# Evaluation of the Level of Happiness against Class from Student's Perspective: An Example of Physical Education Lesson

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#### **Abstract:**

The aim of this research is to examine the physical education lesson happiness levels of high school students studying in different school types in terms of different variables. Relational survey method, one of the quantitative research models, was used in the research. High school students from different schools (n=891) participated in the study. Personal Information Form and Physical Education Lesson Happiness Level Scale were used to collect data in the study. In order to evaluate the normality of the data, Kolmogorov-Smirnov tests were performed and it was found to be suitable for normal distribution. In the study, it was determined that the Skewness and Kurtosis values of each independent variable ranged between ±1. Accordingly, frequency, arithmetic mean, standard deviation, t-test, one-way analysis of variance, tests were used in the analysis of the data. According to the research findings obtained, it was determined that there was no statistically significant relationship level in gender and grade levels, while there was a significant relationship in the school type variable and the analysis results showed that the Anatolian High School students had higher physical education lesson happiness levels compared to other school types.

**Introduction:** The aim of this research is to examine the physical education lesson happiness levels of high school students studying in different school types in terms of different variables.

Materials and methods: Relational survey method, one of the quantitative research models, was

used in the research. High school students from different schools (n=891) participated in the study. Personal Information Form and Physical Education Lesson Happiness Level Scale were used to collect data in the study. In order to evaluate the normality of the data, Kolmogorov-Smirnov tests were performed and it was found to be suitable for normal distribution. In the study, it was determined that the Skewness and Kurtosis values of each independent variable ranged between ±1. Accordingly, frequency, arithmetic mean, standard deviation, t-test, one-way analysis of variance, tests were used in the analysis of the data.

**Results:** According to the research findings obtained, it was determined that there was no statistically significant relationship level in gender and grade levels, while there was a significant relationship in the school type variable and the analysis results showed that the Anatolian High School students had higher physical education lesson happiness levels compared to other school types.

**Conclusion:** The fact that the concept of sports, which is good for the body physically and mentally, is included in education and training, does not differ in terms of gender and class level, but differs in terms of school type, can be shown as the intensive course of the classes and the high course load.

#### Introduction

Physical education is a very important discipline as it not only helps the development of cognitive abilities and motor skills of students, but also affects children's decisions and behaviors about their own health<sup>9,12</sup>. Much of the teaching and learning process for this discipline focuses on the physical ability and motor learning perspective, while others reflect social and historical contextualisation. The terms "body culture", "body movement culture" and "movement culture" were coined to support a new view of physical education. In this new perspective, the concept of culture gains more importance and redefines the relationship between physical education, body structure and knowledge<sup>23,30,6</sup>.

Two factors are effective in human development, internal factors such as genetics, ethnicity, 42 hormones, as well as external or environmental factors such as nutrition and physical activity 24. Because the structure of factors is constantly changing, Dynamic Systems Theory is currently used to study human development. Dynamic systems are systems that consist of constantly changing elements. This theory states that it is possible to understand the emergence of new behaviors in motor development through self-organization, dynamic relationships between people and the

environment. Areas of application include motor development, perceptual and cognitive development, and social development <sup>14,19,40</sup>.

Motor development constraints include the dynamic relationships between the environment, person, and motor task that are relevant to understanding development itself<sup>26,33</sup>. The literature explains that the continuous motor development process goes from simple and irregular movements to complex abilities, from birth to death<sup>19</sup>. Organisms in development are complex because they consist of many components that are in constant interaction with each other and with the environment. These interactions can cause changes in components and the entire system, called multi-causality. Development can be defined as a series of evolving and dissolving patterns with varying dynamic stability<sup>40</sup> and is not an inevitable march towards maturity<sup>38</sup>.

The definition of physical activity can vary. Physical activity is body movement produced by skeletal muscle that increases energy expenditure. It is linked to the development of human psychological, emotional, social, cognitive and motor development. Many studies have shown that moderate-intensity physical activities have significant health benefits 50,7,52. Physical activity reduces the risk of cardiovascular disease, diabetes, depression, obesity; lack of physical activity increases it 50,22,37. Even in patients with specific conditions (e.g. cancer or diabetes), physical activity can provide beneficial effects such as reducing fatigue, improving physical condition, mood and quality of life, aiding cardiovascular integrity, insulin sensitivity, and others 3,29,41. Therefore, these activities can provide psychological and physiological benefits (for example, health promotion, expression of emotions, creation of critical awareness, development of autonomy, motivation to work, level of happiness, etc.) 31,35,36,28.

Happiness can be defined as enjoying life, living a healthy life, feeling good, loving, being loved, freedom, enjoying the moment. Happy person usually has an active life, a sincere smile and joy. Pleasure, virtue and morality are concepts found in life<sup>15</sup>. When life is considered as a circle, the concept of happiness is at the very center of the circle<sup>21</sup>. The concept of happiness, which is explained in many sciences, is defined in the science of psychology<sup>49,25</sup>, as subjective well-being, well-being, satisfaction or satisfaction with life<sup>5</sup> and the positive side of mental health. One of the prerequisites for the psychological, social and academic development of our children, who are the basic building blocks of our future, is to feel safe and happy at school<sup>34</sup>. The size of the school in the school environment, classroom climate, play and socialization and the adequacy of recreation areas are the most effective factors affecting belonging and happiness at school. It has been determined in studies that students who are happy in the school environment are also successful in their social lives<sup>4</sup> and academic life. It is seen in studies that physical education lessons are loved

by students and defined as a joyful lesson<sup>32</sup>. Depending on today's life conditions and the natural flow of life, students' future professional thoughts, exam anxiety and different school types have changed their thoughts on physical education lesson and have caused them to lose much interest. In our research, it is aimed to examine the physical education and sports lesson happiness levels of high school students studying in different school types according to different variables.

### Materials and methods

#### Model of the research

In this study, which aims to examine the physical education and sports course happiness levels of students studying in different high school types according to different variables, a relational survey model, one of the quantitative research methods, was used<sup>47</sup> which describes a situation or event that indicates the relationship of the variables that cause a situation.

# Research group

In the selection of the study group, the criterion sampling method, which is a set of predetermined criteria and a list of criteria prepared beforehand<sup>27</sup>, was used. In this direction, the criterion of the research group was to have education and training at high school level and to have taken physical education and sports lessons at least once.

# **Data collecting**

After obtaining permission from the university's ethics committee, the students gave information about the purpose and necessity of the study before filling out the questionnaire. The study was conducted in accordance with ethical rules. The data were collected in classrooms during class hours with the students who agreed to participate in the research. Personal information form prepared in accordance with its purpose and Physical Education Lesson Happiness Level Scale (BEDMDÖ) were used in the study.

**Personal Information Form**; Information about each student's gender, class, school type was collected.

*Physical Education Lesson Happiness Level Scale*; The Physical Education Lesson Happiness Level Scale (BEDMDÖ) scale developed<sup>48</sup> is one-dimensional and consists of 9 items. The items of the scale were scored as totally agree (5), agree (4), moderately agree (3), disagree (2), strongly disagree (1). The Cronbach alpha value of the measurement tool was determined to be .88. In the literature, it is recommended that the reliability coefficient be above 0.7. In this sense, it can be stated that the scale is reliable.

## Analysis of data

All statistical analyzes were performed using SPSS.26 statistical analysis software. Descriptive statistics were used for the demographic information of the students. The conformity of the data to the normal distribution was tested, and as a result of the normality test, it was seen that the data conformed to the normal distribution assumption. Parametric hypothesis tests (T-test and ANOVA) were applied to examine the students according to demographic variables such as gender, class, school type. The post-hoc test was applied to test which groups caused the significant difference in variables containing multiple groups.

## **Results**

In this section, the descriptive information of the research, skewness and kurtosis values, t tests of the variables and information about the Anova tests are given.

**Table 1.** Demographic information of the participants

Variables	Subgroup	N	%	Total
Gender	Female	605	67,9	891
	Male	286	32,1	
Grade level	9th grade	336	37,7	
	10th grade	232	26,0	891
	11th grade	185	20,8	
	12th grade	138	15,5	
School type	Imam Hatip high school	375	42,1	
	Anatolian High School	299	33,6	891
	Health vocational high School	217	24,4	

Looking at Table 1, a total of 891 people participated, including 605 female and 286 male participants. 37.72% of the research is 9th grade, 26.0% is 10th grade, 20.8% is 11th grade and 15.5% is 12th grade. It is seen that while Imam Hatip High School is the highest with 375 people in the school type of the participants, Anatolian High School and Health Vocational High School follow the ranking.

**Table 2.** Skewness and Kurtosis Values

Min	Max	X	Ss	Skewness		α	Number
					Kurtosis		of items
1.00	5.00	3.54	1,14	578	524	,95	9

Within the scope of the research, the Cronbach Alpha internal consistency coefficient of the Physical Education Lesson Happiness Level Scale (BEDMDÖ) is .95, and it is in the "very good" category in the criterion values of the reliability coefficient according to Kılıç (2016). The skewness and kurtosis values were checked to see if the scale showed a normal distribution. Since the skewness and kurtosis values ranged from + 1.5 to - 1.5, the data were considered to be normally distributed (Tabachnick&Fidell, 2007).

**Table 3.** T-test according to the gender variable of the participants

	Subgroup	N	X	SS	t	df	p
BEDMDÖ	Female	605	3,51	1,06	-,800	889	,424
	Male	286	3,58	1,29			

p<0,05\*

Looking at Table 3, it is seen that there is no significant difference when the answers given by the participants to the gender variable are taken into account (t=-,800;p<,424).

**Table 4.** ANOVA results of scale scores by grade level

Grade	N	$\bar{\mathbf{x}}$	SS	Source o	KT	sd	KO	$\mathbf{F}$	p
Level				variance					
9th grade	336	3,51	1,160	Between G.	9,202	3	3,067	2,352	,071
10th grade	232	3,66	1,031	G.Inside	1156,729	888	1,304		
11th grade	185	3,57	1,195	Total	1165,931	890			
12th grade	138	3,35	1,199						
Total	891	3,54	1,144						

p<0.05\*

Looking at Table 4, it is seen that there is no significant difference when the answers given by the participants to the grade level variable are taken into account. (F=2.352;p<0.05).

	School	N	<b>X</b>	SS	Source of	KT	sd	КО	F	p	Post-
	type				variance						hoch
	İHLª	375	3,35	1,21	Between	24,263	3	12,131	9,436	,000	b-
					G.						a;c-a
BEDMDÖ	$AL^b$	299	3,71	1,03	G.Inside	1141,668	888	1,286			
	$SML^{c}$	217	3,63	1,11	Total	1165,931	891				
	Total	891	3,54	1,14							

**Table 5.** ANOVA results of the scale score according to the school type variable

Looking at Table 5, it is seen that there is a significant difference when the answers given by the participants to the school type variable are taken into account. (F=9,436;p<0.05). According to the results of the LSD test conducted to determine the difference between the answers given to the scale in the school type variable of the participants, it was determined that the physical education happiness levels of the students with the "Anatolian high school" school type were high (IHL, x=3.35 AL, x=3.71, SLM, x=3.63).

#### **Discussion**

In this study, which aimed to measure the happiness level of physical education lesson in terms of different variables, it was determined as a result of the analyzes that the happiness levels of the students in physical education and sports lessons were higher than the other school types of Anatolian High School students. It is seen that students generally have a slightly more positive attitude towards physical education and sports lessons than other lessons <sup>18</sup> and they like physical education and sports lessons <sup>45</sup>. Studies show that students have positive attitudes towards physical education and sports lessons <sup>2,8,10,20</sup>. In our study, it is seen that there is no significant difference between the physical education and sports lesson happiness levels of male students and the physical education and sports lesson happiness levels of female students according to the gender variable. In their study <sup>45</sup> concluded that the motivation of male students towards physical education and sports lessons is 80.9%, while female students are 65.1%. In the study <sup>13</sup>, 60% of male students and 47% of female students out of 3783 high school students studying in the USA stated that they participated in sports activities. În their study, found that male students' attitudes towards physical education and sports were higher than that of female students. <sup>11,17,44</sup>

When our research is examined, it is seen that there is no significant difference when the answers given by the participants to the grade level variable are taken into account. Their attitudes towards physical education lesson did not differ according to grade level and supported our study<sup>52</sup>. in their

study that there was no significant result in the attitudes of the students towards the physical

education lesson<sup>16</sup>. However, the finding of a significant difference in the class variable of the study conducted<sup>51</sup>does not support the result of the current study. In the study <sup>46</sup> another study that did not support the result of the study, which was conducted with secondary school students, a difference was found among students studying in different classes in terms of the class variable.

When we look at the high school variability of the participants in our research, it has been determined that the physical education happiness levels of the students with the "Anatolian high school" school type are high. Anatolian High Schools showed more positive attitudes towards physical education lessons than Vocational high schools.his study that secondary school students studying at Anatolian high schools are more interested in physical education lessons<sup>1</sup>.

#### Conclusion

As a result; The fact that the concept of sports, which is good for the body physically and mentally, is included in education and training, does not differ in terms of gender and class level, but differs in terms of school type, can be shown as the intensive course of the classes and the high course load.

## **Suggestions**

- Increasing the number of physical education courses as elective courses in Imam Hatip High Schools,
- Supporting students in Imam Hatip High Schools and Health Vocational High Schools with rich content to ensure their enjoyment.
- The positive attitude of the students towards the physical education lesson helps the activities to be done in the lesson more productive and facilitates the achievement of the general and specific objectives of the lesson.
- Adding different types of high schools (vocational high schools) to the study,
- It can be suggested for future studies that there is no limitation of only quantitative method in the study and that mixed study is presented as a method.

## References

Akdoğan,
 (2017). Liseöğrencilerininveebeveynlerininbedeneğitimidersineilişkintutumları (Master's thesis, İstanbul Gelişim Üniversitesi Sağlık Bilimleri Enstitüsü).

- 2. Barney, D. (2003). Factors That Impact Middle School Student's Attitudes and Perceptions in Physical Education. Research Quarterly for Exercise and Sport, 74(1), A-36.
- 3. Beuchat-Mamie, S., Sperisen, N., &Kocer, S. (2018). Physical Activity and Cancer. Praxis, 107, 965-970.https://doi.org/10.1024/1661-8157/a003064
- 4. Bird, J. M. veMarkle, R. S. (2012). Subjective Well-being in School Environments: Promoting Positive Youth Development Through Evidence-based Assessment and Intervention. American Journal of Orthopsychiatry, 82, 61-66.
- 5. Boysan, M. (2012). Üniversite Öğrencilerinde Erken Dönem Uyumsuz Şemalar, Baş a Çıkma Stillerive Öznelİyi Oluş Arasındakiİlişkilere Yönelik Bir Model Sınaması, DoktoraTezi, Ankara Üniversitesi, Ankara
- Bracht, V. (2005). Cultura Corporal, Cultura de MovimentoouCultura Corporal de Movimento? In J. M. Souza (Ed.), EducacaoFísica Escolar: Teoria e política curricular, saberesescolares e propostapedagógica (pp. 97-106). Recife: EDUPE.
- 7. Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical Activity, Exercise and Physical Fitness: Definitions and Distinctions for Health-Related Research. Public Health Reports, 100, 126-131.
- 8. Chatterjee, S. (2013). Attitudes Toward Physical Education of School Going Adolescents in West Bengal. International Journal of Innovative Research in Science, Engineering and Technology, 2(11), 6068-6073.
- 9. Chen, S., Zhu, X., Androzzi, J., & Nam, Y. (2018). Enerji Dengesi Eğitimiiçin Kavram Tabanlı Beden Eğitimi Biriminin Gelişimi. Sporve Sağlık Bilimleri Dergisi, 7, 353-362.
- 10. Colquitt, G., Walker, A., Langdon, J. L., McCollum, S. vePomazal, M. (2012). Exploring Student Attitudes Toward Physical Education and Implications For Policy. Sport Scientific and Practical Aspects, 9(2), 5-12
- 11. Demirhan, G. veKoca, C. (2004). An Examination of High School Students' Attitudes Toward Physical Education With Regard to Sex And Sport Participation. Perceptual and Motor Skills, 98, 754-758.
- 12. Ennis, CD (2007). Öğrenmeyi Beden Eğitimive Fiziksel Aktivite Ortamlarında Kavramsal Değişim Olarak Tanımlamak. Egzersizve Sporiçin ÜçAylık Araştırma, 78, 138-150
- 13. Fejgin, N. (2001). Participation in High School Competitive Sports: A Subversion of Scholl Mission or Contribution to Academic Goals? Champaign: Human Kinetics

- 14. Gorla, J. I., & Araujo, P. F. (2007). Motor Skills Assessment and Adapted Physical Education: KTK Test for the Mentally Handicapped. Sao Paulo: Phorte.
- 15. Gökdemir-Dumludağ, Ö. (2011). Mutlulukveİktisadi Parametreler Üzerine Birİnceleme. Yayımlanma mışdoktoratezi, İstanbul Üniversitesi, İstanbul
- 16. Göksel, A. G., &Çağdaş, C. A. Z. (2016). Anadolulisesiöğrencilerininbedeneğitimidersineyöneliktutumlarınınincelenmesi. *Marmara ÜniversitesiSporBilimleriDergisi*, *1*(1), 1-9
- 17. Güllü, M. (2007). Ortaöğretim Öğrencilerinin Beden Eğitimi Dersine İlişkin Tutumlarının Araştırılması. Doktora Tezi. Gazi Üniversitesi, Ankara.
- 18. Harrison, J. ve Blakemore, C. (1984). Instructional Strategiest for Secondary School Physical Education, Wmc Brown Pub, New Jersey.
- 19. Haywood, M. K. (1986). Life Span Motor Development (6th ed.). Champaign: Htiman Kinetics.
- 20. Keskin, Ö. (2015). Ortaokul Öğrencilerinin Beden Eğitimi Dersine Yönelik Tutumlarının Bazı Değişkenlere Göreİncelenmesi. Yayınlanmamış yüksek Lisanstezi, Sakarya Üniversitesi, Sakarya
- 21. Kırbıyık, M. E. (2012). MutlulukAhlakı (Eudaimonizm). Farabi e-Dergi, 3, 12-19.
- 22. Kohl III, H. W., & Cook, H. D. (2013). Committee on Physical Activity and Physical Education in the School
- 23. Kunz, E. (1991). Educação Física: Ensino & mudanças. Ijui: Unijui.
- 24. Lima, F., De Falco, V., Baima, J., Carazzato, J. G., & Pereira, R. M. (2001). Effect of Impact Load and Active Load on Bone Metabolism and Body Composition of Adolescent Athletes. MedSci Sports Exercise, 33, 1318-1323.
- 25. Lyubomirsky, S. (2007). The How of Happiness: A scientific approach to getting the life you want. The Penguin Press, New York
- 26. Manoel, E. J. (1996). The Study of the Motor Behavior of the Person with Disability: Problems and Questions. Brazilian Journal of School Health.
- 27. Marshall, C. & Rossman, G. B. (2014). Designing Qualitative Research. New York: Sage
- 28. Mavilidi, M. F., Ruiter, M., Schmidt, M., Okely, A. D., Loyens, S., Chandler, P., &Paas, F. (2018). A Narrative Review of School-Based Physical Activity for Enhancing Cognition and Learning: The Importance of Relevancy and Integration. Frontiers in Psychology, 9, 2079
- 29. Melmer, A., Kempf, P., &Laimer, M. (2018). The Role of Physical Exercise in Obesity and Diabetes. Praxis, 107, 971-976.

- 30. Mendes, MI veNóbrega, TP (2009). HareketKültürü: Beden, doğavekültürileil gilirefleksler. Pratikte Pensar, 12. <a href="https://doi.org/10.5216/rpp.v12i2.6135">https://doi.org/10.5216/rpp.v12i2.6135</a>
- 31. Munoz, M. T., de la Piedra, C., Barrios, V., Garrido, G., & Argente, J. (2004). Changes in Bone Density and Bone Markers in Rhythmic Gymnasts and Ballet Dancers: Implications for Puberty and Leptin Levels. European Journal of Endocrinology, 151, 491-496.
- 32. Namlı, A., Temel, C. veGüllü, M. (2017). Ortaokul Öğrencilerinin Beden Eğitimi Dersine İlişkin Ürettikleri Meaforlar. Kastamonu Education Journal, 25(2), 479-496
- 33. Newell, K. M. (1993). Coordination, Control and Skill. In K. M. Newell, & D. M. Corcos (Eds.), Variability and Motor Control (pp. 295-317). Champaign: Human Kinetics
- 34. Önder, F. C. ve Sarı, M. (2009). Öğretmenlerde Öznel İyi Olmanın Yordayıcıları Olarak Okul Yaşam Kalitesive Tükenmişlik. Kuramve Uygulamada Eğitim Bilim, 9(3),1205-1236.
- 35. Pettersson, U. et al. (2000). Effect of High Impact Activity on Boné Mass and Size in Adolescent Female: A Comparative Study between Two Different Types of Sports. Calcified Tissue International, 67, 207-214.
- 36. Sarma, A. S. (2017). A Critical Review on Benefits of Different Physical Education Programs in School. International Journal of physical Education, Sports and Health, 4, 86-88.
- 37. Sargın, K., & Güleşce, M. Öğretmenlerin Sağlıklı Beslenmeyeİlişkin Tutumlarının Değerlendirilmesi (Van İli Örneği). *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 7(1), 1-11.
- 38. Serbetar, I. (2014). The Role of Dynamic Systems in Motor Development Research: Just a Metaphor or a Notable Reality? AnnalesKinesiologiae, 5, 113-121.
- 39. Sipahi, B., Yurtkoru, E. S. veÇinko, M. (2008). Sosyal Bilimlerde SPSS ile VeriAnalizi. İstanbul: Beta Yayınları
- 40. Smith, L. B., &Thelen, E. (1993). MIT Press/Bradford Books Series in Cognitive Psychology. A Dynamic Systems
- 41. Squires, R. W., Shultz, A. M., & Herrmann, J. (2018). Exercise Training and Cardiovascular Health in Cancer Patients. Current Oncology Reports, 20, 1-20.
- 42. Stafford, D. E. (2005). Altered Hypothalamic-Pituitary-Ovarian Axis Function in Young Female Athletes. Treatments in Endocrinology, 4, 147-154.
- 43. Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5, pp. 481-498). Boston, MA: pearson.

- 44. Taşğın, Ö. veTekin, M. (2009). Çeşitli Değişkenlere Göreİlköğretimve Orta Öğretim Kurumlarında Öğrenim Gören Öğrencilerin Beden Eğitimive Spor Dersineİ lişkin Tutumve Görüşleri, Kastamonu Eğitim Dergisi, 17(2), 457-466.
- 45. Taşmektepligil, Y., Yılmaz, Ç.,İmamoğlu, O. veKılcıgil, E. (2006). İlköğretim Okullarında Beden Eğitimi Ders Hedeflerinin Gerçekleşme Düzeyi. Spormetre Beden Eğitimive Spor Bilimleri Dergisi, 4(4), 139-147
- 46. Tavlaş, S. (2012). Erzurum İlin dekiortaöğ retimöğren cilerininbede neğitimider sineili şkintutumlarınının celenmesi. *Atatürk Üniversitesi, Sağlık Bilimleri Enstitüsü, Erzurum*.
- 47. Toytok, E. H., & Leyla, U. Ç. A. R. (2018). Okul Yöneticilerinin Kullandıkları GüçTürleri VeÖrgütsel Depresyon: Birİlişkisel Tarama Modeli. *EkevAkademiDergisi*, (76), 109-126.
- 48. Uğraş, S. veÖzen, G. (2020). Investigation of Relationship Between Attitude to Physical Education Course and School Belonging. Pedagogy of Physical Culture and Sports. 24(1):48-53.
- 49. Vaillant, G. E. (2003). Mental Health. American Journal of Psychiatry, 160,1373-1384.
- 50. WHO, World Health Organization (2019). Global Strategy on Diet, Physical Activity and Health. https://www.who.int/dietphysicalactivity/pa/en/
- 51. Yıldız, Ö. (2010). Sınıf Öğretmenlerinin Beden Eğitimidersineyönelik Tutumlarıve Karşılaştıkları Problemler. Doktora Tezi. Gazi Üniversitesi, Ankara
- 52. Yıldızhan, Ç. Y. ve G. N. Çağlayan (2019). Öğrencilerin Beden Eğitimi Dersine Yönelik Tutumlarıile Sosyal Zeka Düzeyleri Arasındakiİ lişkinin İncelenmesi. Gazi Beden Eğitimive Spor Bilimleri Dergisi, Cilt 24, Sayı 4, 227-240.
- 53. Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P., &Gao, Z. (2017). Effects of Physical Activity on Motor Skills and Cognitive Development in Early Childhood: A Systematic Review. Biomed Research International, 2017, Article ID: 2760716.

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