

## EVALUATION OF PERCEPTION OF QUALITY OF LIFE OF DISABLED ATHLETES

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**Annotation.** *Purpose:* To evaluate the perception of quality of life for athletes - disabled, participating in individual and team Paralympic sports. *Material:* The study involved 32 athletes sports club "Start" in Wrocław in 2013, engaged in individual sports: swimming, weightlifting, powerlifting (powerlifting) and command: wheelchair basketball and volleyball in a sitting position. *Results:* Studies have proven that sports people with physical disabilities have a positive effect on the quality of their lives. *Conclusions:* 1. Study aspects of perception of quality of life is a complex issue, but deserves proper attention and appropriate force to study it. 2. Athletes - Disabled involved both individual and team sports, the perception of quality of life is average.

**Keywords:** physical activity, quality of life, disability.

### Introduction

Holistic concept of life quality was developed on the base of existential psychology, which regards a human being as personality [4, 11, 13, 14]. According to this conception person is a complex and many-sided being and, therefore, has inhomogeneous structure of demands and strives. That is why apprehension of life quality shall also be regarded as a complex and many-sided phenomenon. Basing on existential psychology of personality it can be assumed that mental life goes in four dimensions: psycho-physical, psycho-social, subjective and meta-physical [4, 11, 13]. Increased physical activity is a quantity of movement and physical exercises, required for progressing and maintenance of health of every person. Physical activity is especially useful for disabled people, for whom movement is a kind of therapy [1, 6, 8-10, 12].

### Purpose, tasks of the work, material and methods

*The purpose of the work* was evaluation of life-quality's apprehension by disabled sportsmen, who participated in individual and team para-Olympic kinds of sports.

*Materials and methods of the research.* In researches 2013 32 sportsmen of sport club "Start" in Wrocław took part. They practiced individual kinds of sports: swimming, power-lifting, weight-lifting as well as team sports: basketball on wheelchairs and volleyball in sitting position. On the base of test-questionnaire sportsmen were divided by their age, type of dysfunction, kind of sport and degree of disablement. High disablement degree – 1<sup>st</sup> group, moderate degree -2<sup>nd</sup> group, light degree – 3<sup>rd</sup> group [15]. Age of sportsmen was from 17 to 58 years old, mean age – 31.2 years with standard deviation 11.4. Most of all there were sportsmen at the age from 17 to 30 years old (53% of participants), 31% of sportsmen were of age from 30 to 45 years old; the least quantity of sportsmen were of age from 45 to 58 years old – 16%.

*The methods of the research.* For evaluation of life quality's apprehension by disabled sportsmen, who practiced sports professionally both as individual kinds of sports and as team kinds we used questionnaire of life quality's apprehension (QLQA), created by Maria Stras-Romanovska 2004) [14].

*Statistical methods.* Statistic calculations were carried out with software PI (v. 11 Stat.Soft)

### Results of the research and their discussion

Recent years there has been being registered significant increment of disabled, practicing competition kinds of sports in Poland sport clubs. In spite of the fact that trend to increasing of main statistic indicators gives a picture about functioning of certain clubs, it does not reflect total participation of disabled in physical culture [2, 3, 13-15]. Percentage of disabled people, practicing sports in relation to total quantity of disabled of age up to 54 years old is only 1.3%. If not to consider age category, this percentage is only 0.5% in relation to all disabled in Poland. For comparison, in Germany this indicator is 6%, in Switzerland – 3%. Both in Poland and in the mentioned countries this percentage is not high [2, 5, 13, 15]. The conducted researches show that among groups of disabled sportsmen, by the data of questionnaire, total mark of life quality apprehension was 181. 4 ±17.7 points in different fields and it was average result. The obtained results are presented in Table 1.

Table 1

*Results of life quality questionnaire obtained in groups of disabled sportsmen (N=32). Mean results with standard deviation (SD)*

Life quality questionnaire (QLQA)	Mean results $\bar{x}$	Standard deviation SD
Psycho-physical sphere	44.59	6.62
Psycho-social sphere	44.06	5.91
Subjective sphere	47.28	4.91
Meta-physical sphere	45.50	4.56
Total result	181.44	17.67

**Analysis of research results in both groups of disabled sportsmen in certain kinds of sports.** Mean results of swimmers were  $183.38 \pm 22.58$  points, power-lifting received in average  $175.33 \pm 16.19$  points, mean mark of basketball players on wheelchairs was  $179.5 \pm 12.34$  points; the best indicators were shown by volleyball players  $187.11 \pm 17.91$  points. Results varied but did not differ at statistically significant level ( $p > 0.05$ ). By results of psycho-physical scale, the highest average mark was received by volleyball players in sitting position –  $46.56 \pm 5.43$  points, swimmers' results were not much worse –  $46.25 \pm 9.32$  points. Similar results were shown by basketball players on wheelchairs –  $42.83 \pm 6.40$  points, power-lifting –  $42.33 \pm 4.85$  points. In psycho-physical sphere there were no statistically significant differences between sportsmen of individual and team kinds of sports. Analyzing mean results in psycho-social sphere we noticed that they were in similar correlation, like in psycho-physical sphere. Mean results of volleyball players in sitting position were  $45.67 \pm 5.54$  points; similar results were shown by swimmers –  $45.25 \pm 6.07$  points and they were the best results. A little worse were results of basketball players on wheelchairs –  $43.83 \pm 2.79$  points and by power-lifters –  $41.56 \pm 7.50$  points. Subjective sphere, like in previous examples, did not show statistically significant differences between sportsmen. In this sphere volleyball players in sitting position also showed the highest mean mark –  $48.56 \pm 5.94$ , while the lowest mean mark was received by power-lifters –  $46.11 \pm 4.14$ . Mean indicators of swimmers were  $47.88 \pm 5.41$  points and basketball players on wheelchairs showed –  $46.33 \pm 4.18$  points. In meta-physical sphere results were distributed in the other way. The highest indicators had basketball players on wheelchairs –  $46.5 \pm 5.02$  points; the following were volleyball players with mean mark  $46.33 \pm 5.02$  points, power-lifters –  $45.33 \pm 4.24$  points; the lowest result was shown by swimmers – mean value  $44.00 \pm 5.29$  points. Regarding disabled sportsmen we did not notice substantial differences between individual kinds' representatives and team kinds of sport ones [7] (see table 2).

Table 2

*Characteristics of mean results of sportsmen, who practice individual kinds of sports (M1) and team kinds of sports (M2)*

Life quality questionnaire (QLQA))	Individual kinds of sports (M1)	Team kinds of sports (M2)	p
Psycho-physical sphere	44.1765	45.0667	0.710732
Psycho-social sphere	43.2941	44.9333	0.442916
Subjective sphere	46.9412	47.6667	0.683469
Meta-physical sphere	44.7059	46.4000	0.302409
Total resul	179.1176	184.0667	0.438055

Analysis of total apprehension of life quality as well as separate spheres, with regarding results by categories: low, middle and high, witnesses that in every example middle results dominate.

Table 3

*Total apprehension of life quality as well as certain spheres, according to classification into " low, middle and high, where N – quantity of persons by results in certain category. Besides the above given variables, with analysis of results we regarded some questions and method of their evaluation by sportsmen*

		Psycho-physical sphere	Psycho-social sphere	Subjective sphere	Meta-physical sphere	Total result
Low resul	N	3	6	6	6	5
	%	9	19	19	19	15.5
Middle result	N	27	22	23	20	22
	%	77	72	69	62	69
High result	N	5	3	4	6	5
	%	14	9	12	19	15.5

Among questions with the least quantity of points we can mention such as: "I often feel pain", "In my relations with surrounding people there are often competitiveness and struggle", "I rare give up pleasure for the sake of higher values", "I have no plans for the future", or "It is difficult for me to forgive anybody". The questions, which received the highest quantity of points were: "I am physically active (practice sports, gymnastics, practice outdoors walking)", "I should like to leave something good after me", "There are people, with whom I have profound links", "It is worthy to strive to be a good man" as well as "Receiving new experience gives me a lot of joy". From position of criterion of professional or educational functioning situation was more positive. The mentioned functioning covered 78% of participants that was an obvious advantage in respect to people, who were not physically active. Age structure of certain kinds of sports' sportsmen, especially swimmers, was also interesting. Men age of these sportsmen was the lowest. It

can witness about development of this kind of sports and about training of swimmers since childhood. There was no difference between mean results of sportsmen of individual and team kinds of sports. It concerned psycho-social and subjective spheres, where in team kinds of sports individuality and independence of a participant was stressed. In individual kinds of sports possibility to achieve success is more one-dimensional. It should be noted that development of sports in Poland, planned up to 2015, promises a lot because the main, planned task is active in good physical form society [2, 5, 13]. Sports shall take even more important place in system of values and facilitate human progressing, including health and physical form.

#### Conclusions:

1. Disabled sportsmen apprehend quality of life at middle level, independent on their belonging to individual or team kinds of sports.
2. There was noticed no differences in life quality's apprehension between disabled professional swimmers, powerlifters, basketball players on wheelchairs and volleyball players in sitting position.
3. Increased physical activity, including professional disabled sportsmen, positively influences on life quality apprehension.
4. Research of life quality's apprehension is rather a difficult problem, but it is worthy to pay attention to it and render efforts for it that shall result in further studying of this topic.

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**Cite this article as:** Bolach Bartosz, Prystupa Tetyana. Evaluation of perception of quality of life of disabled athletes. *Physical education of students*, 2014, vol.1, pp. 13-16. doi:10.6084/m9.figshare.903687

The electronic version of this article is the complete one and can be found online at: <http://www.sportpedagogy.org.ua/html/ahive-e.html>

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Received: 04.11.2013  
Published: 28.12.2013