

Conditional abilities in young Special Olympics athletes who practice unified football

MONTESANO, P¹; TAFURI, D¹; ESPOSITO, A²; GIGANTE, F²; SALZANO, E²; VISCIDO, G²; MAZZEO, F¹

¹University of Naples "Parthenope", Department of Motor Sciences and Wellness, Naples, ITALY

²Special Olympics Coach, ITALY

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Abstract:

The study of the Unici project and Pari Special Olympics Italia, has been done by the teaching post of Disability and Scienze Motorie and Benessere Department, at the *Parthenope University of Naples* and it has been developed and continued at the technical college *S. Caterina da Siena*, in Salerno over a sample of 24 athletes (15-18 years old) of among whom 12 young people with intellectual disability and another group who are able-bodied partners. Method . The information has been gathered through tests ("Sargent test" [high explosive strength], "Cooper test" [resistance], "Long Jump from a standing start" [explosive strength forward] and the "30 metres sprint" [speed]), over a period of 7 months, and the manual and computerized collection of data together with initial, intermediate and final screenings. After initial screening the athletes and partners were divided in group A and group B. Result and Conclusion. Results showed an improved performance by all participants, but particularly of those, athletes and partners, placed in Group B who has conducted 12 supplementary training meetings. The intermediate survey, group B, has underlined a general percentage increase quantifiable around 4/6 % with peaks of 7% while the final results have denoted the percentage improvement of almost 6.5%.

Key words: Disability, motor capacity, special Olympics, football.

Introduction

The Special Olympics, an international organization founded by Eunice Kennedy Shriver, carries on the purpose of socially integrating people affected by intellectual and mental disability (Pfanner, Marcheschi 2005).

The activity program envisages competition among equally skilled people, which is the best way to test your own athletic abilities and to evaluate your own progress, in order to promote physical, mental, social and spiritual growth without any racial, national, geographical, age and religious discrimination. (D'Intino, Oronzo, Di Marco, 2005).

The Special Olympics, which belongs to the IPC section-International Paralympic Committee, offers millions of disabled youth and adults the possibility of doing some sports and avails itself of the contribution of family members who are directly involved and of those who, every year, help organize thousands of events all over the world.

Competitions are held with the affiliation to Sport Accord, an organization which was established in 2009 by the union of the historic organizational initials, such as GAISF, ASOIF, AIOWF and ARISF which, after instituting the sports activity for mentally disabled people, have also overseen its development.

Internationally speaking, the most important event is called *The Special Olympic Games*, which provides for the implementation of several competitions in diversified disciplines both summer and winter (D'Intino, Oronzo, Di Marco, 2005).

The Games take place every four years with the summer and winter events staggered in two years. The last summer games were held in Greece in 2011, whereas the winter games were held in Korea in 2013.

Method

Addressee and Objectives

A sample of 12 athletes between the ages of 15 and 18 and another group of 12 who are able-bodied partners of the same age. Disabled and able-bodied athletes were suited to the agonistic medical-sportive examination and they play football. The partners were members of the same class, attending the third year.

The objectives are the promotion of the social integration through sports and by implementing specific didactic and educational methodologies; involving disabled people in sports activities; increasing resistant abilities, in order to improve performance during the competition.

The research, done by an observatory method, with the administration of tests (Marella, Risaliti, 2007) and the manual and computerized survey of data, was realized over a sample of 24 athletes, among whom 18 are boys and 6 are girls, assisted by 24 able-bodied athletes, of whom 6 males and 6 females.

The course was structured over a time frame of 7 months, from October to April, with initial (Tables 1,2), intermediate (Table 3 and Graphics 1,2) and final screenings (Tables 4,5 and Graphics 3,4,5,6). Participants were distributed the "Sargent test" (high explosive strength), the "Cooper test" (resistance), "Long Jump from a standing start" (explosive strength forward) and the "30 metres sprint" (speed).

The initial screening of the institute allowed the subdivision of the participants into 2 groups, group A and B, based on 2 fundamental judge criterions. The first is referred to the most important strength, resistance and speed data, the second is the relationship-side, signalled by the teachers as a type of predisposition to collaboration and to the ability of stimulating disabled athletes to overcome the difficulties met during the course.

The two groups, during the agonistic year, followed the normal method of training (Barba, Tafuri, 2007) prepared by the technical staff, consisting of weekly-training sessions, during extra-curricular time, characterized by athletic, technical and tactic exercises, as well as by the simulation of competition during the training.

Only group B was given 12 supplementary sessions in total, with a media of twice monthly meeting. The motor proposals were shown alternating the global methodology to the analytical, by using also the deductive approach for normative and motor development.

Research Periods

1st period- 1 month: initial survey with distribution of tests and familiarization with the project materials.

2nd period- 5 months: one training hour per week for both the groups, with the addition of twice monthly supplementary meetings for group B.

3rd period- 1 month: final survey with distribution of tests and participation of the 12 athletes in the group B in the national competitions.

The organization of the workout was subjected to the participants' effective abilities, both during the workout itself, which is merely technical, and, overall, in the relationship part, aiming for the improvement of technical and motor skills and for the acquisition of the basics of individual and team tactics. Particular attention to the space-concept was addressed, preparing numerous exercises aimed for the use of the ball, inside a well-defined area.

An inductive method for the acquisition of the game-rules was used, starting from the personal experienced and the application in the competitive context.

Instrument Standard Training Sitting (1 hour)

Mixed type meeting:

10' (of) general activity with slow running and games with a ball passed from hand to hand.

5' (of) stretching

15' (of) running reps with progressive increase in the speed and exercises in a closed course with a ball.

2' (of) jumps (leaps).

20' (of) technical exercises with simulations of competitions.

8' (of) wind down period exercises and stretching.

7' (of) general activity with slow running and games done with a ball passed from hand to hand.

3' (of) stretching.

10' (of) reps with progressive increase in the speed and exercises in a closed course with a ball.

20' (of) technical exercises with simulations of competitions.

5' (of) wind down exercises and stretching.

Materials and Equipment

Football field for 5 (players) (28m x 15m)

8 football balls for 5 n.4

Cones

Signal flags

Football strips composed of T-shirt, shorts and knee high socks

Chronometer

Survey grid

Results

Initial recognition has enabled participants to divide into two groups. The group A consisted of athletes partners with the best performance while group B consisted of the subjects with the lowest parameters. The intermediate survey, conducted during the second phase of the research, has underlined a general percentage

increase quantifiable around 4/6 % with peaks of 7%. The final results, obtained at the end of the activity and after the participation to the national phase of the project, have denoted the percentage improvement of almost 6.5%, for group B, making efficient the training supplementary methodologies which were proposed.

Also the athletes and the partners of group A, motivated to workout with more concentration, have shown an improvement in performance of some percentage points.

INITIAL SURVEY

Table 1- Conditional abilities test for athletes

Number	Athlete	SargentTest (m)	Standing Long Jump(m)	Cooper Test (m)	SpeedTest (30m)sec
1	Subject a1	0.55	1.55	1800	5.30
2	Subject a2	0.80	0.77	900	8.50
3	Subject a3	0.10	1.00	1100	8.10
4	Subject a4	0.40	2.10	1800	4.45
5	Subject a5	0.20	1.50	1188	5.20
6	Subject a6	0.27	2.00	1800	4.50
7	Subject a7	0.32	1.70	1900	4.50
8	Subject a8	0.17	1.33	1600	6.20
9	Subject a9	0.10	1.00	1080	8.00
10	Subject a10	0.90	0.76	1134	8.60
11	Subject a11	0.32	1.70	1900	4.50
12	Subject a12	0.37	2.06	1900	4.46

Table 2- Conditional abilities test for Partners

Number	Partner	Sargent Test (m)	Standing Long Jump (m)	Cooper Test (m)	Speed Test (30m)sec
1	Subject p1	0.40	2.10	2400	4.86
2	Subject p2	0.34	2.00	2400	5.10
3	Subject p3	0.30	2.10	1900	4.80
4	Subject p4	0.32	1.86	1800	4.98
5	Subject p5	0.24	1.25	2000	5.10
6	Subject p6	0.25	1.53	2100	4.86
7	Subject p7	0.34	1.70	2400	5.10
8	Subject p8	0.30	2.10	2500	4.80
9	Subject p9	0.32	2.00	1800	4.98
10	Subject p10	0.40	1.50	2200	5.10
11	Subject p11	0.32	1.86	1800	4.98
12	Subject p12	0.35	1.87	2400	4.90

The results of the initial survey, together with the performance and relationship criterions, have determined the constitution of the A control group and of group B which ran a supplementary course:

Group B

Group A

Number	Athlete	Partner	Number	Athlete	Partner
1	Subject a1	Subject p1	1	Subject a7	Subject p7
2	Subject a2	Subject p2	2	Subject a8	Subject p8
3	Subject a3	Subject p3	3	Subject a9	Subject p9
4	Subject a4	Subject p4	4	Subject a10	Subject p10
5	Subject a5	Subject p5	5	Subject a11	Subject p11
6	Subject a6	Subject p6	6	Subject a12	Subject p12

INTERMEDIATE SURVEY

Table 3- Conditional abilities test for athletes/partners group B

Number	Athlete	Partner	SargentTest (m)	Standing Long Jump(m)	Cooper Test (m)	SpeedTest (30m) sec
1	Subject a1		0.26	1.60	1880	5.25
2	Subject a2		0.90	0.77	1000	8.30
3	Subject a3		0.12	0.90	1050	8.00
4	Subject a4		0.40	2.15	1900	4.35
5	Subject a5		0.22	1.40	1200	5.15
6	Subject a6		0.27	2.05	1850	4.45
7		Subject p1	0.42	2.12	2500	4.88
8		Subject p2	0.34	2.08	2550	5.05
9		Subject p3	0.32	2.15	1900	4.80
10		Subject p4	0.32	1.90	2000	4.95
11		Subject p5	0.25	1.80	2000	5.09
12		Subject p6	0.26	2.12	2200	4.84

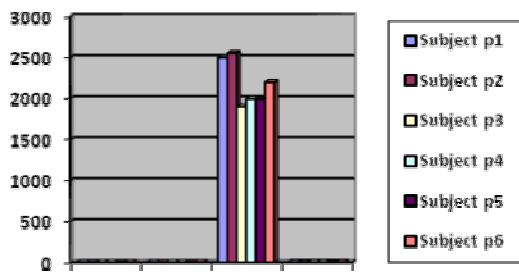


Fig. 1 – Group B Performance intermediate testing partners

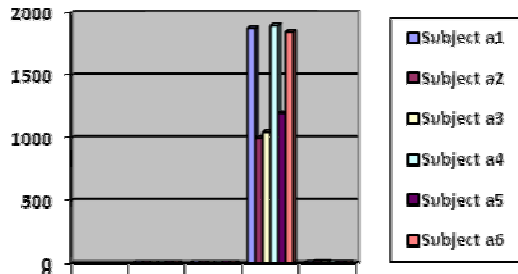


Fig. 2 – Group B Performance intermediate testing athletes

FINAL SURVEY

Table 4- Conditional Abilities Test Group A

Number	Athlete	Partner	SargentTest (m)	Standing Long Jump(m)	Cooper Test (m)	SpeedTest (30m) sec
1	Subject a7		0.34	1.87	2000	4.47
2	Subject a8		0.19	1.39	1800	6.10
3	Subject a9		0.10	1.10	1100	8.00
4	Subject a10		0.90	0.80	1150	8.60
5	Subject a11		0.32	1.75	2000	4.50
6	Subject a12		0.37	0.21	2000	4.46
7		Subject p7	0.35	0.20	2500	5.09
8		Subject p8	0.36	0.21	2100	4.78
9		Subject p9	0.37	1.86	2000	4.95
10		Subject p10	0.39	1.82	2200	5.07
11		Subject p11	0.35	1.86	1900	4.95
12		Subject p12	0.38	2.18	2500	4.89

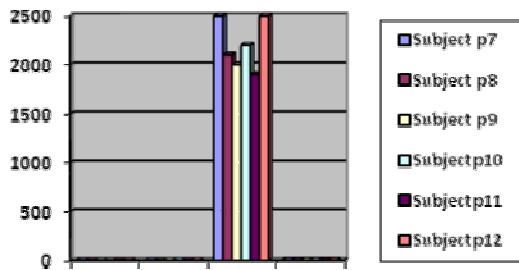


Fig. 3 – Group A Performance final testing partners

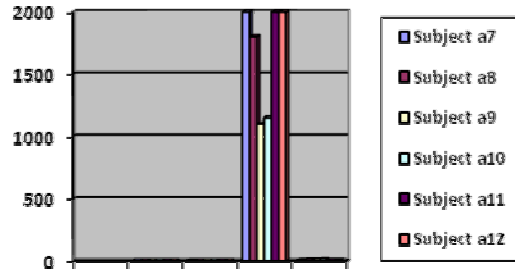


Fig. 4 – Group A Performance final testing athletes

Table 5- Conditional Abilities Test Group B

Number	Athlete	Partner	SargentTest (m)	Standing Long Jump(m)	Cooper Test (m)	SpeedTest (30m) sec
1	Subject a1		0.28	1.67	1990	5.25
2	Subject a2		0.10	0.80	1050	8.44
3	Subject a3		0.15	1.09	1050	8.00
4	Subject a4		0.43	2.15	2000	4.30
5	Subject a5		0.24	1.56	1200	5.00
6	Subject a6		0.30	2.05	1850	4.45
7		Subject p1	0.44	2.16	2700	4.84
8		Subject p2	0.36	2.09	2650	5.03
9		Subject p3	0.36	2.21	2000	4.75
10		Subject p4	0.36	1.95	2100	4.93
11		Subject p5	0.25	1.80	2000	5.07
12		Subject p6	0.25	2.10	2300	4.85

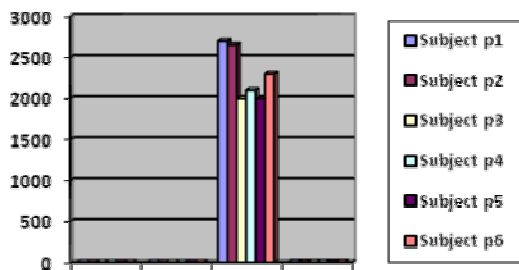


Fig. 5 – Group B Performance final testing partners

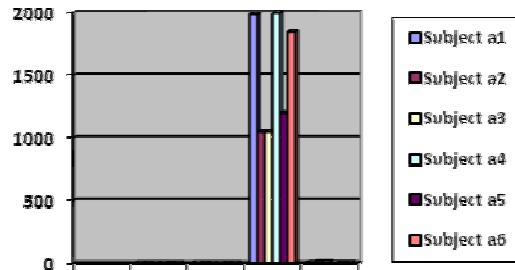


Fig. 6 – Group B Performance final testing athletes

Discussion

The participation of the guys to the phases of the survey for the unified football project has been preceded by the creation of the football team by the coaches, who have involved everyone who had even a minimal coordination in kicking the ball. (Vatta, 2006).

The beginning of the activities and of the starting tests has been preceded by the showing of the certification of the sports-medical suitability, given by the doctors specialized in sports medicine. The coaches had distributed the initial tests to the whole group of 24 pupils (12 athletes and 12 partners) and then they have created two groups: A and B.

In the group A, they have been included pupils with good parameters between 15-18 years.

In the group B they have been inserted athletes with lower indexes, who needed to be improved necessarily.

The two groups have realized two training meetings together and the only group B has done 12 supplementary meetings.

The intermediate surveys for the group B only and the final ones have highlighted an improvement of the performances, both in training competitions and in the official ones.

The partners, all normally-given, have supported the activity of the disabled companions, offering them all the energies and relational and collaborating qualities they had. The presence of the team-mates (normally-given), has reassured disabled people who has disputed competitions in a quiet way and without any particular anxiety.

Moreover The comparison of results of surveys carried out was carried out with similar research conducted with the Six-Minute Walk Test (Nasuti, Stuart-Hill, Temple, 2013) and on the influence of the force against the muscular resistance training on performance outcomes (Sedano et. al., 2013). Recent studies have highlighted how physical activity for individuals with intellectual disabilities affects positively on motivation (Hutzler, Oz, Barak, 2013) and as there is attention for the issues related to obesity (Salaun, Reynes, Berthouze-Aranda, 2013).

Conclusions

Disabled athletes and partners who were busy in the 'Unici e Pari' project have shown great enthusiasm and participation during the development of the sports activities in the year 2011/2012.

The study has been considered really important because it put on evidence that those prearranged objectives have been reached, thanks to the survey of the conditional abilities. The sport which had been selected was the unified football, which gave the possibility to both disabled people and normally-given partners to play together. This allowed the development of the socializing and the collaborating objects too, which are fundamental stages in the integrating process of disabled individuals (Angermeyer, Kilian, 1997).

In the tables, both athletes (A) and partners (B) have been indicated as 'subjects' in order to respect the conditions for the privacy.

The project has allowed 12 pupils (8 disabled and 4 partners) to take part to the final competition happened in May 2012 in Italy. The possibility of competing with other national realities has driven guys to do their best and continue to take part to the Special Olympics initiatives, participating to competitions of other sports disciplines.

Perspectives

The survey done can be placed in a wider draw, in order to offer to disabled subjects the possibility of doing sports and daily activities, which are being more and more demanding, both from a quantitative and qualitative point of view.

The working model in Team Special Olympics can succeed in schools facilitating a strong awareness and training for volunteering with non-disabled students, partners, and students with disabilities. This will help improve the quality of services aimed at integrating, optimizing costs and especially using all the potential human and professional resources available in public institutions, and schools in particular, stating the values of sports as a tool relational, and social rehabilitation. The ability to work in a teamable bodied and disabled will help to develop motor skills and social skills in a safe environment which the school, given that more than four million are involved in Special Olympics athletes and the sports are practiced in 170 countries with tournaments international summer and winter.

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