Original Paper

Biomedical Human Kinetics, 4, 29 – 37, 2012

DOI: 10.2478/v10101-012-0006-0

Conditions for preparations for the 2008 Beijing Paralympic Games in the opinion of the Polish national team

Joanna Sobiecka[1], Ryszard Plinta[2,3], Katarzyna Drobniewicz[4], Jadwiga Kłodecka-Różalska[5], Katarzyna Cichoń[6]

[1] Faculty of Motor Rehabilitation, University School of Physical Education, Krakow, [2] Department of Physical Education and Sport, Medical University of Silesia, Katowice, [3] Faculty of Physiotherapy, The Jerzy Kukuczka Academy of Physical Education, Katowice, [4] Non-Public Health Care Centre „Alma Spei", Cracow, [5] Department of Psychology, Institute of Sport, Warsaw, [6] Non-Public Health Care Centre for Autistic Persons „EFFATHA", Cracow, Poland

Summary

Study aim: To evaluate the process of preparing Polish athletes with disabilities for the 2008 Beijing Summer Paralympic Games.
Material and methods: The study included 31 women and 58 men representing 11 Paralympic disciplines, accounting for 97.8% of the Polish team taking part in the games. The average age was 32 years; the average amount of experience with sports training, 12 years. The method of diagnostic survey applied in the study was a questionnaire by J. Kłodecka-Różalska that was adapted to the needs of athletes with disabilities. The interpretation of the results was based on the arithmetic mean of individual evaluations. After checking the confidence interval, the factors were classified into one of three categories of conditions: satisfactory, sufficient, or unsatisfactory.
Results: Data analysis revealed different levels of care and conditions created for the Polish national team during their preparations for the Beijing Paralympic Games. The athletes were fully satisfied with the conditions of the central camps and consultation (food, accommodation, sports equipment) and social relations (atmosphere of cooperation between the athletes and cooperation between the athletes and national team coaches of various disciplines). Issues requiring more professional attention are the health of athletes nominated to participate in the Paralympic Games (medical care and individual orthopaedic equipment) and contact with the media, which shapes the image of sport of the disabled people.
Conclusions: In preparation for Paralympic Games, these athletes need to be provided with the constant and high-level assistance of a psychologist and a nutritionist. In the perspective of future athletic goals set for the representatives of our country, a high standard of sports facilities, individual sports equipment, transport to the central camps and consultation, as well as professional care in the field of wellness, physiotherapy and massage, should be taken into account for Paralympic Game preparations.

Key words: Preparation conditions – The Paralympic Games – Polish Paralympians

Introduction

Adapted physical activity tasks are carried out with people with disabilities as part of rehabilitation, special physical education, and sports. However, Paralympic sport has its own specific needs and it has become increasingly important not only to participate in the competition, but also to achieve results, including winning medals at the games.

Despite its distinctive nature, the requirements set out for the today's Paralympics basically do not differ from the training procedures followed for the Olympic Games [2]. According to Nunn [16], the training processes used to prepare for participation in the Paralympic Games should take place in conditions comparable to those of Olympic sports, which according to Sawicki [19] are designed not only to achieve success in sports, but above all else, to protect the athletes from injury and health risks.

In the culture of Polish athletes with disabilities there is a belief that to build their own sports career requires devotion [22]. But in the literature there is no information about the conditions under which the national team athletes trained for the Olympics from 1972 to 2002. The first studies were finally conducted among the athletes training for the 2004 Athens Paralympic Games [23]; those results are compared with the results obtained in our work, in the Discussion part of the paper.

Expectations and working hypotheses were associated with the observations conducted among the Olympic team

Author's address Joanna Sobiecka, Faculty of Motor Rehabilitation, University School of Physical Education, Al. Jana Pawła II 78, 31-571 Cracow, Poland j.w.soblecka@interia.pl

sportswomen in the period preceding their participation in the 2000 Sydney Olympic Games, the 2002 Salt Lake City Games, and the 2008 Beijing Games. Kłodecka-Różalska concluded that it is not only the modern facilities and optimal training programs that are necessary for the proper realisation of training and preparation for the event at the highest level. Instead, the following issues also require special attention and provision: medical care; specialist support of psychologists, physiologists, physiotherapists, dieticians; providing sportswomen with professional supervision of trainers who are highly qualified and experienced in working with women; care for the good emotional atmosphere and positive interpersonal relations; and the effective promotion of women's sport in the media and training organization that enable women athletes to reconcile their personal life, school, and professional preparation required to do sports [8,9].

Taking the above observations and recommendations into account, the present research assumes that to achieve sporting success on a scale of the Paralympians' dreams and fan expectations, it is not enough to secure the conditions met on an average or even good level. The process of preparation for big events must take place in circumstances that are satisfying and highly rated by the players in all areas that affect achievements in the Paralympic Games. The aim of this study was to evaluate the process of preparing Polish athletes with disabilities for the 2008 Beijing Summer Paralympic Games.

Material and Methods

The study involved 89 athletes, including 31 women and 58 men, i.e., 97.8% of all Polish athletes preparing for the 2008 Beijing Paralympic Games. The average age of respondents was 32 ± 9.7 years: 29 ± 10.3 years (15-51) for women and 32 ± 9.32 years (16-61) for men. The average duration of sports training experience was 12 ± 6.0 years: 10 ± 2.6 years (2-20) for women and 13 ± 7.0 years (4-47) for men. The youngest group of athletes were swimmers (mean = 21 years); the oldest, archers (mean = 51 years). People with damage to the musculoskeletal system accounted for 85.4% of the respondents, and those with damage to eyesight, 14.6%. The subjects had various education degrees, but most of them had completed general secondary school (about 34%) and higher education (about 22%). Some 14% of the Paralympians had finished technical or vocational secondary school, and 13% of them primary or lower secondary school. The surveyed athletes, who regularly trained up to 12 times a week, won nominations to the Paralympic Games in the following disciplines: horse riding – 1.1%, cycling – 3.4%; athletics – 32.5%, archery – 7.9%, swimming – 12.4%, lifting weights – 11.2%, shooting – 5.6%, wheelchair fencing – 7.9%, wheelchair tennis – 4.5%, table tennis – 11.1%, and rowing – 3.4 %. It is worth noting that repeat participants in the Paralympic Games were the majority of respondents (approximately 57%).

The study was mainly conducted during the camps that occurred about 30 days before leaving for the Paralympic Games. The study was preceded by detailed instruction. Visually impaired or amblyopic athletes could ask the researchers for assistance. The method of diagnostic survey was applied through the use of a questionnaire by J. Kłodecka-Różalska [6,7], which with the consent of its author was adapted to the needs of athletes with disabilities by J. Sobiecka and entitled "Survey for female and male athletes training for the Paralympic Games" (see Appendix A). It should be noted that the survey was verified in pilot studies, performed on a group of 91 athletes four years earlier, during preparations for the 2004 Athens Paralympic Games.

The questionnaire consisted of two parts. The first was comprised of 20 closed questions in which the respondents rated the preparation conditions on a scale of 1 to 5 (5 – very high, 4 – high, 3 – average, 2 – low, 1 – very low). The questionnaire also included open questions with which athletes could describe other needs that in their opinion should be secured in preparation for the Paralympic Games. The second part contained the subjects' socio-demographic and sports data.

The arithmetic mean was calculated from a sum of individual results for each of the evaluated factors by classifying the averaged opinions to three categories of conditions: satisfactory (5.0-4.1), sufficient (4.0-3.0) and unsatisfactory (2.9-1.0).

Furthermore, for each averaged opinion describing the preparation conditions, we examined the concordance of ratings of the respondents. The opinions were considered concordant in a statistically significant way if the width of the confidence interval for the mean was less than 1.0 ($\alpha = 0.05$).

Results

The first analysed data concerned sports infrastructure and individual equipment (Table 1). Both female and male athletes found having the opportunity to use high-quality sports equipment the most satisfactory, while sportswomen also evaluated individual sports equipment as the most satisfactory. For majority of the Paralympians, the most unsatisfactory factor was individual orthopaedic equipment used in their disciplines. Sports facilities received a generally positive assessment, being categorized as sufficient.

Among the factors considered were the conditions of the stay on central camps and consultation. The data in Table 2 shows that the respondents were mostly satisfied with provided food and accommodation. Duration of camps and transport were rated as sufficient. Women more often than men expressed a higher degree of satisfaction with these conditions.

Questions related to the conditions in which Polish national team athletes were preparing for the Paralympics also included the area of interpersonal relations. The data in Table 3 demonstrate the cooperation of the respondents with the national team coaches; atmosphere; and interaction between the athletes themselves. The responses relating to social dimension received a positive assessment; there were differences, however, between the polarized attitudes of women and men. None of the sportswomen evaluated the atmosphere of cooperation as destructive.

Table 1. Evaluation of the facilities, sports equipment, individual equipment, and sports orthopaedic equipment that the athletes used during their preparations for the Paralympic Games

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Sports facilities								
Women	31	10	14	5	2	0	4,0	Sufficient
Men	58	13	31	11	2	1	3,9	Sufficient**
Total	89	23	45	16	4	1	4,0	Sufficient**
Sports equipment								
Women	31	13	9	8	1	0	4,1	Satisfactory**
Men	58	22	24	7	5	0	4,1	Satisfactory**
Total	89	35	33	15	6	0	4,1	Satisfactory**
Individual sports equipment								
Women	31	11	14	5	1	0	4,1	Satisfactory**
Men	58	16	23	11	8	0	3,8	Sufficient**
Total	89	27	37	16	9	0	3,9	Sufficient**
Sports orthopedic equipment								
Women	20	3	4	3	2	8	2,6	Unsatisfactory
Men	39	6	5	8	8	12	2,6	Unsatisfactory**
Total	59	9	9	11	10	20	2,6	Unsatisfactory**

* Ratings: 5 - very high, 4 - high, 3 - average, 2 - low, 1 – very low; ** Level of significance of mean rating: $p < 0.05$

Table 2. Evaluation of transport, accommodation, food, and planned duration of stay on the central sports camp and consultation that would allow for optimal preparation of athletes for the Paralympic Games

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Transport								
Women	30	12	7	6	5	0	3,9	Sufficient
Men	55	13	26	10	6	0	3,6	Sufficient**
Total	85	25	33	16	11	0	3,7	Sufficient**
Accommodation								
Women	30	11	12	6	1	0	4,1	Satisfactory**
Men	55	18	26	10	1	0	4,1	Satisfactory**
Total	85	29	38	16	2	0	4,1	Satisfactory**
Food								
Women	30	18	10	2	0	0	4,5	Satisfactory**
Men	55	22	22	7	1	3	4,1	Satisfactory**
Total	85	40	32	9	1	3	4,2	Satisfactory**
Planned duration								
Women	30	9	10	7	3	1	3,8	Sufficient
Men	55	13	17	16	4	5	3,5	Sufficient**
Total	85	22	27	23	7	6	3,6	Sufficient**

For explanation of symbols see Table 1.

Table 3. Evaluation of cooperation between the national team coaches and Paralympic athletes, atmosphere, and interaction between the athletes themselves while preparing for the Paralympics

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Cooperation with coaches								
Women	31	17	8	3	1	2	4,2	Satisfactory**
Men	58	30	10	10	4	4	4,0	Sufficient**
Total	89	47	18	13	5	6	4,1	Satisfactory**
Atmosphere and interaction between athletes								
Women	31	14	12	4	1	0	4,3	Satisfactory**
Men	58	20	30	5	1	2	4,1	Satisfactory**
Total	89	34	42	9	2	2	4,2	Satisfactory**

For explanation of symbols see Table 1.

Table 4. Evaluation of medical care and assistance of specialists the athletes received when preparing for the Paralympics

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Medical care								
Women	31	7	1	6	11	6	2,7	Unsatisfactory
Men	58	5	9	7	8	29	2,2	Unsatisfactory**
Total	89	12	10	13	19	35	2,4	Unsatisfactory**
Wellness treatments after trainings and competitions								
Women	31	6	5	11	6	3	3,2	Sufficient
Men	58	10	15	12	8	13	3,0	Sufficient**
Total	89	16	20	23	14	16	3,1	Sufficient**
Assistance of physiotherapist								
Women	20	5	6	3	4	2	3,4	Sufficient
Men	30	8	6	5	4	7	3,1	Sufficient
Total	50	13	12	8	8	9	3,2	Sufficient**
Assistance of masseur								
Women	28	8	6	6	6	2	3,4	Sufficient
Men	38	14	7	4	7	6	3,4	Sufficient
Total	66	22	14	9	13	8	3,4	Sufficient**
Assistance of dietician								
Women	12	2	2	2	1	5	2,6	Unsatisfactory
Men	13	1	0	2	4	6	1,9	Unsatisfactory
Total	25	3	2	4	5	11	2,2	Unsatisfactory**
Assistance of psychologist								
Women	5	1	4	0	0	0	4,2	Satisfactory**
Men	5	2	0	0	2	1	3,0	Sufficient
Total	10	3	4	0	2	1	3,6	Sufficient

For explanation of symbols see Table 1.

The opinions of the respondents about medical care and assistance of specialists varied from very positive to strongly negative (Table 4). Every second man and fifth women expressed deep dissatisfaction with the medical care. As a result, it fell into a category "unsatisfactory". In the opinion of the Paralympians, wellness treatments after trainings and competitions only satisfied their needs at a sufficient level, and one in five respondents put them in the "very low" category. Only 56% of the athletes could count on the assistance of a physiotherapist: one in four persons rated this at the highest level, while one in five, strongly negative. This means that the guaranteed offer of assistance was far from the expectations of Polish Paralympians. Moreover, not all persons on the national team had the opportunity to work with a masseur. About 74% of the athletes received this assistance. Most of them expressed satisfaction with it; however, some women and men gave it low or very low ratings. In preparation for the games, the Polish athletes were not provided with the direct support of a dietician or a psychologist. Only a small

portion of the respondents could use it (25 used a dietician; 10 used a psychologist). The sportswomen and sportsmen felt that the level of service of dietician was unsatisfactory. With regard to the assistance of psychologist: these conditions were satisfactory for women and sufficient for men.

The experience of the Paralympian team concerning their interaction with the media also proved unsatisfactory. Most of the ratings were low and very low for men, while average for women. Generally, the level of cooperation with the media was evaluated as unsatisfactory (Table 5).

The last of the studied issues was the relationship between obligations arising from practicing sports and the sphere of personal life, career, and education (Table 6). Most of the Paralympians managed to combine personal life with a sports career at a sufficient level. Juggling professional responsibilities and education with regular sports practice proved more difficult.

work and rest. The opinions expressed by the respondents – from very positive to strongly negative – confirmed the fact that not all areas of support and organization satisfied the Polish national team.

It should be noted that in preparation for the Paralympics, the adequate adaptation of facilities to the functional capabilities of persons with disabilities plays a crucial role. According to Depauw and Gavron [3], such facilities should provide the athletes with easy and unfettered access to every place in the infrastructure and its facilities. It is even more true in the eye of the norms used to design sports centres, which must address the needs of athletes with disabilities. Whether the facilities meet their requirements, according to Hanrahan [4], depends primarily on the national team coaches, because they are responsible for the organising training process, including planning and selecting optimal training facilities.

Table 5. Evaluation of contacts the athletes with the media during preparations for the Paralympic Games

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Women	29	6	3	10	7	3	3,1	Sufficient
Men	47	2	5	9	17	14	2,1	Unsatisfactory**
Total	76	8	8	19	24	17	2,6	Unsatisfactory**

For explanation of symbols see Table 1.

Table 6. Evaluation of the possibility of reconciling personal life, professional, academic and school responsibilities with sport by the athletes preparing for the Paralympic Games

Respondents	n	Rating categories*					Mean rating	Categories of conditions
		5	4	3	2	1		
Combining personal life with sport								
Women	31	2	17	9	2	1	3,6	Sufficient**
Men	58	15	19	21	0	3	3,7	Sufficient**
Total	89	17	36	30	2	4	3,7	Sufficient**
Combining work with sport								
Women	20	1	9	5	2	3	3,2	Sufficient
Men	38	9	9	14	3	3	3,5	Sufficient**
Total	58	10	18	19	5	6	3,4	Sufficient**
Combining school and university with sport								
Women	21	3	6	9	2	1	3,4	Sufficient
Men	30	5	7	12	3	3	3,3	Sufficient**
Total	51	8	13	21	5	4	3,4	Sufficient**

For explanation of symbols see Table 1.

Discussion

Steadward and Sheri [25] pointed out that only the hard work of the athletes and their coaches, intensive training, and a well executed period before a competition have a significant impact on success in the Paralympic Games, but also the high standards of conditions created for both

The sports, individual, and orthopaedic equipment is also of great importance to the athletes preparing for the games. Pallis [17] and Vanlandewijck [27] are convinced that ensuring that this equipment is at the highest possible level will enable athletes with disabilities to not only achieve significantly better results during the competition, but it will also guarantee their safety. In addition,

the appropriate adaptation of equipment with regard to the individual needs of each competitor will prevent or reduce the likelihood of injury and increase comfort during training and competition. The considered research results become very important when referring to the opinion expressed by Burkett and Mellifont [1]. In their view, an athlete's fitness and safety may be increased by simple but effective modifications in design techniques of basic sports equipment. Laing and Carr were of the same opinion [11], claiming that appropriate sports clothing is not only comfortable for athletes, but also minimises the risk of injury in case of a fall.

The opinions of the national team on the state of individual orthopaedic equipment that they used during the Paralympic competition are highly alarming. On the basis of the obtained results, it can be concluded that the athletes were not satisfied with it both during the Beijing and the Athens Olympic Games [23].

Before the Paralympic Games, sport training for the athletes nominated for national team are based on central camps and consultation, thus their satisfaction with the comfort of accommodation and the use of sports equipment is essential. The duration of stay at camps and sports consultation should be carefully thought out, with optimal possible access (transport). In the case of Polish Paralympians, this is particularly important due to the fact that the athletes who were nominated to participate in the Beijing Olympic Games combined their sports careers with family lives and parenting (about 26%), professional lives (about 65%), and/or school-academic responsibilities (about 57%).

It is believed that sports success is affected not only by properly realised training and athletic skills, but also – due to high levels of stress – by satisfying the area of human relations, including cooperation with coaches and a favourable atmosphere and interaction between the athletes themselves. The thesis of the impact of coach-athlete relationships on sports results has been confirmed by many researchers, including Smith and Smoll [20], Lavoie [12], and Martens [14].

A study conducted by Sobiecka et al. [24] showed that communication between coaches and participants of the Paralympic Games was at a very good level. It should be assumed then that the atmosphere and cooperation in this area proved to be satisfactory to the members of the Polish national team who were preparing for the Beijing Games.

According to Depauw and Gavron [3] and Makowski [13], in order to ensure the appropriate conditions for training, competition, and above all else, safety for the athletes with disabilities, it is necessary to appoint a medical team, which will include a doctor and other specialists in the following areas: wellness, physiotherapy, massage, physiology, and nutrition. They should fulfil their tasks not only during preparations for major competitions, but through systematic controlling and promoting the athletes' health and, if necessary, administering proper treatment and rehabilitation. From the point of view of mission, which has to be accomplished by a medical team while preparing the national team representatives to participate in the Paralympic Games, the results of the present study proved to be unsatisfactory. A low evaluation of the medical care provided to Polish athletes raises concerns. It is especially alarming in the face of Regulation of the Minister of Sport of 8 January 2007 regarding the scope of medical care for athletes of the national team – persons with disabilities and Paralympians – which was to provide athletes with disabilities with medical care, including all health-related prevention, treatment, and rehabilitation.

The key factors in the process of Olympic preparations include mental support. Kłodecka-Różalska [8,9] and Porter [18] argue that the success in significant events is not only an effect of physical fitness and mental preparation, but also the actual disposition of an athlete. Unfortunately, the data demonstrated that only one in ten Paralympians had the assistance of a psychologist ensured. Not everyone was satisfied with it.

There is a general belief that multilateral cooperation of the sports community of the disabled with representatives of the media has the greatest impact on promoting positive ideas about adapted physical activity, including Paralympic sports [3,15]. The results revealed the dissatisfaction of the Paralympians and negative opinions on contact with the mass media. This situation requires consideration and modern transformation, since the media, especially television, significantly affects social perceptions of the value of sport for the quality of life of people with disabilities.

According to Jones and Howe [5], special attention should be paid to the personal lives of athletes, as this factor is an essential element of the existence of every person, the disabled person's life in particular. Our findings in this field showed that preparations of a large group of athletes for the Paralympic Games were performed at the expense of their personal lives.

Key issues also remain including the ability to combine a professional career with other fields of activities as well as including people with disabilities into society [21,22]. Tasiemski and colleagues drew attention to the importance of a professional career for the functioning of disabled athletes [26]. According to them, in addition to the social benefits, a career provides financial independence for people with disabilities. The authors also

pointed out that the athletes taking part in competition are hard workers. Systematic training and therefore sense of duty connected with it is reflected in their conscientiousness and efficient work organization. Similar views were demonstrated in a paper by Sobiecka [21]. She assumed that experiences acquired during a sports career proved to be useful in the exercise of professional responsibilities. In addition, many athletes appreciated their promotions and professional prestige, which were supported by regular sports activities. Education and professional preparation for athletes was of similar importance. The paper by Kraemer and Fleck [10] suggested that what is most important in schooling is not only individualized education, as well as support from teachers, lecturers, and family, but also the attitude of the closest sports circles, especially coaches of young athletes.

Based on the obtained results he following conclusions can be formulated:

1. Different levels of care and conditions for the Polish national team were provided during their preparations for the Beijing Paralympic Games.

2. Most of the athletes were fully satisfied with the conditions of central camps and consultation (food, accommodation, sports equipment) and social relations (atmosphere of cooperation between the athletes and cooperation between the athletes and national team coaches of various disciplines).

3. The issues that require more professional attention are the health of athletes nominated to participate in the Paralympic Games (medical care and individual orthopaedic equipment) and contact with the media, which shape the image of sport of the disabled people.

4. In preparation for the next Paralympic Games the athletes need to be provided with constant and high-level assistance of both a psychologist and a nutritionist.

5. In the perspective of future athletic goals set for the representatives of our country, a high standard of sports facilities, individual sports equipment, transport to the central camps, and consultation, as well as professional care in the field of wellness, physiotherapy and massage, should be taken into account in the Paralympic preparations.

References

1. Burkett B.J., R.B.Mellifont (2008) Sport science and coaching in Paralympic cycling. *Int.J.Sports Sci.Coach.* 3:95-103.

2. Coaching Association of Canada (2005) Stages coaches may go through when working for the first time with an athlete with a disability. In: Coaching Athletes with a Disability. Investors Group, Canada, pp. 4-6.

3. DePauw K.P., S.J.Gavron (2005) Disability Sport. Human Kinetics Publishers, Champaign IL.

4. Hanrahan S. (2005) Able athletes with disabilities: issues and group work. In: M.B. Andersen (eds.) Sport Psychology in Practice. Human Kinetics, Champaign IL, pp.223-247.

5. Jones C., P.D.Howe (2005) The conceptual boundaries of sport for the disabled: classification and athletic performance. *J.Philos.Sport* 32:133-146.

6. Kłodecka-Różalska J. (2001) Advantages-obstacles-psychological costs of women s sport activity. In: A.Papaioannou, M.Goudas, Y.Theodorakis (eds.) In The Dawn Of The New Millennium. Proc. 10th World Congr. Sport Psychology, ISSP, Skiatos, pp. 279-281.

7. Kłodecka-Różalska J. (2002) Opinion of Polish female athletes on preparation conditions for the Olympic Games in Sydney 2000 and Salt Lake City 2002. (in Polish) *Kob.Sport* 3:6-9.

8. Kłodecka-Różalska J. (2006) Mental training achievements and future applications of psychology in Polish sports. *Phys.Educ. Sport* 50 (4):99-107.

9. Kłodecka-Różalska J. (2007) "Face to face" with the whole world: how to mentally prepare the team for the Olympics. *Pol.J. Sports Med.* 23:184-188.

10. Kraemer W.J., S.J.Fleck (2004) Creating individualized programs. In: Strength Training for Young Athletes. Human Kinetics Publishers, Champaign, pp. 52-61.

11. Laing R.M., D.J.Carr (2005) Is protection part of the game? Protection against impact using clothing and personal equipment. In: R.Shiho (eds.) Textiles in Sport. Woodhead Publishing, pp. 232-261.

12. LaVoi N.M. (2007) Expanding the interpersonal dimension: closeness in the coach-athlete relationship. *Int.J.Sports Sci.*, 2(4):497-512.

13. Makowski A. (2008) High performance preparation for athletes of diverse abilities. *N.Am.J.Sports Phys.Ther.* 3 (2):66.

14. Martens R. (2004) Communicating with your athletes. In: Successful Coaching. Human Kinetics Publishers, Champaign, pp. 95-119.

15. Molinatti B. (2006) TV, sports, & history. *Sports'n Spokes* 32: 61.

16. Nunn C. (2009) Coaching at the Paralympic level: if only the administrators understood. In: O.J.Schantz, K.Gilbert (eds.) The Paralympic Games: Empowerment Or Side Show? Meyer & Meyer Verlag, Aachen, pp. 102-114.

17. Pallis J.M. (2003) Materials in Paralympic sports. In: M.Jenkins (eds.) Materials in Sports Equipment. Woodhead Publishing, Cambridge, pp. 376-398.

18. Porter K. (2003) Mental training for specific needs. In: The Mental Athlete: Inner Training for Peak Performance in All Sports. Human Kinetics, Champaign, IL, pp.153-188.

19. Sawicki O. (2008) Reflections on the Beijing Summer Paralympic Games - A Canadian Paralympic Committee perspective. *Coach.Plan* 15: 37-39.

20. Smith R.E., F.L.Smoll (2007) Behavioral research and intervention in youth sports. In: D.Smith, M.Bar-Eli (eds.) Essential Readings in Sport and Exercise Psychology. Human Kinetics Publishers, Champaign, pp. 135-144.

21. Sobiecka J. (2000) The role of sport in comprehensive rehabilitation of Polish participants of Paralympic Games (in Polish). Studies and Monographs No. 9, AWF Cracow.

22. Sobiecka J. (2005) Winter sports practice and its influence on the frame of mind and lifestyle of disabled persons as exemplified by Polish Paralympic competitors. *Pol.J.Environ.Stud.* suppl. II, 13:512-516.

23. Sobiecka J. (2005) Some selected aspects concerning the preparation of the Polish national team members for the summer Paralympic Games held in Athens in 2004. *Med.Sport.* suppl. 9 (2):163-164.

24. Sobiecka J., R.Plinta, K.Cichoń, K.Drobniewicz (2011) The relations that occurred between the athletes and coaches of the national team during their preparations for the Paralympics games (according to the athletes). *J.Orthop.Trauma.Surg.Relat.Res.* 26:52-70.

25. Steadward R.D., L.F.Sheri (2003) History of disability sport. In: R.D.Steadward, G.D.Wheeler, E.J.Watkinson (eds.) Adapted Physical Activity. University of Alberta Press, Edmonton, pp. 471-498.
26. Tasiemski T., P.Kennedy, B.P.Gardner, R.A.Blaikley (2005) Athletic identity and sports participation in people with spinal cord injury. *Adapt.Phys.Activ.Q.* 21:364-378.
27. Vanlandewijck Y. (2006) Sport science in the Paralympic movement. *J.Rehabil.Res.Dev.* 43: 17-24.

Received 8.02.2012
Accepted 6.03.2011

© University of Physical Education, Warsaw, Poland

Appendix A

Questionnaire for female and male athletes training for the Paralympic Games

(Based on "Survey for female athletes training for the Olympic Game", modified by Dr. J. Sobiecka for the needs of the athletes with disabilities)*

Please rate the conditions under which you have been preparing for the Beijing Summer Paralympic Games **on a scale of 5 to 1 (5 – very high, 4 – high, 3 – average, 2 – low, 1 – very low)**. If an issue does not concern you, underline the answer "**not applicable**". However, when the assistance of specialists has not been provided during your preparations or there was no interest from the media – please choose the answer "**none**".

1/ Sports facilities **5 4 3 2 1**

2/ Sports equipment **5 4 3 2 1**

3/ Individual sports equipment (clothing, shoes, bags, etc.) **5 4 3 2 1**

4/ Sports orthopaedic equipment **5 4 3 2 1 not applicable**

5/ Transport to the central sports camps and consultation **5 4 3 2 1**

6/ Standards of accommodation during the central sports camps and consultation **5 4 3 2 1**

7/ Food during the central sports camps and consultation **5 4 3 2 1**

8/ Planned duration of your stay on the camps and consultation, allowing the optimum preparation for the Paralympic Games **5 4 3 2 1**

9/ Cooperation with the Paralympic national team coaches **5 4 3 2 1**

10/ Atmosphere and interaction between the athletes themselves **5 4 3 2 1**

11/ Medical care **5 4 3 2 1 none**

12/ Wellness treatments after trainings and competitions **5 4 3 2 1 none**

13/ Assistance of a physiotherapist **5 4 3 2 1 none**

14/ Assistance of a masseur **5 4 3 2 1 none**

15/ Assistance of a dietician **5 4 3 2 1 none**

16/ Assistance of a psychologist **5 4 3 2 1 none**

17/ Contact with the media **5 4 3 2 1 none**

18/ Possibility of combining personal life with sports **5 4 3 2 1**

19/ Possibility of combining professional responsibilities with sports **5 4 3 2 1 not applicable**

20/ Possibility of combining school and academic responsibilities with sports **5 4 3 2 1 not applicable**

21/ Name other needs that should be met in your preparation for the Paralympic Games**:**

a/……
b/……
c/……

** Kłodecka-Różalska J. (2002) Opinion of Polish female athletes on preparation conditions for the Olympic Games in Sydney 2000 and Salt Lake City 2002. (in Polish) Kob.Sport 3:6-9.*

Personal Data

Gender *(underline as appropriate):* female, male **Year of birth** ……

Weekly participation in training *(how many times per week)……*

Experience with sports training *(in a number of years)……*

Discipline *(underline as appropriate):* horse riding, cycling, athletics, archery, swimming, weightlifting, shooting, wheelchair fencing, wheelchair tennis, table tennis, rowing

Multiple participation in the Paralympic Games *(underline as appropriate):* 1 2 3 4 5

Start group - medical classification *(underline as appropriate):* visual impairment, amputations of at least one limb, paraplegia, other injuries of the musculoskeletal system, Cerebral Palsy

Education *(underline as appropriate):* higher education, general secondary education, vocational education (including post-secondary), basic vocational education, primary education (including lower secondary school *gimnazjum*)

Marital status (*underline as appropriate):* single, married, widowed, divorced, unmarried partners

Working life *(underline as appropriate):* working, unemployed, not working, pupil, student

Disability categories *(underline as appropriate):*
visual impairment – blind, amblyopic; injuries of the musculoskeletal system of the lower limbs – in a wheelchair, not using a wheelchair; injuries of the musculoskeletal system of the upper limbs; other (what?)……

Disability levels *(underline as appropriate):* severe, moderate, light

Thank you very much for completing the survey. We wish you success in the Games and look forward to our further cooperation.