

# THE INFLUENCE OF SPORTS ON PARALYMPIC ATHLETES' PERSONAL DEVELOPMENT

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## **Abstract**

One of the most effective ways of integrating people with disabilities into society and ensuring their comprehensive personal development is to engage people with disabilities into Paralympic Games. Such engagement creates the necessary conditions to socialize people with disabilities, to adapt their physical and mental states to existing living conditions, to ease negative manifestations of their psycho-emotional states, to promote their self-realization. The article presents the results of the research determining the impact of sports on Paralympic athletes' personal development. The comparison of the indicators of psychological well-being and hardiness of Paralympic athletes with normative values, the indicators shown by students without disabilities and students with disabilities has confirmed proven clear positive influence of sports on Paralympic athletes' personal development. In particular, Paralympic athletes achieve an optimal level of psychological well-being and a significant increase in all psychological hardiness components.

**Keywords:** *Paralympic sports, people with disabilities, self-realization, psychological factors of sports achievements.*

## **Introduction**

One of the most pressing social problems of nowadays is full integration of people with disabilities into society and their comprehensive personal development. Among the effective ways of it addressing is especially important involving people with disabilities in Paralympic sports (Dařova, 2007; Ondruřova, et. al., 2013). After all, such engagement creates the necessary conditions to socialize people with disabilities, to adapt their physical and mental states to living conditions, to ease negative manifestations of their psycho-emotional states, to promote their self-realization and personal development (Dieffenbach, 2012; Kasum, Gligorov, & Nastasić-Stořković, 2011; Martin, Malone & Hilyer, 2011).

Close interactions with healthy athletes give Paralympic ones chances to compensate consequences of their disabilities, establish new relations and friendships and increase their satisfaction with their lives (Ondrušova, & al., 2013). The humanistic sense of various sport competitions for persons with disabilities are invaluable because they allow such people to “come back to society” (Dađova, 2007). The role of camaraderie is significantly enhanced in Paralympic sports, which satisfies the Paralympic athletes’ need for autonomy and social support (Alvarez, & al., 2009; Falcao, Bloom, & Loughhead, 2015; Vincer, & Loughhead, 2010).

Paralympic athletes, as a rule, show a high level of internal motivation (Banack, Sabiston, & Bloom, 2011). The leading motives for sports activities of people with disabilities are: self-realization, satisfaction, rewards, support, physical development and stress reduction (Omar-Fauzee, & al., 2010), their identity strengthening, creation of a positive attitude to life, a gain in health, advanced athletic qualifications, competency and competitiveness (Huang, & Brittain, 2006).

The psychological differences between people with disabilities engaged in and not engaged in sports are: the first show higher altruism, willingness to help others, the desire for cooperation, sense of responsibility, well-wishing attitude towards others, self-esteem, independence from opinions of others, self-actualization, sociability, constructivism, purposefulness, self-confidence, life satisfaction and psychosocial adaptation (Campbell, & Jones, 1994; Greenwood, Dzewaltowski, & French, 1990; Maryasova, 2013). They also show less symptoms of depression and anxiety (Martin, Malone & Hilyer, 2011).

Paralympic athletes, in comparison with other athletes, are characterized by the following psychological properties: they accept significantly higher risks; perceive their failures and mistakes more constructively; they are more open for supervision; they also are focused mainly on to the present; significantly higher estimate their quality of life and better satisfied with it; are characterized by higher vivacity and lower nervousness and depression; show a higher need for cohesiveness (Maryasova, 2013).

However, there is a lack of comparative studies on an influence of sports on Paralympic athletes’ personal development, in particular on their psychological hardiness and psychological well-being (Hanrahan, 2007; Jefferies, Gallagher, & Dunne, 2012).

**Object of the research:** psychological hardiness and psychological well-being of Paralympic athletes and students with and without disabilities.

**The aim of the research:** to determine the influence of sports on Paralympic athletes’ personal development.

**Methods of the research:** The Ryff Scales of Psychological Well-Being and S. Maddi’s Personal Hardiness test.

For statistical analysis, we used SPSS 22 programming package. The data obtained in our research correspond to the normal distribution of studied data. We used: descriptive statistics (mean, and std. deviation), independent-samples t-test, t-test for single means.

**Methodology of the research:** the influence of sports on Paralympic athletes’ personal development was determined by comparing of the indicators of psychological well-being and hardiness of Paralympic athletes with normative values, the indicators shown by students without disabilities and students with disabilities not engaged in sports.

**Participants of the research:** 1) 106 members of the Paralympic and Defilimnical teams of Ukraine in different sports (16-53 year old, 84 men and 22 women); 2) 191 students (17-25 year old, 91 students without health problems and 98 students with disabilities not engaged in sports). All of them were students of the Open International University of Human Development “Ukraine” (Kiev, Ukraine). The research was conducted during 2015-2017.

The studies were conducted with the permissions of the teams' and universities' management and the personal consent of the participants.

### Results and Discussion

The results obtained by us with the Ryff Scales of Psychological Well-Being show that the main components of psychological well-being of the Paralympic athletes, in general, are close to the normative values (see Table 1).

**Table 1.** Comparison of the main components of the Paralympic athletes' psychological well-being with the normative values

Scale	Paralympic athletes (n = 106)		Normative values			
			men 20-35 years		women 20-35 years	
	$\bar{X}$	$S_x$	$\bar{X}$	$S_x$	$\bar{X}$	$S_x$
Positive relations with others	59,2	9,5	63	7,12	65	8,28
Autonomy	56,8	10,0	56	6,86	58	7,31
Environmental mastery	58,9	7,5	57	6,27	58	7,35
Personal growth	61,2	7,2	65	4,94	65	6,04
Purpose in life	64,8	8,8	63	5,16	64	8,19
Self-acceptance	57,8	8,1	59	6,99	61	9,08

Similarly, the main components of the Paralympic athletes' psychological well-being are not significantly different from values obtained in our study for the students without health problems (Table 2). There is even a certain excess of the Paralympic athletes' results for all components.

**Table 2.** Comparison of the main components of the Paralympic athletes' psychological well-being with those of the students without health problems

Scale	Paralympic athletes (n = 106)		Students (n = 91)		p ≤
	$\bar{X}$	$S_x$	$\bar{X}$	$S_x$	
Positive relations with others	59,2	9,5	59,1	9,2	-
Autonomy	56,8	10,0	55,2	8,1	-
Environmental mastery	58,9	7,5	55,9	8,7	-
Personal growth	61,2	7,2	60,5	9,1	-
Purpose in life	64,8	8,8	59,7	9,2	-
Self-acceptance	57,8	8,1	56,5	10,4	-

We believe that the compliance of these results for the Paralympic athletes' psychological well-being with the population standards, revealed in our study, exists thanks to full use by people with disabilities of Paralympic sports opportunities in to achieve an acceptable level of psychological well-being for themselves. This assumption is supported by the fact that all components of psychological well-being of the Paralympic athletes are significantly higher than those of the students with disabilities not engaged in sports (Table 3).

**Table 3.** Comparison of the main components of the Paralympic athletes' psychological well-being with those of the students with disabilities not engaged in sports

Scale	Paralympic athletes (n = 106)		Students with disabilities (n = 98)		p ≤
	$\bar{X}$	S <sub>x</sub>	$\bar{X}$	S <sub>x</sub>	
Positive relations with others	59,2	9,5	54,7	8,8	0,001
Autonomy	56,8	10,0	53,6	9,5	0,05
Environmental mastery	58,9	7,5	54,1	8,2	0,001
Personal growth	61,2	7,2	58,2	9,7	0,01
Purpose in life	64,8	8,8	56,3	9,1	0,001
Self-acceptance	57,8	8,1	52,9	9,2	0,001

The most pronounced excess in the values has been determined for four scales: "Positive relations with others" (characterizing trust in relationships with one's entourage, caring for the welfare of others, empathy and established close relationships with others); "Environmental mastery" (ability to manage one's entourage, to control external activities, efficient use of opportunities to meet personal needs and achieve goals); "Purpose in life" (existence of purposes in life, a sense of focusing, belief in the sense of the past and present life); "Self-acceptance" (positive attitude towards oneself, acceptance of own positive and negative qualities, positive assessment of own past).

Thus, the obtained results are consistent with the literature data presented in the introduction to this article, as well as with the results of our research (Kokun & Shamich, 2016) concerning the outstanding opportunities of Paralympic sports in promoting personal self-realization and achieving the psychological well-being by people with disabilities.

As the results of S. Maddi's Hardiness Test show, the positive influence of engagement in sports for people with disabilities is even more pronounced as for hardiness development in comparison with the psychological well-being results. A part of hardiness indicators obtained in our research for the Paralympic athletes is significantly higher than the standard values (Table 4), and the indicators of the students without health disorders (Table 5).

**Table 4.** Comparison of the Paralympic athletes' hardiness indicators with the normative values

Scale	Paralympic athletes (n = 106)		Normative values	
	$\bar{X}$	S <sub>x</sub>	$\bar{X}$	S <sub>x</sub>
Commitment	38,03	8,07	37,64	8,08
Control	32,46	7,07	29,17	8,43
Challenge	17,05	5,14	13,91	4,39
Psychological hardiness	87,53	18,2	80,72	18,53

In particular, the obtained Paralympic athletes' hardiness indicators are significantly higher than the standard values (with t-test for single means) for: the integral hardiness scale (t = 3,34; p ≤ 0,001), "Control" scale (t = 2,90; p ≤ 0,001) and, to the greatest extent, "Challenge" scale (t = 4,78; p ≤ 0,001). That is, the indicators of the studied Paralympic athletes are in line with the normative only for "Commitment" scale.

Such differences indicate that Paralympic athletes, in general, are characterized, in a greater extent than the norm,: 1) by the belief that a struggle allows a person to influence outcomes from things happening around them, even if this influence is not absolute and success is not guaranteed (“Control” scale); 2) by the conviction that everything happening to a person contributes to his/her development because of knowledge and experience, not important, positive or negative, gained through it; by a view of life as a way of gaining experience, by willingness to act at own risk, considering that the desire for simple comfort and safety impoverish human life (“Challenge” scale); 3) by the integral hardiness indicator. That is, the data about a relatively high level of Paralympic athletes’ hardiness can be considered as sufficiently confirmed.

**Table 5.** Comparison of the Paralympic athletes’ hardiness indicators with those of the student without health problems

Scale	Paralympic athletes (n = 106)		Students (n = 91)		p ≤
	$\bar{X}$	S <sub>x</sub>	$\bar{X}$	S <sub>x</sub>	
Commitment	38,0	8,1	35,9	7,2	0,05
Control	32,5	7,1	30,7	7,4	-
Challenge	17,0	5,1	16,2	4,2	-
Psychological hardiness	87,5	18,2	82,8	15,8	0,05

This conclusion is supported by the fact that all hardiness indicators of the Paralympic athletes surpass those of the students with disabilities even more significantly than those of the students without health problems (Table 6).

**Table 6.** Comparison of the Paralympic athletes’ hardiness indicators with those of the student with disabilities, not engaged in sports

Scale	Paralympic athletes (n = 106)		Students with disabilities (n = 98)		p ≤
	$\bar{X}$	S <sub>x</sub>	$\bar{X}$	S <sub>x</sub>	
Commitment	38,0	8,1	32,7	8,6	0,001
Control	32,5	7,1	28,3	6,4	0,001
Challenge	17,0	5,1	15,4	4,9	0,05
Psychological hardiness	87,5	18,2	76,4	17,7	0,001

The last result, in our opinion, can be explained by three interrelated reasons: 1) people with disabilities, engaged in Paralympic sports, have even at the start of such activities a potentially higher psychological hardiness, compared to people with disabilities not interested in sports; 2) a “natural” sports selection leads to the fact that Paralympic athletes with an initial low hardiness stop such activities; 3) Paralympic exercises themselves, without a doubt, contribute to improvement of psychological hardiness of people with disabilities.

## Conclusions

The performed research has empirically confirmed clear positive influence of sports on Paralympic athletes' personal development. In particular, Paralympic athletes achieve an optimal level of psychological well-being and a significant increase in all psychological hardiness components.

The main components of Paralympic athletes' psychological well-being are close to the normative values. These values are also not differ significantly from those of the students without health problems (there is even a certain excess of Paralympic athletes' results for all components over the students' values). At the same time, all components of Paralympic athletes' psychological well-being are significantly higher than those of the students with disabilities not engaged in sports. The most pronounced excess is for four scales: "Positive relations with others", "Environmental mastery", "Purpose in life" and "Self-acceptance".

The positive influence of sports on people with disabilities as for development of their psychological hardiness is even more pronounced in comparison with psychological well-being. A part of hardiness indicators obtained in our research for the Paralympic athletes is significantly higher than the standard values and the indicators of the students without health disorders. In addition, all hardiness indicators of the Paralympic athletes exceed those of the students with disabilities even more significantly than those of the students without health problems.

We believe that Paralympic athletes' psychological hardiness is increased due to three main reasons: 1) people with disabilities, engaged in Paralympic sports, have even at the start of such activities a potentially higher psychological hardiness, compared to people with disabilities not interested in sports; 2) a "natural" sports selection leads to the fact that Paralympic athletes with an initial low hardiness stop such activities; 3) Paralympic exercises themselves, without a doubt, contribute to improvement of psychological hardiness of people with disabilities.

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### Summary

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