

Life Satisfaction and Subjective Health Assessment in Future Teachers Compared with Current University Students of Physical Culture and Natural Science

Jana Kvintová, Martin Sigmund, Hana Hřebíčková

Abstract

The study presents the results of a survey aimed at life satisfaction and subjective health assessment in current Czech university students ($n = 522$; average age 21.2 ± 1.29 years). The analysis covers a comparison of future teachers and students of physical culture and natural science. The monitored variables present significant factors influencing the quality and level of university study and overall academic performance. The results of the survey indicate significant differences in the different variables in terms of gender differences and selected study specialization. The results of the study enrich the current theoretical background and are applicable in everyday work with students in the area of educational and psychological counselling in university.

Key words: well-being, health, university students, study specialization.

Introduction

The term of life satisfaction has its general basis in philosophical concepts of human being and also in psychological and anthropological images of humans (Rodná & Rodný, 2001). Life satisfaction tends to be understood as one of the dimensions of the well-being construct. Well-being is a term often described periphrastically and with respect to other related terms: in Anglo-Saxon terminology the most frequently related term is life satisfaction, but also welfare, pleasure, prosperity or happiness. It is also often related with the term of health (Kebza & Šolcová 2005). The World Health Organization (WHO) uses a definition of health where well-being is directly specified: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948, 2014).

In contemporary scientific literature there is no congruence in defining this term. There are several terms used in relation to life satisfaction. For example, they include 'well-being', 'subjective well-being', or 'quality of life'. There is also a degree of discrepancy in translating the term by Czech scientists. Here are some examples: Lašek (2004) translates 'subjective well-being' both as 'subjective life well-being' and 'subjective life satisfaction'. Blatný (2001) translates the term of 'well-being' as 'mental well-being', Kebza and Šolcová (2005) as 'personal well-being', Krivohlavý (2009) uses the shortest alternative, i.e. 'well-being'.

The World Health Organization (WHO) defines quality of life as an individual's perception of their position in life in the context of the culture and in relation to their goals, expectations, lifestyle and interests (Kováč, 2004). In foreign scientific publications quality of life tends to be perceived as a synonym to life satisfaction, see McAuley et al. (2006). Kebza and Šolcová (2003) refer to the studies by foreign researchers who frequently assume that quality of life has two dimensions; subjective personal well-being and objective personal well-being. As a result, personal well-being is often understood as a part of quality of life (Diener et al., 1999; Blatný, 2001; Blatný et al., 2005; Hnilica, 2009; Kebza & Šolcová, 2005; Kožený, Csémy, & Tišanská, 2007; Krivohlavý, 2009).

During the last two decades personal well-being has become one of the most studied psychological topics. Before that, psychology rather focused on the sources and causes of personal unwell-being and on the ways of overcoming and coping with these negative feelings (Hrdlička, Kuric, & Blatný, 2006).

According to Carlson et al. (in Kebza & Šolcová 2003), a significant dimension of personal well-being is also wellness. In defining personal well-being the term of wellness is sometimes used as a synonym. More often the term is defined independently as a concept related to accepting certain behaviour and lifestyle encouraging optimum physical and mental health. Such behaviour includes stress coping, healthy diet, non-smoking, appropriate sleep, physical exercise, etc. Kebza (2005) states that physical activity has

a short-term as well as long-term effect on mental well-being; in particular it has a positive influence on self-respect, anxiety, depression, tension, and stress perception.

Recently there has been a growing interest of the professional community in the issues specified above and in the health of university students. University students represent a specific population group and the national capital and future investment of every society. In terms of development, the period of university study is characterized by achieving maturity in the somatic, mental, emotional and social areas. An individual of this age category leaves adolescence and moves to adulthood, or to be more precise, young adulthood. For these individuals, the mentioned developmental facts present both positive and negative confrontations with life reality.

It is generally assumed that the population aged between twenty and thirty years represents a group with the lowest degree of morbidity and mortality. It should be emphasised however that the results of research studies analysing risk factors influencing the university population point to a fact that the overall health condition in university students is worse than the health condition of non-studying population of the same age. Similarly, the prevalence of psychological distress is higher among university students compared with working non-studying population of the same age (Roberts, Golding, Towell, & Weinreb, 1999; Adlaf, Gliksman, Demers, & Newton-Taylor, 2001; Dyrbye, Thomas, & Shanafelt, 2006).

The factors that influence students' health are very specific and they are assumed to be closely linked with university study. The main stressogenic factors are academic overload, constant pressure to be successful and competition among classmates. In some countries these factors include financial limitations and concerns about one's own future (Lu, 1994; Omigbodun et al., 2006). Undesirable stress influences not only students' health but also their academic performance (Hamaideh, 2011). At the same time, academic distress is associated with gender influences, selected study specialization, overall duration of university study or social and adaptation influences. It is therefore important for the factors influencing successful study to be balanced and not to lead to health deterioration and decreased probability of successful completion of university study. In terms of possible academic failure, the most significant factors are lack of self-confidence, concerns about the future, emotional instability, tendency to extraversion, feelings of disillusion, rigid interpretation of study requirements and inability to promptly adapt to the changing nature of academic activities.

Successful coping with the demands of university study often requires a combination of personality factors, abilities, required degree of motivation and will together with appropriately selected style of study, rational use of time and appropriate regime. The main variable saturating possible causalities in relation to the health of university students include academic load, selected study specialization, level and length of overall distress, personality characteristics and social aspects. These factors form the context of research of this study of current university students.

The aim of the present study is to assess the degree of life satisfaction and assessment of subjective satisfaction in the area of health in current university students. The paper analyses the current state of the monitored variables in future teachers compared with university students of physical education and natural science, all in the context of gender differences and length of study.

1 Research sample

The research involved a total of 522 students of Palacký University from three different Faculties. Specifically, the students were from the Faculty of Education, Faculty of Physical Culture and Faculty of Science (term: students of natural science is used further in text) (Table 1).

In the context of our research, 'current university student' was any individual properly enrolled in full-time study whose age was appropriate to the grade studied. In terms of age, the individuals were younger adults aged 19 to 26 years. The highest number of students were in the categories of 20, 21 and 22 years ($n = 420$). In total these categories represented over 80% of the total sample. The average age of the whole sample was 21.2 ± 1.29 years. In terms of ethical aspects, all participants were fully informed about the purpose of the research and about a possibility to terminate their participation at any stage without giving any reason. All participants were informed about further data processing and with guaranteed anonymity. Each participant was involved in the research study on a voluntary basis and consented to data processing and/or publication.

Table 1

Basic description of research sample ($n = 522$)

	Number of participants	Men / Women
Faculty of Education	218	11 / 207
Faculty of Physical Culture	118	50 / 68
Faculty of Science	186	38 / 116
TOTAL	522	131 / 391

Diagnostics

To assess the current level of life satisfaction, the research study used a standardized psychodiagnostic tool – Life Satisfaction Questionnaire (LSQ) (Rodná & Rodný, 2001). The Czech version of the LSQ is based on the original German questionnaire Fragebogen zur Lebenszufriedenheit (FLZ) (Fahrenberg, Myrtek, Schumacher, & Brähler, 2000). The LSQ is designed for standardized description of inter-individual and intra-individual life satisfaction variability. The questionnaire aims at the assessment overall life satis-

faction and its individual components: health, work and employment, finance, leisure time, partnership, relationship with one's own children, one's own person, sexuality, friends and acquaintances, living.

Each of the specified items contains seven statements. For each statement in each item the proband tries to express the current level of satisfaction by selecting on a seven-grade scale. 1 = very dissatisfied, 7 = very satisfied. The overall value of life satisfaction is represented by the sum of gross score values in the seven defined items; work and employment, partnership and relationship with one's own children are not taken into account (Rodná & Rodný, 2001). The Health item was elaborated and analysed in more detail.

2 Statistical analysis

Basic statistical quantities were calculated for all variables; distribution normality was verified. Parametric as well as non-parametric statistical tests were applied. The Shapiro-Wilk test was used to assess normality. The Mann-Whitney U test was applied to assess the significance between independent samples. A multiple comparison was performed using the Kruskal-Wallis test. The level of statistical significance was tested at a level of $p \leq 0.05$; $p \leq 0.01$. To assess the material significance the Effect of Size according to Cohen was applied where $d = 0.2$ represented small effect, $d = 0.5$ represented medium effect and $d = 0.8$ represented large effect (Cohen, 1988; Cortina & Nouri, 2000; Thomas, Nelson, & Silverman 2011). Statistical result processing was performed using the Statistica v. 10.0 programme (Statistica, Tulsa, USA).

3 Results

The results of the survey including statistical processing are documented in Tables 2, 3, 4, 5. The present findings indicate that the overall level of life satisfaction in current Czech university students is lower than normative values (Table 2). The largest differences were observed in the Health item in terms of significantly lower values. Lower values were also observed in the Work and employment and One's own person items. The other items mostly oscillate around average normative values.

Table 2

Life satisfaction and its components in current university students

Life satisfaction (n = 522)	Mean \pm SD	Range	Standard ¹ Man (14–25 yrs.)	Standard ¹ Woman (14–25 yrs.)	Standard ¹ Average (14–25 yrs.)
Health	34.5 \pm 6.55	11–49	42.8	39.6	41.2
Work and employment	34.9 \pm 5.85	17–49	36.4	35.9	36.2
Finance	31.4 \pm 6.71	7–49	31.7	32.1	31.9
Leisure time	36.2 \pm 8.03	7–49	37.6	35.6	36.6
Partnership	41.2 \pm 6.50	15–49	38.6	40.0	39.3
One's own person	35.6 \pm 6.20	7–49	39.8	37.9	38.9
Sexuality	36.4 \pm 7.33	12–49	36.2	35.8	36.0
Friends and acquaintances	37.3 \pm 5.13	17–49	38.2	37.0	37.6
Living	36.9 \pm 6.80	7–49	35.9	35.9	35.9
TOTAL	248.4 \pm 30.73	155–354	262.2	254.0	258.1

Legend: N – number of probands; SD – standard deviation; Standard¹ – source (Rodná & Rodný, 2001)

The overall level of life satisfaction and its components in the context of gender differences shows a higher degree of satisfaction in men than women. However, the observed difference is not significant (Table 3). A total of four statistically significant gender-based differences were observed across the different items. University male students feel healthier compared with female students ($p = 0.002$; $d = 0.32$). At the same time, men reported a significantly higher level of satisfaction in the Finance item ($p = 0.021$; $d = 0.24$) and in the One's own person item ($p = 0.027$; $d = 0.23$). On the other hand, university female students reported a higher level of satisfaction in the Partnership item ($p = 0.043$; $d = 0.25$). Other differences in the life satisfaction components with respect to gender differences were not significant.

Table 3

Gender, life satisfaction and its components in current university students

Life satisfaction	Mean \pm SD (Man = 131)	Range	Mean \pm SD (Woman = 391)	Range	<i>p</i>	<i>d</i>
Health	36.1 \pm 6.35	11–49	34.0 \pm 6.54	15–49	0.002	0.32
Work and employment	35.0 \pm 6.14	17–49	34.9 \pm 5.76	18–49	NS	
Finance	32.6 \pm 6.42	7–49	31.0 \pm 6.77	7–45	0.021	0.24
Leisure time	36.5 \pm 8.44	12–49	36.1 \pm 7.90	7–49	NS	
Partnership	39.8 \pm 7.57	15–49	41.5 \pm 6.14	20–49	0.043	0.25
One's own person	36.6 \pm 6.80	7–49	35.2 \pm 5.95	15–47	0.027	0.23
Sexuality	35.6 \pm 7.65	13–49	36.6 \pm 7.20	12–49	NS	
Friends and acquaintances	37.3 \pm 5.33	17–49	37.3 \pm 5.07	18–49	NS	
Living	37.1 \pm 6.97	16–49	36.8 \pm 6.75	7–49	NS	
TOTAL	252.3 \pm 33.97	155–354	247.1 \pm 29.49	158–316	NS	

Legend: SD – standard deviation; *p* – statistical significance; NS – not significant.

Table 4 presents the results of future teachers in comparison with the students of physical culture and natural sciences. The value of overall life satisfaction in the students from the Faculty of Education was higher compared with the students from the Faculty of Science. The difference however is statistically insignificant. A comparison of overall satisfaction of future teachers and the students of physical culture shows significantly lower values ($p = 0.001$; $d = 0.41$). Similarly, a comparison of the students of physical culture and the students of natural science shows significant differences ($p = 0.001$; $d = 0.51$).

A comparison of the individual components indicates further significant differences with respect to study specialization (Table 4). The Health item showed the lowest value in future teachers. On the contrary, the highest value was achieved by the students of physical culture, who reported significantly higher values compared with future teachers ($p = 0.001$; $d = 0.53$) and the students of natural science ($p = 0.005$; $d = 0.38$). A similar trend was observed in the Work item, where the highest values were reached by the students of physical culture; these values were significantly higher compared with future teachers ($p = 0.011$; $d = 0.33$) and the students of natural science ($p = 0.001$; $d = 0.55$). Also in the Finance category the students of physical culture reported the highest values, again significantly higher compared with future teachers ($p = 0.028$; $d = 0.34$) and the students of natural science ($p = 0.001$; $d = 0.30$). In the Leisure time category the highest values were observed in the students of physical culture. Compared with future teachers the results are insignificant but compared with the students of natural

science the values are significant ($p = 0.001$; $d = 0.42$). Mutually significant differences were observed in the One's own person item. The highest values of satisfaction with One's own person were reported by the students of physical culture. Compared with future teachers the difference was significant ($p = 0.001$; $d = 0.50$); the same applies to a comparison with the students of natural science ($p = 0.001$; $d = 0.50$). The students of physical culture achieved a significantly higher level of satisfaction in the Sexuality item compared with the students of natural science ($p = 0.033$; $d = 0.32$). The difference in the Sexuality item in future teachers compared with the students of physical culture is significantly lower. In the categories of Partnership, Friends and acquaintances and Living no mutually significant differences were observed with respect to study specialization (Table 4).

Table 4

Life satisfaction and its components in future teachers in comparison with university students of physical culture and natural science

Life satisfaction components	Mean \pm SD	Range	H	Comp.	p	d
Health						
E	33.3 \pm 6.87	11–49	22.27542 $p = 0.0001$	E–P	0.001	0.53
P	36.8 \pm 6.17	19–49		P–N	0.005	0.38
N	34.5 \pm 6.04	21–49		E–N	NS	
Work						
E	34.9 \pm 5.68	18–49	22.29258 $p = 0.0001$	E–P	0.011	0.33
P	36.8 \pm 5.92	19–49		P–N	0.001	0.55
N	33.6 \pm 5.70	17–46		E–N	NS	
Finance						
E	30.9 \pm 6.33	7–45	7.339834 $p = 0.0255$	E–P	0.028	0.34
P	33.1 \pm 6.67	11–49		P–N	0.001	0.30
N	31.0 \pm 7.03	7–46		E–N	NS	
Leisure time						
E	36.7 \pm 7.04	12–49	14.80247 $p = 0.0006$	E–P	NS	
P	38.1 \pm 8.05	15–49		P–N	0.001	0.42
N	34.5 \pm 8.76	7–49		E–N	NS	
Partnership						
E	41.4 \pm 6.11	20–49	0.2387107 $p = 0.8875$	E–P	NS	
P	40.7 \pm 7.81	15–49		P–N	NS	
N	41.1 \pm 6.06	21–49		E–N	NS	

Life satisfaction components	Mean ± SD	Range	H	Comp.	<i>p</i>	<i>d</i>
One's own person						
E	34.8 ± 6.16	7–46	25.83557 <i>p</i> = 0.0001	E–P	0.001	0.50
P	37.9 ± 6.14	15–48		P–N	0.001	0.50
N	34.9 ± 5.92	15–49		E–N	NS	
Sexuality						
E	36.4 ± 7.30	12–49	6.652220 <i>p</i> = 0.0359	E–P	NS	
P	37.7 ± 7.01	16–49		P–N	0.033	0.32
N	35.4 ± 7.44	13–49		E–N	NS	
Friends and acquaintances						
E	37.6 ± 4.92	23–49	2.400777 <i>p</i> = 0.3011	E–P	NS	
P	37.9 ± 4.72	19–49		P–N	NS	
N	36.7 ± 5.57	17–46		E–N	NS	
Living						
E	37.6 ± 6.16	21–49	4.425473 <i>p</i> = 0.1094	E–P	NS	
P	37.1 ± 7.26	17–49		P–N	NS	
N	35.9 ± 7.11	7–49		E–N	NS	
TOTAL						
E	247.3 ± 27.36	173–316	20.44530 <i>p</i> = 0.0001	E–P	0.001	0.41
P	259.2 ± 31.99	188–354		P–N	0.001	0.51
N	243.0 ± 32.04	155–316		E–N	NS	

Legend: E – Faculty of Education; P – Faculty of Physical Culture; N – Faculty of Science; SD – standard deviation; H – Kruskal-Wallis test score; Comp. – comparison; *p* – statistical significance; NS – not significant.

The results of subjective assessment of health and its components in current university students are presented in Table 5. Significant differences with respect to study specializations were observed in almost all Health items. Only in the assessment of Pain frequency no significant differences were identified among the students with respect to study specialization.

Future teachers (students from the Faculty of Education) reported significantly lower values of satisfaction with one's own physical health compared with the students of physical culture (*p* = 0.0001; *d* = 0.47). In this item the students from the Faculty of Education reported the lowest values, also compared with the students of natural science.

Similarly, in the item of satisfaction with one's own mental condition future teachers scored the lowest values of all monitored fields of study. On the contrary, the students of physical culture reported significantly highest values compared with the students from the Faculty of Education and the Faculty of Science (*p* = 0.04; *p* = 0.02). These differences can be considered highly significant in terms of material significance (*d* = 0.95; *d* = 0.81).

In the item of physical condition the highest scores were achieved by the students of physical culture. Compared with future teachers and the students of natural science these are significant differences ($p = .001$; $d = 0.28$).

The highest values of subjective assessment of mental performance were achieved by the students of physical culture. The difference was significant in comparison with the students of natural science ($p = 0.0158$; $d = 0.27$).

The lowest satisfaction with organism immunity was observed in future teachers. The difference was significant in comparison with the students of physical culture.

The highest degree of satisfaction with illness frequency was reported by the students of natural science and by the students from the Faculty of Education. On the contrary, the students of physical culture scored the lowest values. The difference is significant compared with the students of natural science ($p = 0.0334$; $d = 0.27$).

Table 5

Comparison of various health components in future teachers and university students of physical culture and natural science

Health components	Mean \pm SD	Range	H	Comp.	p	d
Physical health						
E	4.96 \pm 1.41	1–7	19.59116 $p = 0.0001$	E–P	0.0001	0.47
P	5.58 \pm 1.19	1–7		P–N	0.0028	0.38
N	5.10 \pm 1.32	1–7		E–N	NS	
Mental condition						
E	4.20 \pm 1.34	1–7	8.911156 $p = 0.0116$	E–P	0.0353	0.95
P	5.42 \pm 1.20	1–7		P–N	0.0239	0.81
N	4.39 \pm 1.31	1–7		E–N	NS	
Physical condition						
E	4.98 \pm 1.54	1–7	55.35764 $p = 0.0001$	E–P	0.0001	0.28
P	5.37 \pm 1.13	2–7		P–N	0.0001	0.28
N	4.99 \pm 1.45	1–7		E–N	NS	
Mental performance						
E	5.05 \pm 1.17	1–7	8.847190 $p = 0.0120$	E–P	NS	
P	5.31 \pm 1.19	1–7		P–N	0.0158	0.27
N	4.98 \pm 1.21	1–7		E–N	NS	
Immunity						
E	4.95 \pm 1.67	1–7	9.470024 $p = 0.0088$	E–P	0.0493	0.28
P	5.40 \pm 1.53	1–7		P–N	NS	
N	5.44 \pm 1.36	1–7		E–N	0.0278	0.32

Health components	Mean ± SD	Range	H	Comp.	<i>p</i>	<i>d</i>
Pain frequency						
E	4.42 ± 1.66	1–7	5.036484 p = 0.0806	E–P	NS	
P	4.76 ± 1.83	1–7		P–N	NS	
N	4.47 ± 1.64	1–7		E–N	NS	
Illness frequency						
E	4.73 ± 1.71	1–7	6.890704 p = 0.0319	E–P	NS	
P	4.50 ± 1.80	1–7		P–N	NS	
N	5.17 ± 1.59	1–7		E–N	0.0334	0.27

Legend: E – Faculty of Education; P – Faculty of Physical Culture; N – Faculty of Science; SD – standard deviation; H – Kruskal-Wallis test score; Comp. – comparison; *p* – statistical significance; NS – not significant.

4 Discussion

Psychosocial research highlights the continuous, topical and serious nature of the issue of concentration on the life of university students, the main focus being their social, economic and study conditions, particularly with respect to the changing offer of educational services, changing concept of university policy and, last but not least, social changes (Menclová & Baštová, 2005). A certain load can be presented by e. g. a change in the professional focus, where a study course has to be changed to reflect the labour market (Wagnerová, Hoskovcová, & Šírová, 2008). In 1980s in the Czech Republic, little emphasis was put on material profit ensuing from professional focus in terms of motivation factors. According to Grác (in Kohoutek, 1998) motivation was typical for the preference of intrinsic motives (79%) as opposed to extrinsic motives. This is also confirmed by Freiová (in Kohoutek, 1998), who described the main motivation elements, i. e. the need for personality refinement, application of individual abilities and interests and only third was the need for obtaining qualification. Currently the main students' motivation factors for entering a university are relatively clearly structured (Linhartová, 2008; Menclová & Baštová, 2005). These factors primarily include achieving a certain level of education in order to start a successful professional career and a well-paid job. Complementary features of these factors are obtaining a university degree and a high status in the society. The most frequent problems during the course of study include lack of finance, combining occasional employment and study, difficult commuting and passing exams and obtaining credit.

In the Czech environment, there are presently several studies focussing on the issue of current university students and their study. The research dealing with the social portrait of a university student implies that a typical student enrolled in a state university is unmarried, childless, average age of 24 years and lives in a university residence hall

(Menclová & Baštová, 2005). In her study aimed at university aspects, Linhartová (2008) describes a current university student as more open, more critical to very critical, with considerable self-confidence, using assertive behaviour, with good language abilities and well knowledgeable about information technologies. On the other hand, the personality of such student is characterized by lower independence and responsibility. There are clear differences with respect to study specialization. Plháková and Reiterová (2010) examined the differences in personality and social skills in university students of exact sciences and humanities. The authors conclude that students of psychology are more open to new experience and less neurotic compared with students of mathematics and informatics. Student of psychology scored significantly higher values in the scales of emotional sensitivity, social control and overall scales of emotional and social skills. On the contrary, students of mathematics and informatics achieved significantly higher scores in the scale of social perceptiveness. At the same time the authors observed significant gender differences; women scored higher values than men especially in sensitivity and emotional expressiveness.

The issue of quality of life, life satisfaction and personal well-being is also addressed by a research study aimed at the relationship between personality and personal well-being. Hřebíčková, Blatný and Jelínek (2010) point to a relationship between university students' personality traits of the five-factor personality model (neuroticism, extraversion, openness to experience, agreeableness, conscientiousness) and personal well-being. The authors revealed that the prediction of personal well-being in university students is codetermined by four personality traits (neuroticism, conscientiousness, extraversion, agreeableness). As far as gender differences are concerned, the prediction of personal well-being in female university students is codetermined by the above specified four personality traits in the order given, while in male university students the agreeableness predictor is missing.

The factors of personal well-being and life satisfaction are influenced both by personality characteristics and the selection of study specialization. In our sample of university students of three different specializations we observed certain differences in terms of study specialization. In the study, the primary focus was on the students of the Faculty of Education (future teachers) in comparison with the students of physical education and natural science. In terms of overall life satisfaction the students of the Faculty of Education reported higher values compared with the students of natural science but lower than the students of physical education. In general, the students of physical culture are significantly more satisfied compared with the other two specializations. This trend is maintained by the students of physical culture in most items of life satisfaction and also with respect to health. The values scored by future teachers and the students of natural science alternate. The observed higher values in the students of physical culture can be attributed to both personality characteristics and study specialization. This group of students is represented by current and former active athletes

and their study takes both theoretical and practical form. These facts could have an effect on the findings.

On the contrary, the students of natural science whose study is purely theoretical scored the lowest values in overall life satisfaction, which corresponds with the selected components. A trend similar to overall life satisfaction and individual components in current university students is observed also in subjective health assessment. Also in this category the highest scores were achieved by the students of physical culture. On the contrary, the lowest values of satisfaction with health were observed in the students of the Faculty of Education. Compared with the students of physical education these values were significant. Future teachers reported the lowest satisfaction in the area of Physical health, Mental condition and Physical condition and Pain frequency. It is possible that the results represent a certain profile in the monitored parameters in the students from the Faculty of Education. At the same time, the observed differences between future teachers and the students of physical culture and natural science are to a certain extent determined by gender saturation as a majority of students at the Faculty of Education are women.

The degree of life satisfaction can also be associated with academic adaptation and the overall demanding nature of the study. It turns out that particularly fresh university students have considerable problems with adaptation to university demands, resulting in a certain degree of emotional instability and consequent academic underachievement in the form of unfinished assignments, courses, etc. This procrastination appears to be a relatively frequent phenomenon in the population of university students (Gabrhelík, Vacek, & Miovský, 2006). Delayed work or completion of assignments leads to stressogenic situations that have an overall effect on the work of a student. In the process of adaptation the first year of study seems the most strenuous as all demands, difficulties and problems emerge during a short period of time. There are two principal problems – the previously mentioned need for orientation in a new environment, understanding the demands and reacting to them. The other problem is the coexistence of students in a residence hall, inclusion among other students, development of a new social network and acceptance of the role of a university student. These aspects are confirmed by Hicks and Heastie (2008) who add that students living in a residence hall tend to be more endangered by undesirable stress and adaptation and mental problems compared with students who live elsewhere. Students whose place of residence does not change do not experience some of these problems and their adaptation to university life is smoother. Some studies point to a fact that better social adaptation to a university environment is also influenced by material aspects, the so-called 'higher material well-being' (Batrymbetova, 2008).

Taking into consideration the above mentioned findings in the context of university population, the aim of our research study was to extend the reservoir of existing knowledge. An important motivation aspect of the present survey was an effort to detect

and describe those variables that can have an influence on the overall quality of life and health of current university students in a way that no complications occur or even blocking of adequate academic performance during university study. These findings will extend the knowledge about this specific population group and at the same time can be used in the delivery of educational and psychological counselling in universities.

Limitations of the study. The overall number of research participants is relatively extensive, at the same time there is a gender disproportion, particularly the higher number of women from the Faculty of Education. With respect to the transversal design of the study a cohort effect is also possible. These facts are considered in the context of the present findings.

Conclusions

In the context the present findings about current university students we conclude that:

- Current university students report lower values of overall life satisfaction than reference values of a population of the same age,
- University male students report insignificantly higher values of overall life satisfaction than university female students,
- University students report lower values of life satisfaction in the Health item than reference values of a population of the same age,
- University male students report significantly higher values of life satisfaction in the Health item than university female students.

In the context the present findings about current university students of education (future teachers) and in comparison with the students of physical culture and science we conclude that:

- The students of the Faculty of Education reported a higher level of overall life satisfaction than the students of natural science but a significantly lower level compared with the students of physical culture,
- The students of the Faculty of Education achieved the highest scores in the following components of life satisfaction: Partnership and Living,
- The students of the Faculty of Education achieved the lowest scores in the following components of life satisfaction: Health, Finance and One's own person,
- The highest values were not scored by the students of the Faculty of Education in any of the items of subjective assessment of health,
- In the subjective assessment of health the students of the Faculty of Education achieved the lowest values in the following items: Physical health, Mental condition, Physical condition and Pain frequency.

The present findings extend the knowledge about current university students. The results can be practically applied in everyday delivery of educational and psychological counselling in universities.

Acknowledgement

The study was supported by the project No. MSMT CR VZ 6198959221.

References

- Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). Prevalence of Elevated Psychological Distress among Canadian Undergraduates: Findings from the 1998 Canadian Campus Survey. *Journal of American College Health, 50*, 67–72.
- Batrymbetova, S. A. (2008). Medical Social Factors of Students' Health. *Probl Sotsialnoi Gig Zdravookhraneniiai Istor Med, Sep-Oct, 5*, 9–11.
- Blatný, M. (2001). Osobnostní determinanty sebeohodnocení a životní spokojenosti: Mezipohlavní rozdíly. *Československá psychologie, 45*(5), 385–392.
- Blatný, M. (2005). Osobnostní předpoklady sebeohodnocení a životní spokojenosti: shody a rozdíly. In Blatný, M., Dosedlová, J., Kebza, V., Šolcová, I. (Eds.). *Psychosociální souvislosti osobní pohody* (s. 83–107). Brn: MU, MSD.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. (4th ed.). New York: Academic Press.
- Cortina, J. M., & Nouri, H. (2000). *Effect Size for ANOVA Design*. Thousand Oaks, CA: Sage Publications.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective Well-being: Three Decades of Progress. *Psychological Bulletin, 125*, 276–302.
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic Review of Depression, Anxiety, and Other Indicators of Psychological Distress among U.S. and Canadian Medical Students. *Academic Medicine, 81*, 354–373.
- Fahrenberg, J., Myrtek, M., Schumacher, J., & Brähler, E. (2000). *Fragebogen zur Lebenszufriedenheit (FLZ). Handanweisung*. Göttingen: Hogrefe.
- Gabrhelik, R., Vacek, J., & Miovský, M. (2006). Prokrastinace: Validizace sebeposuzovací škály na populaci studentů vysokých škol. *Československá psychologie, 50*(4), 361–371.
- Hamaideh, S. H. (2011). Stressors and Reactions to Stressors among University Students. *International Journal of Social Psychiatry, Jan; 57*(1), 69–80.
- Hicks, T., & Heastie, S. (2008). High School to College Transition: A Profile of the Stressors, Physical and Psychological Health Issues That Affect the First-year On-campus College Student. *Journal of Cultural Diversity, 15*(3), 143–147.
- Hrdlička, M., Kuric, J., & Blatný, M. (2006). *Krise středního věku – úskalí a šance*. Praha: Portál.
- Hřebíčková, M., Blatný, M., & Jelínek, M. (2010). Osobnost jako prediktor osobní pohody v dospělosti. *Československá psychologie, 54*(1), 31–41.
- Kebza, V. (2005). *Psychosociální determinanty zdraví*. Praha: Academia.
- Kebza, V., & Šolcová, I. (2005). Prediktory osobní pohody (well-being) u reprezentativního souboru české populace. *Československá psychologie, 49*(1), 1–8.

- Kebza, V., & Šolcová, I. (2003). Well-being jako psychologický a zároveň mezioborově založený pojem. *Československá psychologie*, 47(4), 333–345.
- Kohoutek, R. (1998). *Osobnost a sebepoznání studentů*. Brno: Akademické nakladatelství CERM.
- Kováč, D. (2004). K pojmo-logice kvality života. *Československá psychologie*, 48(4), 460–464.
- Kožený, J., Csémy, L., & Tišanská, L. (2007). Strukturální analýza modelu životní spokojenosti adolescentů. *Československá psychologie*, 51(3), 227–234.
- Křivohlavý, J. (2009). *Psychologie zdraví*. Praha: Portál.
- Lašek, J. (2004). Subjektivní životní spokojenost u tří věkových skupin respondentů. *Československá psychologie*, 48(3), 215–224.
- Linhartová, D. (2008). *Vysokoškolská psychologie*. Brno: MZLU.
- Lu, L. (1994). University Transition: Major and Minor Life Stressors, Personality Characteristics and Mental Health. *Psychological Medicine*, 24(1), 81–87.
- Menclová, L., & Baštová, J. (2005). *Vysokoškolský student v České republice roku 2005*. Praha: MŠMT.
- McAuley, E., Konopack, J. F., Motl, R. W., Morris, K. S., Doerksen, S. E., & Rosengren, K. R. (2006). Physical Activity and Quality of Life in Older Adults: Influence of Health Status and Self-efficacy. *Annals of Behavioral Medicine*, 31, 99–103.
- Omigbodun, O. O., Odukogbe, A. T., Omigbodun, A. O., Yusuf, O. B., Bella, T. T., & Olayemi, O. (2006). Stressors and Psychological Symptoms in Students of Medicine and Allied Health Professions in Nigeria. *Psychiatric Epidemiology*, 41(5), 415–421.
- Plháková, A., & Reiterová, E. (2010). Rozdíly v pěti dimenzích osobnosti a sociální inteligenci mezi studenty exaktních a humanitních věd. *Československá psychologie*, 54(2), 147–159.
- Roberts, R., Golding, J., Towell, T., & Weinreb, I. (1999). The Effects of Economic Circumstances on British Students' Mental and Physical Health. *Journal of American College Health*, 48, 103–109.
- Rodná, K., & Rodný, T. (2001). *Dotazník životní spokojenosti*. Praha: Testcentrum.
- Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2011). *Research Methods in Physical Activity*. (6th ed.). Champaign, IL: Human Kinetics.
- Wagnerová, I., Hoskovcová, S., & Šírová, E. (2008). Změny profesní orientace psychologů. *Československá psychologie*, 52(3), 302–307.
- World Health Organization. (2014). What Is the WHO Definition of Health? Retrieved 19. 1. 2014 from the World Wide Web: <http://www.who.int/suggestions/faq/en/>

Contact:

PhDr. Jana Kvintová, Ph.D.
Department of Psychology
Faculty of Education, Palacký University
Žižkovo nám. 5,
771 40 Olomouc
E-mail: jana.kvintova@upol.cz

Martin Sigmund, Ph.D.
Mgr. Hana Hřebíčková
Faculty of Physical Culture, Palacký University
Třída Míru 115
771 11 Olomouc
E-mail: martin.sigmund@upol.cz
E-mail: hana.hrebickova@upol.cz