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SPECIAL OLYMPICS UNIFIED SPORTS AS THE POSSIBLE MODEL IN SPECIAL EDUCATION (EXAMPLE OF ATHLETES – PARTNERS COOPERATION IN UNIFIED FOOTBALL)

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SUMMARY

The article presents the Special Olympics (SO) Unified Sports model as a complex means for: a) skills improvement of athletes with intellectual disability (ID), b) cooperation between athletes and partners, inclusion in community, c) influence on public awareness. Unified sports development, principles, benefits are described in detail. Attention is paid to system UNIFY and methods of assessment. The SO theory of “meaningful involvement” proclaims advantage of balanced cooperation between athletes with ID and partners without disabilities in the team during the match. Assessment of the cooperation was provided through observation based on Critical Incident Technique with frequency-counting selected items (pass to athlete with a disability, pass to partner, assistance, shoot, goal, yellow-red card). Two selected unified football teams of boys 7-side SO Unified football were assessed: winning unified team (WUT), winner of all matches, losing unified team (LUT), loser of all matches. Special Olympics official Individual Football Skill Tests (IST) which included dribbling, passing, shooting, were used for relevance between skills level and attraction in match cooperation (index IST). Results of IST were not in direct relation with cooperation items. Athletes with disabilities preferred asking partners for cooperation. The cooperation is influenced by winning-losing match development. Despite of the numeric data and absence of assessment of emotional and social items at each tournament the positive team context, satisfied atmosphere was visible. The pleasant mood in the team cooperation seemed to be important marker of benefit of unified sports model.

Key words: intellectual disability, SO Individual Skills Test, Critical Incident Technique assessment, index of activity

INTRODUCTION

Special Olympics Unified Sports System and Policy

Special Olympics Sports Program is considered as the valuable approach to the quality of life of individuals with intellectual disability from the aspect of health and socialization (www.specialolympics.org/research). The Unified Sports System is the unique model which is not included in any handicapped sports federations (Paralympics, Deaflympics etc.). The idea and concept started as a reaction of Special Olympics US on social integration movement in that period (Special Olympics International [SOI], 2003, p.16). In spite of the positive impact of SO on persons with intellectual disability (Block, 1992; Castagno, 2001; Corbin, 2005; Dykens & Cohen, 1996; Dykens, Valkova, & Mactavish, 1999; Rosegard, Pegg, & Compton, 2001; Siperstein & Hardman, 2001),

critics remained during the period of discussion and improvement of Unified Sports program even up to late 90ies (Goodwin, Fitzpatrick, Thurmeier, & Hall, 2006, p.164). This discussion and improvement was oriented on the categorical approach, segregation of persons with intellectual disability, less opportunities for communal activities, lack of opportunities for participation of persons with mild level of disability in competition, labelling SO as “only a fun” for persons with severe disability (Hourcade, 1989; Orelove, Wehman, & Wood, 1982; Porretta, Gillespie, & Jansma, 1996; Wilhite & Kleiber, 1992; Wolfensberger, 1995). On the other aspect this discussion supported research results that have improved the Unified Sports process.

Unified Sports Program is based on proportion of number of athletes (with intellectual disability) and partners (without intellectual disability) for year-round training and competition. The basic root of definition includes the main Special Olympics philosophy and goals. The goals of Unified Sports are to improve sports skills and competition behaviour, social contacts with peers, families, and public, and to create opportunity for personal development and society involvement of all participants (Special Olympics International [SOI], 2004). Special Olympics Unified Sports handbook (Special Olympics International, Inc., July, 1989) proclaims the SO unified system is *based on results of pilot projects and accompanying research and evaluation which were conducted during the period from September 1987 through April 1989* (p. 34).

The idea and concept of an integrated softball program appeared in 1983. The next year (1984) Massachusetts Integrated softball program was developed (Special Olympics Unified Sports, Special Olympics, Inc., 2003). A worldwide implementation in team sports was realized by SOI in 1989 and a new name was adopted – *Unified Sports/ events* instead of *integrative sports*. The official unified sports competitions were included in Special Olympic World Summer Games (Minneapolis) in 1991. Participants were recruited from the USA teams: softball, football, volleyball, and bowling. Unified Sports were introduced to Europe in 1991 (France and Eurasia – model of Unified basketball). The research related to SO unified sports was oriented to basketball, bowling, soccer (football), softball, volleyball in the 1980's-1990's.

Due to the systematic development of Special Olympics knowledge about unified sports the explanation of this system was included into basic textbooks (Eichstaedt & Lavay, 1992) and later to Sherrill (1998). The extended study of the benefits of SO unified sports was realized by Siperstein and Hardman (2001) as the reaction to the nearly 30 years development of Unified sports. The purpose of this study was to provide information as to how effectively Unified Sports are implemented, impact and benefit of Unified Sports on US families, coaches, peers, partners, and athletes' life. Questioning of opinion of stakeholders was used, but there was no “field” observation or scaling or measurement. Results concluded Unified Sports had a positive impact on all participants (quality of life, self-confidence, sports skills, social skills and social atmosphere). Recommendations are composed into seven thesis, one of the most important stressed solving the problem of “partner dominance”. Despite the broad evaluation and sharing idea of Special Olympics (and Unified Sports) across the USA the number of participants seems to be limited (134 athletes, 145 coaches, 89 family members, 60 coaches).

Social aspects and maladaptive behaviour were examined by Rosegard, Pegg and Compton (2001), especially the effects of participating in a Unified Bowling program

on maladaptive behaviours among Special Olympic athletes. Sportsmen aged 11 to 68 years (with a mean of 32 years) participated in 12-week Unified Bowling program. The variables of maladaptive behaviour were checked with the Child Behaviour Checklist (CBCL). Athletes as well as parents were questioned, too. The results seemed to be positive but during the time effect was decreasing.

The first official unified sports competition with wide international participation was realized in 1995 at SO World Summer Games and went through specific development. Unified sports system was adopted for all sports in 1996. Summer sports rules valid for period 1996–1999 and Winter sports rules for period 1999–2001 presented an unified system for swimming, gymnastics, cross-country, etc. “Unified” cross country event 1 km or 10 km were official events on the program of the Winter SO World Games in Toronto 1997. The principle was based on a separate run of athlete and partner, the result was the counted summary of both achieved time-score. This principle was criticized by coaches (personal experience) as lacking in integration or cooperation. Next recommended revision defined Unified Sports for team, dyadic sports (tennis, table tennis, bocce, figure-scating, etc.)

Development of step by step inclusive policy through unified sports can be observed since 80’s of the last century. A systematic orientation to the model of unified sports can be considered since 2008. The long-term SOI strategy formulated the main objectives of the unified model in 3 key domains: a) athletes’ skills improvement with support of partners; b) inclusion in society through physical activities and sports; c) improvement of positive public awareness toward persons with intellectual disability. The inclusion approach has been implanted in both sport programmes and in health-oriented complimentary programmes. In this sense, numerous programs were established (Healthy Fitness, Expanding Health) of which the most intensive and pompous was the Healthy Community Programme supported by the Golisano Foundation (Válková, 2015; Válková & Krejčí, 2016).

In addition to the development of sports activities, education for the population with intellectual disabilities was emphasized together with the active population. SOI has formulated program UNIFY oriented on medialization and education models based on the unified sports roofed by basic slogan: *New Opportunities arising from Unified Schools and Youth Engagement* leading to Unified Generation (SOI, 2016). Some of sub-models were called: Inclusive Youth Leadership (involvement of experience athletes in training and competitions as leaders), Unified athlete and unified partner (accent on education), Unified volunteer (recruitment and education), Unified School and Unified Champions School (inclusive school policy according unified sports recommendation and competitive criteria), Unified Clubs (inclusive sports clubs policy – accent on inclusive or parallel competition). The SOI reported the estimated number of registered participants in UNIFY (Unified Sports Programs) in 2016 was 1, 400.000. New sports were recommended such as: beach volleyball, basketball 3x3, tandem cycling, dance). These presented models are largely developed in the US environment mainly and are transformed into rules and recommendations for inclusive policy in all registered national SO programmes. Some models are also financially supported by SOI (Golisano Foundation, Samuel Family Foundation, Lions Clubs International, etc.).

Central European countries SO Unified Sports development

Countries from Central Europe have joined the SOI after political and economy changes in beginning of 1990's with a great enthusiasm. The reasons can be very simply and easily explained on the example of Czech Republic. Former sports games for pupils, students, persons with intellectual disability, were permitted with governmental moral and financial support and could be developed only with respect to "normative philosophy" and only on regional level. "Normative philosophy" means - only the best athletes could continue to a higher level of competition, there were minimal chances to participate for persons with more intensive disability. Then the Special Olympics philosophy was quickly accepted as the educator's reaction to the former system which was oriented only on the "better" athletes with mild intellectual disability. Educators and coaches wanted to do more for potential athletes of all abilities. Regional and district level means - competitions, sports meetings were organized only on local, district level, there were no chance to hold national games or participate in international network. The educator's reacted quickly because new opportunities became a challenge to improve sports of persons with intellectual disability on higher, systematic approach including international level. Quick changes were linked with the level of education of teacher/educators. At that time, under the school law (1976-1990), only Masters' level graduates either in physical education or in special education could be fully employed in special schools, special centres, residential centres as the teachers, educators. The Special Olympics Unified sports program became attractive due to traditional sports games orientation in the Central European countries and in the Czech environment context, too. Participation of Czech SO team in WSSOG (1995) in volleyball and football unified event seemed to be great challenge for future field unified sports development as well as organizing European unified volleyball tournament (2002) and European unified football tournament in the city Zlin (2002).

Despite the fact that within the framework of the Czech Special Olympics movement the principle of unified sports has been known and successfully implemented since 1995, despite the school legislation in the Czech Republic promotes inclusive education, the above-mentioned comprehensive models of UNIFY have not been expanded in schools in the Czech Republic. One reason is that inclusive schools (teachers, directors) with students with a mild or moderate level of intellectual disability are not aware of this possibility, and that out-of-class activities are based on unpaid volunteering. Thus, it happens that these "inclusions" in the so-called academic subjects is stressed, where their positive experiences of success are very, very questionable, do not have the opportunity to manifest themselves in another area, namely physical (Titzl, 2016, pp. 261-293). While establishing unified groups or clubs directly at the school is not so demanding. Ideal activities in unified format is just football of 5 or 7 players, bocce, table tennis, hiking and outdoor camps, Czech national sport "throw-over". These unified sports combined with healthy fitness orientation are very common in Czech Special Olympics National Programme (Válková, 2016; Válková & Krejčí, 2016).

Unified Football

Characteristics and the Development of Unified Football

Football (American title soccer is officially change – www.specialolympics.org-sports) is one of the most popular SO Unified Sports. The program is mainly played in a modified, small-team format of 5 or 7 players. Football development is supported by FIFA (Fédération Internationale des Football Associations) and UEFA (European Union of Football Association). (See www.UEFA.com. // Grassroots football, Disability football panel). The report Conclusion from the 1995 SO World Summer Games, Unified football competition (Dublin SO seminar 1997) highlighted the increase in Unified Football. Statistics of the unified football teams participated in the World Summer Special Olympic Games were as follows:

- in 1991 – USA (Minnesota) - there were 15 teams of Unified football, only from the USA;
- in 1995 – USA (Connecticut) - there were 21 teams from 15 countries of different continents (eg.: from Argentina, Germany, United Kingdom, Hungary, Czech Republic, USA-CT, USA-NH, etc.);
- in 2019 - United Arab Emirates (Abu Dhabi) – there were 14 female teams and 25 mixed male-female teams.

According to the SO philosophy related to the principle of relativity the SO team sports divisioning system is created on the Individual Skills Test assessment (Unified Sports, 26.5.2006). The results created the bases of highest commendation in regard to equality in ability. The balanced dominance between athletes-partners within the team are proclaimed. The appropriate activity and cooperation are considered as valuable attitudes, inclusion not only for unified sports participants but as the signal for public awareness. The founding of different activities, efficiency and dominance between athletes-partners according to different competitive situation has been provoking discussions related to future development of understanding and realization of the principle of “meaningful involvement” theory. It was the reason the report Conclusion from the 1995 SO World Summer Games, Unified football competition (Dublin SO seminar 1997) recommend change rules, mainly in the direction of partners activity restriction. A similar discussion occurred during European Unified basketball seminar in Switzerland in 1997. But the discussed domain was not relevant with one of the main principles of “meaningful involvement”. The principles were included, in the first time, in SO sports rules followed Unified Sports Handbook (1992).

Individual skills tests

The system of Individual Skills Test (IST) creates the obligatory part of unified sports training and competition, as *Members of a Special Olympics Unified Sports team should be able to demonstrate fundamental skills and strategies of the sport* (SOI, 2004, p.11). The system of IST was developed for assessment of every teammate and every team sport (SOI, 2003, p.22), including unified sports. Hypothetically the success of the team games can be linked with individual skills. A balanced team should be composed from teammates with similar achievements from the aspect of IST both for high level of

achievement, team cooperation among athletes/partners and for safety during match scrimmage (SOI, 2003, p.15). The most of those tests have been developed on the bases of AAHPER test. Exact SO IST system, administration and application are described on www.specialolympics.org. However, the exact data related to origin, procedures of standardization are missing. There is lack of research information dealing with a procedure of assessment of SO IST in general. Only validity and reliability of SO IST in volleyball was assessed. Downs and Wood (1996) examined 130 SO volleyball players. Volleyball skills assessment test consists of the following - forearm pass, spike, set, serve. Again, volleyball skills measurement is used as a predictor of individual team success in SO volleyball competition. Castagno (2001) was focused on the changes in unified basketball IST of teammates (with and without intellectual disability). All of them participated in 8 week after-school unified basketball program. The improvement of IST was found in all teammates. The findings of improvement of IST both athletes and partners due to unified system are important. Additional results supported the social benefit of unified sports.

The football IST reliability assessment was realized by Saňák (2002) for use in Czech language and environment purposes. The changes in SO football IST results and motor fitness variables after 8 week unified football training were investigated by Özer et al., (2005). The different picture of improvement in determined sub-tests was found in athletes-partners results. The general benefit in social behaviour of SO unified football training was presented.

The success of a team in match-games is linked with not only with individual skills but with executive functions "decision making" and "problem solving". These are basic problems in SO team cooperation both in general and in unified design. Information about IST achievements and relation to competitive achievements in match are still waiting for serious research.

Definition and principles of "meaningful involvement" theory in SO unified sports

"Special Olympics unified sports is a program that combines approximately equal numbers of Special Olympics athletes and athletes without intellectual disabilities (partners) on sports teams for training and competition" (www.specialolympics.org, Unified Sports, 26.5.2006). The principles of meaningful involvement in team sports were systematically developed since 1992 in three periods. The principles of meaningful involvement were first defined in Unified Sports Handbook (1992, p.25):

- 1) *all athletes shall compete without causing undue risk of injury to oneself or other participants;*
- 2) *all athletes shall be able to participate according to the rules and conditions of competition for that particular sport;*
- 3) *all athletes shall have the ability and opportunity to contribute to the performance of the team, without significant accommodation by any person on their team.*

The second period was touched with discussion of results reports and perception of unified tournaments. The most important basic information was presented in Conclusion from the 1995 SO World Summer Games, Unified football competition (Dublin SO seminar

1997). Exact data dealing with activity and dominance athletes/partners showed that athletes scored goals on the level of 48% and assisted to goals in 38%. Partners scored in 55% cases, but in 83% of winning goals. The similar discussion was running during European Unified basketball seminar in Switzerland in 1997. The conclusion recommended changing rules, mainly in direction of partners activity restriction.

Eventually this recommendation was rejected as supporting negative labelling of athletes/partners and stigmatization of low-high abilities of teammates, and, more important, not relevant with one of the main principles of meaningful involvement. Recent effort of SO policy is to support through the Unified sports program the ideas of inclusion and higher ability of athletes who may have avoided the perceived stigma of SO such as easy motor activities for severely handicapped (Block, 1992). Next, the rules and internal material from European Unified sports workshops changed the terminology for better inclusive feeling and no labelling (*Appropriate terminology: sportsman -athlete -partner = players, teammates*). The check-list of available team or dyadic unified sports was published (SOI, 1997; SOI, 1999; SOI, 2002) and the principles of meaningful involvement were stressed in a divisioning system of competition (Dublin, 1997; Zlín, 2002; SO rules, 1999, 2003).

Recent explanation of principles of meaningful involvement is as follows: (Special Olympics Unified Sports, Special Olympics, Inc., 2003, www.specialolympics.org, p. 16):

- 1) *teammates athletes shall compete without causing undue risk of injury to themselves;*
- 2) *teammates participate according to the rules of the competition;*
- 3) *teammates have the ability and opportunity to contribute to the performance of the team;*
- 4) *teammates understand how to blend their skills with those of other athletes, resulting in improved performance by athletes with lesser ability.*

Through meaningful involvement it is essential to protect the integrity of Unified Sports, it is intended to govern the quality of interaction and competition within a team. It means every teammate will have a chance to play adequate role, have opportunity to contribute to the team achievement, have chance to play important and valued role in the team. Athletes and partners compete together as a team without advantages of athletes or restrictions of partners. Activity and cooperation are shared by all teammates related to their role. Players with and without disabilities compose the team. Team atmosphere is supported by coaches' and officials' approach and behaviour (no labelling in language, on bibs). Meaningful involvement is not achieved by teammates (usually partners) who have superior sports skills, control most aspects of the competition, or concentrate the activity of the team on themselves. The recommendation related to SO Unified rules can be considered as the principle of "meaningful involvement between athletes with and without disabilities" theory which means athletes and partners compete together as a team without advantages of athletes or restrictions of partners. Teammates became the friends for out-training and out-competition time, as well.

The issues presented above were the reason that since 2002 a team of university students – Czech SO volunteers has been engaged in the domain of unified football in the context of health-oriented fitness, individual skills and cooperation between athletes and partners within their bachelor and master theses. The fulfilment of the

principle of meaningful involvement can be a marker of suitability and benefit of inclusive approach in SO. From the second-hand unified sports can be available model for complex rehabilitation.

Research in athletes – partners involvement in unified football

Design of unified football pilot study 2002

The pilot research study was oriented on three issues:

- a) assessment of exact data of Individual Skills Testing (IST) in Czech environment as the background for next study;
- b) the verification of the observation system for the evaluation of cooperation between athlete – partner;
- c) the verification of the index of participants activity and cooperation in unified football competition.

a) The process of *standardization of the IST* for Czech SO population was realized for both levels of testing: low ability individual level and high ability team level (Special Olympics Unified Sports, Special Olympics, Inc., 2003 www.specialolympics.org). Both levels consisted of skills: dribbling, passing, shooting, but on the different level of difficulty. Scoring of IST results showed time, points, etc. related to norms of the manual. The higher amount of points means higher level of skills. Determined categories, content of the tests, administration were described in SO Unified Football rules (SOI, 2003).

The complete list of all six tests and assessment procedures were included in Czech manual (Saňák, 2002). The text of IST went through a process of translation–retranslation. Test-retest reliability assessment was realized in 27 athletes with moderate mental disability and 23 partners. A two days break was adhered between pre and post measurement. All of teammates participated in unified football training and competition longer than two years. The tests for low level ability appeared too easy for partners, even for athletes able to participate in football match. All of them were able to achieve 93% of the score points in skills as so as in summary (dribbling – 51.1 points from 60 maximum, shooting – 69.6 points from 70 maximum, run and kick – 38.2 points from 40 maximum, partners – 170 points total which is maximum). High level of the team IST could better distinguish differences in football skills of all teammates. The stronger index of reliability was demonstrated in partners group (on the level of 0.01 statistical significance) than in athletes' group (on the level of 0.05 statistical significance). Football IST is complex (especially high level for team unified) and can be considered as relevant for assessment of potential participation in football match. The test of “passing” seems to be the strongest variable of the complete test battery and most important variable for potential participation in football match and team cooperation.

Table 1. *Recording System of Movement Act Observation*

MARK	MOVEMENT ACT
→+ (No)	Pass successful to No
→- (No)	Pass un-successful to No
+	Getting/fighting ball
-	Losing the ball
V+G	Successful shoot (goal achievement)
V+	Successful shoot on the gate (not goal)
V-	Un-successful shoot on the gate
f+	Player fouled
f-	Player was fouled
O	Yellow card

b) *Observation* (including our “activity” and “cooperation”) is applied in situation where there is necessary to discover behaviour of participants in real environment (Table 1.) *Behaviour is usually coded as to what occurs, when, how often, and how long* (Thomas, Nelson, & Silverman, 2005, p. 341). The selected category (items) for observation accepted former experience in pilot study. Direct observation was provided on the basis of Flanagan CIT (Critical Incident Techniques). Flanagan’s Critical Incident Technique appeared in the 1930’s (working – job psychology domain) (Flanagan, 1954). CIT principle was used frequently during the period of attempts to assess teaching–learning process (Flanders, 1970; Lewin, Lippit, & White, 1970; Piéron & Cheffers, 1973) called as FIAS or CAFIAS evaluation system (Flanders Interaction Analysis System) or CBAS (The Coaching Behavior Assessment System). CIT principle has been commonly used in all domains when process has to be evaluated, particularly in team sports competition analysis of process or statistics assessment of success of players or teams. CIT is based on the simple principle of bi-polar determination: category/incident exists – or category/incident does not exist. Every incident during the process regarding to the aim of process is precisely formulated and recognized by basic criterion: positive – negative, promoting – interfering, verbal – nonverbal (etc.). Incidents/categories can be evaluated on the level of time spending or basic level of statistics: scaling (making ranks, orders), counting (making summary, frequency, percentage, indices, etc.).

Related to football IST the incidents dribbling, pass, shooting, ball loosing and goal achievement were selected and recorded. The incident “pass” was recorded and analysed in relation: pass to athlete – to partner, pass received the ball from either athlete or partner. The incidents dribbling, pass, shooting with additional ball loosing and goal achievement were considered as the items of teammates activity. Recognizing of pass to athletes – to partner, receiving the ball from athletes–partner was considered as an item of teammate’s cooperation.

Before using the instrument in this study the categorical observation system was verified during various unified football tournaments in period 2003-2004, in 26 matches. Two pairs of SO volunteers, APA students, assed the identical team, totally 11 pairs (22 persons) were trained and included in proved process for two years. Persons in observing pairs were changed match per match. Analyses of records from each match were realized

during two days after the match. Items of activity (dribbling, pass, shooting, ball loosing and goal achievement) were processed on the level of descriptive statistics. Each observed and recorded item represented one point for total sum. Concordance between pairs evaluated by correlation coefficient on the level 0.01 varied from $r = .44$ in first evaluation to $r = .74$ in the end of verification process. All pairs were able to achieve coefficient $r = .71$. Average value of the coefficient was $r = .67$ (Holušová, 2004). Items of cooperation were not statistically processed for various additional aspects like tactics of the team, different time players spent on the pitch in minutes. The coding system including observers training, creating manual for unified clubs had been developed until 2016. Recent valid system of players behaviour in unified football is presented in the Table 1.

c) *Verification of the index of participants activity and cooperation* in unified football competition related to the theory of “meaningful involvement” was processed during several unified football tournament up to 2016, too, by trained observers. Index of activity (IXA) was worked out as a summary of positive points (pass, dribbling, shoot, goal) minus negative points of item lost the ball. Higher number of IXA points means higher activity, higher team role and player’s dominance. The intensity of cooperation between the athlete and the partner is calculated as the sum of actions taken (from) and sent (to).

The conclusions of the pilot study, outside the verification of methodology and process, revealed other issue:

- Differences in activity of athletes–partners were found in relation with the winning – lost matches as well as in relation with the performance level of the teams. In winning matches partners behave more cooperatively, in loosing matches partners behave more dominate in shooting as well as with yellow cards (Válková, 2003). The results of the pilot study were not in accordance with theoretical concept of principle of meaningful involvement and proclaimed request for realization in practice.
- ISTs are the basis for the teams divisioning into adequate groups. Do the results of the IST fitted the activity and cooperation in the match?

The findings of the pilot study provoked follow up research during next years.

Comprehensive research model of unified football

The main goal was to assess the principles of meaningful involvement theory of SO unified sports on the background of Unified Sports 7-sided football. Sub-goals are:

- to assess the athletes–partners’ results of IST and activity during the match,
- to assess activity of athletes–partners in winning - loosing matches,
- to assess the items of cooperation between athletes–partners in winning - loosing matches.

METHOD

Participants - teammates

Participants of the investigation were recruited from two unified 7-a-side teams participated in UEFA week tournament in May 2016 (Table 2). Winning unified team (WUT – team was winning in all 3 matches) compost from 9 players (5 athletes with F 70 diagnosis

of intellectual disability, 4 partners with secondary or college education). The average age of athletes was 31 years, average age of partners – 29 years. Athletes were interested in football about 8 years, in unified football 6 years. The partners played football at interval 14–34 years (average 22 years), unified football 6 years. The teammates played together 6 years, they participated in several international tournaments. The team is balanced in similar age, and football experience as well as unified football inclusion.

Loosing unified team (LUT – team lost all 3 matches) consisted from 10 players (7 athletes with F 70 diagnosis of intellectual disability, 3 partners with college education). The average age of athletes was 16 years, partners 34 years. All of them participated in unified football from 1 to 3 years. Partners participated in unified football the same time, but they had approximately 21years experience with general football (from 14 to 30 years). The team was not adequately balanced from age and football experience. The team began the unified sports career and suffered with lack of competition chances. By reason that the goalkeepers of both teams were athletes (related to SO unified rules recommendation) competition strategy of both teams was based on defensive position of partners and attack tasks of sportsmen.

Instruments of data collection

Football IST battery was applied for assessment of the potential level of achievement of all teammates. All of six tests were used (3 for low ability individual level, 3 for high ability team level), together with 6 examinations in the battery. Both levels of IST consisted from basic skills: dribbling, passing, shooting, but on the different level of difficulty (SOI, 2003). Used observation coding system for assessment of unified football match is described in the part “pilot study”.

Table 2. *Characteristics of Participants of Winning (WUT) and Loosing (LUT) Teams (WUT N = 9, LUT N = 10)*

Winning team (WUT)					Loosing team (LUT)				
No A-P	Age	ID	FEx	UEx	No A-P	Age	ID	FEx	UEx
A 1	28	F 70	8	6	A 11	15	F 70	0	1
A 2	39	F 70	8	6	A 12	16	F 70	0	3
A 3	39	F 70	8	6	A 13	15	F 70	0	2
A 4	20	F 70	6	6	A 14	18	F 70	0	1
A 5	30	F 70	8	6	A 15	16	F 70	0	2
					A 16	16	F 70	0	3
					A 17	16	F 70	0	1
M	31.2		7.6	6	M	17.6		0	1.9
P 7	44	MA	34	6	P 18	48	MA	30	3
P 8	31	col	25	3	P 19	20	col	14	1
P 9	20	col	14	6	P 20	35	col	20	3
P 10	21	col	14	6					
M	29		21.7	5.25	M	33.7		21.4	2.9

Note. No A = code number of athletes; No P = code number of partners; M = average; ID = code of level of intellectual disability; FEx = football experience in years; UEx = unified football experience in years; col = college or secondary school education; MA = master education.

Procedure

The project was realized during “UEFA week” (May, 2016). The research project was proved by Ethical Commission of Faculty of Sport Studies, Masaryk University in Brno including a written consent letter signed by partners and athletes or their guardians.

All teammates were assessed with IST (morning). Testing was professionally organized by 18 trained students (sport management). Standard conditions for measurements related to SO rules were saved. All teammates were directly questioned about basic life-span data (age, sports experience, period of unified football participation). Athletes were asked with assistance of coaches in case of a necessary situation. Competitive matches started afternoon and continued for next 2 days. Playing system of tournament (afternoon) was realized “each team against each one” – together 3 matches were recorded and analysed. Playing period of one match was divided in two periods per 15 minutes (clear time). Matches were judged with officials on national grade. Players were recognized with T-shirt numbers without any labelling athletes/partners.

Each match was evaluated with three trained observers – students. They were trained in CIT system of observation and familiar with the process of unified football, proficient and interested in observation due to their study orientation. Three observers assessed one identical team during the tournament: one pair of observers and one “Dictaphone speaker”. The “dictaphone speaker” worked independently out of pair and reported the match with respect of categorical scale, it means bib number of players and brief description of activity item. In a system of pairs one of the observers dictated the items of athletes/partners activity to a second person recording the items in special marks directly with “pencil-paper” (Table 1). The movement of players was not too dynamic and the size of 7-side football playground created appropriate condition for observation. It means, no problems occurred during assessed process. Recording was provided in running time of the match.

Data evaluation

Points from six tests of IST were summarized related to the Unified handbook (SOI, 2003). A higher number of IST points means higher level of skills. Those findings were worked out only on a frequency–counting bases: summary, frequency, percentage. The data analyses of CIT items were relevant with proved process (Holušová, 2004). The records and reports of only WUT and LUT were included in the study. Observer who recorded the data in a written form checked the data with Dictaphone record and the collected final version of record in two days after tournament. Independent examiner on observers summarized raw data recorded in running time into the category items, player per player. Every record of observed items represents one point. Complete data were evaluated on the level of descriptive statistics (Thomas, Nelson & Silverman, 2005): means, percentage, and standard deviation of IST and IXA.

RESULTS

Summary of average teams results (not individuals) are presented. The similar average of IST points were found in both teams, WUT M = 470 (SD = 62.4), LUT M = 467 (SD = 53.1). But average scores of athletes and partners were very different. The order of athletes/partners in average IST scoring was the following: P WUT M = 524, P LUT M = 502, A LUT M = 432, A WUT M = 417.

Between WUT partners and athletes there were 100 points discrepancy despite their long term together in football experience. WUT athletes achieved the least score even though they participated in winning team. The difference between athletes and partners in LUT was 70 points and they were in the middle of ranking the average points.

The average IXA of WUT players together was M = 42.6 (SD 17), LUT players M = 45.4 (SD 23.1). The findings indicate greater differences in activity items among teammates in LUT. Findings are underlined with the order of average IXA of partners and athletes: P LUT M = 63.7, P WUT M = 55.0, A WUT M = 32.2, A LUT M = 27.2. The highest IXA of P LUT is in accordance the thesis that higher IST can be in relation with higher activity since differences between LUT and WUT partners are minimal. The gap between partners and athletes IXA is evident in both teams while average IXA of WUT and LUT athletes are similar. Summary of items of activity and cooperation between partners and athletes is presented in the Table 3.

Table 3. *Summary of Items of Activity and Cooperation of Winning (WUT) and Loosing (LUT)*

team	Items of activity							Items of cooperation			
	L-ball	pass	dribbling	shoot	goal	IXA	IST	Ps to A	Ps to P	R from A	R from P
WUT – athletes											
<i>M</i>	12.2	25	9.6	7.2	2.6	32.2	417	7.2	17.8	8.8	23.8
WUT – partners											
<i>M</i>	13.3	42.7	20.7	4.7	0.5	55.0	524	26.6	16.7	26.2	20.0
Team <i>M</i>	12.7	33.8	15.1	5.9	1.5	42.6	470	16.9	17.2	17.9	21.9
<i>SD</i>							17.2	62.4			
LUT – athletes											
<i>M</i>	14.1	23.6	10.6	6.0	1.0	27.2	432	10.1	13.3	10.8	17.8
LUT – partners											
<i>M</i>	14.4	53.7	19.7	3.7	1.0	63.7	502	39.7	14.0	30.7	17.7
Team <i>M</i>	14.2	38.6	15.1	4.6	1.0	45.4	467	24.9	13.6	20.2	17.7
<i>SD</i>							23.1	53.1			

Note. WUT = winning unified team; LUT = loosing unified team; M = average; SD = standard deviation; L-ball = lost ball; IXA = index of activity, points; IST = Individual skill test, points; Ps to A = pass to athlete; Ps to P = pass to partner; R from A = pass received from athlete; R from P = pass received from partner.

The percentage of lost ball item varied from 12% to 14,4% in both WUT athletes, partners and LUT athletes, partners. Passing and dribbling activity was the priority of partners in both teams: passing in 50% of activity and dribbling in 20% of activity.

Partners presented about 50% higher achievement in items of category dribbling which is probably relevant to skills and higher dominance of partners. The frequency of pass to athletes from partners and receiving the pass from athletes to partners is higher than opposite direction of passing. There is no doubt the athletes prefer passing to partners, primarily athletes of WUT (71.8%) as well as athletes of LUT (56.7%). Shooting and goal records seem to be priority of athletes. It means an attack strategy was delegated to athletes, maybe partners accepted defensive responsibility and cooperation with athletes. Athletes achieved 13 goals, partners 2, but both these goals were winning goals before the end of the match. The picture of activity items in LUT teammates is a quite similar. Relation between IST and IXA ranking are documented in the Table 4.

Table 4. *Ranking of Results in Individual Skill Tests (IST) and Index of Activity (IXA) of players (N = 19)*

No A-P	team	IST		IXA	
		points	order	index	order
P 8	WUT	545	1	54	5
P 9	WUT	535	2	62	3
P 18	LUT	5104	73	1	
P 19	LUT	510	4	46	9
P 7	WUT	5104	53	6	
P 10	WUT505	6	51	8	
A 16	LUT	495	7	25	13
P 20	LUT	485	8	72	2
A 12	LUT	475	9	57	4
A 15	LUT	465	10	29	11
A 1	WUT	450	11	53	6
A 5	WUT	450	11	41	10
A 17	LUT	415	13	22	15
A 3	WUT	410	14	25	13
A 13	LUT	405	15	25	13
A 2	WUT	405	15	22	15
A 14	LUT	385	17	14	19
A 11	LUT	385	17	18	18
A 4	LUT	370	19	20	17
M		484		40	
<i>SD</i>		59		19	

Note. No A = code number of athletes; No P = code number of partners; IST = Individual skill test, points; IXA = index of activity, points; WUT = winning unified team; LUT = loosing unified team.

DISCUSSION

The relationship between football skills results (IST) and activity (IXA) was additionally processed with Spearman "order" correlation test (index of correlation was 0,69). Even without statistics there is visible the higher level of partners. The finding

can influence the match performance. The IST results are not in direct relation with IXA among players–partners and separately among players–athletes’ group, but they should be considered as positive background for teammate’s assessment. The results can better distinguish differences among partners than among athletes as the athlete’s decision making process during the competition can cover the level of individual skills. IST relation with cooperation items could not be assessed as visible preference of athletes was oriented on partners. Partner’s priority was to pass and initiate with the athletes. But with logical reflection, the discrepancies between partners and athletes within both teams show doubts about analogous results in situation of higher number of participants in separate partners group and separate athletes’ group. This idea can be an opportunity for future research.

The issue of “individual skills tests” against “the team performance” is discussed among general sports training specialist. This is because the “match” performance is composed from fitness, individual skills and “team cooperation” based on anticipation, problem solving or decision-making process. The decision-making process is the weak part of team participation of Special Olympians, yet. There are no findings related to this topic.

The dominance of the partners, particularly in LUT, can be explained either by “age reason” or general football skills reason or personal approach which were not investigated. Probably the potential skills teams prefer strategy of athletes attack positions and partners defensive tasks. This strategy can influence the shooting activity of athletes and goal records. However, in losing situation, partners are more active in goals as well. High number of sending passes of partners to athletes can be relevant with the athlete’s offensive strategy. Athlete’s priority in passing to partners can be linked with their confidence to the partner’s skills and abilities, with their pragmatic strategy of athletes. This includes to win as the team, to be part of it despite of the lack of personal success. Another explanation of the finding can be linked with the idea of higher skills of partners, as well as higher activity and confidence or beliefs of athletes in higher ability of partners. The results of IST seem to be important for activity and strategy of competition and secondary, for activity and cooperation of teammates. Also, opposite – partners can give the athletes a chance to play and score which is in accordance of principle of meaningful involvement. The phenomenon of possible sympathy-antipathy among teammates was not investigated but in a very small group this phenomenon cannot be expected. Balance activity and cooperation is usually in the case of winning competition process. In case of critical situation then partners become more dominant, active, or aggressive. It means – the balance of activity and cooperation between athletes and partners as the principle of “meaningful involvement” theory is polluted with social role expected both athletes and partners. New questions appeared: Is the principle of meaningful involvement realistic or only virtual reality? And – in conclusion: “What is the priority for athletes – to be in balanced items of activity/cooperation, dominance or – to play together, to be part of it and be happy?”

Despite of the numeric data, despite the fact that research on social role, subjective feelings (joy – sadness) was not realized, at each tournament you can see the effort and team atmosphere, talking with each other, applaus of spectators, expectations of awarding ceremony, joint photo, etc. It is meaningful involvement in community due to model of unified sports.

CONCLUSION AND RECOMMENDATION

Football IST is relevant with potential performance in competition (in Czech Republic SO environment, too). Using only the part of high level of IST battery (team tests) is enough for evaluation of player's skills (athletes, partners). IST results are not in direct relation with activity items in a match but they seem to be important background for divisioning of teams complemented by experts' observation. The appropriate age in team composition should be respected in team sports. High level of IST and IXA documents the dominance of partners and typical competition strategy: attacking of athletes, defending of partners. Cooperation among teammates was assessed with sending pass to athletes/partners or receiving pass from athletes/partners. The priority of selecting partners from athletes and athletes from partners is marked and probably linked with partner's skills. A losing match atmosphere provokes the dominance of partners. Further research should focus on comparing SO unified results with players cooperation in regular teams. The visible emotional and social benefits should also be supported by research. The prerequisite is that the whole UNIFY system will be extended to sport clubs and schools.

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