

A Study on Disability and the Problems of Disabled Students' Participation in Physical Activities

Muhammet Jamam^{1*}, Cemal Kaplan², Sümeyra Başçiftçi³, Emiř Nihan Akbayram⁴, Selda Arıkan⁵, Osman Iřık⁶, Yunus Yaman⁷

1. Headmaster, Ministry of National Education, Ali Kuřcu Secondary School, Mersin/Turkey
2. Headmaster, School, Ministry of Education, 700th middle school of the year, Mersin/Turkey
3. Teacher, Ministry of National Education, Ersoy Middle School
4. Assistant principal, Ministry of National Education, Ali Kuřcu Secondary, Mersin/Turkey
5. Assistant principal, Ministry of National Education, Namik Kemal Secondary School, Mersin/Turkey
6. Headmaster, Ministry of National Education Korukent Anatolian High School, Mersin/Turkey
7. Assistant principal, Ministry of National Education, Korukent Anatolian High School, Mersin/Turkey

*Corresponding Author Email: jamam33@gmail.com

Abstract: The aim of this study is to determine the barriers to the participation of disabled students in physical activities. The sample of the study consisted of students with mild mental disabilities (5 females, 8 males), hearing disabilities (7 females, 6 males), visual disabilities (5 females, 7 males), and orthopedic disabilities (9 females, 13 males) who continue their education in Malatya. A total of 60 students were reached in 10 schools (N=60). The average age of the students was 16 years. In the study, qualitative research method was used to get to know and understand the social environments and interactions of the students in more depth. Data were collected through focus group interviews. A semi-structured questionnaire was used in the focus group interviews. Content analysis method was used in the statistical analysis of the data. As a result of the data analysis, disabled students cannot participate in physical activities due to both school and individual conditions. Non-governmental organizations, disabled sports federations, local and national media have responsibilities in removing the related obstacles.

Introduction

Physical activity has psychological, physical and sociological benefits for everyone. The importance of this situation is even more important for people with disabilities. Physical activity allows disabled individuals to overcome their disabilities. While there are positive changes in their moods, they are enabled to be seen more in the social sphere. However, aggression, anger and jealousy levels decrease. They do not have difficulty in maintaining their own control. In addition to the physical and psychological effects of physical activities on disabled individuals, it can also be said to create integration and rehabilitation effects. Physical activities with the group contribute to the sharing (Bingöl, 2020, Gül & Bingöl, 2022) aspects of disabled individuals and contribute to their social environment. Different physical activities for individuals with disabilities also contribute to the work of their different muscle groups. However, disabled individuals experience the socialization process by staying in contact with many people. In this direction, physical activity habits enable disabled individuals to stay healthy and to be at peace with themselves. When the rate of people with disabilities is compared to the general population, we come across a figure of 12%. Individuals with disabilities are negatively affected by personal and environmental problems (Finch et al, 2001; Kirchner et al, 2008). Due to the negative approaches of the environment, most disabled individuals cannot participate in physical activities. This situation negatively affects the health of individuals. Undoubtedly, disabled individuals

experience more health problems than non-disabled individuals. Regular participation in physical activities minimizes the health problems and expenditures of disabled individuals (Philips et al, 2009).

In this context, Kirchner et al. (2008) examined the barriers to participation in physical activities for individuals with visual and orthopedic disabilities. According to the results of the study, the reported barriers are pedestrian sidewalks, nearby construction activities, broken roads and sewers. Especially environmental reasons negatively affect the participation of people with disabilities in physical activities. For these reasons, people with disabilities preferred quieter environments and participated in physical activities. In contrast to environmental barriers, Finch et al. (2001) investigated whether physical disability is a negative factor in physical activity participation. According to the results of the study, the participants stated that their disabilities made it difficult for them to engage in physical activity. It was also shown that participation in physical activities worsened with advancing age. As a result of participation in physical activity, physical, mental and socialization changes are seen in people with disabilities. The benefits of physical activities for people with disabilities are among the current research topics. When the researches (Chinn et al., 2006; Heler et al., 2002; Nixon II, 2009; Ravesloot, 2009; Rimmer et al., 2009; Rimmer and Rowland, 2007; 2008; Spivock et al., 2007; Spivock et al., 2008) are reviewed, one of the most important issues is the process of participation of disabled people in physical activities.

Chinn et al. (2006) concluded the following results in a study conducted on disabled individuals participating in physical activities by benefiting from health institutions. Not leaving home, boring physical activities, disliking physical activities, individual health problems, not having someone to do physical activities with were shown among the biggest reasons for participation in physical activities. In another study, Heller et al. (2002) conducted on individuals with Down syndrome revealed barriers to participation in physical activity such as 'the cost of physical activity activities', 'inappropriate transportation problems, not knowing where, how and with whom to do physical activities', 'not knowing how to use physical activity tools', 'anxiety felt and experienced due to the possibility of ridicule', 'lack of experts to show how to do physical activities', 'inaccessibility of physical activity environments'. In another study (Rimmer et al., 2008), the barriers to the participation of physically disabled individuals in physical activities were explained as the cost of physical activity activities, not being aware of the physical activity environments in the living environment, transportation problems.

In their study, Anderson et al. (2005), while explaining the barriers to participation in physical activities of women with physical disabilities, mentioned that the biggest reason is the limited opportunities to participate in physical activities, lack of role models, the perspective of the social environment and the lack of appropriate environments. In a study conducted by Rimmer et al. (2000) with African American women with physical disabilities, transportation problems, shyness, cost of participation in physical activity programs and not knowing where to do physical activity activities were found to be barriers to participation in physical activity. In a similar but more comprehensive study (Rimmer et al., 2004), similar results were found in a study conducted on individuals with disabilities in ten states of the USA. The results include barriers related to the natural environment, economic and individual barriers. Again, in the research conducted on school students, the lack of adequate facilities in schools, students' intensive course schedule, students' reluctance, and the lack of adequate teachers in the field negatively affect participation in physical activities.

Method

The sample of the study consisted of students with mild intellectual disabilities, visual impairment, hearing impairment and orthopedic disabilities in Malatya. A total of 60 students were reached in 10 secondary schools. The demographic characteristics of the participants were mentioned in the findings section. Qualitative research method was used as a data collection tool. Focus group interviews were used to collect data (Yıldırım and Şimşek 2005). During the interviews, a semi-structured question form was used for the disabled students. In order for the answers of the mildly mentally disabled individuals to be healthier, support was received from the school physical education teacher. For the validity of the data collection tool, the questions in the semi-structured form were consulted with experts in the field and necessary corrections and additions were made. Face-to-face interviews, form filling and a voice recorder were used to collect the data. The interviews with the students lasted an average of 50 minutes.

Table 1. Gender information of the participants

	Gender
Woman	26
Male	34

Table 2. Participants' disability type information

Disability Type	Woman	Male	Total
Mild Mental Disability	5	8	13
Physically Disabled	9	13	22
Visually Impaired	5	7	12
Hearing Impaired	7	6	13
Total	26	34	60

Findings

In the interviews with the participants, the questions were delivered in 3 sections. In the first part, demographic characteristics of the participants were asked. In the second part, the types of disabilities of disabled students were determined. In the third part, it was asked what the barriers to disabled students' participation in physical activities were. The findings of the relevant sections were analyzed as a whole. Disability status of students with disabilities, reasons preventing their participation in physical activities (family views, peer pressure, inadequate physical activity environments, attitudes of school administration towards students with disabilities) and their thoughts on preventing obstacles were analyzed together with the questions in the semi-structured interview form. It is seen that students with disabilities are highly willing to participate in physical activities. In addition, the opinions of the families of students with disabilities were also analyzed and tabulated. It was determined that the majority of the families of disabled students were sensitive about physical activities. Participants were analyzed according to their gender and the results were tabulated.

Table 3. Participation of Disabled Students in Physical Activities

Gender	I want to participate in physical activities	I do not want to participate in physical activities	My family supports me	
			Yes	No.
Woman	19	7	17	9
Male	28	6	26	8
Total	47	13	43	17

When **Table 3** is analyzed, 78.3% of the participants stated that they wanted to participate in physical activities, while 21.7% stated that they did not want to participate in physical activities. Again, 71.6% of the families support the participation of their disabled children in physical activities, while 28.4% do not support the participation of their disabled children in physical activities.

Some statements about why students with disabilities do not participate in physical activities

Student 1 (Female): I cannot participate because there is no suitable environment for physical activities in our school

Student 2 (Female): I cannot participate in physical activities due to transportation problems Student 3

(Male): My family does not want me to participate in physical activities.

Student 4 (Male): I do not have enough clothes and materials to participate in physical activities.

Student 5,9,12,14 (Male, female, female, male) We want to participate in physical activities and we like them very much. From time to time we are ridiculed by our peers. This is seen as the most important factor that prevents us from participating in physical activities.

Conclusion and Recommendations

Lack of physical activity has become one of the biggest problems of our age and has caused an increase in diseases such as obesity problems, cardiovascular diseases and diabetes (Mac Auley, 1984, Paffenbarger et al. 2001, Bulut 2013). With many regulations made for the disabled, they have been ensured to be in social life. While their living conditions have become easier, their quality of life has increased with the rights they have. While the employment of disabled individuals in public institutions and organizations has become compulsory, disabled individuals have started to use many social environments with the environmental arrangements made. The facilities provided by local governments regarding transportation have enabled disabled individuals to be seen more in social life. There are many reasons why disabled people do not regularly participate in physical activities. The main reason is that the benefits of physical activities are not sufficiently explained. School administrators should support the participation of disabled individuals in physical activities and provide facilities for them. Students' joy of participating in physical activities should be prioritized. When students feel that the activities are positive, they are more likely to move (Kimiecik et al. 1996, Trost et al. 1999, Özdemir et al. 2018).

With the increase in positive perceptions towards individuals with disabilities, it is seen that there are also studies on the participation of these individuals in physical activities. Sports scientists equipped in their field

know the benefits of physical activities very well (Ilkim and Akyol 2018). Individuals with disabilities who lead a static life will have a more social personality through physical activities (Ilkim and Yurtseven 2021, Ilkim et al 2021). In this context, families with disabled individuals should also be informed about the positive effects of physical activities. In order to implement physical activity programs for disabled individuals more easily, transportation conditions should be facilitated. In this sense, relevant federations, local administrations, relevant departments of universities, non-governmental organizations and sports clubs have important duties. In the light of the results determined in this research, it should be the most important task to know the situations that prevent disabled students from participating in physical activities, to remove these situations from being an obstacle and to ensure the participation of more disabled students in physical activities.

Reference

- Bingöl, S. 2020. Views of the Sports Audience Who Received Sports Education about the Sports Organizations Postponed Due to COVID-19. *African Educational Research Journal*, 8(4), 806-813. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Bulut, S. 2013. A social determinant of health; physical activity. *Turkish Journal of Hygiene and Biology*, 70(4), pp.205-14. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Chinn DJ, White M, Howel D, Harland JOE, Drinkwater CK. 2006. Factors associated with non- participation in a physical activity promotion trial. *Public Health*, 120 (4), 309-319. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Finch, C. E., & Ruvkun, G. 2001. The genetics of aging. *Annual review of genomics and human genetics*, 2(1), 435-462. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Gül, C., & Bingöl, Ş. 2022. Investigation of Sportsmanship Perception of Sports High School Students. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Heler T, Hsieh K, Rimmer J. 2002. Barriers and supports for exercise participation among adults with down syndrome. *Journal of Gerontological Social Work*, 38 (1-2), 161-178. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Ilkim, M., & Akyol, B. 2018. The Comparison of Some Motoric Characteristics of Hearing Impaired Individuals Sports Athletic and Gymnastic. *Universal Journal of Educational Research*, 6(10), 2148-2152. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Ilkim, M., & Yurtseven, C.N 2021. Evaluation of the Risk Status of Individuals with Mild Mental Disabilities Participating in Physical Activities at the Time of Activity. *Journal of Physical Education and Sports Sciences*, 23(2), 134-146. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Ilkim, M., Özoglu, F., Kalaycı, M. C., Paktaş, Y., & Keskin, M. T. 2021. The Level of Fulfillment of Expectations of Parents of Mentally Disabled Individuals Attending Sports Clubs from Sports and Sports Clubs. *Mediterranean Journal of Sport Sciences*, 4(2), 283-293. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Kimiecik J.C., Horn T.S., and Shurin C.S. 1996: Relationships among children's beliefs, perceptions of their parents' beliefs, and their moderateto-vigorous physical activity. *Res. Q. Exerc. Sport* 67: 324-336. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Kirchner CE, Gerber EG, Smith BC. 2008. Designed to deter: community barriers to physical activity for people with visual or motor impairments. *American Journal for Preventive Medicine*, 34 (4), 349- 352. [\[Google Scholar\]](#) [\[Publisher\]](#)
- MacAuley, D. A. 1994. History of physical activity, health and medicine. *J R Soc Med*, 87, pp.32-35. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Nixon II HL. 2009. Constructing diverse sport opportunities for people with disabilities. *Journal of Sport and Social Issues*, 31 (4) , 417- 433. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Özdemir, M., Tanır, H., İlkin, 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. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Paffenbarger, R.S., Steven, J., Blair, N., I-Min, Lee. 2001. A history of physical activity, cardiovascular health and longevity. *Int J Epidemiol*. 30, 1184-92. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Philips M, Flemming N, Tsintzas K. 2009. An exploratory study of physical activity and perceived barriers to exercise in ambulant people with neuromuscular disease compared with unaffected controls. *Clinical Rehabilitation*, 23, 746- 755 [\[Google Scholar\]](#) [\[Publisher\]](#)
- Ravesloot C. 2009. Chancing stage of readiness for physical activity in medicine beneficiaries with physical impairments. *Health Promotion Practice*, 10 (1) , 49- 57. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Rimmer JH, Rauworth A, Wang E, Heckerling PS, Gerber BS. 2009. A randomized controlled trial to increase physical activity and reduce obesity in a predominantly African American group of women with mobility disabilities and severe obesity. *Preventive Medicine*, 48 (5), 473- 479. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Rimmer JH, Rowland JL. 2007. Health promotion for people with disabilities: Implications for empowering the person and promoting disability- friendly environments. *American Journal of Lifestyle Medicine*, 2 (5), 409-420. [\[Google Scholar\]](#) [\[Publisher\]](#)

- Spivock M, Gauvin L, Brouder JM. 2007. Neighborhood- level active living buoys for individuals with physical disabilities. *American Journal for Preventive Medicine*, 32 (3), 224- 230. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Spivock M, Gauvin L, Riva M, Brodeur JM. 2008. Promoting active living among people with physical disabilities. *American Journal for Preventive Medicine*, 34 (4), 291- 298. [\[Google Scholar\]](#) [\[Publisher\]](#)
- Trost S.G., Pate R.R., Ward D.S. et al. 1999. Correlates of objectively measured physical activity in preadolescent youth. 17: 120-126. [\[Google Scholar\]](#) [\[Publisher\]](#)