Journal of Social Studies. Vol., 10 (2), 39-43, 2024 Available online at http://www.jssjournal.com

ISSN: 2149-3316 ©2024

Investigation of the General Health Status of Individuals with Down Syndrome who Participate in Regular Physical Activities

Serhan Yilmaz^{1*}, Ahmet Yilmaz², Bilal Öner³, Halil Erten⁴, Zeki Erdoğan⁵, Zafer Şen⁶, Yusuf Acar⁷, Necat Paker⁸, Fatih Tirzik⁹, Orhan Özalp¹⁰

- 1. Ministry of National, Teacher, Tuna Anatolian High School, Bayrampasa-Istanbul
- 2. Ministry of National Education, Deputy Director, Tuna Anatolian High School, Bayrampasa-Istanbul
- 3. Ministry of National Education, Head of the school, Martyr Hüseyin KISA middle school, Esenler-Istanbul
- 4. Ministry of National Education, Teacher, Oyakkent primary school, Başakşehir-Istanbul
- 5. Ministry of National Education, assistant director, Tuna Anatolian High School, Bayrampaşa-istanbul
- 6. Ministry of National Education, School Principal, TOKI Halkalı Anatolian Imam Hatip High School, Küçükçekmece Istanbul
- 7. Ministry of National Education, Teacher, Sancaksoy Middle School, Bayrampasa Istanbul
- 8. Ministry of National Education Head of School, Sabit Büyükbayrak Vocational and Technical Anatolian High School, Bayrampasa-Istanbul
- 9. Ministry of National Education. Principal Assistant Manager, Sabit Büyükbayrak Vocational and Technical Anatolian High School, Bayrampasa –Istanbul
- 10. Ministry of National, Teacher, Battalgazi-Malatya

*Corresponding Author Email: serhanyilmaz52@gmail.com

Abstract: Individuals who participate in regular physical activities do not experience health problems in general. Because at the end of regular physical activities, individuals have a strong physical structure. Disabled people generally lead a stationary lifestyle. Individuals with Down syndrome are the group that is the most inactive among individuals with disabilities. For this reason, people with Down syndrome need regular physical activities for a healthy body. The aim of this research is to examine the general health status of individuals with Down Syndrome who regularly participate in physical activities. Method; For this reason, 4 sports clubs were identified in Malatya Battalgazi district, where individuals with Down Syndrome regularly participate in physical activities. 24 individuals with Down syndrome who regularly attend sports clubs and whose ages range from 15 to 20 were identified Dec. The majority of people with Down syndrome fall into the group of people with mild intellectual disabilities. However, they cannot answer healthy questions about themselves. For this reason, faceto-face meetings were provided with the coaches and families of individuals with down syndrome who regularly participate in physical activities. Within the scope of the interviews, club coaches and families were asked, 'Does a person with Down syndrome have health problems in general, what kind of changes have you detected in individuals along with physical activities?, Questions were asked. The qualitative method was used in this research. Focus group interviews were used to collect the data and a semi-structured questionnaire was used during the interviews. In face-to-face interviews, the interview technique is usually used. In this study, interview technique was preferred among qualitative research methods. 8 Coaches participated in the meeting. 8 Participating coaches; They stated that the general health condition of individuals with Down syndrome was better after regular physical activities and that the individuals did not experience any health problems. All of the parents who participated in the interview stated that individuals with Down Syndrome who regularly participate

in physical activities have a stronger physical structure. Families who stated that they often had health problems before physical activities, explained that the immune systems of individuals became stronger as a result of the activities. As a result, as a result of both information received from parents and information received from coaches, it is understood that the general health status of individuals who regularly participate in physical activities is better than the situation before the activities.

Keywords: Physical activity, down syndrome, health

Introduction

Individuals with disabilities generally have difficulty forming daily life skills. Individuals with disabilities who develop daily life skills exhibit a peaceful situation with themselves, integrate with society and participate in society. However, individuals in society also have an important task in improving the daily life skills of people with disabilities. The individual's ability to lead an independent life is related to daily basic life skills. An individual who develops daily life skills integrates with society more easily and participates in society more easily (Salles and Baros 2009). According to Eishtaed and Lavay (1992), individuals with sufficient mobility become more comfortable in daily life activities (Eichstaedt and Lavay 1992). The study of daily life skills has attracted the attention of educators and research centers in recent years(Linda 2003, Dolva et al. 2004, Leonard et al.2002). The successful integration of a disabled individual with both home and social environment is related to the safe performance of basic functional activities of the individual (Salles and Baros 2009). Disabled people live a stationary life because of their characteristics. They need to be active for a healthy life.Other functional activities such as games and social interaction are activities that the individual desires and needs support (Haley et al. 1991, Özdemir et al 2018). An individual who has fewer skills than most of his peers is also usually the last preferred person for group activities and activities (Gallahue and Ozmun, 1988, Weise, 1987). All these problems affect an individual's social interaction with peers at school or in a social environment. Inadequacy in movement skills in individual or group environments constitutes an unwillingness of a disabled person to participate in physical activities (Buckley and Sacks, 2001,Ilkım et al 2018). These aversions pose the risk of obesity, especially in individuals with Down syndrome. For this reason, it is important for individuals with Down syndrome to do regular physical activities(Jobling and Cuskelly, 2006, 25).

Regular physical activities are known as a means of supporting the development of the muscular and nervous system of individuals, mental and physical reactions, the development of the body (physiological and metabolic). Nov. Getting a good result from physical activity depends on various factors. When physical activities are performed regularly and systematically, they are also used as a kind of healing tool(Beasley, 1982, Ilkim et al 2021). Along with regular physical activities, the individual's different muscles become stronger, coordination improves, and he November have a more balanced structure. He gets a healthy Respiratory and circulatory system. With the increase in social awareness, it is ensured that people with disabilities can participate in sports activities more comfortably today. In this case, the most important thing to pay attention to is that well-planned programs should be prepared for the interests, skills and abilities of individuals. Along with regular participation in physical activities, socialization and social acceptance begin earlier in people with disabilities. The fact that disability is permanent in individuals affects their positive approach to themselves. Symptoms of introversion and aggressiveness occur in the individual. Along with disability, psychological reactions will occur in individuals, as well as communication problems arise between family members who are responsible for them. Dec. Participation of disabled people in physical activities improves their sense of self-care, enables them to adapt to social life earlier.

Individuals with disabilities are intertwined with society with the positive effect of physical activities and establish better relationships with them.(Savucu et al. 2006). In addition, since sports activities are of interest to the masses in modern societies, individuals with disabilities become more social and more conscious thanks to sports activities (Duman et al. 2011). The positive effect of physical activities is seen in making special education more meaningful. In addition, the effect of physical activities is important in improving family life satisfaction (Savucu and Biçer, 2009). People with Down syndrome have a higher risk of obesity. For this reason, physical activity activities are more important for individuals with down syndrome. The main causes that negatively affect the participation of these individuals in physical activities are November muscle hypotonia. In these individuals, there is excessive joint mobility, looseness in the connective tissues. In addition, respiratory and circulatory systems are underdeveloped. For this reason, individuals with down syndrome should be more careful when performing physical activity(Pastore et al., 2000). The physical, mental, emotional and quality of life of individuals with Down syndrome who regularly participate in physical activities are developing positively, and their happiness levels are also increasing positively. Physical activities discharge the happiness of the individual. As a result of all this, a person with down syndrome is expected to have a positive relationship with his environment. (Ceylan et al., 2016; Bağcı et al., 2019; Small, 2020).

Method

The aim of this study is to examine the general health status of individuals with Down Syndrome who regularly participate in physical activities. For this purpose, 4 sports clubs were identified in Malatya Battalgazi district, where individuals with Down Syndrome regularly participate in physical activities. 24 individuals with Down syndrome who regularly attend sports clubs and whose ages range from 15 to 20 were identified Dec. Individuals with Down syndrome are included in the group of individuals with mild intellectual disabilities. They cannot give healthy answers on issues that concern them. For this reason, face-to-face meetings were provided with the coaches and families of individuals with down syndrome who regularly participate in physical activities. As part of the interviews, coaches and families were asked, 'Does a person with Down syndrome have health problems in general, can you compare the health status before and after physical activities?, Questions were asked. Qualitative research method has been preferred as the data collection method. Focus group interviews were used to collect the data and a semi-structured questionnaire was used during the interviews. Interview technique has been preferred among qualitative research methods. Observation technique has also been applied by the researcher to obtain healthier results.

Results

7 Coaches who participated in the interview; They stated that the general health condition of individuals with Down syndrome is better after regular physical activities and that the individuals do not have any health problems. All of the parents who participated in the interview stated that individuals with Down Syndrome who regularly participate in physical activities have a stronger physical structure. Families who stated that they often had health problems before physical activities, explained that the immune systems of individuals became stronger with the activities.

Table 1. The state of regular participation in physical activities

	Participates in Regular Physical Activity	
Spor Klb.1	8	
Spor Klb 2	5	
Spor Klb 3	4	
Spor Klb 4	7	
Toplam	24	

Table 1 shows the number of individuals with down syndrome who regularly participate in physical activities. The number of individuals with down syndrome who regularly participate in physical activities has been determined as 24.

Table 2. Health status of individuals with Down syndrome who participate in Regular Physical Activities

He is not having a health problem	He is Having a Health Problem	Total	
21	3	24	

In Table 2, it was evaluated whether individuals with Down syndrome who regularly participate in physical activities have health problems. 21 People with Down syndrome do not have health problems due to regular physical activities, while 3 people with Down syndrome stated that they have health problems.

Conclusion

Individuals with Dovn syndrome are considered as individuals with mild intellectual disabilities. In general, they lead a stationary life. Due to their characteristics, they have a tendency to obesity. If physical activities are done regularly, they have a positive effect on health problems. For this reason, individuals with Down syndrome need to participate in physical activities regularly in order not to experience health problems(Ilkim et al. 2021). It is stated that some positive changes occur in the behavior of individuals with disabilities as a result of regular physical activities (Dörger, 2001; Bruininks and Chvat, 1990:). Stainback (1983) states that the development of self-care skills, positive changes in social behaviors and maturation, as well as improvements in some motor abilities, have a positive effect on reducing behavioral disorders and increasing learning abilities in a study conducted to investigate the developmental characteristics of severely disabled individuals. When Table 1 is examined, 24 individuals with Down syndrome attend 4 sports clubs regularly by doing physical activity. When Table 2 is examined, it is seen that 21 individuals with Down syndrome who regularly participate in physical activities do not have health problems. Bulut concluded in his research conducted in 2013 that physical activities do not require much economic costs and, besides that, their positive impact on human health is quite high(Bulut

2013). Cengiz and Delen 2019, Arslan et al. in a study they conducted in 2016, they explain that physical activities have positive effects on the health of young people, and they state that this has become a positive habit (Cengiz and Delen 2103. Arslan et al. 2016)

As a result, as a result of both information received from parents and information received from coaches, it is understood that the general health status of individuals who regularly participate in physical activities is better than the situation before the activities.

References

- Arslan, S. A., Daşkapan, A., & Çakır, B. (2016). Üniversite öğrencilerinin beslenme ve fiziksel aktivite alışkanlıklarının belirlenmesi. *TAF Preventive Medicine Bulletin*, 15(3), 171-180. [Google Scholar] [Publisher]
- Bağcı R., Uslu S. & Sarıçam H. (2019). Rekreasyonel etkinliklere katılan ve katılmayan bireylerin mutluluk yönelimlerinin incelenmesi. Uluslararası Spor Bilimleri Öğrenci Çalışmaları, 1(1):27-34 [Google Scholar] [Publisher]
- Beasley, C.R. (1982). Effects of a Jogging Program on Cardiovascular Fitness and Working Performance on Mentally Disabled Adults. American Journal of Mental Deficiency, 86(6);609-613. [Google Scholar] [Publisher]
- Bulut, S. (2013). Sağlıkta sosyal bir belirleyici; fiziksel aktivite. *Turkish Bulletin of Hygiene & Experimental Biology/Türk Hijyen ve Deneysel Biyoloji*, 70(4). [Google Scholar] [Publisher]
- Buckley S.J., Sacks B. (2001). An Overview of the Development of Children with Down Syndrome (5-11 years). Down Syndrome Issues and Information. [Publisher]
- Bruininks, R.H. and Chvat, M. (1990), "Research on the Motor Proficiency of Persons with Mental Retardation:

 Psychomotor Therapy and Adapted Physical Activity" In Better Movement Proceeding of the 2nd International Symposium, Belgium, pp. 43-69 [Google Scholar]
- Cengiz, Ş. Ş., & Delen, B. (2019). Gençlerde fiziksel aktivite düzeyi. *Uluslararası Güncel Eğitim Araştırmaları Dergisi*, 5(2), 110-122. [Google Scholar] [Publisher]
- Ceylan, L., Demirkan, E. & Küçük, H. (2016). Examination of sprint duration and repeated sprint level of soccer players in different age group. International Journal of Science Culture and Sport, 4(SI-1):188-199. [Google Scholar] [Publisher]
- Dolva A.S., Coster W., Lilja M. (2004). Functional Performance in Children with Down Syndrome. American Journal of Occupational Therapy 58(6), 621-9. [Google Scholar] [Publisher]
- Dörger, D. (2001), Özürlüler İle Yaratıcı Drama. Hacettepe Üniversitesi Aile Hizmetleri Ve Uygulama Merkezi (Ahum) Etkinliği, Ankara, ss. 21. [Google Scholar]
- Duman, S., Şirin, E., Erdoğdu, M., Yılmaz, M., (2011). Engelli Bireylerde Fiziksel Benlik Algısının Yaşam Doyumuna Etkisi.". I. International Physical Education and Sports Congress for Disabled Persons. Konya.
- Eichstaedt C.B., Lavay B.W. (1992). Physical Activity for Individuals with Mental Retardation: Infancy Through Adulthood. Champaign, IL: Human Kinetics. [Google Scholar] [Publisher]
- Gallahue D.L., Ozmun J.C. (1988). Understanding Motor Development; Infants, Children, Adolescent, Adults (4th ed.). Boston: WCB/McGraw-Hill. [Google Scholar] [Publisher]
- Haley S.M., Coster W.J., Ludlow L.H. (1991). Pediatric Functional Outcome Measures. Physical Medicine and Rehabilitation Clinics of North America 2(4), 689-723 [Google Scholar] [Publisher]
- Ilkım, M., Özoğlu, F., Şimşek, E., & Keskin, M. T. (2021). Düzenli fiziksel aktiviteye katılan ve katılmayan down sendromlu bireylerin mutluluk ve öz saygı düzeylerinin ebeveynler tarafından değerlendirilmesi (Malatya il örneği). [Google Scholar] [Publisher]
- Ilkim, M., Tanir, H., & Özdemir, M. (2018). Socialization Effect of Physical Activity in Students Who Need Special Education. *Asian Journal of Education and Training*, 4(2), 128-131. [Google Scholar] [Publisher]
- Ilkım, M., Özoğlu, F., & Kalaycı, M. C. (2021). Evaluation Of Sports Awareness Of Parents Of Individuals With Autism Attending To Sports Clubs. *About This Special Issue*, 76. [Google Scholar] [Publisher]
- Jobling A., Cuskelly M. (2006). Young People with Down Syndrome: A Preliminary Investigation of Health Knowledge and Associated Behaviours. Journal of Intellectual & Developmental Disability 31(4), 210–218. [Google Scholar] [Publisher]
- Küçük H. (2020). Kadın futbolcularda statik ve dinamik dengenin mevkilere göre karşılaştırılması. Uluslararası Spor Egzersiz ve Antrenman Bilimi Dergisi. Supp.(4): 53-56. [Google Scholar] [Publisher]
- Leonard S., Msall M.E, Bower C., Tremont M., Leonard H. (2002). Functional Status of School-Aged Children with Down Syndrome. Journal of Pediatric and Child Health 38, 160–165. [Google Scholar] [Publisher]
- Linda G. (2003). Measuring Developmental and Functional Status in Children with Disabilities. Journal of Pediatric Physical Therapy 15(1), 4345. [Google Scholar] [Publisher]

- Özdemir, M., Tanır, H., İlkim, M., & Şeker, T. (2018). Sports injuries in 15-17 year-old male athlete students participating on school teams. *Turkish Journal of Sport and Exercise*, 20(2), 44-48. [Google Scholar] [Publisher]
- Pastore E., Marino B., Calzolari A., Digilio M.C., Giannotti A. & Turchetta A. (2000). Clinical and Cardiorespiratory Assessment in Children With Down Syndrome Without Congenital Heart Disease. Archives of Pediatrics & Adolescent Medicine.;154:408-410 [Google Scholar] [Publisher]
- Salles M.M., Baros S. (2009). The Effect of Mental Illness on The Activity of Daily Living: A Challenge for Mental Health Care. Acta Paulista de Enfermagem 22(1), 11-6. [Google Scholar] [Publisher]
- Stainback, S. (1983), 'A Review of Research on the Educability of Profoundly Retarded Persons Educatian and Training of the Mentally Retarded' Sports Medicine, (5)(2), pp. 90-100. [Google Scholar] [Publisher]
- Savucu, Y., Biçer, Y. (2009). "Zihinsel Engellilerde Fiziksel Aktivitenin Önemi". Turkiye Klinikleri J Sports.1(2):117-22 [Google Scholar] [Publisher]
- Savucu, Y., Sirmen, B., İnal, S., Karahan, M., Erdemir, İ. (2006). "Zihinsel Engelli Bireylerde Basketbol Antrenmanının Fiziksel Uygunluk Üzerine Etkilerinin Belirlenmesi". Fırat Üniversitesi Sağlık Bilimleri Tıp Dergisi. 20(2), 105-113 [Google Scholar] [Publisher]
- Weise M.R. (1987). Self-esteem and Achievement in Children's Sport and Physical Activity. Edited by Goukd D., Weise M.R. Advances in Pediatric Sport Sciences 2, 87-117. Champaign. IL:Human Kinetics. [Google Scholar] [Publisher]