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COMPARISON OF ATHLETICS RECORDS OF INTELLECTUALLY DISABLED PERSONS WITH RECORDS OF INTACT ATHLETES

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SUMMARY

Comparative studies between intact and ID (Intellectually Disabled) individuals have been carried out in many areas (psychic, somatic characteristics, motor skills of individuals with ID, comparison of the level of intellect and motor performance). The study compares the records of intellectually disabled athletes with the records of majority population athletes. For comparison, we have used the existing world records registered by the International Association of Athletics Federations (IAAF), and Inas, (International Sports Federation for Persons with Intellectual Disability). To compare the best Czech records with world records, the best performances of women registered by the ČSMPS (Czech Sports Association for the Mentally Handicapped) were used. If we compare the World Records (IAAF and Inas), we can find differences ranging from 8.2 to 45.3%. The differences between intact and intellectually disabled men are approx. by 2 to 10% lower than in women's similar events. It is only in three events that the differences between intact and ID are slightly lower in women than in men (high jump, discus throw, javelin throw).

The smallest differences between the IAAF and Inas records are in sprints events and middle running distances of men and women (10% men, or 15% women respectively). The differences in long distances reach 18% (men) and 23% (women). The differences in jumping events are very different, accounting for 20% for men and 24% for women with some generalization. Throwing events for practically both sexes bring differences above 40% (except for shot put).

Key words: Inas, ČSMPS, IAAF, Comparison of Performance, Intellectually Disabled

INTRODUCTION

Sport of the disabled has presently become an integral part of social life of modern society. Our study is devoted to sport practised by intellectually disabled (ID) athletes who are able to participate in sports activities from the lowest to the highest performance level within numerous sports associations. At the national level, ID athletes are organised in the Czech

Sports Association for the Mentally Handicapped (ČSMPS), or the Czech Movement of Special Olympics (ČHSO). At the international level, there are also two large organisations associating athletes with intellectual disabilities, Inas (International Sports Federation for Persons with Intellectual Disability) and SOI (Special Olympics International).

Inas organises sports competitions according to the rules of international sports federations (IAAF, FINA, FIBA, FIFA etc.) with practically minimal modifications of the rules with respect to athletes' handicaps. For this reason, the comparison of performances – world records registered by the International Association of Athletics Federations (IAAF) and the Inas federation was chosen for our comparative study, and to compare the world level with the national, Czech, level, we used Czech national women's records registered by the ČSMPS association, which is the Inas member.

Intellectual disability

While defining the term of intellectual disability (ID) a number of definitions may be encountered differing, in particular, by the professional orientation of their authors. In their majority, they share the emphasis on the overall reduction of intellectual abilities of an individual, or his/her adaptability to the environment. The definitions of ID (Slowík, 2007) nearly always attempt to distinguish an individual with ID from an intact individual by enumerating a list of deficits. Doing this, there is, in any case, a need to preserve the multidimensional approach which includes information about intellectual functions, considers the criterion of etiology, social adaptability, corresponds to pedagogic intentions, etc.

In the Pedagogic Dictionary (Průcha, Walterová & Mareš, 2003), ID is defined as a permanent reduction of intellectual abilities caused by an organic brain disorder leading to a different development of some psychic characteristics and to disorders in adaptation behaviour.

In this light, the most significant features of ID include the following (Fischer & Škoda, 2008):

- a low level of mental capacity manifested above all by impaired adaptation to common living conditions,
- the disability is inborn, a child does not develop in a standard way like intact individuals since the very start of their life,
- the disorder is permanent, although depending on the etiology some improvement is possible.

The upper limit of achievable development of each person with ID results both from the severity and cause of disability, and the individually specific suitability of the surrounding environment's action, i.e. educational and therapeutic effects.

The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, 2000, p. 41) published by the American Psychiatric Association in 2000, describes the basic feature of ID as:

"... below average general intellectual functioning (criterion A) accompanied by limitations in adaptive behaviour in at least two of the following areas of skills: communication, grooming, living, interaction, using community resources, decision making and choice, education, work and employment, leisure time, health, safety (criterion B). It must originate before the age of 18 (criterion C)." According to Vágnerová (2004, p. 289) ID is:

"... a general definition for an inborn disability affecting mental capacity manifested by the inability of understanding the individual's surroundings and adapting to it to the required extent. It is defined as the inability of reaching the corresponding level of intellectual development (less than 70% of the norm) despite the adequate educational stimulation of the disabled individual. The principal features of mental retardation are insufficient development of thinking and speech, limited learning ability and resulting more difficult adaptation to common living conditions. The limited development of mental abilities tends to be connected with the impairment or a change of other abilities and with differences in the personality structure."

The Inas federation requires the fulfilment of prescribed primary ID criteria for athletes to participate in competitions, by meeting the criteria athletes become eligible for competitions within the Inas federation.

The primary eligibility criteria applied by Inas are based on the definition of intellectual disability formulated by the American Association on Intellectual and Developmental Disability (AAIDD, 2002). This interpretation is similar to the interpretation by the World Health Organisation (WHO, 2001) and reads as follows:

Intellectual disability is a disability characterised by significant limitations both in intellectual functioning and in adaptive behaviour as expressed in conceptual, social and practical adaptive skills. This disability originates before the age of 18.

The primary eligibility criteria of Inas (www.inas.org) for competing in sports events for the intellectually disabled based on the above definition are:

a) Significant impairment of intellectual activities. This is defined as 2 standard deviations below the average, which means the total score of 75 or below.

b) Significant limitations in adaptive behaviour manifested in conceptual, social and practical adaptive skills. This is defined as a performance which is at least by 2 standard deviations below the average in either: one of the following 3 types of adaptive conceptual, social behaviour or practical skills or the total score of standardised measurement of conceptual, social and practical skills.

c) Intellectual disability must become evident during the development stage from the conception to the completion of 18 years of age.

The diagnosis of intellectual disability must be established using internationally recognised and professionally administered IQ tests approved by Inas.

The diagnosis of adaptive behaviour must be made using internationally recognised and professionally performed standardised measurements containing standards for the intact population, including the population of persons with disabilities.

Athletes must comply with all 3 component parts of criteria to become eligible for participation in sporting activities of the intellectually disabled. Experience shows that the participants of Inas competitions are predominantly athletes whose IQ is in the area of mild mental retardation, or moderate intellectual disability, in the IQ range of 50–55 to 70–75.

Comparative studies between ID and intact individuals have been carried out in many areas (e.g. psychic, somatic characteristics, motor skills of individuals with ID, comparison of the level of intellect and motor performance).

Despite some specificities of **psychic characteristics and the mental development** of persons with moderate ID, these are basically regulated by the same development rules as

in intact individuals, but individual functions obviously appear later and development stages take longer (Kvapilík & Černá, 1990). A disharmony between the psychic and biological development arises (Výšková, 1982); the differences between individuals with ID and intact persons in the psychic domain are much more prominent than in the motor domain (Graunke & Schmidt, 1983).

Their mental capacity usually does not develop on an intact biological basis, which results not only in imperfections of nearly all mental functions, but also in the insufficient development of personal qualities manifested by reduced activity, a lack of independence and increased dependence, social immaturity, a lack of willpower, reduced level of self-criticism, etc. The above symptoms, however, according to Výšková (1982), need not always be manifested to their full extent.

The total disruption of the neuropsychic development is related to numerous specificities in the mental capacity of the personality of individuals with ID. The disorder affects cognitive processes, perception, attention, imagination, memory and thinking, it impairs the emotional as well as volitional sphere influencing adaptability and behaviour (Lejčarová, 2012).

Individuals with ID are characterised by the lack of initiative, inability to control their acts, overcome the smallest obstacles and persist in doing some activity for a longer time, by concentration on material and short-term goals of their acts (Langer, 1996), low frustration tolerance and hypobulia (reduced volitional competences). In the decision making stage, these individuals tend to prefer the currently more attractive motive; in the volitional act, i.e. in reaching the goal, especially if it is a long-term one, self-control is their persistent problem and they are easily distracted by other, current motives (Vágnerová, 1993).

The **somatic development of individuals** with ID is, according to Van der Schoot (1977), usually by two to four years below the norm; in this respect, individuals with moderate ID quite resemble their peers, while individuals with more severe ID levels fall behind them (Horvat, 1990).

The physical development of an individual is in a close, dynamic relation to the development of the higher nervous activity so that each severe disruption in this domain may be reflected by somatic changes. There is practically no consensus among authors concerning the body height and body weight indicators of ID and their comparison with intact individuals.

The results of the majority of studies evaluating anthropometric indicators of individuals with ID lead to conclusions that "the occurrence of obesity in this population is high and, in fact, it may be twice higher than in intact peers" (Pitetti, 2002, p. 3). Eichstaedt, Lavay (1992) claim that obesity in the child population with ID is a problem mainly in children with a more severe ID level and with Down's syndrome. The occurrence of obesity (amount of body fat) is higher in women than in men with ID (Rimmer, Braddock & Fujiura, 1994), which is a finding that also holds true for the intact population.

Numerous studies surveyed the relationship between the occurrence of obesity and the ID level. Rimmer, Braddock and Fujiura (1994) discovered that the amount of body fat grows with the falling ID level (in the direction from profound to moderate ID). The same relationship was also discovered for the height and weight (Kelly, Rimmer & Ness, 1986).

Kreze et al. (1974, in Kelly, Rimmer & Ness, 1986) surveyed the relationship between obesity and IQ in adult workers who were divided into the low, average and above average

category by their IQ. The results indicate a strong inverse relationship between IQ and obesity in women and a similar, though less distinct, trend in men.

Motor disorders or deficiencies of persons with ID cannot be formulated in general and generalised. In this respect, their typical motor behaviour cannot be identified either as the locomotor activity of each such individual is characterised by the appearance of highly diverse specificities depending on the level and etiology of the disability, the effects of the environment and the age. According to empirical findings (Kiphard, 1992), about 70% of children with ID develop disorders or striking features in their motor behaviour – their motor activity may principally be at the "normal" or even above average level, but also at a below average level with the occurrence of pathological forms (Mühlinghaus, 1996). Moreover, we may never unambiguously identify whether the disturbed motor activity is the cause or the consequence of these individual' disability (Paul, 1982).

Individuals with moderate ID are limited – mainly in games and sports activities – in the generalisation of locomotor programmes, i.e. an ability of applying mastered locomotor rules in changing situations, in anticipation (Theile, 1974) and integration of locomotor activities into the general structure of the rules of games, tactics and sporting behaviour (Horvat et al., 2003). The lack of intellect is also reflected in the choice of adequate and efficient movements and in the performance of unsuitable and risky exercises in locomotor activities (Kábele, 1988). These individuals are usually not persistent in locomotor activity, they are not able to force themselves to overcome difficulty, indolence or even laziness. Another unfavourable factor is the lack of interest in physical exercise (Černá, 1985).

Professional literature frequently points out the links between **motor activity and intelligence** which were unclear for a long time. Up to now, diverse opinions and assumptions have been formulated ranging from the assumption of a strong parallelism to absolute independence of the both phenomena. It may generally be said that that in early childhood intelligence and motor activity are very closely interrelated, with growing age, however, this correlation dramatically weakens (Schilling, 1980), while with falling intelligence it grows – motor activity is more frequently and more severely disturbed (Kusano & Gohara, 1990). In intact individuals, no correlation between intelligence and motor activity may usually be identified at all (Schilling, 1987).

Besides, there is a substantially closer relationship between intelligence and motor performances which require the simultaneous integration of visual, kinesthetic and vestibular stimuli (e.g. in tasks aimed at dynamic or static balance skills) and thus the coordination of several partial movements in space and time than between cognitive performances and tasks with low demands for the complexity and difficulty of movements (Graunke & Schmidt, 1983).

The links between motor and intellectual performances are also manifested by the positive effect of physical exercise and psychomotor stimulation of children with ID on their cognitive development (Croce, Horvat & Roswal, 1993). In no case, however, do research studies dealing with these issues produce evidence for a close causal relationship between motor activity and intelligence as motor development in particular may be affected by most diverse conditions of the surrounding environment. Therefore, no direct parallelism between motor retardation and lower intellect can be proved.

Comparison of the motor performance level of individuals with intellectual disability and intact individuals.

There are presently large quantities of data from empirical investigations available which identify the differences in the motor performance of children with moderate ID and intact children of similar chronological age.

In terms of the structure of motor skills, no basic differences against the intact population were identified in individuals or children with ID (Dobbins & Rarick, 1975). Therefore, they possess a differentiated structure of motor skills with no significant changes within a given age category, but only slight differences between the sexes. If an individual with ID fails in some area of motor activity, this does not unconditionally mean that he/she will also score low in tests of other motor skills (Sherrill, 1998).

Compared to their intact peers, individuals with ID reach a lower level of motor performance (Frey et al., 1999). As Lejčarová sums up (2012), the greatest differences are found at the locomotor coordination level, i.e. in motion accuracy, agility, dexterity, in balance skills, reaction speed, orientation in space and time, distance estimation, laterality and rhythmic skills; there are also differences in fitness skills – mainly in endurance, force and velocity skills. Gross motor skills are generally less affected than fine motor skills and locomotion.

Insufficiencies in motor activity are more frequently found in younger individuals or children with ID, and its level improves with growing age (Černá, 1985). At the same time, however, the differences between persons with ID and their intact peers get bigger with age as the motor development of a healthy individual is much faster (Rarick, Dobbins & Broadhead, 1976).

The results of research dealing with the motor performance of individuals with ID (Lejčarová & Tilinger, 2002, 2004, 2007) emphasise the urgent need for adequate care for the motor activity of pupils at practical primary schools (PPS), or children with ID. The deficiencies identified in their motor activity may be considered a serious, but not insurmountable, barrier to their locomotor cultivation as there is no doubt that even children with ID are endowed with plenty of qualifications for the development of their locomotor skills within their disability. The lower level of their motor performance cannot be perceived only from the perspective of their mental insufficiency and related personality characteristics, but also from the perspective of external conditions which represent, e.g. the physical education process at PPS, the family, etc. It has been manifested (Krejčí, 1998) that the level of motor performance of children and youth with ID may be significantly positively affected by regular physical exercise or a training programme under professional guidance.

METHODOLOGY

To compare the performance levels in athletics we used the values of currently valid world records of the International Sports Federation for Persons with Intellectual Disability – Inas and compared them against currently valid records registered by the International Association of Athletics Federations (IAAF) and the national Sports Association for the Mentally Handicapped (ČSMPS). The world records (IAAF) of intact athletes represent 100% in our comparison, and the world records of the intellectually disabled, or the national ČSMPS records respectively, are calculated as percentages of the IAAF records.

The percentage represents a real comparison, while in times "worse times" are presented as "higher percentages", which is illogical; this is corrected in the column "Difference in %" – a difference in performances between the compared world records of intact (IAAF), intellectually disabled (Inas) and national records of intellectually disabled (ČSMPS) women. (Athletic records of men are not registered by ČSMPS). The assessment of differences was performed using content analysis of identified facts.

RESULTS AND DISCUSSION

Table 1. Comparison of athletic performances – world records (Inas) of individuals with intellectual disability with world records of intact athletes (IAAF) – men. IAAF and Inas records were valid as of 31. 12. 2011 (performances are in s, min, m)

Event MEN	World record Inas	World recordIAAF = 100%% share		Difference in % Inas/IAAF	
100 m	10.68	9.58	111.5	-11.5	
200 m	21.45	19.19	111.8	-11.8	
400 m	46.72	43.18	108.2	-8.2	
800 m	1:49.91	1:41.01	108.7	-8.7	
1500 m	3:54.07	3:26.00	113.6	-13.6	
5000 m	14:55.79	12:37.35	118.3	-18.3	
10,000 m	31:14.58	26:17.53	118.8	-18.8	
110 m hurdles	14.57	12.87	113.2	-13.2	
400 m hurdles	55.09	46.78	118.7	-17.8	
3000 m hurdles	9:29.51	7:53.63	120.2	-20.2	
High jump	1.95	2.45	79.6	-20.4	
Long jump	7.48	8.95	83.6	-16.4	
Triple jump	14.62	18.29	79.9	-20.1	
Shot put	15.16	23.12	65.6	-34.4	
Discus throw	40.69	74.08	54.9	-45.1	
Javelin throw	56.84	98.48	57.7	-42.3	
Hammer	47.44	86.74	54.7	-45.3	
20 km walk	1:25:22	1:17:25.6	110.5	-10.5	
Marathon	2:29:59	2:03:38	121	-21	

Comparison of Inas and IAAF athletic records (men)

Dramatic differences between the performances of intellectually disabled and intact men are evident reaching in extremes 8.2–45.3%. If the situation is compared within individual athletic events, differentiated values are obtained.

In sprints, the difference reaches the value of 8.2–11.8%. These differences are practically the lowest identified in men's events.

In middle distance track events (800 m and 1500 m), some difference is apparent, in the 800 m race the difference is merely 8.7%, while in the 1500 m race it already reaches 13.6%.

In track endurance events (5000 m and 10,000 m), the difference keeps growing up to over 18%. In this respect, the performance of ID athletes in 20 km walk may be considered exceptionally high-quality as the difference is unusually low accounting for mere 10.5%. The performance in the marathon race of ID male athletes is by 21% worse, i.e. there is practically the same difference as in long track events (5 km and 10 km).

In track hurdles, the difference in performance keeps growing with the track distance ranging from 13.2% up to 20.4%. In comparison to flat tracks, a ca 2% growth is evident here, which may be attributed to higher demands of track hurdles for coordination.

In jumping events, the difference is at the level of 16.4–20.4%. The growing difference may most likely be explained by higher demands for mastering the technique and combining speed and take off in long jump, or speed and repetitive take offs in triple jump, and transforming horizontal speed into vertical speed in high jump.

The greatest differences in performances may be identified in throwing events accounting for 34.4–45.3%. Here, the technical demands in throwing events and high demands for power may be the major reasons for such big differences.

The interpretation of differences in the performance of ID and intact men may very likely be a component part of the confirmation of the nature of intellectual disability. The popularity and (technical) simplicity or, on the other hand, complexity of a respective event may also play some role here. The differences in running events are relatively lower.

In disciplines with growing technical demands for an event or with growing demands for endurance skills, the difference in performances also slightly grows. The prominent differences in throwing events may be explained by their high technical demands and by high demands for power and speed-power performance where an intellectual handicap may play a more significant role.

Event women	World record Inas	World record IAAF = 100%	% share	Difference in % Inas/IAAF	Czech ČSMPS record	Difference in % ČSMPS/ IAAF	Difference in % ČSMPS/ Inas
100 m	11.91	10.49	113.5	-13.5	13.37	-27.5	-12.3
200 m	25.01	21.34	117.2	-17.2	28.80	-35	-15.2
400 m	56.78	47.60	119.3	-19.3	71.70	-50.6	-26.2
800 m	2:07.74	1:53.28	112.8	-12.8	2:43.80	-44.6	-28.2
1500 m	4:24.85	3:50.46	114.9	-14.9	6:34.40	-71.1	-48.9
5000 m	17:18.38	14:11.15	122	-22	24:41.10	-74	-42.6
10,000 m	36:46.34	29:31.78	124.5	-24.5	-	-	-
100 m hurdles	15.15	12.21	126.9	-26.9	18.20	-49	-20.1

Table 2. Comparison of athletic performances – world records (Inas) and Czech records (ČSMPS) of individuals with intellectual disability and intact athletes (IAAF) – women. IAAF, Inas and ČSMPS records were valid as of 31. 12. 2011

Event women	World record Inas	World record IAAF = 100%	% share	Difference in % Inas/IAAF	Czech ČSMPS record	Difference in % ČSMPS/ IAAF	Difference in % ČSMPS/ Inas
400 m hurdles	1:06.13	52.34	126.3	-26.3	-	-	-
High jump	1.68	2.09	80.4	-19.6	1.48	-29.2	-11.9
Long jump	5.72	7.52	76.1	-23.9	4.75	-36.8	-17
Triple jump	11.42	15.50	73.7	-26.3	10.16	-34.5	-11
Shot put	14.33	22.63	63.3	-36.7	8.82	-61	-38.5
Discus throw	42.26	76.80	55.0	-45	23.41	-69.5	-44.6
Javelin throw	39.77	72.28	55.0	-45	31.66	-56.2	-20.4
Hammer	46.46	79.42	58.5	-41.5	_	_	-
Marathon	2:39:12	2:15:25	117.6	-17.6	_	_	_

Comparison of Inas and IAAF records (women)

Again, there are visible differences between the performances of intellectually disabled and intact women accounting for 13.5-45%; in the majority of events the differences are by 2-5% higher than in men.

In sprints, the difference reaches values of around 13.5–19. 3%. It is a difference by 2 and more per cent greater than may be observed in men. Among potential reasons is the fact that these records for intact women are very "old" and were achieved by exceptionally talented female athletes.

In middle distance track events, the previous sentence may also illustrate the 800 m race. The differences of 12.8% (800 m) and 14.9% in the 1500 m race are comparable to the differences in men.

In endurance track events (5000 m and 10,000 m), the difference keeps growing up to 22-24.5%. In this respect, the performances of ID athletes in the marathon race are very good as the difference reaches only 17.6%.

In track hurdles, the difference in performances grows up to over 26%. Hurdle races evidently do not rank among events preferred in ID athletics. Furthermore, the technical demands play a distinct role to the disadvantage of ID.

In jumping events, the difference is at the level of 19.6–26.3%. The relatively smallest difference is in high jump (19.6%), which is a difference smaller than that identified in men (20.4%). If we compare the men's and women's falling behind in long jump, the improvement in the women's performance in this discipline might be expected.

The greatest differences may be identified in throwing disciplines accounting for 36.7–45.0%. The differences are similar to those in men. We adhere to the same explanation of these high differences as was said above for men.

The explanation of the differences between intact and ID women also most likely results from the nature of intellectual disability of female athletes. The popularity and (technical) simplicity or complexity of a respective event may also play a significant role here. Unlike men, the differences between women's running events are relatively smaller.

In disciplines with growing technical demands for an event or with growing demands for endurance skills, the difference in performances also slightly grows.

Like in men, prominent differences in throwing events may also be observed in women. These may again be explained by their high technical demands and by high demands for power and speed-power performance where the intellectual handicap level may play a more significant role.

Comparison of IAAF and ČSMPS performances (women)

The still more dramatic differences between intact and Czech ID female athletes are very evident. A difference below 30% may only be found in the 100 m running race (27.5%) and in high jump (29.2%). A difference below forty per cent may be seen in the 200 m running race (35%), long jump (36.8%) and triple jump (34.5%). In throwing events, the difference accounts for around 60%, and in 1500 m and 5000 m races the difference is over 70%. It seems evident that in this case we compare practically incomparable.

Comparison of Inas and ČSMPS records (women)

This comparison points out great differences between the national and world performances of ID athletes. With some generalisation we may say that the differences copy the differences between IAAF and Inas.

The lowest falling behind may be identified in the performances in triple jump and in high jump (11.0 or. 11.9% respectively).

This may be caused by the fact that it was in triple jump that our female athlete won a medal at the Inas world championship (WC).

The difference below 20% is in 100 m (12.3%) and 200 m (15.2%) sprints. In 400 m and 800 m races, the difference ranges around 26–28%. More dramatic differences were identified in 1500 m (48.9%) and 5000 m (42.6%) races.

Even though ČSMPS female athletes obtained numerous good results at Inas world championships in the past, the differences between the national and the world record levels are unsatisfactorily high.

The performances in throwing events fall behind by 38.5% (shot put) and 44.6% (discus throw). The exception is javelin throw where our record falls behind the Inas record by 20%. It was in this event as well that our female athlete won a medal at the Inas world championship.

CONCLUSIONS

The presented study is an attempt to compare by means of qualitative analysis the performance level of intact athletes (IAAF records), intellectually disabled athletes represented by records of the Inas federation and the records of the best Czech intellectually disabled female athletes organised in the Czech Sports Association for the Mentally Handicapped. The comparison at the world level (IAAF and Inas) implies differences accounting for 8.2-45.3%. The differences between intact and intellectually disabled men are by cca 2-10% lower than in the same women's disciplines. It is only in three events that the differences between intact and ID female athletes are slightly lower than in male athletes (high jump, discus throw, javelin throw).

The smallest difference between the IAAF and Inas records is in sprints and middle distance track events in both men and women (10% men, or 15% women respectively). The differences in long distance track events account for 18% (men) and 23% (women).

In jumping disciplines, the differences vary a lot, with some generalisation they are 20% for men and 24% for women.

Throwing events for practically both sexes bring differences of over 40% (except for shot put).

Comparing the world level of intellectually disabled female athletes represented by Inas records and the national record level represented by ČSMPS female records the differences are 11–48%. The practice of the participation of Czech ID athletes at top world competitions organised by Inas has shown that differences of around 10–12% might result in our athletes' placement in the finals of these competitions, and a difference in performance of less than 10% might even result in a medal.

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SROVNÁNÍ ATLETICKÝCH REKORDŮ INTELEKTOVĚ POSTIŽENÝCH OSOB S REKORDY INTAKTNÍCH SPORTOVCŮ

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SOUHRN

Srovnávací studie mezi IP a intaktními byly realizovány v řadě oblastí (psychika, somatické charakteristiky, motorika jedinců s IP, srovnání úrovně intelektu a motorické výkonnosti).

Studie přináší srovnání rekordních výkonů intelektuálně postižených atletů s rekordy sportovců většinové populace. Pro komparaci jsme využili stávající světové rekordy vedené mezinárodní atletickou federací IAAF a Inas, (mezinárodní organizací pro paralelní sport pro osoby s intelektovým postižením). Pro srovnání českých nejlepších atletek se světem byly využity rekordy ČSMPS (Českého svazu mentálně postižených sportovců, žen). Ze srovnání světových rekordů (IAAF a Inas) vyplývají diference na úrovni 8,2–45,3%. Diference mezi intaktními a intelektově postiženými muži jsou o cca 2–10% nižší než u obdobných disciplín žen. Pouze u tří disciplín jsou rozdíly mezi intaktními a IP u žen nepatrně nižší nežli u mužů (skok vysoký, hod diskem, hod oštěpem). Nejmenší rozdíl mezi rekordy IAAF a Inas je u sprintů a středních tratí mužů i žen (10% u mužů, resp. 15% u žen) Rozdíly na dlouhých tratích dosahují 18% (u mužů) a 23% (u žen).

Ve skokanských disciplínách jsou diference velmi různé, při určitém zobecnění 20% u mužů a 24% u žen. Vrhačské disciplíny prakticky u obou pohlaví přináší rozdíly nad 40% (vyjma vrhu koulí).

Klíčová slova: Inas, ČSMPS, IAAF, srovnání výkonnosti, intelektově postižení

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