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A Research on Attention Control Levels of the Students at Vocational School of Health Services in terms of Sports and Different Variables¹

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Abstract

It is thought that the high or low attention levels of students affect their achievements in their social, learning and professional lives equivalently. In this case, it is significant to determine the crucial elements for increasing attention control levels. The aim of this study was to examine attention control levels of university students in terms of different variables. In the study a total of 449 students 268 females and 181 males that are studying at services Vocational School of Health, Ataturk University Erzurum have been included. With the aim of collecting data, the 'Attention Control Scale' was used. The techniques of frequency distribution, t test and Anova variance analysis have been used in data analysis. The difference between the views of the group has been reviewed considering the 0.05 significance level of P.

According to the findings it has been found out that gender, age and family structure do not make a significant difference with attention control levels. When examined in terms of sports participation of the students, types of sports and weekly sporting duration, attention control averages have been found to be significant differences. It has emerged that the students that do sports have higher levels of attention control than those that do not. The fact that the students have high attention control levels in terms of their professions is an important factor. Studies that may impact on different factors ought to be carried out in order to increase attention control levels of the students, encouraging sports.

Keywords: Attention Control, Attention of University Students, Doing Sports

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Sağlık Hizmetleri Meslek Yüksekokulu Öğrencilerinin Dikkat Kontrol Düzeylerinin Spor ve Farklı Değişkenler Açısından Araştırılması

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Öz

Öğrencilerin dikkat kontrol düzeylerinin düşük veya yüksek olmasının sosyal hayatta, öğrenim sürecinde ve mesleki alanda başarısını aynı paralellikte etkileyeceği düşünülmektedir. Bu durumda öğrencilerin dikkat kontrol düzeylerini artırmada önemli olan unsurların belirlenmesi önem teşkil etmektedir. Bu çalışmanın amacı, üniversite öğrencilerinin dikkat kontrol düzeylerinin farklı değişkenler açısından incelemektir. Araştırmaya, Erzurum Atatürk Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulunda öğrenim görmekte olan 268 kadın ve 181 erkek olmak üzere toplam 449 öğrenci katılmıştır. Veri toplamak amacı ile “Dikkat Kontrol Ölçeği” kullanılmıştır. Verilerin analizinde frekans dağılımı, t testi ve anovaryans analizi tekniklerinden yararlanılmıştır. Grupların görüşleri arasındaki fark P 0.05 anlamlılık düzeyi dikkate alınarak yorumlanmıştır.

Elde edilen bulgulara göre cinsiyet, yaş ve aile yapısı ile dikkat kontrol düzeyi ortalamaları arasında anlamlı farklılık olmadığı ortaya çıkmıştır. Öğrencilerin spor yapma durumları, spor türü ve haftalık spor yapma süreleri açısından incelendiğinde ise dikkat kontrol düzeyleri ortalamaları arasında anlamlı farklılık olduğu bulunmuştur. Spor yapan öğrencilerin dikkat kontrol düzeylerinin spor yapmayanlara oranla yüksek olduğu sonucu ortaya çıkmıştır. Öneri olarak öğrencilerin meslekleri gereği dikkat kontrol düzeylerinin yüksek olması önemli bir etkidir. Öğrencilerin dikkat kontrol düzeylerinin artırmak için spor yapmaya teşvik edilerek, dikkat kontrolü üzerinde etkili olabilecek farklı unsurların belirlenmesi üzerinde çalışmalar yapılmalıdır.

Anahtar Kelimeler: Dikkat Kontrol, Üniversite Öğrencilerinde Dikkat, Spor Yapma

Introduction

Attention is of the components that play an active role in all cognitive processes. It conducts a selective processing due to limited information processing capacity of the brain (Wood, Cox & Cheng, 2006).

Attention control means one's ability to control his attention management. Lack of attention is not a deficiency of attention but rather having difficulty for someone to direct and sustain his attention intentionally on a subject out of his interest and requires mental effort - often studying lesson for students- (Cisler & Koster, 2010).

It is called "attention bias" when attention has a partiality on behalf of detecting specific stimulus that are self-related and processing (Waters et al., 2009).

Sports, like defeating and capability, is a set of physical, mental and spiritual facilities that are competitive, socializing, integrating and aim to satisfy the human subconscious desire, done within certain rules (Şahin, 2002).

Sports is defined as a cultural term that is socializing, developing both the spirit and the body, competitive, solidarist and that develops the skills under some rules, practised by individually or in a team, with or without materials, in free time or full time by making it professionally as well as turning someone's predicate environment into social environment. Today sports means more than a set of activities people do in order to get stronger physically. It is the whole of planned exercises that is suggested by trainers with the aim of ensuring the personality formation and development of individual skills and it is gaining importance day by day. Sports is a biological, pedagogical and social occupation that develops someone's skills, mental and spiritual structure, social behaviours through physical activities and provides him to race these abilities within specific rules (İnal, 2009).

Sports are a social activity field that provides physical, mental, emotional and social developments of individuals. It not only improves sense of self-confidence but also physical development of individuals. It is also the most influential activity that makes people prepare to life psychologically. With this aspect, sports contribute psycho-social balance between people, individually or socially, too (Yalçın, 2009).

A regular and tight exercise provides production of a protein called "brain-derived neurotrophic factor". This protein feeds the brain. Regular exercise brings up production of neuron at hippocampus that is responsible for thinking and memory, which provides a better performance of the brain (Hillman et al., 2008).

Physical learning improves learning, memory and concentration and as a result of this academic performances of the students increases. (Ratey & Sattelmair, 2009).

In a research on children conducted by Sibley and Etnier, a positive relationship was found between physical activity and some cognitive performance categories (perception skills, intelligent quotient, achievement, verbal tests, mathematical tests, progress level/ academic availableness) (Sibley & Etnier, 2003).

Dwyer et al. in the research that they did with 8000 school students reported that academic success had a considerable relation with exercise level and performance in physical fitness tests (Dwyer et al., 1983).

In a study conducted by Castelli et al. it was stated that physical fitness and aerobic capacity influenced the results of maths and reading tests positively (Castelli et al., 2007).

In the light of this information, the study has been carried out in order to examine the students of Vocational School of Health Services, Ataturk University, Erzurum in terms of their attention control levels, genders, family structures, habits of smoking and drinking, school departments, sporting activities, sport types and weekly sporting durations.

Materials and Method

The research is a descriptive study in order to determine the relation between attention control levels of the university students in the health sciences and gender, age, family structure, sporting activities, sport type and sport duration of the students.

The participants consisted of a total of 449 students, 181 female and 268 male, who are studying at Vocational School of Health Services, Ataturk University, Erzurum. "Attention Control Scale" developed by Akın et al. (2013) was used for data acquisition.

Attention control scale is a 4-point scale that consists of 20 items. The highest score means the highest attention control level, for the scale does not have reverse scoring. The maximum score that can be taken in the scale is 80 and the minimum is 20. Internal consistency of attention control scale has been determined to be Cronbach Alpha 0.88. This value indicates that the scale has a fairly high internal consistency (Akın et al., 2013). In the analysis of survey data, frequency to determine demographic characteristics, independent sample t test to determine the relation between two different variables and one way Anova analysis has been used in order to determine the relationship among more than two variables. The difference between the views of the groups has been reviewed by considering the 0.05 significance level of P.

Findings

In this part, the findings that were obtained in the survey and the comments on them are included. Table 1 shows demographic characteristic of the students and table 2 shows the frequency distribution of sport participation of the students. In table 3 and 6, the values obtained from attention control scale and statistical results of variables-gender and sport participation- are shown. In Table 4,5,7 and 8 gender, family structure, sport type and weekly sporting duration.

Table 1. Demographic Characteristics

| Demographic characteristics | Variables | Number (N) | Percent (%) |
|-----------------------------|-----------------|------------|-------------|
| Sex ? | Female | 268 | 59,7 |
| | Male | 181 | 40,3 |
| | Total | 449 | 100,0 |
| Age? | Under 19 | 173 | 38,5 |
| | 20-23 | 244 | 54,3 |
| | 24 and more | 32 | 7,1 |
| Family structure? | Nuclear family | 358 | 79,7 |
| | Extended family | 82 | 18,3 |
| | Broken family | 9 | 2,0 |

Table 2. Sport participation

| Sport participation | Variables | Number (N) | Percent (%) |
|-----------------------|--------------------|------------|-------------|
| Doing Sports | Yes | 285 | 63,5 |
| | No | 164 | 36,5 |
| | Total | 449 | 100,0 |
| Sport Type | Team Sports | 87 | 19,4 |
| | Individual Sport | 197 | 43,9 |
| | I do not do sports | 165 | 36,7 |
| Weekly Sport Duration | 1 hour or less | 58 | 12,9 |
| | Between 2-3 hours | 121 | 26,9 |
| | Between 4-5 hours | 60 | 13,4 |
| | 6 hours and more | 45 | 10,0 |
| | I do not do sports | 165 | 36,7 |

Table 3. Mean Scores for, Standard Deviations And T Scores of Difference Between Mean Scores for Female and Male Students

| Sex | N | X | Ss | t | P |
|--------|-----|---------|---------|--------|------|
| Female | 268 | 45,6381 | 5,85783 | -1,540 | ,095 |
| Male | 181 | 46,5525 | 6,60923 | -1,505 | |

It is seen that there is no significant difference in the level P.0.05 between mean scores of female and male students obtained from the attention control level scale.

Table 4. Mean Scores and Standard Deviations for Students in Different Age Groups

| Age | N | X | Ss | F | P |
|-------------------|-----|---------|---------|------|------|
| Under 19 | 173 | 45,7168 | 6,42810 | ,645 | ,525 |
| Between 20 and 23 | 244 | 46,0779 | 5,88837 | | |
| 24 years and over | 32 | 47,0312 | 7,03211 | | |
| Total | 449 | 46,0067 | 6,18086 | | |

It is seen that there is no significant difference in the level P.0.05 between mean scores that students in different age groups obtained from attention control level scale.

Table 5. Mean Scores and Standard Deviations for the Students that have different family structures

| Family structure | N | X | Ss | F | P |
|------------------|-----|---------|---------|------|------|
| Nuclear family | 358 | 46,0447 | 6,25940 | ,129 | ,879 |
| Extended family | 82 | 45,9512 | 5,92109 | | |
| Broken family | 9 | 45,0000 | 5,89491 | | |
| Total | 449 | 46,0067 | 6,18086 | | |

It is seen that there is no significant difference in the level P.0.05 between mean scores that students from different family structures obtained from attention control level scale.

Table 6. Mean Scores Standard Deviations and T Scores of Difference between Mean Scores for Students doing sports and not doing sports

| Sports participation | N | X | Ss | t | P |
|----------------------|-----|---------|---------|-------|------|
| Yes | 285 | 46,7579 | 6,67038 | 3,436 | ,033 |
| No | 164 | 44,7012 | 4,97747 | 3,711 | |

It is seen that there is a significant difference in the level P.0.05 between mean scores that students obtained from attention control level scale and sports participations. It is found out that the students who do sports have higher mean scores than those who do not.

Table 7. Mean Scores and Standard Deviations in terms of Sport Types

| Sport Type | N | X | Ss | F | P | Variance |
|--------------------|-----|---------|---------|------|------|----------|
| Team Sports | 87 | 47,2529 | 6,85772 | ,129 | ,879 | 3-1,2 |
| Individual Sports | 197 | 46,5584 | 6,60418 | | | |
| I do not do sports | 165 | 44,6909 | 4,96404 | | | |
| Total | 449 | 46,0067 | 6,18086 | | | |

It is seen that there is a significant difference in the level P.0.05 between sport types and mean scores of the students who do not do sports. It is found out that mean scores of the students that do not do sports is lower than those do sports individually or in a team. And there is no significant difference between the students that do sports individually and those in a team.

Table 8. Mean Scores and Standard Deviations in terms of weekly sporting duration

| Weekly sports duration | N | X | Ss | F | P | Variance |
|------------------------|-----|---------|---------|-------|------|----------|
| 1 hour and less | 58 | 46,1379 | 6,95461 | 3,219 | ,013 | 5-2,3,4 |
| Between 2 and 3 hours | 121 | 46,8843 | 6,90554 | | | |
| Between 4 and 5 hours | 60 | 47,0667 | 6,52990 | | | |
| 6 hours and more | 45 | 46,8889 | 6,02352 | | | |
| I do not do sports | 165 | 44,6909 | 4,96404 | | | |
| Total | 449 | 46,0067 | 6,18086 | | | |

It is seen that there is a significant difference in the level P.0.05 between sport duration and mean scores of the students who do not do sports. It is observed that the students that do not do sports have lower mean scores than those that have different sporting durations. And there is no significant difference between the students that do sports for different durations.

Discussion and Conclusion

In the study the relationship between attention control levels in school and daily lives of the students at vocational school of Health Services and doing sports and different variables was examined. The study included totally 449 university students, 268 female and 181 male students whose ages are mainly from 19 to 24.

As a result of the analyses, it was assigned that there is no significant difference between mean scores of male and female students in the survey. It may be commented according to the result that the variable sex does not have an effect on attention control level.

A considerable difference between doing sports and mean scores obtained from attention control levels was observed. It was seen that the students that do sports had higher attention control levels than those that do not. Öztürk (1999) Stimulants that are active exhibit more

variability and it affects attention (Öztürk, 1999). Yurdakul et al. in the study called “effects of movement tendency in 8-year-old children on attention and memory development” found that specially prepared movement education has an effect on 8 year-old-children in terms of attention and memory development (Yurdakul et al.,2012). It is thought that constant movements in both the sportsman and the rival sportsman have a positive effect on attention level development. According to these results, it is revealed that doing sports has a developer effect on attention control.

It was observed that there was a significant difference between sport types and mean scores obtained from attention control levels. It has been revealed that the students that don not do sports have lower attention control levels than those that do sports individually or in a team. There is no significant difference between the students that do sports individually or in a team. It has also been observed that the students playing in a team have higher attention control levels than those that do individually. Physical intelligence is the ability to use body mindfully and significantly. Weekly working out duration is also an influential factor on mean scores obtained from attention control level scale. It has been observed that the students that do not do sports have lower attention control levels than those that do at certain intervals. Any important difference has not been observed between the students that do sports at certain duration in a week. To Bümen, individuals having high bodily intelligence has the capacity to use their bodies as a whole and a part, and they can link between mind and body easily. Bodily intelligence provides to control and understand body movements and to manipulate physical objects and to create a harmony between body and mind (Bümen, 2004). It is thought sports have a positive impact on attention as it contributes to bodily intelligence development and to coordinated development of neuromuscular. The positive impact of sports on neuromuscular development is supportive of the results that have been obtained from the study.

Individuals from different age groups have been found to have no significant difference about mean scores obtained from attention control scale. When examined the results of analyses, though there is not a significant difference, it has been observed attention levels get increased in parallel with the increasing age. The students from different structured families have been found to have no significant difference about mean scores. When examined the analysis results, it has been observed that the students families of whom are broken have lower attention levels than those that have nuclear or extended families. As a result of divorces broken families is one of the factors that affect the development of children negatively. Deniz (2012). It is considered that children’s being lack of care and needs in broken families might result in lower attention levels, as a result of negative effects on their mental and emotional development (Deniz, 2012).

Conflict of Interest

The authors have not declared any conflicts of interest.

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