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Quality Assessment of Recreation Athletes

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Abstract: *The aim of this study was to determine the quality of life of recreationists, based on the questionnaire "The World Health Organization Quality of Life". Assessment of quality of life was determined on a sample of 24 respondents (18-35 years), both sexes, athletic club "Pirot" from Pirot and who completed a standardized questionnaire WHOQOL. The assessment of quality of life was performed in 4 domains: physical health, mental health, social relations, environment and assessed by the Likert scale method, with grades from 1 to 5. Descriptive statistics were used. The results of the research showed that people who are physically active have a high level of quality of life as opposed to inactive people. The mean values of the results range from 1.33 to 4.92, except for the results of the four domains, which covered all 26 questions (12.99-30.96). The results showed a link between the least moderate physical activity and an overall assessment of health, vitality, physical function, and limitations due to physical difficulties in transversal research. The relationship between these variables and the total level of physical activity has not been established. The results of this research showed that the quality of life of recreational athletes was highly rated. More than 96% of participants estimate that they have a very high quality of life due to physical activity. The research showed only positive effects on the psychophysical condition of the participants in recreational athletics, as well as better attitudes towards the environment and positive effects on social life.*

Keywords: *recreation, athletes, physical health, WHOQOL*



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Introduction

The World Health Organization (WHO, Geneva, Switzerland) defines quality of life as an individual's perception of his position in life in the context of the value system and culture in which he lives, as well as in relation to goals, expectations and standards. WHOQOL)¹. It is experienced in the context of self-assessment at different levels (physical, social, psychological) and is related to the individual level of health and life satisfaction, and in relation to the physical, mental, social and environmental domain²⁻⁴.

Sport and physical activity (PA) have been confirmed as key factors for health and psychophysical condition⁵. Sport contributes to the improvement of health and quality of life by developing healthy life habits in an individual^{6,7} and strengthens self-esteem⁷. Quality of life is also related to the way of life habits, which is subject to constant changes and includes behavior, characteristic ways of life of an individual or a social group. A characteristic of lifestyle is the ability to make decisions in certain areas, such as work, education, family life, leisure and more⁸. Regular PA has a positive effect on health^{9,10}, because being physically active reduces the risk of many conditions and diseases associated with poorer physical, mental and social health¹¹⁻¹³. It also has a positive effect on perception and concentration¹⁴, while simultaneously reducing anxiety and stress^{15,16}. On the one hand, PA meets biological needs, and on the other supports social development¹⁷, and is a tool for health education in society, because it shapes an active (sports) lifestyle that is often associated with the choice of other behaviors that affect health (proper nutrition, avoidance alcohol and tobacco products, systematic health monitoring)¹⁸. At the global level, sports and sports recreation are marked as one of the most important areas of social development, so that many countries consider sports recreation to be an important factor in determining the quality of life, health and work efficiency of citizens⁷.

Physical activity is indirectly associated with improvements in quality of life in people with multiple sclerosis, through the parameters of depression, fatigue, pain, social support and self-efficacy¹⁹. Exercising PA and recreational content is associated with sociological characteristics, because athletes are better sociologically adapted, more confident and more resistant to stress and have a more developed sense of social responsibility towards other individuals and the group as a whole, as well as a sense of cooperation and tolerance²⁰. The survey was conducted in Poland on a random sample of 1858 respondents, where 64% stated that PA exercises at least once a month, where the most active were representatives of the younger generation aged 15 to 24 (80%), people from education (90%) or with higher education (78%)²¹. Scientific research has shown a positive link between PA and quality of life, health and well-being. Respondents aged 18-64 in Poland, whose activity level was rated as high (min. 1500METs min/week) had a higher overall quality of life, as well as a higher perception of health and quality of life in the physical, psychological, social and environmental domains²².

The aim of this paper is to determine the quality of life of recreational athletes, based on the questionnaire The World Health Organization Quality of Life (WHOQoL). Based on the analysis of the collected data, report the appropriate conclusions about the quality of life of recreational athletes.

Methods

Participants

The sample of participants for the needs of research, the quality of life of recreational athletes, was taken from the population of athletes of the Athletic Club "Pilot" from Pilot (18-35 years). The questionnaire was used on a sample of 24 male and female respondents. At the time of testing, all recreational athletes were healthy and mentally fit and voluntarily agreed to participate in the research. The criteria for the inclusion of the sample were that the respondent was engaged in recreational athletics in the Athletic Club Pilot for more than 3 months.

Sample of measuring instruments

A standardized WHOQOL questionnaire (World Health Organization of Life-Brief Version Questionnaire; World Health Organization, 1998) was used as a sample of measuring instruments for assessing the quality of life of recreational athletes. The WHOQOL questionnaire is an abridged version of the questionnaire developed by the World Health Organization to assess quality of life, and contains a total of 26 questions (quality of life assessment, self-satisfaction, impact of physical pain on work, need for medical treatment in everyday life, enjoyment of life, significance life, concentration, safety, physically healthy environment, energy, acceptance of one's appearance, finances, availability of information, relaxing activities, movement, sleep, doing daily chores, job satisfaction, self-satisfaction, relationships with others, sexual life satisfaction, support of friends, living conditions, availability of health services, transport, negative feelings). Perception of quality of life is scored in four domains: physical health, mental health, social relations, environment. The scale is positive, which indicates that a higher number of points means a better quality of life.

Procedure

All participants were informed about the study, they were explained the purpose and goal of the research, the possible consequences and benefits that this research brings to their population. Participation in the study was voluntary and each of the subjects could withdraw at any time during the test. Each question is scored on a Likert scale from 1 (worst) to 5 (best), and it is assumed that respondents with a value greater than 60% of the scalar maximum (SM) in certain domains have a good quality of life in the same domains, and those with a value below 60% SM poor quality of life²³. The program SPSS V.20 was used for statistical data processing.

Results

Table 1 shows the basic descriptive statistics from the WHOQOL questionnaire: sample size (N), mean, minimum (Min) and maximum values (Max), range (Range) and standard deviations (SD) of the obtained results by variables. By analyzing Table 1, it can be concluded that different arithmetic values of the mean quality of life of recreational athletes were obtained. The values of the results range from 1.33 to 4.92, except for the results of 4 domains, which included all 26 questions, ranging from 12.92 to 30.96. The

minimum score on the scale is 1 and the maximum is 5, so the largest recorded range of results is 4 and the smallest is 1. The standard deviations ranged from 0.28 to 1.17, while the standard deviation for domains ranged from 1.32 to 3.95.

Table 1. Basic descriptive statistics of the WHOQOL questionnaire

	N	Mean	Min	Max	Range	SD
Q1	24	4,29	3,0	5,0	2,0	0,55
Q2	24	4,25	1,0	5,0	4,0	0,85
Q3	24	1,83	1,0	5,0	4,0	1,13
Q4	24	1,33	1,0	4,0	3,0	0,87
Q5	24	4,08	3,0	5,0	2,0	0,83
Q6	24	4,63	3,0	5,0	2,0	0,58
Q7	24	4,13	3,0	5,0	2,0	0,74
Q8	24	3,79	3,0	5,0	2,0	0,78
Q9	24	3,33	2,0	5,0	3,0	0,96
Q10	24	4,29	3,0	5,0	2,0	0,55
Q11	24	4,38	1,0	5,0	4,0	1,01
Q12	24	3,67	1,0	5,0	4,0	1,09
Q13	24	4,42	2,0	5,0	3,0	0,88
Q14	24	3,63	1,0	5,0	4,0	1,17
Q15	24	4,92	4,0	5,0	1,0	0,28
Q16	24	4,08	2,0	5,0	3,0	0,78
Q17	24	4,58	3,0	5,0	2,0	0,58
Q18	24	4,63	4,0	5,0	1,0	0,49
Q19	24	4,46	3,0	5,0	2,0	0,59
Q20	24	4,21	4,0	5,0	1,0	0,41
Q21	24	4,38	3,0	5,0	2,0	0,71
Q22	24	4,29	3,0	5,0	2,0	0,62
Q23	24	4,13	2,0	5,0	3,0	0,80
Q24	24	3,54	1,0	5,0	4,0	1,02
Q25	24	4,46	3,0	5,0	2,0	0,66
Q26	24	2,04	1,0	4,0	3,0	0,69
Domen 1	24	25,67	22,0	33,0	11,0	2,37
Domen 2	24	24,13	19,0	31,0	12,0	2,69
Domen 3	24	12,92	10,0	15,0	5,0	1,32
Domen 4	24	30,96	22,0	37,0	15,0	3,95

N- number of participants, **Mean**- mean value, **Min**- minimum result, **Max**- maximum result, **Range**- range, **SD**- standard deviation, **Q1**- assessment of quality of life, **Q2**- satisfaction with one's own life, **Q3**- influence of physical pain on work, **Q4**- need for medical treatment in everyday life, **Q5**- enjoyment of life, **Q6**- importance of life, **Q7**- concentration, **Q8**- safety, **Q9**- physically healthy environment, **Q10**- energy, **Q11**- acceptance of one's own appearance, **Q12**- finances, **Q13**- availability of information, **Q14**- relaxing activities, **Q15**- movement, **Q16**- sleeping, **Q17**- doing daily chores, **Q18**- job satisfaction, **Q19**- self-satisfaction, **Q20**- relationships with others, **Q21**- sex life satisfaction, **Q22**- friend support, **Q23**- living conditions, **Q24**- availability of health services, **Q25**- transport, **Q26**- negative feelings, **Domain 1**- physical health, **Domain 2**- mental state, **Domain 3**- social relations, **Domain 4**- environment

Table 2 Response percentage frequency (Likert scale) with response range 1 to 5

	1	2	3	4	5
Q1			n=1; 4.17%	n=15; 62.5%	n=8; 33.33%
Q2	n=1; 4.17%			n=14; 58.33%	n=9; 37.5%
Q3	n=11; 45.83%	n=10; 41.67%	n=1; 4.17%		n=2; 8.33%
Q4	n=20; 83.33%	n=2; 8.33%		n=2; 8.33%	
Q5			n=7; 29.17%	n=8; 33.33%	n=9; 37.5%
Q6			n=1; 4.17%	n=7; 29.17%	n=16; 66.67%
Q7			n=5; 20.83%	n=11; 45.83%	n=8; 33.33%
Q8			n=10; 41.67%	n=9; 37.5%	n=5; 20.83%
Q9		n=4; 16.67%	n=12; 50%	n=4; 16.67%	n=4; 16.67%
Q10			n=1; 4.17%	n=15; 62.5%	n=8; 33.33%
Q11	n=1; 4.17%		n=3; 12.5%	n=5; 20.83%	n=15; 62.5%
Q12	n=1; 4.17%	n=3; 12.5%	n=4; 16.17%	n=11; 45.83%	n=5; 20.83%
Q13		n=1; 4.17%	n=3; 12.5%	n=5; 20.83%	n=15; 62.5%
Q14	n=2; 8.33%	n=1; 4.17%	n=7; 29.17%	n=8; 33.33%	n=6; 25%
Q15				n=2; 8.33%	n=22; 91.67%
Q16		n=1; 4.17%	n=3; 12.5%	n=13; 54.17%	n=7; 29.17%
Q17			n=1; 4.17%	n=8; 33.33%	n=15; 62.5%
Q18				n=9; 37.5%	n=15; 62.5%
Q19			n=1; 4.17%	n=11; 45.83%	n=12; 50%
Q20				n=19; 79.17%	n=5; 20.83%
Q21			n=3; 12.5%	n=9; 37.5%	n=12; 50%
Q22			n=2; 8.33%	n=13; 54.17%	n=9; 37.5%
Q23		n=1; 4.17%	n=3; 12.5%	n=12; 50%	n=8; 33.33%
Q24	n=1; 4.17%	n=2; 8.33%	n=8; 33.33%	n=9; 37.5%	n=4; 16.67%
Q25			n=2; 8.33%	n=9; 37.5%	n=13; 54.17%
Q26	n=3; 12.5%	n=19; 79.17%		n=2; 8.33%	

Q1- quality of life assessment, Q2- satisfaction with one's own life, Q3- impact of physical pain on work, Q4- need for medical treatment in everyday life, Q5- enjoyment of life, Q6- importance of life, Q7- concentration, Q8- safety, Q9- physically healthy environment, Q10- energy, Q11- acceptance of one's appearance, Q12- finances, Q13- availability of information, Q14 - relaxing activities, Q15- movement, Q16- sleep, Q17- doing daily chores, Q18- job satisfaction, Q19 - self-satisfaction, Q20- relationships with others, Q21- satisfaction with sexual life, Q22- support from friends, Q23- living conditions, Q24- availability of health services, Q25- transport, Q26- negative feelings.

Table 2 shows the frequency of responses ranging from 1 to 5 to 26 questions about each individual's quality of life assessment. From the percentage of answers to all questions, it can be stated that collectively everyone was satisfied with the quality of life, because the scale was positive and a higher number of points means a better quality of life. When asked to rate quality of life (Q1) on a scale of 3-5, the majority gave a score of 4 (n = 15; 62.5%) and 5 (n = 8; 33.33%), which collectively amounts to over 96%. Further, when asked about the assessment of how important your life is (Q6), the respondents mostly gave a grade of 4 and 5 (n = 23; 95.84%), while only 4% (n = 1) gave a grade of 3. It is characteristic that when asked about the physically healthy environment (Q9), on a scale of 2 to 5.50% of respondents (n = 12) believe that they live in an average physically healthy environment, and 34% (n = 8) gave a score of 4 and 5 for a physically healthy environment. Performing daily activities (Q17), as many as 95.8% of respondents believe that they are satisfied and very satisfied with the ability to perform daily activities, while 50% of respondents stated that they are "very satisfied" with themselves (Q19). Satisfaction with sex life was rated at over 87%, while three respondents gave the answer "you are neither satisfied nor dissatisfied".

Table 3 Response percentage frequency (Likert scale) with response range from 10 to 37

	DOMEN 1	DOMEN 2	DOMEN 3	DOMEN 4
10			n=1; 4.17%	
11				
12			n=11; 45.83%	
13			n=4; 16.67%	
14			n=4; 16.67%	
15			n=4; 16.67%	
16				
17				
18				
19		n=1; 4.17%		
20		n=1; 4.17%		
21		n=2; 8.33%		
22	n=3; 12.5%	n=2; 8.33%		n=1; 4.17%
23	n=1; 4.17%	n=5; 20.83%		
24	n=3; 12.5%	n=1; 4.17%		
25	n=2; 8.33%	n=5; 20.83%		n=1; 4.17%
26	n=8; 33.33%	n=4; 16.67%		n=2; 8.33%
27	n=4; 16.67%	n=1; 4.17%		n=1; 4.17%
28	n=2; 8.33%	n=1; 4.17%		n=2; 8.33%
29				n=1; 4.17%
30				n=1; 4.17%
31		n=1; 4.17%		n=4; 16.67%
32				n=1; 4.17%
33	n=1; 4.17%			n=3; 12.5%
34				n=3; 12.5%
35				n=1; 4.17%
36				n=1; 4.17%
37				n=2; 8.33%

Domain 1- physical health, **Domain 2-** mental state, **Domain 3-** social relations, **Domain 4-** environment

Table 3 presents the perception of quality of life, which refers to four domains: physical health, mental health, social relations and the environment. When asked about physical health (Domain 1), the majority answered positively, and when asked about mental health assessment (Domain 2), the sum of grades is large, which shows that respondents are satisfied or very satisfied with their mental state. The results of Domain 3 showed that 11 respondents are very satisfied with social relations, and the sum of assessments related to the environment (Domain 4) showed that respondents are satisfied with the environment in which they are.

Discussion

This study was conducted with the aim of assessing the quality of life in recreational athletes based on the questionnaire for assessing the quality of life (The World Health Organization Quality of Life-WHOQOL). The main finding of this study is that all the positive effects of engaging in physical activity, ie recreational athletics, and that the quality of life is well assessed.

The correlation of these variables with the total level of physical activity has not been established. The results of this research showed that the quality of life was highly rated by recreational athletes. More than 96% of respondents stated that they have a very high quality of life thanks to engaging in physical activity. The research also showed that these people

are very satisfied with their health condition. A large number of respondents, as many as 70%, stated that they enjoy life, and that very few respondents express negative emotions and conditions, which is the result of engaging in recreational athletics. When considering the answers of recreational athletes who engage in physical activity, it was concluded that physical activity itself affects the quality of life, mental state, social relations and environment.

Research has shown that people who are physically active show a higher level of quality of life compared to inactive people. The obtained results are in line with previous research, where a higher level of quality of life has been proven by exercising 30 minutes of physical activity a day, where it was emphasized that there is a need to promote PA of moderate and high intensity²⁵. It is considered that one of the main features of the modern way of life is the accelerated pace of life and that social life affects the quality of life, which can be seen from the response of this research, and which was investigated in other studies that had similar problems, where proven association between the least moderate physical activity and general assessment of health, vitality, physical functioning and limitations due to physical difficulties in transversal research²⁶. Changes in the level of physical activity are associated with changes in social functioning, regardless of the intensity of activity. Changes in the overall level of physical activity in men and women are associated with changes in vitality and mental health. We also note an association between PA and the health aspect of life, and we have evidence through other research²⁷, that there is an association between the least moderate FA and overall assessment of health, vitality, physical functioning, and limitations due to physical disabilities.

This research was limited to recreational athletes only. In addition to all the advantages of the study, the limitation of the study is that the results can only be applied to recreational athletes, the assessment of quality of life was applied to only one sport and to a sample of respondents that does not cover a slightly wider range of recreational sports. Future studies should extend these observations to other recreational PAs, to different groups of respondents, of different ages, comparing these activities in relation to the quality of life results they provide.

Conclusion

Based on the research entitled "Assessment of quality of life in recreational athletes" on a sample of respondents, consisting of a population of recreational athletes and the results of a questionnaire with a five-point Likert scale and their statistical processing, it was shown that the physical health of respondents is very good and mental the condition of the respondents at a high level. The results also showed that the respondents are very satisfied with their social relations, which shows the impact of physical activity on the quality of life. The research showed only positive effects on recreational athletics on the psychophysical condition of the respondents, on a better attitude towards the environment, as well as positive effects on social life. The significance of this research is that it provides information on the quality of life of respondents engaged in recreational athletics, that is, what changes occur in the quality of life when people engage in physical activity recreationally. This research gives results in 4 domains in human life that are affected by physical activity. The obtained results provide information that in practice can help athletic coaches and coaches who are engaged in recreational athletics, all with the aim of achieving the best possible quality of life. Also, the presented results can be a recommendation for further research dealing with athletics or recreational athletics.



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