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Habitual Subjective Well-Being and Movement Activity of Female Adolescents

Abstract

Purpose: This paper presents the results of a comparative and dependency analysis between physical activity, joy of physical activity and quality of life in female high school students with different levels of sport performance.

Methods: The survey was attended by (n = 560) 16–19 years old high-school students. The quality of life was monitored using the modified SQUALA questionnaire, the joy of physical activity using the PACES questionnaire and the level of physical activity during the week in hours (PA). The data are presented by means of descriptive characteristics (n, M, SD) and statistical significance and dependencies respectively are assessed using nonparametric methods (W, U, rs) on significance levels ($p < ,10$; $p < ,05$ and $p < ,01$).

Results: The results of the dependency analysis did not show a large number of interactions between the PA, PACES and SQUALA among high-school female students. We found the interactions between the PA and PACES or SQUALA sporadically in groups of girls with the different levels of sports, where positive interactions predominated. PA in the week is positively correlated with PACES ($r_s = ,218$, $p < ,10$) only in registered female athletes. Positive interactions between PACES and SQUALA can be found in top female athletes (material well-being $p < ,10$; education $p < ,05$; free time $p < ,01$) and in occasional female athletes (physical well-being $p < ,20$; psychosocial well-being $p < ,20$; appearance and ownership of things $p < ,20$).

Conclusions: The results confirm the importance of voluntary and organized physical activity in the life of high-school students, who have the potential to increase the level of satisfaction with activity.

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Keywords: physical activity, joy, quality of life, interaction, adolescence, high school

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Introduction

The period of adolescence is one of the most difficult periods in the life of an individual. Many important changes in biological and social spheres occur in this period. Appearance (body proportions), opinions, behavior and manners are changing throughout adolescence. The whole personality is going through changes related to the social relationships, interests, attitudes, motivation, life goals and many more [2], [20]. Development during adolescence is characterized by the intra-individual variability [12], [1], [15].

Physical appearance is an important part of adolescent identity. Adolescents compare and judge their bodies with actual standards of attractiveness with other adolescents and their current idols. They are very concerned with their bodies in the narcissistic way [14]. If adolescents are satisfied with their physical appearance, they create support for their self-confidence and feeling that they can reach social acceptance and prestige. If they are disadvantaged by the esthetic or functional disability, there is risk that their uncertainty and negative self-evaluation will grow. Valuation of their self-appearance is affected by social environment, fashion norms and stereotypes and, to a large extent, it is affected by their physical ability [16], [18], [13], [19].

The beneficial effect on metabolism and the ability to achieve the optimal body weight are considered to be the major benefits of physical ability for the overall life satisfaction and personal well- being. These abilities result in prevention of many diseases and disorders while it is important to mention independence and autonomy of an individual [21]. Adolescents' dissatisfaction with their bodies was noticed to manifest itself by their low self-confidence, self-esteem and the occurrence of anxiety and depressive states [11]. Young people who are dissatisfied with their bodies feel handicapped and they have fewer friends, which shows up in their social status [17].

Regular physical activities, 3-5 times a week, are recommended [3], [4], [5], [10] and they draw attention to the positive interactions between the regular physical activity and the life areas mainly in groups of high school and university students. The amount and polarity of physical activity interactions with individual areas of life are closely related to specificity of adolescent groups. The essentials factors which play the important role here, are the level of physical activity, type and area dimension of the school, study program, gender, social groups and many others [6], [9]. Therefore, it is necessary to apply the presented research methods to diverse target groups of adolescents and to contribute to the issue of relationship analyzes between the level of physical activity and individual areas of quality of life. The important factor which should have affected the causality in a relationship to the results is the level of sport performance.

The main objective was to point out the interactions between the individual areas of life, joy from physical activity and different physical activities during the week in female high – school students in Slovakia.

Methods

The questionnaire survey focused on finding the frequency of physical activity per week, the level of sport performance, the joy of the physical activity and the quality of life. Questionnaire survey was attended by 516 high-school students (girls) from Slovak Republic with average age of 17,22 years. There was no age difference between the groups of high-school students with different sport performance levels (p = n. s.). All of the respondents were informed of the procedures and the main purpose of the study. The presented procedures were in accordance with the ethical standards on human experimentation stated in compliance with the Helsinki Declaration. Physical activity per week was determined from the total realized hours of the week and hours without physical education. Respondents reported their sport performance levels by their subjective evaluation.

We designated groups of students with different sport performance levels from A to E.

A: Passive athletes – do not seek physical activity, attend mandatory sports activities at school or at work
B: Occasional athletes – seek physical activity, not regular in a week, physical activity is not organized
C: Active athletes – regular activity in a week, no membership in sport organization, member
D: Registered athletes – members of sport organization, national level,
E: Top athletes – international level, performance and top sport.

For assessment of the joy of physical activity we used the PACES questionnaire – Physical Activity Enjoyment Scale which consists of 16 statements to which the respondents express their opinions using the 5 points Likert scale. Total score is obtained by counting individual answers. High values represent the joy derived from physical activity and the low values from summary score represent less joy derived from the physical activity [8].

The quality of life questionnaire contained several parts from the SQUALA questionnaire [7], [22]. The questionnaire parts were evaluated from the point of view:

1st: the sphere of physical well-being – health, sleep, solution of everyday activities, do not have problems

2nd: the sphere of psychosocial well-being – family, personal relationships, intimate relationships, hobbies, safety

3rd: the sphere of spiritual well-being – justice, freedom, beauty and art, truth

4th: the sphere of material well-being – money, good food

5th: education – to be educated, to go to school

6th: leisure time – possibility to spend your free time, have enough things for play and fun

7th: appearance and ownership of things – look goods, to dress nicely, have things that I like

8th: orientation to the future – to have children and jobs in the future that will entertain me

The questionnaire defines spheres from the objective aspect: "how important is it to you…" and from the second subjective viewpoint: "how satisfied are you with…".

Both items are assessed on a 5-point scale depending on the importance of each item for their life (1 totally unimportant; 2 of little importance; 3 medium important; 4 very important; 5 the most important) and (1. Very dissatisfied, 2. Dissatisfied, 3. Medium satisfied, 4. Satisfied, 5. Very satisfied).

We used basic descriptive statistics (frequency n, arithmetical mean M, standard deviation SD, mathematical difference of averages "d") for data presentation. Differences between the importance and satisfaction in the quality of life of dependent groups were assessed by the Wilcoxon test and the differences of independent groups were assessed by the Mann-Whitney U-test. The Spearman´s correlation coefficient (r_s) was used to find the interaction between criteria "frequency of physical activity in a week" and "areas of quality of life". For the assessment of the statistical significance of differences we used the level of significance $p < ,20$, $p < ,10$, $p < ,05$, $p < ,01$. The data were processed in MS Excel and SPSS.

Results

Physical activity of female high school students divided to groups according to level of sport performance is differentiated from the view of the total number of hours of physical activities ($p < ,01$) and the extracurricular physical activities in a week ($p < ,01$). The amount of the physical activity is closely related to the rising sport level (table 1 and 2). We noticed the lowest amount of physical activities in a week in the group of students who had passive interest in physical activity (M = 3,05; SD = 1,68). The amount of physical activity in passive athletes consisted mostly of compulsory physical education hours at high schools, while the extracurricular physical activity reached on average M = 1,10; (SD = 1,48) in a week. The highest amount of physical activity was reached by the students who were registered at the sports clubs (M = 9,74; SD = 3,78) or did sport on the top level (M = 11,76; SD = 3,68).

The results of physical activity enjoyment evaluation indicate that there are statistically significant differences between the defined sporting levels (Table 1, 2) in a group of female high-school students reporting passive interest in physical activity (p <, 05). Active, registered and top athletes have the same level of enjoyment from exercise activities (p = n.s.).

Table 1. The level of physical activity per week, joy of physical activities and the fields of quality of life in high-school students

Indicators		**Sports performance girls**									
		A Passive [n = 40]		B Occasional [n = 251]		C Active [n = 180]		D Registered [n = 72]		E Top [n = 17]	
		M	SD	M	SD	M	SD	M	SD	M	SD
Physical activity in a week without school physical education [h]		1,10	1,48	2,91	1,70	5,53	3,04	7,68	3,64	9,76	3,68
Physical activity in a week [h]		3,05	1,68	4,87	1,83	7,52	3,12	9,74	3,78	11,76	3,68
The joy of movement activities		46,95	3,52	48,12	3,71	48,30	3,78	49,49	3,57	48,71	3,77
How important for you ...	Physical well-being	4,41	,47	4,36	,55	4,39	,51	4,43	,42	4,44	,41
	Psychosocial well-being	3,78	,47	3,80	,51	3,85	,47	3,93	,45	4,04	,49
	Spiritual well-being	4,24	,46	4,09	,61	4,16	,50	4,14	,56	4,40	,46
	Material well-being	3,99	,81	3,68	,83	3,67	,81	3,93	,73	4,09	,67
	Education	3,98	,72	3,95	,73	3,96	,72	4,07	,66	4,09	,78
	Leisure time	4,18	,74	3,92	,76	3,92	,75	4,08	,68	4,12	,82
	Appearance and Property affairs	3,66	,77	3,44	,88	3,44	,84	3,62	,78	3,73	1,01
	Focusing on the future	4,05	,90	4,28	,73	4,38	,61	4,37	,67	4,71	,44
How are you satisfied ...	Physical well-being	3,63	,62	3,71	,63	3,81	,59	3,92	,44	4,06	,52
	Psychosocial well-being	3,68	,51	3,66	,54	3,76	,48	3,82	,44	3,99	,59
	Spiritual well-being	2,82	,72	2,85	,64	2,86	,63	3,02	,56	3,19	1,03
	Material well-being	3,68	,77	3,55	,73	3,60	,73	3,81	,64	3,74	1,02
	Education	3,76	,72	3,82	,76	3,85	,69	3,83	,73	3,97	,78
	Leisure time	3,65	,77	3,71	,82	3,81	,79	3,85	,77	3,94	,88
	Appearance and Property affairs	3,72	,64	3,83	,67	4,03	,57	3,92	,64	4,31	,43

Note: n – quantity, M – average value, SD – standard deviation

Table 2. Statistical comparison of the physical activity in a week, joy of physical activity and the fields of quality of life between the groups of students with different sport level performance.

Indicators		A<>B	A<>C	A<>D	A<>E	B<>C	B<>D	B<>E	C<>D	C<>E	D<>E
Physical activity in a week witout school physical education [h]		**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,033***
Physical activity in a week [h]		**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,001****	**,032***
The joy of movement activities		,065	**,010***	**,001****	**,040***	,208	**,010***	,295	,109	,578	,789
How important for you ...	Physical well-being	,595	,816	,892	,839	,679	,476	,828	,811	,991	,775
	Psychosocial well-being	,723	,453	,107	,060	,503	,059	,064	,179	,102	,411
	Spiritual well-being	,204	,599	,366	,241	,282	,654	**,041***	,691	,089	,077
	Material well-being	**,036***	**,031***	,710	,754	,854	**,015***	,056	**,014***	**,045***	,553
	Education	,916	,864	,472	,682	,668	,252	,524	,428	,603	,962
	Leisure time	**,046***	,057	,420	,829	,876	,125	,241	,165	,276	,712
	Appearance and Property affairs	,127	,135	,868	,604	,955	,073	,173	,085	,172	,501
	Focusing on the future	,141	**,040***	,0689	**,003***	,279	,396	**,012***	,939	**,036***	**,054***
How are you satisfied ...	Physical well-being	,599	,176	**,040***	**,044***	,167	**,017***	**,044***	,173	,142	,454
	Psychosocial well-being	,944	,416	,133	,062	,092	**,027***	**,040***	,308	,148	,333
	Spiritual well-being	,695	,816	,069	,330	,856	**,025***	,340	,030*	,318	,945
	Material well-being	,451	,765	,284	,419	,410	**,003***	,137	**,021***	,214	,914
	Education	,623	,402	,658	,305	,634	,970	,418	,775	,473	,473
	Leisure time	,580	,145	,144	,109	,160	,209	,181	,798	,393	,509
	Appearance and Property affairs	,345	**,003****	,121	**,001****	**,001****	,306	**,002***	,182	,063	**,018***

Note: PA – physical activity, TV – physical education, Mann-Whitney U test, $p < ,05^{*}$, $p < ,01^{**}$, n.s. – not statistically significant

By comparison of the quality of life among the groups of students with different sport performance (table 1–2), and from the perspective of the subjective evaluation of importance and satisfaction with the fields of quality of life, it pointed to some common but also to some differentiated characters of the groups. Respondents attach the greatest importance (> 4,0 very important) to the physical well-being, spirituality, education and to the orientation to their future. The fields of psychosocial well-being and material well-being are less important for them. Fields of quality of life are very important for the respondents, even though they are not very satisfied with these fields. In the majority of cases, the evaluation of the satisfaction did not reach the rating index 4,0 (satisfied). Satisfaction higher than 4,0 can be found in areas of appearance and property

affairs and in physical well-being of active and top athletes groups of students. All groups of students report the same level of dissatisfaction with spiritual well-being (< 3,19 dissatisfied), which is defined by justice, freedom, beauty, art, and truth. On average the evaluation of satisfaction is between 2,82–4,13. In the section of importance, the high values are recorded in each group of adolescents divided by sport performance, the major difference is in the satisfaction section where the highest values are on the side of registered and top athletes. The congruence between importance and satisfaction (Table 3) was recorded in adolescent girls in material well-being.

Table 3. Statistical comparison of the fields of quality of life from the importance and satisfaction point of view according to the different level of sport performance of the high-school students.

Indicators	**Sports performance girls**									
	Passive		Occasional		Active		Registered		Top	
	z	p	z	p	z	p	z	p	z	p
Physical well-being	**5,12****	**,000**	**10,78****	**,000**	**9,56****	**,000**	**5,82****	**,000**	**3,01****	**,003**
Psychosocial well-being	0,89	,374	**3,03****	**,002**	1,78	,074	1,57	,117	,13	,900
Spiritual well-being	**5,38****	**,000**	**13,07****	**,000**	**11,30****	**,000**	**6,85****	**,000**	**3,30****	**,001**
Material well-being	1,48	,140	1,88	,060	,59	,554	,99	,324	1,00	,319
Education	1,87	,062	**2,51***	**,012**	1,93	,054	**2,44***	**,015**	,73	,467
Leisure time	**2,64****	**,008**	**2,45***	**,014**	1,01	,314	1,72	,085	,92	,356
Appearance and Property affairs	0,82	,415	**5,92****	**,000**	**7,23****	**,000**	**2,85****	**,004**	**2,39***	**,017**

Note: Wilcoxon z test, $p < ,05^{*}$, $p < ,01^{**}$

Interactions in the structure of the three factors PA, PACES and SQUALA are sporadically recorded in groups of adolescent girls with different sporting levels, with positive interactions prevailing. The total PA in the week correlates positively with PACES only in registered athletes ($r_s = ,218$; $p < ,10$). Positive interaction of physical activity was found in a group of passive athletes with education (Rs = ,232, $p < ,150$), occasional athletes with material well-being ($r_s = ,097$; $p < ,127$), registered athletes with appearance and ownership of things ($r_s = ,207$, $p < ,081$), and sports-top athletes with psychosocial well-being ($r_s = ,477$; $p < ,053$) and leisure time ($r_s = ,350$, $p < ,168$). Positive correlations between PACES and SQUALA are found in top athletes group (material well-being $r_s = ,427$; $p < ,088$; education $r_s = ,533$; $p < ,027$; leisure time $r_s = ,696$; $p < ,002$) in occasional athletes (physical well-being $r_s = ,094$; $p < ,139$; psychosocial well-being $r_s = ,093$; $p < ,144$). Performance of physical activities during the week is closely related to the appearance and property affairs in a group of occasional athletes ($r_s = ,101$; $p < ,111$), active athletes ($r_s = ,122$; $p < ,104$) and registered athletes ($r_s = ,153$; $p < ,20$).

Table 4. Correlation of total physical activity in a week and the joy of physical activity/quality of life fields

The joy of movement activities			**Sports performance girls**				
			Passive	Occasional	Active	Registered	Top
		r_s	-,074	,019	,090	**0,218****	,281
		p	,652	,764	,229	**,066**	,275
How are you satisfied ...	Physical well-being	r_s	-,123	,008	-,053	-,046	,121
		p	,449	,904	,482	,704	,644
	Psychosocial well-being	r_s	,073	,014	**-0,128****	-,047	**0,477****
		p	,655	,825	**,087**	,692	**,053**
	Spiritual well-being	r_s	,122	-,073	-,032	,050	,164
		p	,455	,246	,670	,678	,528
	Material well-being	r_s	,197	**0,097***	,065	-,100	-,131
		p	,222	**,127**	,386	,405	,616
	Education	r_s	**0,232***	,077	-,083	**-0,167***	,028
		p	**,150**	,221	,269	**,160**	,915
	Leisure time	r_s	,150	-,016	,005	,009	**0,350***
		p	,357	,801	,949	,937	**,168**
	Appearance and Property affairs	r_s	,096	,068	-,049	**0,207****	,290
		p	,554	,280	,509	**,081**	,260

Note: (Spearman correlation coefficient r_s ; p < ,20*; p < ,10**; p < ,05***; p < ,01****)

Table 5. Correlation of the joy from the physical activity and the quality of life fields

			Sports performance girls				
			Passive	Occasional	Active	Registered	Top
How are you satisfied ...	Physical well-being	r_s	-,004	**0,094***	,011	-,016	**0,481****
		p	,981	**,139**	,884	,891	**,051**
	Psychosocial well-being	r_s	,145	**0,093***	,076	-,047	,277
		p	,372	**,144**	,312	,694	,282
	Spiritual well-being	r_s	,027	,051	**-0,166*****	,059	,231
		p	,868	,425	**,026**	,620	,372
	Material well-being	r_s	,031	,058	,009	-,053	**0,427****
		p	,850	,358	,901	,660	**,088**
	Education	r_s	**0,236***	,059	-,065	**0,293*****	**0,535*****
		p	**,143**	,353	,385	**,013**	**,027**
	Leisure time	r_s	**0,333*****	-,019	,088	-,054	**0,696******
		p	**,036**	,762	,241	,654	**,002**
	Appearance and Property affairs	r_s	-,009	**0,101***	**0,122***	**0,153***	,145
		p	,954	**,111**	**,104**	**,200**	,580

Note: (Spearman correlation coefficient r_s; p < ,20*; p < ,10**; p < ,05***; p < ,01****)

Conclusion

From the presented results, we can say that the top and registered athletes were best represented. The highest value of physical activity enjoyment in the registered athletes as well as the assessment of the individual areas of quality of life in the top athletes gives the assumption that the amount of physical activity influences to a great extent the perception of well-being. This can also be caused by the fact of socialization in regulated and regularly performed sports activities, where adolescent girls often find themselves in collectives. Top athletes also had the slightest difference between the importance and satisfaction from quality of life areas and the most interactions, either with the amount of physical activity or joy of physical activity. For this reason, it is necessary to try to involve as many girls in the critical age of adolescence as possible to engage in physical activity. Physical activities should be organized in the best way with the competition element. Nowadays we offer options such as unconventional floorball games or other that offer not only distraction but also coordinated development of physical abilities.

Bibliography

[1] Antaramian S.P., Huebner S.E., Valois R. (2008): *Adolescent Life Satisfaction*. Applied Psychology, 57(s1), 112–126; https://doi.org/10.1111/j.1464-0597.2008.00357.x.

[2] Blatný M. (2001): *Osobnostní determinanty sebehodnocení a životní spokojenosti: mezipohlavní rozdíly*. Československá psychologie, 45(5), 385–392.

[3] Broďáni J. (2012): *The Relationship of Physical Activity and Subjective Well-Being of Students on Constantine the Philosopher University in Nitra*. [in:] Doulík P (ed.): *Current Trends in Educational Science and Practice II*. Ústí nad Labem, UJEP, 19–28.

[4] Broďáni J., Bradáčová N. (2012): *The relationship between the activity and quality of students lives at high schools in Nitra.* [in:] Krška P., (ed.): *Aktuálne problémy telesnej výchovy a športu l*. Ružomberok, VERBUM, 28–33.

[5] Broďáni J., Spišiak M., Paška Ľ. (2015): *The interaction of physical activity and quality of life of adolescents*. Journal of Physical Education and Sport, 15(3), 518–524; http://dx.doi.org/10.7752/jpes.2015.03078.

[6] Broďáni J., Lipárová S., Kráľ M. (2016): *The interaction of physical activity and the life quality of students in mid and late adolescence*. Physical Activity Review. Vol. 4, No. 1, 124–131; http://dx.doi.org/10.16926/par.2015.01.15.

[7] Dragomirecká E. (2006): *SQUALA Subjective quality of life analysis: příručka pro uživatele české verze dotazníku subjektivní kvality života SQUALA*. Praha: Psychiatrické Centrum.

[8] Heesch K.C., Masse L.C., Dunn A.L. (2006): *Using Rasch modeling to re--evaluate three scales related to physical activity: enjoyment, perceived benefits and perceived barriers*. Health Education Research, 21 (suppl 1), 58–72; http://dx.doi.org/10.1093/her/cyl054.

[9] Kalinková M., Broďáni J., Kanásová J., et al. (2015): *The influence of physical activities on the quality of life of adolescents*. Sport Science, 8(1), 17–23.

[10] Krška P., Sedláček J., Hubinák A. (2016): *General motor fitness and somatic parameters comparison between former population and present primary school girls in Ružomberok*. Interdisciplinary Journal of Physical Education and Sport. Vol. 16, Issue 1, 57–60.

[11] Legey S., Aquino F., Lamego M.K., Paes F., Nardi A.E., Neto G.M., Mura G., et al. (2017): *Relationship Among Physical Activity Level, Mood and Anxiety States and Quality of Life in Physical Education Students*. Clinical Practice & Epidemiology in Mental Health, 13, 82–91; http://dx.doi.org/10.2174/1745017901713010082.

[12] Levin J.S., Chatters L.M. (1998): *Religion, health, and psychological well-being in older adults*. Journal of Aging and Health, 8(10), 504–531; http://dx.doi.org/10.1177/089826439801000406.

[13] Motl R.W., Dishman R.K., Saunders R., Pate R.R. (2001): *Measuring enjoyment of physical activity in adolescent girls*. American Journal of Preventive Medicine, 21(2), 110–117.

[14] Norris R., Carrol D., Chochrane R. (1992): *The effects of physical activity and exercise training on psychological stress and well-being in an adolescent population*. Journal Psychosom Res. 36(1), 55–65.

[15] Ojiambo RME. (2013): *Physical Activity and Well-being: A Review of the Health Benefits of Physical Activity on Health Outcomes*. Journal of Applied Medical Sciences, 2(2), 69–78.

[16] Rank M., Wilks D.C., Foley L., Jiang Y., Langhof H., Siegrist M., Halle M. (2014): *Health-related quality of life and physical activity in children and adolescents 2 years after an inpatient weight-loss program*. J Pediatr. 165(4), 732–737; http://dx.doi.org/10.1016/j.jpeds.2014.05.045.

[17] Reynolds KD., Killen JD., Bryson S., Farquhar JW. (1990): *Psychosocial predictors of physical activity in adolescents.* Preventive Medicine, 19(5), 541–551.

[18] Romanová M., Sollár T. (2016): *Vnímaná športová kompetencia, aktuálna norma pohybovej aktivity a radosť z pohybovej aktivity v období adolescencie*. [in:] Broďáni J. (ed.): *Šport a rekreácia*. UKF, Nitra, Slovakia, pp. 5–13.

[19] Sigvartsen J., Gabrielsen L., Abildsnes E., et al. (2016): *Exploring the relationship between physical activity, life goals and health-related quality of life among high school students: a crosssectional Study*. BMC Public Health. 16:709; http://dx.doi.org/10.1186/s12889-016-3407-0.

[20] Valášková M., Ježko S., Macek P. (2002): *Changes of body image during adolescence: relationship to self esteem and self-efficacy*: Poster presented at the 8th Biennial Conference of the European Association for Research on Adolescence, September 3rd – September 7th 2002, Oxford.

[21] Wu X.Y., Ohinmaa A., Veugelers P.J. (2012): *Diet quality, physical activity, body weight and health-related quality of life among grade 5 students in Canada*. Public Health Nutrition, 15(1), 75–81; http://dx.doi.org/10.1017/S1368980011002412.

[22] Zannotti M., Pringuey D. (1992): *A method for quality of life assessment in psychiatry: the S-QUA-L-A* (*Subjective Quality of life Analysis*). Quality of life News Letter, 4(6).

Subiektywne samopoczucie i aktywność ruchowa u uczennic szkół średnich

Streszczenie

Cel: W artykule prezentujemy wyniki analizy porównawczej i zależnościowej między aktywnością ruchową, przyjemnością z aktywności ruchowej a jakością życia u uczennic szkół średnich z różnym poziomem sportowym.

Metody: W badaniu wzięły udział uczennice (n = 560) szkół średnich na Słowacji w wieku 16–19 lat. Jakość życia monitorowano za pomocą zmodyfikowanego kwestionariusza SQUALA, przyjemność z aktywności ruchowej za pomocą kwestionariusza PACES, a poziom aktywności fizycznej w tygodniu w godzinach (PA). Dane przedstawiono za pomocą charakterystyki opisowej (n, M, SD), a istotność statystyczną i zależności ocenia się metodami nieparametrycznymi (W, U, r_s) na poziomach istotności (p <, 20, p <, 10, p <, 05 i p <, 01).

Wyniki: Wyniki analizy zależnościowej nie wykazały dużej liczby interakcji pomiędzy PA, PACES i SQUALA wśród uczennic szkół średnich. Interakcję pomiędzy PA, PACES albo SQUALA znajdujemy sporadycznie w grupach uczennic o różnych poziomach sportowych, przy czym w dużej mierze przeważają interakcje pozytywne. PA w tygodniu jest pozytywnie skorelowane z PACES (r_s = 218, p <, 10) tylko dla registrowanych sportowców. Pozytywne oddziaływanie pomiędzy PACES i SQUALA znajduje się u najlepszych zawodniczek (materialne samopoczucie p <, 10, edukacja p < 0,05, wolny czas p < 01), a u okazjonalnych zawodniczek (fizyczne samopoczucie P <, 20, psychospołeczne samopoczucie p <, 20, wygląd i własność rzeczy p <20).

Wnioski: Wyniki potwierdzają znaczenie dobrowolnej i zorganizowanej aktywności fizycznej w życiu uczniów szkół średnich, którzy mają potencjał, aby podnieść poziom zadowolenia z aktywności fizycznej.

Słowa kluczowe: aktywność fizyczna, radość, jakość życia, interakcja, dorastanie, liceum.

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