

The analysis of the attention levels of individuals playing golf

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Abstract

The purpose of this study is to investigate whether the golf exercises affect the attention level of the individuals in 14-15 years of age. The sample group of the study is occurring 60 students in 14-15 age group from Hekimoglu Vocational High School located in Selcuklu District of Konya. The mean age of the subjects participating in the study as the experimental group is 14.80 ± 1.38 years, mean age of the control group is 14.90 ± 1.39 years. Before and after the 8 weeks process Bourdon (1955) attention test is applied. SPSS 16.0 programme is used in evaluation and using the calculated values. The test of the data distribution is normal or not made by One-sample Kolmogorov-Smirnov test method and fixed that data have normal distribution. For the pre-test – posttest comparisons in the group paired samples t-test is used. As a result, in the survey made for inspecting the attention levels of the individuals in 14 – 15 age group who are making golf exercises, it is fixed that the golf exercise applied to the test group affects the attention level of the kids significantly. In this context, we can say that the golf exercise positively affect the attention properties of the kids in 14-15 age group.

Keywords: Adolescent, attention, exercise, golf.

INTRODUCTION

This very function of the nervous system has to fulfill many processes. The first one is the outlying sensual information's being treated as the selector. Since a lot of sensual information reaches to the nervous system more than it can treat simultaneously, a part of this information is selected to be processed by the nervous system in accordance with the objectives and needs at the time and another part is filtered. This kind of selectivity is necessary because of the limitations in the treatment of the information in all sensual modality ducts (12). Selective attention process is a process which both allows nervous systems get the related and basic information and ensures information resources that will prevent performance, is unrelated, probably misleading and are hardly treated to be eliminated, as well (1). Sustainable Attention: "Baddeley" (7) Sustainable attention can be defined as the identification and assignment of the amount of the capacity that the task requires by the organism and the continuation of the attention during the performance of the act set forth. Perpetual attention is related to the effective and fruitful treatment of the information received for a long time and is measured by the wakefulness missions who are mostly affected by the factors such as tiredness,

anxiety and motivation (1). Whereas focused attention is connected to hidden talents, split attention is associated with general ability. The measure device of the concept of attention is considered to be a changeable spotlight. This attitude assumes the information kept out of the attention spotlight not to be treated hence, one can concentrate on only one task at one time. However, there is anecdotal evidence that makes one think that it is possible for athletes to get information from two different places as is considered from the point of sports. There is also empirical evidence about the information kept out of attention is processed. Here, a discrimination related to the direction of attention as hidden and explicit can be done. Whereas open attention is the focusing of attention consciously, hidden attention is associated with the expectations that reveal in specific places through experiences (15). Voluntary attention: It is the condition of making a decision consciously in the light of watching specifically the related object or event, target and aim. For instance, the increase of long term intensity in attention during a tennis match that lasts long also makes an increase in the energy used. The sportsman tries to control his attention by having conscious breaks in order not to have fluctuations.

Involuntary attention: It is the type of attention which occurs without any attempt. Extrinsic stimulus diverts the attention. For example, in case of a sportsman who directs his attention at hearing the sound of the whistle towards the direction of the sound when he is about to throw the ball (6).

Attention also includes the processes of filtering our perceptions, of balancing our various perceptions and of the ability of adding emotional importance to these perceptions. It is the key which is necessary to the ability of controlling the process of apprehension and of concentrating on a task (13). Golf is kind of sports within which you can have an enjoyable time by striking the ball and with which body operates in harmony. Golf is a higher-up mental strategy game. The performers are supposed to make a decision in between emotions and apprehensions by considering environmental factors and to concentrate and be in higher-up condition despite psychological pressures. We know that golfers have the consideration of "focus and relax". They are very much so concentrated before and after the stroke and after that they can relax without losing their ability of getting important information. While they are acting through the next stroke, they concentrate again; check the important elements and they apply LTD (location, distance and orbital bent) which is a simple guidance for focusing. This directive of LTD is adapted for performers to keep the most important things in mind. These are, relatively, the location of the ball, the distance of the ball towards the target and the bent which is necessary for the ball to reach the target. When the performers focus on this simple set, this helps them make better mental decisions and control their anxiety. The period needed to accomplish this golf tournament may let the attention repeated easily in the past and which is transferred (the last strike stuck out, the missed goal, etc.) be used. This research asserts to be focused on the present time and ignore the past. Golf is unique game in all respects (8). Pre-strike plan has displayed the fact that good golfers have a better mental preparation involving higher-up concentration and that they are less affected by negative evaluations on their performances or the inner-talk related to this.

MATERIAL & METHOD

The universe of the research is constituted on 60 students who are between the ages of 14-15 at Konya Mehmet Halil İbrahim Hekimoglu Trade Vocational High School. The experimental group consists of 30

students, 15 of which are girls and 15 as boys. The control group consists of 30 students, 15 of which are girls and 15 as boys. The control and experimental groups formed of boys and girls has been determined with the random method. The experimental group is implemented to a program of practicing techniques of golf stroke for 80 minutes a day, two days a week in 8 weeks. The program which will be applied in this research has been performed in the hall at school during the periods designated except for PE. Both the control and experimental groups are implemented to Bourdan (1955) attention test before and after the period of 8 weeks. The Bourdan attention test has been applied by the students involved in the research as in the format of pre and posttests. Permission of Provincial Directorate for National Education, of the school administration where the practice will take place and of students' guardians.

Bourdon Attention Test

The object of this test is to measure the level of individuals' attention. Before the test is applied to individuals, necessary information should be given and personal information questionnaire should be filled in. Children are given letters that are randomly ranked. These letters are ranked in a specific and regular space. There are 407 letters in each page. There are 20 lines in each page. All the numbers of the letters on the page is known. There are 150 a(s), 75 (g)s, 50 (b)s and 25 (d)s on the paper prepared for test. It is applied to individuals at the age of 9-20 in Bourdon experimentation.

Individuals are given 5 minutes for every part and they are given the following instruction: You will have to underline all the a(s), (b)s, (d)s and (g)s with a pencil. When you are scanning a line, you mustn't underline only one letter. You will have to underline all the a(s), (b)s, (d)s and (g)s in the line. When the test is over, all the lines are counted and the test is evaluated.

The Golf Practice Program to be Applied

In our research, the intensity of training is accepted as 55%. Warm-up period will be 10 minutes and the period of rest will be in between 15 minutes training in the light of effective resting principle. There will be 2-4 minutes break until the pulse of the sportsmen decrease to 90-120 and after that there will be 15 minutes practice again. Getting water in accordance with individual needs will be allowed during 8 weeks' program. Individuals at the age of 14-15 will be taught the techniques of golf

practically by me with the document of 1st Grade Golf Trainer which is the initial training of golf. At the information stage, information on the definition and history of golf will be given to subjects, who receive training on golf. Golf supplies will be introduced. Golf wedges: iron, putting, and driver.

Golf ball is a small ball which is filled with intense liquid, is made of rubber cover with white plastics and which is 46 gr. in weight and 4,11 cm. in diameter. Golf course is a green, rubber carpet. The experimental group will be trained in the following way before the training program: They will practice 10 minutes warm-up exercises (running, arm and belly circling etc.) wrist circling towards right and left with a golf wedge to ensure flexibility in wrists, the practice of passing the golf wedge from the right hand to the back and then getting it on the left, and the reverse of this practice. 3 types of grabbing the golf wedge will be displayed and the individuals will be asked to identify grabbing types of depending on the size of their hands. Stance of golf will be displayed and taught and experimental group will be asked to apply the stance as well. They will also be supplied to practice golf swing movement with the stance by stretching their hands and holding a book or carton in their hands. Golf Pata stroke (the stroke to hit the ball into the hole); 5 groups will be formed in order to practice the technique of stroke and the groups will be asked the strike the ball towards the target in accordance with the Pata stroke. The techniques of stroke applied in golf like Chipping, Pitching and Full swing will be made to gradual practice on Golf "mata" and "tee" which have been prepared before the practice with a

ball. The experimental group will be supplied to step up on Mata, to place the golf ball on tee, take the stroke position and fulfill the stroke with an order. After the teaching of trainings taken place indoors, golf course will be introduced. Subjects will be asked to practice exercises on hitting the ball into the hole with the techniques they have learned by information, analysis, synthesis and practice. Subjects will be followed by observation during practices. Before starting golf, the test will be asked to be done in order to measure the changes of attention. After golf is played regularly, there will be measurement with the test to measure the subjects' attention level and will be determined whether there are differences between pre-test and post-test or not. Chipping, Pitching and Full swing which are stroke techniques of golf will be displayed to the group relatively and from the hard one to the easy one and the group will be asked to practice them. Students who have made a mistake will be interfered and necessary corrections will be done.

On evaluation of the data and on finding the values accounted, the statistical program SPSS 16.0 has been used. The data is summarized by being given charts of percentages and frequency. The data has been tested with One-Sample Kolmogorov Smirnov Test in order to understand whether the data displays a normal range and it is found out that the data has a normal range. Since the data displays a normal range, independent sample t test is used to set the difference between groups. As to the pre and post the comparison of test in groups, paired samples t-test is used. The error performance parameter has been accepted as 0.05.

8 Weeks' Training Program That Will Be Applied to Subjects on 4 Stroke Techniques Used in Golf

Weeks	Monday	Wednesday
1 st Week	The display of location of arms in "Pata" technique in golf and the practice of the stroke	The position of the body in "Pata" in golf and the practice of the stroke
2 nd Week	The place of the ball in "Pata" stroke in golf	The practice of the Pata stroke in golf
3 rd Week	The display of chipping stroke in golf and the location of the wedge during practice	The display of stance in chipping stroke in golf, practice of the stroke
4 th Week	The location of the ball in chipping stroke in golf	The practice of the chipping stroke in golf
5 th Week	The display of pitching stroke in golf and the location of the wedge during practice	The practice of the pitching stroke in golf
6 th Week	The location of the ball in pitching stroke in golf	The display of stance in fullswing stroke in golf and the practice of the stroke
7 th Week	The display of fullswing stroke in golf and the location of the wedge during practice	The practice of the fullswing stroke in golf
8 th Week	The location of the ball in fullswing stroke in golf	

RESULTS

Table 1. The range of percentages and frequencies related to men and women participated in the research in terms of experimental and control groups.

Groups	Sex	Frequency	%
Experimental	Female	15	50.0
	Male	15	50.0
	Total	30	100.0
Control	Male	15	50.0
	Male	15	50.0
	Total	30	100.0

Table 2. The range of percentages and frequencies related to the age of the subjects participated in the research in terms of experimental and control groups.

Groups	Age	Frequency	%
Experimental	14	6	20,0
	15	24	80,0
	Total	30	100,0
Control	14	3	10,0
	15	27	90,0
	Total	30	100,0

Table 3. The range of percentages and frequencies related to the participant subjects' fathers' education level in terms of experimental and control groups.

Groups	Education Level of the Father	Frequency	%
Experimental	Primary School	12	40.0
	Secondary School	6	20.0
	High School	8	26.7
	Undergraduate	2	6.7
	Post graduate	2	6.7
	Total	30	100.0
Control	Primary School	7	23.3
	Secondary School	6	20.0
	High School	14	46.7
	Undergraduate	3	10.0
	Post graduate	0	0
	Total	30	100.0

Table 4. The range of percentages and frequencies related to the participant subjects' mothers' education level in terms of experimental and control groups.

Groups	Education Level of the Mother	Frequency	%
Experimental	Primary School	19	63.3
	Secondary School	7	23.3
	High School	4	13.3
	Undergraduate	0	0
	Post graduate	0	0
	Total	30	100.0
Control	Primary School	23	76.7
	Secondary School	7	23.3
	High School	0	0
	Undergraduate	0	0
	Post graduate	0	0
	Total	30	100.0

Table 5. The range of percentages and frequencies related to the participant subjects' monthly income in terms of experimental and control groups.

Groups	Monthly Income	Frequency	%
Experimental	Below 750 TL	4	13,3
	750-1000 TL	8	26,7
	1000-1500 TL	8	26,7
	1500-2000 TL	6	20,0
	Over 2000 TL	4	13,3
	Total	30	100,0
Control	Below 750 TL	3	10,0
	750-1000 TL	8	26,7
	1000-1500 TL	9	30,0
	1500-2000 TL	3	10,0
	Over 2000 TL	7	23,3
	Total	30	100,0

Table 5. The range of percentages and frequencies related to the number of the participant subjects' siblings in terms of experimental and control groups.

Groups	Number of Siblings	Frequency	%
Experimental	An only child	1	3.3
	Two-children	7	23.3
	Three-children	18	60.0
	Four-children	4	13.3
	Total	30	100.0
Control	An only child	0	0
	Two-children	13	43.3
	Three-children	11	36.7
	Four-children	6	20.0
	Total	30	100.0

Table 6. The range of percentages and frequencies related to as to whether to the condition of the participant subjects' serious past illnesses in terms of experimental and control groups.

Groups	As to whether They Have a Serious Illness in the Past	Frequency	%
Experimental	Available	4	13.3
	None available	26	86.7
	Total	30	100.0
Control	Available	4	13.3
	None available	26	86.7
	Total	30	100.0

Table 7. The range of percentages and frequencies related to the participant subjects' parent's condition of living together in terms of experimental and control groups.

Groups	Do your parents live together?	Frequency	%
Experimental	Yes	29	96.7
	No	1	3.3
	Total	30	100.0
Control	Yes	28	93.3
	No	2	6.7
	Total	30	100.0

Table 8. The range of percentages and frequencies related to as to whether to the condition of the participant subjects' owning their own rooms in the house in terms of experimental and control groups.

Groups	Have you got your own room at home?	Frequency	%
Experimental	Available	22	73.3
	None available	8	26.7
	Total	30	100.0
Control	Available	24	80.0
	None available	6	20.0
	Total	30	100.0

Table 8. The range of percentages and frequencies related to the daily sleep duration of subjects participated in the research in terms of experimental and control groups.

Groups	Daily Sleep Duration	Frequency	%
Experimental	6 Hours	4	13.3
	7 Hours	14	46.7
	8 Hours	6	20.0
	9 Hours	4	13.3
	10 Hours	2	6.7
	Total	30	100.0
Control	6 Hours	7	23.3
	7 Hours	6	20.0
	8 Hours	10	33.3
	9 Hours	3	10.0
	10 Hours	4	13.3
	Total	30	100.0

Table 9. The comparison of pre and posttest rates related to the subjects participated in the research in terms of groups.

Groups	Variables	N	Mean	Std. Dev.	t	P
Experimental	Pre-test	30	77.10	11.813	8.975	0.000*
	Post-test	30	91.13	10.023		
Control	Pre-test	30	70.97	15.912	1.917	0.065
	Post-test	30	72.30	15.093		

*p<0.05

By comparison with the rates of pre and post-tests related to the participant subjects, it is ascertained that there is a significant difference statistically between the rates of pre and post-tests attained for the experimental group ($p < 0.05$). However, there is no significant difference statistically between the rates of pre and post-tests attained for the control group ($p > 0.05$; table 9).

A meaningful difference couldn't be found out between the pre and post-tests of the experimental and control groups participated in the research ($p > 0.05$). On the contrary, when the post-tests of the experimental and control groups are examined, it is revealed that there is a significant difference statistically ($p < 0.05$; table 10).

Table 10. The comparison of the rates of pre and post-tests in terms of attention levels of the students participated in the research.

Variables	Groups	N	Mean	Std. Dev.	t	P
Pre-test	Experimental	30	77.10	11.81	1.695	0.095
	Control	30	70.97	15.91		
Post-test	Experimental	30	91.13	10.02	5.693	0.000*
	Control	30	72.30	15.09		

*p<0.05

Table 11. The comparison of the rates of pre and post-tests related to males and females participated in the research in terms of groups.

Sex	Groups	Variables	N	Mean	Std. Dev.	t	P
Female	Experimental	Pre-test	15	78.53	12.67	5.463	0.000*
		Post-test	15	91.67	9.09		
	Control	Pre-test	15	73.33	18.10	1.964	0.070
		Post-test	15	75.20	16.09		
Male	Experimental	Pre-test	15	75.67	11.14	7.258	0.000*
		Post-test	15	90.60	11.17		
	Control	Pre-test	15	68.60	13.60	0.777	0.450
		Post-test	15	69.40	13.96		

*P<0.05

By comparison with the rates of pre and post-tests related to males and females participated in the research in terms of groups, it is ascertained that there is significant difference statistically when the results of the pre and post-tests of the male and female subjects in the experimental group are examined ($P<0.05$). When the results of the pre and post-tests of the male and female subjects in the control group are examined, it is found out that there is no significant difference statistically ($P>0.05$; table 11).

By comparison with the rates of pre and post-tests related to subjects participated in the research in terms of monthly income, it is ascertained that there is a statistically significant difference between the pre and post-tests of the experimental group in terms of monthly income ($p<0.05$). However, it couldn't be found out that there is a statistically significant difference in the control group in terms of monthly income ($p>0.05$; table 12).

Table 12. The comparison of the rates of pre and post-tests related to subjects participated in the research in terms of monthly income.

Monthly Income	Groups	Variables	N	Mean	Std. Dev.	t	P
750 TL and below 750 TL	Experimental	Pre-test	4	80.50	17.748	3.766	0.033*
		Post-test	4	95.75	11.325		
	Control	Pre-test	3	59.67	16.653	0.500	0.667
		Post-test	3	60.33	16.166		
751-1000	Experimental	Pre-test	8	72.00	7.329	5.580	0.001*
		Post-test	8	91.50	9.871		
	Control	Pre-test	8	75.38	14.491	1.973	0.089
		Post-test	8	78.25	11.708		
1001-1500 TL	Experimental	Pre-test	8	80.38	11.795	3.306	0.013*
		Post-test	8	92.12	8.758		
	Control	Pre-test	9	70.22	15.714	0.970	0.360
		Post-test	9	71.56	16.584		
1501-2000 TL	Experimental	Pre-test	6	79.33	13.486	5.066	0.004*
		Post-test	6	89.50	10.055		
	Control	Pre-test	3	72.00	22.539	0.571	0.625
		Post-test	3	70.67	22.143		
2000 TL and over 2000 TL	Experimental	Pre-test	4	74.00	12.028	7.914	0.004*
		Post-test	4	86.25	14.127		
	Control	Pre-test	7	71.29	17.221	0.725	0.496
		Post-test	7	72.29	14.244		

*p<0.05

Table 13. The comparison of the rates of pre and post-tests related to subjects participated in the research in terms of daily sleep duration.

Daily Sleep Duration	Groups	Variables	N	Mean	Std. Dev.	t	P
6 Hours	Experimental	Pre-test	4	79.75	11.236	1.868	0.159
		Post-test	4	90.75	8.382		
	Control	Pre-test	7	75.00	10.801		
		Post-test	7	76.00	12.806		
7 Hours	Experimental	Pre-test	14	75.14	11.714	9.428	0.000*
		Post-test	14	91.36	10.515		
	Control	Pre-test	6	69.17	17.069		
		Post-test	6	71.33	16.158		
8 Hours	Experimental	Pre-test	6	79.83	13.258	3.962	0.011*
		Post-test	6	92.67	8.066		
	Control	Pre-test	10	67.60	15.064		
		Post-test	10	69.10	12.897		
9 Hours	Experimental	Pre-test	4	80.50	15.503	2.875	0.064
		Post-test	4	85.25	15.327		
	Control	Pre-test	3	73.00	29.138		
		Post-test	3	73.33	27.319		
10 Hours	Experimental	Pre-test	2	70.50	4.950	6.750	0.094
		Post-test	2	97.50	.707		
	Control	Pre-test	4	73.50	19.672		
		Post-test	4	74.50	19.157		

* $p < 0.05$

By comparison with the rates of pre and post-tests related to subjects participated in the research in terms of daily sleep duration, it is realized that there is a statistically significant difference between the pre and post-tests of the subjects whose sleep duration is normal in the experimental group when the results of pre and post-tests of them are examined ($p < 0.05$). When it comes to the control group, there is no statistically significant difference in terms of sleep duration when the results of the pre and post-tests of the subjects in the control group are examined ($p > 0.05$; table 13).

By comparison with the rates of pre and post-tests related to subjects participated in the research in terms of monthly income among groups, it is revealed that there is a statistically significant difference between the subjects who has a monthly income of 750 TL and below 750 TL, 750-1000 TL and 1000-1500 TL in terms of the experimental and the control group when the post-test results related to monthly income are examined ($p < 0.5$). When the pre and post-tests of the results related to the

subjects who has a monthly income of 1501-2000 and 2000 TL and over 2000 TL are examined, it is found out that there is no statistically significant difference ($p > 0.05$; table 14).

By comparison with the rates of pre and post-tests related to subjects participated in the research in terms of sleep duration among groups, it is revealed that there is a statistically meaningful difference in the results of the post-tests of the subjects who has a daily sleep duration of 7 and 8 hours in terms of experimental and control groups between ($p < 0.05$). It is found out that there is no statistically significant difference in the results of both the pre and post-tests of the subjects who has a daily sleep duration of 6, 9 and 10 hours in terms of experimental and control groups ($p > 0,05$). At the same it is ascertained that there is no statistically significant difference in the results of the pre-test results of the subjects who has a daily sleep duration of 7 and 8 hours in terms of experimental and control groups ($p > 0.05$; table 15).

Table 14. The comparison of the rates of pre and post-tests related to subjects participated in the research in terms of monthly income among groups.

Monthly Income	Variables	Groups	N	Mean	Std. Dev.	t	P	
750 TL and below 750 TL	Attention	Pre-test	Experimental Control	4 3	80.50 59.67	17.748 16.653	1.575	0.176
		Post-test	Experimental Control	4 3	95.75 60.33	11.325 16.166	3.442	0.018*
751-1000 TL	Attention	Pre-test	Experimental Control	8 8	72.00 75.38	7.329 14.491	0.588	0.569
		Post-test	Experimental Control	8 8	91.50 78.25	9.871 11.708	2.447	0.028*
1001-1500 TL	Attention	Pre-test	Experimental Control	8 9	80.38 70.22	11.795 15.714	1.490	0.157
		Post-test	Experimental Control	8 9	92.12 71.56	8.758 16.584	3.246	0.007*
1501-2000 TL	Attention	Pre-test	Experimental Control	6 3	79.33 72.00	13.486 22.539	0.625	0.552
		Post-test	Experimental Control	6 3	89.50 70.67	10.055 22.143	1.828	0.110
2000 TL and over 2000 TL	Attention	Pre-test	Experimental Control	4 7	74.00 71.29	12.028 17.221	0.276	0.789
		Post-test	Experimental Control	4 7	86.25 72.29	14.127 14.244	1.568	0.151

*p<0.05

Table 15. The comparison of the rates of pre and post-tests related to subjects participated in the research in terms of sleep duration among groups.

Daily Sleep Duration	Variables	Groups	N	Mean	Std. Dev.	t	P	
6 Hours	Attention	Pre-test	Experimental Control	4 7	79.75 75.00	11.236 10.801	0.692	0.506
		Post-test	Experimental Control	4 7	90.75 76.00	8.382 12.806	2.042	0.071
7 Hours	Attention	Pre-test	Experimental Control	14 6	75.14 69.17	11.714 17.069	0.913	0.373
		Post-test	Experimental Control	14 6	91.36 71.33	10.515 16.158	3.325	0.004*
8 Hours	Attention	Pre-test	Experimental Control	6 10	79.83 67.60	13.258 15.064	1.640	0.123
		Post-test	Experimental Control	6 10	92.67 69.10	8.066 12.897	4.000	0.001*
9 Hours	Attention	Pre-test	Experimental Control	4 3	80.50 73.00	15.503 29.138	0.446	0.674
		Post-test	Experimental Control	4 3	85.25 73.33	15.327 27.319	0.744	0.490
10 Hours	Attention	Pre-test	Experimental Control	2 4	70.50 73.50	4.950 19.672	0.201	0.850
		Post-test	Experimental Control	2 4	97.50 74.50	.707 19.157	1.600	0.185

*p<0.05

DISCUSSION

In this research which is fulfilled with the aim of the examination of individuals who play golf and who are at the age of 14-15,

In the consequence of comparing the rates of the pre and post-tests related to the subjects in the research, the rate of the pre-test in the experimental group is found to be 77.103 ± 11.813 and the post-test is $91.13 \pm 10,023$. The rate of the pre-test in the control group is found to be 70.97 ± 15.912 and the post-test is 15.093 (Table 9). It is revealed that there is a statistically significant difference when the results of the post-tests of the experimental and control groups are examined ($p > 0.05$). This displays us that the golf exercises applied to the experimental group has a positive effect on individuals' attention level.

The rate of the pre-test in the experimental group is found to be 77.10 ± 11.813 and the control group as 70.97 ± 15.912 and it is found out that there is no statistically significant difference. In the post-test results, however, it is revealed that there is a statistically significant difference ($p < 0.05$).

In his study of the contribution of piano training to focusing attention on primary school students, he has appointed that piano training has a positive effect on focusing attention of primary school students (11).

By comparison with the rates of the results of pre and pos-tests of male and female subjects in the experimental and control groups in terms of groups, it is found out that there is a statistically significant difference in the results of the male and female subjects in the experimental group ($p < 0.05$). When the results of the pre and post-tests of the male and female subjects are examined, it is understood that there is no statistically significant difference ($p > 0.05$).

In a study done on individuals who has no experience of golf, the first group is asked to focus on swing (internal focalization) and the other to the wedge (external focalization). At the end of the study, it is seen that the ones in the group of the individuals that focused on the wedge (external focalization) has a better performance (16).

According to the result of a study on the effects of the instructions of attention focus of golfers, whereas highly talented golfers have a better performance in external instructions than in internal

instructions of attention focus, the unskilled golfers, on the contrary, have a better performance in internal instructions of attention focus (9).

When monthly income level is examined, there is a significant difference in the rates of the subjects in the experimental group. But, it is found out that there is no significant difference in the control group ($p > 0.05$).

It is ascertained in relationship with the subjects in the experimental and control groups participated in the research that there is a statistically significant difference as 95.75 ± 11.325 for the ones with an income of 750 TL and below 750 TL, 91.50 ± 9.871 for the ones with an income of 751-1000 TL and 92.12 ± 8.758 for the ones with an income of 1001-1500 ($p > 0.05$). However, it is found out that there is no significant difference in the subjects who has a monthly income of 1501-2000 ($p > 0.05$).

According to the result of a study on attention training in children, the students in the group that attend the attention training program are assigned as having an improvement on visual and auditory attention (10).

When it is compared in terms of level of sleep, it is ascertained that only the ones who has a normal sleep duration has a statistically difference. It affected the attention of the students who has normal sleep duration positively. It is revealed that there is no significant difference in the subjects who sleep 6, 9 and 10 hours a day ($p > 0.05$).

His study on the relationship between movement training and improvement of attention and memory in children has appointed that movement training has a positive effect on improvement of attention and memory (4).

In the study in which the effects of pedagogic game practices on children's attention level, it is identified that 8 weeks of a pedagogic game program applied to students who are at the age of 9-13 has affected attention level and that the rates in the experimental group who has been applied the pedagogic game program are higher than the rates of attention levels in the control group (3).

He has studied on the comparison of attention levels of students who are sportsmen and none sportsmen in a university. In the consequence of the research, students who are sportsmen have been found out to be more attentive than the ones who are not sportsmen (14). In his study, the effect of

keeping training on attention of primary school students, it is revealed with the tests done that the ones who keep training are 83 % more attentive than the one who don't keep training when evidence of the primary school students are examined (2). In the study done within the aim of examining attention levels of children who practice ping pong, it is found out that exercises on ping pong have a positive effect on attention properties in children who are at the age of 9-13 (5).

As a result, in this research which is fulfilled with the aim of the examination of the attention levels of individuals who play golf and who are at the age of 14-15, it is observed that golf exercises positively affect the attention properties of children of ages 14-15. This research which is fulfilled with the aim of the examination of the attention levels of students who play golf and who are at the age of 14-15 has been conducted at Mehmet Halil İbrahim Hekimoğlu Trade Vocational High School in Selcuklu, Konya. According to the data, golf exercises positively affect the attention properties of individuals of ages 14-15. Since there is observation on the increase in the attention level of children who play golf, it is suggested that individuals at the ages of 14-15 should be given golf training. To apply this practice in an appropriate pitch may help subjects be more motivated and see the natural surrounding and conditions. The intensity of training programs and exercise should be more extensively fixed considering their age and physiological state. In the light of the findings we got from our research, the attention levels of individuals whose ages are of 14-15 and who play golf have showed a positive increase when compared with the individuals who don't play golf. The fact that individuals acquire their sports ability earlier may be going to mediate in leading themselves to success. Since children have also to be equipped with some cognitive abilities in order to succeed in their lives, the fact that their social progress should be supported especially in puberty becomes crucial. In the consequence of the statistical findings acquired in this research, which is fulfilled with the aim of the examination of the attention levels of children who play golf, it is observed that golf exercises influence attention properties of individuals at the age of 14-15 positively.

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