The participation of Turkish National Ski Team and mentally handicapped camp with changes before and after the physical examination of dynamic and static balance changes in 2010 at the world championships

Orcan MIZRAK

Department of Recreation College of Physical Educatıon and Sport, Atatürk University, Turkey

Abstract: The main purpose of this study is to evaluate the Mentally Handicapped Skiing National Team camp in Turkey participated in the World Championships before and after the study of the physical changes and changes in the dynamic and static balance. The study group is including people ranging from 14-22 years and 5 girls, 9 boys consisting of a total of 14 people in Turkey Mentally Disabled Skiing National Team athletes. Euro fit athletes before and after the camp study tests (dynamic and static balance, discs, touch, flexibility, standing long jump, hand grip, the shuttle 30 seconds, Twisted Grip Handle, 10x5 m shuttle run test) were compared by examining changes in the physical and physical condition. The research data were analyzed using the SSPS 16.00. The study of frequency, percentage distribution, standard deviation, Z values and significance levels tabulated and interpreted. According to the results, the test values before and after camp among the athletes left hand grip strength tests were statistically significant differences that they were also found externally (P> 0.001).
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Introduction

Sports are one of the best methods of the integration of people with disabilities. Today, people with disabilities, disability status, and according to the degree of sports facilities are available in various areas. The most common issues are subjected to patients with hearing impairment, that it can be emerged among the sportsman of volleyball, football, table tennis, judo and wrestling. This can be true about the branches of sport in terms of hearing impairments, balance, and muscle control, freedom of movement, coordination, and evaluation of their free time (Maggill, 1980; Civan et al, 2011). In regardless of the type of problem and degree of movement, exercise, happiness in giving the individual to participate in sporting activities differ from acting to achieve the pleasure to meet the needs of the individual, and considered as an important means of entertainment but also increases the motivation of life. Fitness physical and mental impairment contribute to social development and social integration (Eichsteadt and Lava, 1995; Demir et al, 2010). The purpose of swimming people to participate in physical activities, enjoyment of life, individual freedom is to gain the benefits of modern society to adapt to engage in this regard. Cratty, applied an approach for children with disabilities in physical education activities to minimize the emotional and muscular tensions caused by improvement in IQ levels; Ninot et al suggested people with disabilities in the programs of physical education and sports activities to give the control of the activities carrying out at the same time that the body has been also recommended to educators in this regard. Nolan et al who regularly go to physical education classes positive developments see the behavior of students with disabilities. Physical Education and its positive effects on individuals with normal development of the sport, and even more people with disabilities on all possible can observe the same issues by themselves (Suveren Ilhan, 2010). However, today many disabled individuals have got inequality of opportunity due to a few reasons such as poor performance expectancy and social discrimination have had trouble participating in physical activities (Murphy, 2008). Whereas the participation of disabled sports or any physical activity explores different identities and roles provided in this regard (Groff, 2009). Rehabilitation of disabled sports, confidence, balance, muscle control, and coordination of movements used to gain freedom (Ergun, Axeman, 2006. Sunk et al, 2011). Physical activity, periods of growth and development of children is of paramount importance. Health, growth and development of the engine are closely related to physical activity. As well as the body composition and other factors motivate children's physical activity levels. According to the findings of many studies, children with mental retardation, due to the inadequacies of social development, have difficulty in participating in physical activity or the participation is weak, and in this situation negatively affects the overall level of physical fitness of children (Açıkada et al, 1990; Akt et al, 2007). Educable mentally impaired physical, physiological problems can be apeared and there are many studies for the

development of motor characteristics. Regular exercise or sporting activities and the effect of mental disability is stated that some of the behavioral changes and motor development can be happened in this case (Ilhan et al, 2008). The main aim of this study was to move the information to the world championships in Turkey participated in the Mentally Handicapped Skiing National Team camp before and after the study of the physical changes and changes in the dynamic and static balance.

Materials and Methods

Mental Retardation of National Team consists of 14 athletes participated in the study. This includes 5 female and 9 male athlete athletes. Athletes are ranging from14 to 22 years old. Turkish National Team is consisted of six athletes who reside in different provinces. Research, with permission from the National Team managers and coaches planned voluntary participation by explaining the purpose of the study provided to athletes. 10-15 minute warm-up prior to testing (stretching) exercises was built. Camp activities begin applying the pre-tests that were recorded. 15-day camp for athletes with disabilities during the period of strength, endurance, mobility, balance work with a personal trainer and a mixed intensive training program was performed and the values recorded in the last tests performed. Euro fit athletes before the camp and the camp after the study tests (dynamic and static balance, discs, touch, flexibility, standing long jump, hand grip, the shuttle 30 seconds, Twisted Grip Handle, 10x5 m shuttle run test) were compared by examining changes in the physical and physical condition.

Results

According to the data in Table 1, the athletes participating in the survey were 64.3% men, 42.8% were 17-20 years old, 42.7% and 42.7% were in the range of 145 to 163 cm in length and 50 percent were found to be -59 kg.

Table 1: The study involved sex, age, height and weight situations

Status	Category	F	%
Sex	Male	9	64.3
	Female	5	35.7
Age	14-16	5	35.6
	17-20	6	42.8
	21-22	3	21.6
Height	145-163cm	6	42.7
	166-175cm	5	35.7
	179-185cm	3	21.6
Weight	50-59kg	6	42.7
	61-65kg	4	28.6
	67-85kg	4	28.6

Table 2: Minimal-Maximum Test Values of the subjects participating in the study

Tests	N	Minimum	Maximum	Mean	Std deviation
Bounce pre test	14	22.00	51.00	37.5714	8.74172
Bounce post test	14	28.00	56.00	42.6429	8.46356
Flexibility pre test	14	2.70	18.60	11.7571	4.48720
Flexibility post test	14	4.50	19.00	13.1357	4.20272
Left paw pre test	14	20.00	55.00	33.9286	8.75710
Left paw post test	14	21.00	56.00	34.0714	8.66881
Right claw pre test	14	22.00	58.00	36.0000	9.57561
Right claw post test	14	26.00	61.00	39.2143	9.10772
Leg strength pre test	14	35.00	162.00	76.3571	33.74476
Leg strength post test	14	45.00	175.00	87.8571	35.42458
Agility pre test	14	19.50	35.00	23.4250	3.76473
Agility post test	14	10.10	34.95	22.4250	5.12831
Standing jump pre test	14	135.00	210.00	1.7036E2	24.45280
Standing jump post test	14	155.00	220.00	1.8393E2	21.22939
Shuttle pre test	14	22.00	42.00	31.0000	5.54700
Shuttle post test	14	27.00	42.00	33.5000	4.45058
Twisted handle grip pre test	14	6.55	16.55	11.3179	3.30731
Twisted handle grip post test	14	7.50	17.55	12.8711	3.15750

Table 2 shows the pre-test and post-test athletes participated in the survey, with minimum and maximum values given here. Among these values and high bar bent arm holding the left hand grip strength tests, no significant differences found ($p > 0.05$ and $p > 0.001$).

Table 3: Minimal-Maximum Test Values of the subjects participating in the study

Tests	Minimum	Maximum	Z	Significance
Bounce test	25.00	53.50	-3.310	0.001
Flexibility test	3.6	18.80	-3.297	0.001
Right paw test	20.50	55.50	-3.336	0.001
Left paw test	25	59.50	-441	0.659
Leg strength test	40	168	-3.308	0.001
Agility test	14.80	34.98	-2.860	0.004
Standing jump test	145	215	-3.321	0.001
30s shuttle test	24.50	42.00	-3.205	0.001
Twisted grip handle test	7.00	16.00	-3.233	0.001

Table 4: Static Stability and Dynamic Stability of the subjects participating in the study

Adaptation tests			Mean pre test	Mean post test	Z	Sig
Static equilibrium	Both legs	Right	506	460	-3.297	0.001
		Left	486	375	-3.297	0.001
		Front	528	412	-3.296	0.001
		Back	474	324	-3.297	0.001
		Score	983	754	-3.296	0.001
Dynamic equilibrium	Both legs	Right	1048	894	-3.299	0.001
		Left	1140	925	-3.297	0.001
		Front	1130	970	-3.296	0.001
		Back	1053	845	-3.297	0.001
		Score	1707	1550	-3.297	0.001

Conclusion and Discussion

According to the survey, Turkey Mentally Disabled Skiing National Team athletes were successful and meaningful during the period of the camp. EUROFIT tests were applied to the results obtained by the athletes jump strength, flexibility, right-hand grip, leg strength, quickness, and standing long jump tests positive development observed significant improvement in only the left hand grip strength test.

By looking at the results, after the development of the physical performance of athletes and before the camp, the camp developed, especially in the sport of skiing as an important factor in the development of static equilibrium and dynamic equilibrium values that provide a significant difference in this regard. ($p > 0.01$) and the findings were obtained here. Mental disability studies emphasized low levels of physical activity in individuals with mental retardation. This situation is even lower when applied to any exercise program. Fernhall (1993), as a result of his research, showed lower extremity muscle strength of adults with mental disabilities up to 71% of non-disabled individuals emphasized. UN and Ark et al. (2001), applied studies of mental disability to a 12-week exercise program: 3 days a week in the knee muscles of people with disabilities who were able to identify significant development. Also Stopka et al. (1994) and their studies on the development of resistance to the results reached in the development of muscle strength with disabilities in this case. Researcher Rimmey et al. (1991), indicated the lower extremities of individuals with mental retardation force development programs have reached a positive development results. Exercise programs for individuals with mental disabilities are as a result of the adoption of the planned developments encountered certainly emphasized. To this end, muscle strength, flexibility, endurance, coordination etc. have been achieved successfully. Working with the program results in a positive purpose also showed the best results in the study. The training program, athletes with intellectual disabilities in our study showed a significant improvement in performance in a positive way.

References:

1. Acıkada, C. Ergen, E. Science and Sport. Office-Tek, Offset Matbacılık, Ankara.1990.akt. Sen, C. Slim, G. Status of Physical Education Courses in Applied Analysis of Private Education Institutions in Turkey, 5 Teachers of Physical Education and Sport of the National Symposium on 2-3 November 2007.Adana.
2. Cratty, M. Bryant, J. 2004. Adapten Physical Education: Self-Control and Attention. Focus on Exceptional Children, v 37, n3 Nov. pl-8 (EJ 758036). Cited in. Şen, C. İnce, G. 2007. Examination of the Situation of Physical

Education Courses Applied in Special Education Institutions of Turkey, 5th Symposium of the National Physical Education and Sports Teachers, 2-3November Adana.
3. Ilhan, EL, Eynur, BR, Eroglu, H., "A Special Physical Education Program, Mental Retardation Effect of children on the Parameters of Some Physical Fitness", 10 International Sport Sciences Congress, October, 23-25, 2008, Istanbul, Turkey.
4. Demir, H. Barsbuga, Y. Kucukbezirci, E. (2011). Investigation of factors predicting the tendency to start to sports athletes with disabilities, Selcuk University, School of Physical Education and Sport Science Journal, Vol, 13 Additional Issue. Konya, Turkey.
5. Fernhall, B. (1993). Physical Fitness and Exercise Training of individual with mental retardation. Med. Sci Sports Exercise, 25(4):442-450.
6. Groff, D.G. Lundberg, N.R. Zabriskie, R. B. (2009). Influence of Adapted Sport on Quality of Life: Perceptions of Atletes With Cerepral Palsy. Disability and Rehabilitation, 318-326.
7. Lavay, B. Reid, G. Cressler-Chaviz, M. (1990). Measuring the cardiovascular endurance of person with mental retardation. Exercies Sports Sci Rev. 18:263-290.
8. Maggill, R. A. (1980). Motor Learning, 66-124, Wm. C. Brown Comp. Pub., USA. Akt. Civan. A. Özdemir, M. Sarvan, F. Civan, Ö. (2011). Trait Anxiety Levels of Hearing Impaired athletes and sedentary, Selcuk University, School of Physical Education and Sport Magazine, p.224-226, Konya.
9. Murphy, N.A. Carbone, P.S. (2008). Promoting the participation of Children With Disabilities in Sports, Recreation and Physical Activities. Pediatrics, 1057-1061.
10. Ninot, G. Bilard, J. Delignieres, D. 2005.Effects of Integrated or Segregated Sport Participation on the Physical Self for Adolescents With Intellectual Disabilities. Journal of Intellectual Disability Research, v 49 n 9, Sep. p;682-689 (EJ718423).cited in. Şen, C. İnce, G.2007. Examination of the Situation of Physical Education Courses Applied in Special Education Institutions of Turkey, 5th Symposium of the National Physical Education and Sports Teachers, 2-3, November Adana.
11. Rimmer, J.H., Kelly, L. E. (1991) Effect of Resistance Training program on adult with mental retardation. APAQ, 8:146-153.
12. Sahin, I.., Iron, R., Knight, M. Salman, MN, Süel, E., Aktepe, K., Korkmaz, C., "10 Weekly Training Programs Trainable Mentally Retarded Female Adolescents Effect of Some Engine Specifications", IV. International Mediterranean Sports Science Congress, 9-11 November 2007, Antalya, Turkey.
13. Stopka, C. Limper, L. Sider, L. Graves, J. Goodman, A. (1994). The Effect of a supervised resistance training programon adolescents and young adults with mental retardation. Journal of Strength and Conditioning Research,3: 8-11.
14. Un, N. Erbahçeci, F. Ergun, N. (2001). Effect of physical fitness training on physical fitness parameters in mentally retarded children. Fizyoterapi Rehabilitasyon.16:16-21.

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