Education and Sports have the same physical and emotional experiences no matter which sports branch they are dealing with.

There is no significant difference between the levels of branch sub-dimensions of imagination Total Imagination score variables of students studying at School of Physical Education and Sports ($P > 0.05$).

There is no significant difference between the levels of branch sub-dimensions of imagination Total Athletic Confidence variables of students studying at School of Physical Education and Sports ($P > 0.05$). The reasons of differences out; It is believed that be caused failure of the sample group comprised of elite athletes. Because of the major areas of competition for elite athletes, they may use different images of the mind and body. The research of Fauzee, Sofian, Daud, Abdullah and Rashid (2009), Murphy, Nordin and Cumming (2008), Smith and Christensen (1995), Mamassis and Doganis (2004), Nordin and Cumming (2006), Cox and Whaley (2004), Perry and Williams (1998) and Vurgun (2010). As a result, all these research studies support our research.

According to the results of the study, there is no significant difference between sub-dimensions of imagination (Motivational Imagination, Motivational Cognition, Motivational Alertness, Total Imagination Score, General Cognitive Imagination, General Motivational Professionalism) and Total Dimensions of Athletic Confidence in the variables of gender, major of the students studying at School of Physical Education and Sports. However, there is a significant difference in sub-dimension of Athletic Confidence according to the department and class variable. It is also found out that according to the class variable, the 4th class students have higher levels of athletic confidence than 1st and 2nd class students; students studying at the Department of Physical Education and Sports have higher levels of athletic confidence than the students studying at the Department of Sport Management evening class. These results prove that quality and the quantity of the decisions may change in accordance with the cognitive and emotional development level of students and social structure.

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