# PHYSICAL ACTIVITY AND THE QUALITY OF LIFE OF STUDENTS AT CONSTANTINE THE PHILOSOPHER UNIVERSITY IN NITRA

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## ABSTRACT

The aim of the work is the evaluation of the quality of life in the relationship to level of physical activity of students CPU in Nitra. The research file was made of 424 students with specializations of Teacher training study programmes. The collection of the data was provided by questionnaire method. The relationship between the level of sport activity and the areas of life quality was evaluated by using correlation analysis.

The results show differentiated relationship between the level of sport activity and importance, which the students attribute to different areas of life quality. By students with low  $(2.61 \pm 1.07 \text{ per week})$  and high frequency  $(5.52 \pm 0.63 \text{ per week})$  of physical activity were not noticed important relationships with satisfaction in particular areas of life quality. The satisfaction with life quality was found out by the students with average physical activity  $(3.76 \pm 1.05 \text{ per week})$  in areas of physical (p<0.05), spiritual (0.01) and material comfortance (p<0.05), let us say, with the free time (p<0.10) and also in consideration of material possession (p<0.10). It turns out, that the occasional physical activity significantly affects the life quality of the students CPU in Nitra in most of its areas.

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## INTRODUCTION

The quality of life (QQL) is according Hartl and Hartlová (2004) defined as "expression of great life feeling", let us say according Sláma (2005) as a subjective global assessment of their own lives as multivariable quality of life, which includes the area of physical, functional ability, psycho-emotional area, social, existential and spiritual area. Křivohlavý (2004) lists three theories how to see the subjective well-being based on life goals, life needs satisfaction theory and the theory of the biological basis of feelings of wellbeing. Personal well-being (wellbeing) is defined by the World Health Organization (WHO) as a characteristic of differentiated health physical, mental, social dimension and social ability - economically productive life. Between predictors and determinants of personal well-being belongs health status, indicators of activity, physical function, and subjective judgment of overall health, socio-economic status, age, religious activities, ethnicity, retirement, widowhood, parenting, social support, life events, orphan hood, personality characteristics and self-esteem (Kebza, 2005). Quality and quantity of their development is closely linked to the personal well-being (Šolcová and Kebza, 2004).

The works from Diener - Suh (1997) and from Pašková (2010) are dealing with physical well-being and move towards the concept of WHO, which distinguishes between physical, psychological and social wellbeing. Frank is finished using factor analysis to the seven factors of physical well-being. These include: satisfaction with the current health status, feelings of rest and relaxation, vitality and joy of life, a pleasant weariness, joy, pleasure and feelings of pleasure, ability to concentrate and react, fresh and pleasant physical sensations. The main element of the subjective physical well-being is according to this model, actual somatic lived positive feelings.

Quality of life is differentially understood in different parts of life. Studies of life quality by adolescents agree that satisfaction of basic personal needs depends on changes of macrosystem. Although there are common factors which determine satisfaction with life and are necessary for happy and fulfilling life. These include health, work, meeting the needs and the like. When comparing the sexes, the level of personal well-being differs only in respect of health and physical problems, when the girls feel worse than boys (Macek, 2003). Research of Škoda et al. (2007) in the 14-16 years adolescents have focused on: ownership matters, health and health status, life goals, relationships with family and friends, feel safe, activities outside the home and feelings of happiness. The results showed the importance of health and relationships with family and friends. A reduction in the quality of life involved in activity outside the home and property matters.

According to Pašková (2010) physical activity of an active athlete (semiprofessional and nonprofessional) increases the frequency of experiencing positive emotions (especially physical pleasure and freshness) and reduces the frequency of experiencing negative emotions. By 380 college students, aged 17-23 years, studying at universities in Slovakia has shown, that physical activity in a minimum rate increases subjective well-being of adolescents as well as satisfaction with oneself, contributes to the frequently survival of positive emotions, increases the satisfaction of adolescents. They spend their time by doing a physical activity, they mark up their physical condition, shape up the body and appearance, which is an important part of self-image for this group of people.

We are able to realize, that also the quality of life is affected by other factors. Moková – Flynn (2002) feature, that students feel higher life quality in the schools, where are good personal relationships, good discipline, high standard of education and lively – relevant curriculum. The quality of life is not affected by the greatness of school. Zahner and others (2006) show worse life quality by higher overweight by adolescents. Higher life quality is mentioned by students with the teachers of humanities (Schmidtová, 1992). In the wide range of factors, which influence the quality of life, are still occurring in the interface some elements of positive living physical comfort and physical feelings. Physical comfort was described by the factors, such as: actual physical status, relax, vitality, happiness of life, delightful tiredness, feelings of delight, concentration, reactions, freshness and physical feelings.

We want to contribute with our work to the problematic of influence of sport activity on the quality of life and broaden the information about the group of students at university school.

The aim of this work is to contribute to the issue of monitoring the relationship between physical activity and the quality of life of the population. The article points of causality between frequency of physical activity a week and individual quality of life of female students in preschool and elementary pedagogy, teachers' studies for primary education and students of two subject studies for teachers in combination of subjects at University of Constantine the Philosopher in Nitra.

## METHODOLOGY

On the questionnaire participated students (n = 424) from Constantine the Philosopher University in Nitra - Slovakia. The students were at the age from 18 to 26. Total number of female students of preschool and elementary pedagogy and teachers' studies for primary education was 204 and students of two subject studies were 220.

The monitored group of female students of preschool and elementary pedagogy and teachers' studies for primary education was divided into three group based on frequency of sport activities of female students (A: 0-2 times per week, B: 3 - 4 times per week, C: 5 and more times per week)

Research of students of two subject studies for teachers in combination of courses was divided into four groups on the basis of frequency of sport activity (passive athlete, occasional athlete, active and top athlete).

In the first part of the questionnaire, we investigated the basic information about the respondent such as age, sex, year, sport level (passive athlete, occasional athlete, active athlete, top athlete) and frequency of doing a sport activity during the week (almost never, rarely, sometimes, often, very often, almost always).

The second part of the questionnaire contained items from the questionnaire squat. Squat item questionnaire were evaluated in terms of area (Sýkorová and Blatný, 2008):

- 1. physical well-being (health, sleep, coping with daily life activities, has no problems)
- 2. psychosocial well-being (family, interpersonal relationships, intimate relationships, hobbies, safety)
- 3. spiritual peace (justice, freedom, beauty, art, true)
- 4. material well-being (money, good food)
- 5. education (to be educated, to go to school)
- 6. leisure time (possibility to spend your free time, have plenty of things for fun)
- 7. appearance and ownership of things (look good, to dress nicely, have things that I like)
- 8. orientation to the future (have children in the future, jobs that will entertain me)

The questionnaire determined what kind of importance people attach to certain areas of life, and they consider it important in life and then assess the extent to which they are happy with them (Ocetková, 2007). The questionnaire SQUALA defines the area from the point of view "how are you satisfied with ...". The item was judged on a scale of 5 points, except 8 items missed (very dissatisfied, dissatisfied, something in between, satisfied, very satisfied) according to that, how satisfied are they now.

In identifying relationships between variables "sports level and quality of life" used the Spearman correlation coefficient. In assessing statistical significance of differences and relationships, we used the significance level p<0.01 to p<0.20. Data were processed in SPSS.

# RESULTS

The causality of frequency of physical activity and selected areas of quality of life in female students in preschool and elementary pedagogy and teachers 'studies for primary education were subjected to correlation analysis (figure 1), while we expected a higher rate of positive relationships among groups with more frequent physical activity. We found by correlation analysis a statistically significant relationship of physical activity and objective satisfaction in groups with a frequency of physical activity three or more times a week. In group B were showed statistically significant relationships of physical activity 3-4 times a week to the areas of physical well-being (p<0.20), material well-being (p<0.01) property affairs (p<0.10). For female students with a frequency of physical activity 5 or more times a week, we had a causality of the spiritual well-being (p<0.10). For female students with physical activity 0-2 times a week, we did not detect any statistically significant relationship of physical activity and the evaluation of the objective assessment of satisfaction in quality of life. The results correspond with the stated researches of the authors. We confirmed again the significant relationship of physical activity and objective assessment of satisfaction in quality of life among groups with a higher frequency of physical activity a week.

Table 1 Relationship between sport levels and life quality areas of students of students of Pre-school and elementary pedagogy and Teachers' studies for the primary education ( $p<0.01^{****}$ ;  $p<0.05^{****}$ ;  $p<0.10^{**}$ ;  $p<0.20^{*}$ ).

		Group / Freqency of physical activity			
St	udents of Pre-school and eleme	A) 0-2 times	B) 3 - 4 times	C) 5 or more	
	Teacher training for the prin	a week	a week	times a week	
	Physical well-being	Correlation Coefficient	0,062	0,161*	-0,105
		p-value	0,587	0,144	0,521
	Psychosocial well-being	Correlation Coefficient	0,064	0,047	0,112
:		p-value	0,573	0,671	0,492
	Spiritual well-being	Correlation Coefficient	0,121	0,011	0,271**
satisfied		p-value	0,286	0,920	0,091
	Material well-being	Correlation Coefficient	-0,094	0,334****	-0,162
λou		p-value	0,406	0,002	0,318
are	Education	Correlation Coefficient	-0,076	0,001	0,160
How		p-value	0,502	0,996	0,325
-	Leisure time	Correlation Coefficient	-0,037	-0,009	0,204
		p-value	0,746	0,934	0,207
	Appearance and Property Affairs	Correlation Coefficient	-0,094	0,184**	0,004
		p-value	0,405	0,094	0,978

The second part (figure 2) of the results shows the relationships between the selected parts of life quality and the level of the physical activity of students of two subject studies for teachers in combination of subjects. By the passive athletes we did not noticed any important relationships between the watched criteria. By the active athletes we can talk about the positive significance to the area of material comfort (p<0.20) and appearance and also possession of money (p<0.05). In the area of satisfaction we did not noticed any statistically important connections between the frequency of physical activity and the areas showed (table 2). Most of the positive relationships were noticed between the frequency of doing a sport and life quality by the occasional athletes in the area of satisfaction. Occasional athletes are satisfied with the physical comfort and (p<0.05), spiritual comfort (p<0.01), material comfort (p<0.05), free time (p<0.10) with personal appearance and possession of things (p<0.10).

Table 2 Relationship between sport levels and life quality areas of students of two subject studies for teachers in combination of subjects  $(p<0.01^{***}; p<0.05^{**}; p<0.10^{*})$ 

			Level of sports		
Students of Teacher training study programmes -			Passive	Occasional	Active and
	combination of two subjects			athlete	Top athlete
	Physical well-being	Correlation Coefficient	-0,003	0,219	-0,060
		p-value	0,980	0,022**	0,664
	Psychosocial well-being	Correlation Coefficient	-0,109	0,083	-0,012
:		p-value	0,421	0,390	0,933
	Spiritual well-being	Correlation Coefficient	-0,057	0,267	0,003
ı satisfied		p-value	0,675	0,005***	0,984
	Material well-being	Correlation Coefficient	0,047	0,219	-0,012
you		p-value	0,731	0,022**	0,934
are	Education	Correlation Coefficient	-0,007	0,010	-0,200
How		p-value	0,959	0,918	0,147
Ŧ	Leisure time	Correlation Coefficient	-0,160	0,168	-0,169
		p-value	0,234	0,081*	0,221
	Appearance and Property Affairs	Correlation Coefficient	-0,080	0,171	0,102
		p-value	0,555	0,076*	0,464

#### CONCLUSION

The work have shown that the frequency of low or too high physical activity a week does not affect the level of satisfaction in various areas of selected areas quality of life of female students in preschool and elementary education, teachers' studies for primary education and also students or two subject studies for teachers in combination of subjects at PE CPU in Nitra.

Physical activity performed 3 or more times a week affects female students in Pre-school and elementary pedagogy and Teachers' studies for primary education the physical well-being (health, sleep, coping with everyday activities, no problem), material well-being (money, good food), look and ownership of the thing (to look good, to dress nicely, have things that I like), respectively spiritual well-being (justice, freedom, beauty, art, true) in the said female students.

The physical activity by university students 2,61 ± 1,07 per week markedly influences the physical comfort (health, sleep, every day activities, without having problems), spiritual comfort (justice, freedom, beauty, art, truth), material comfort (money, good food), free time activities (possibility to spend your free time, have plenty of things for fun), let us say, satisfaction with appearance and possession of things (look good, to dress nicely, have things that I like).

The results, again, show the importance of every day physical activities in the life of university students by increasing individual areas of life quality.

The obtained results, however, we cannot generalize, but can be understood in relation to use of tool of measurement and monitoring group. We realize that the research results could be affected by the misrepresentation arising from the methods and procedures that were used in this research.

#### REFERENCES

Diener, E. - Suh, E. 1997. Measuring Quality of Life. Economic, social and subjective indicator. In. Social Indicator Research. 40, p.189-216

Hartl, P. - Hartlová, H. 2004. Psychologický slovník. Praha : Portál, 2004. 774 s.

Kebza, V. 2005. Psychosociální determinanty zdraví. Praha : Academia. 263 s.

Křivohlavý, J. 2004. Pozitivní psychologie. Praha : Portál. 2004, 195 s.

Macek, 2003. Adolescence. Praha : Portál. 2003, 143 s.

Mok, M - Flyn, M. 2002. Etasblishing Longitudinal Factorial Construct Validity of the Quality School life Scale for Secondary Students. Journal od Applied Measurement, 2002, vol. 3, no. 4, p. 400-420

Ocetková, Í. 2007. Úloha spirituality v životní pohodě a kvalite života mladých lidí. Dizertačná práca. Brno : KP FSS MU. 233 s. Pašková, L. 2010. Vzťah telesnej aktivity a subjektívnej pohody u vysokoškolských študentov. In Studia kinanthropologica, XI,

2010, 2 p.77-82

Sláma, O. 2005. Kvalita života onkologicky nemocných. In Payne, J. a kol. 2005. Kvalita života a zdraví. Triton, 288-295

Shmidt, L. J. 1992. Relationship Between Pupil Control Ideology and the Quality of School Life. In Journal of Invitational Theory and Practice., 1992, Vol. 1, No. 2.

Sýkorová, Z. - Blatný, M. 2008. Kvalita života u adolescentov. Brno: KP FF MU. 99 s.

Škoda, J. a kol. 2007. Kvalita života u skupín mládeže z odlišného sociokulturního prostředí. In Kvalita života u detí a dospívajících II. MSD Brno, s. 191-208.

Šolcová, I. - Kebza, V. 2004. Kvalita života v psychologii: Osobní pohoda (wellbeing), její determinanty a prediktory; In Kvalita života. zborník příspěvků z konference Třeboň: IZPE. 2004. s. 21.32

Zahner, L. et al. 2006. A School Based Physical Activity Program to Improve Health and Fitness in Children 6-13 Years. In BMC Public Health. 2006, Vol. 6, No 147.