

# PERCEPTION OF WORKLOAD BY MEN AND WOMEN TEACHERS AND SELF-ASSESSED HEALTH STATUS

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**Abstract:** *The author analyzes relationships between subjective health and perceived load by men and women working as teachers. Results obtained from a research sample of teachers at the lower secondary stage of primary schools in the Czech Republic (N=967) confirmed the assumption of a relatively high perceived workload in the teaching profession. Self-assessment of one's own health showed symptomatic albeit low correlations with the teachers' load and satisfaction. Differences between men and women teachers were found in certain subjective and objective indicators of health, age, length of one's teaching career and the degree of importance attributed to the profession.*

**Keywords:** *teacher stress, teacher profession, self-assessed health status, genders aspect of teacher profession*

## Introduction

Numerous research workers studying the teaching profession all agree that to work nowadays as a teacher is very often associated with requirements that place, when compared with other professions, specific and relatively high demands on individuals (see, e.g., C. J. Travers, C. L. Cooper, 1996, J. Průcha, 2002, K. Paulík, et al, 2009, M. Popelková, A. Šišková, M. Zatlková, 2010 and others). At the same time, these demands tend to grow as a result of social reconstruction and systemic changes in school education that are either taking place now or are expected to take place in the future (see, e.g., E. Walterová, 2002; V. Rosa, 2003). In this respect, the teachers' situation is made more complicated, problems with students aside, by not always adequate and realistic social tasks that cast them to ambiguous or even conflicting roles, constant supervision and criticism (sometimes unfounded), etc. Besides, there is quite often a feeling among teachers that support provided to them by, e.g., parents, and especially financial remuneration of their work, are not quite adequate to the demands placed on them. All of that plus demanding situations that are not directly related to their jobs may, under certain conditions (e.g. sudden increase in workload

in combination with less time for its execution, intensive conflicts, long-term accumulation of difficulties, etc.), induce stressful situations. In our studies (see, e.g. K. Paulík et al., 2009), the percentages of self-reported stressed teachers were in the range of 20-40 %.

In the present paper, we look into certain relationships between self-perceived workloads and self-perceived health status assessment among teachers, with attention also paid to possible differences between men and women.

## **Teacher stress and health**

In agreement with the classical and relatively often referred to definition (cf. C. Kyriacou, J. Sutcliffe, 1979; M. Cole, S. I Walker, 1989), teacher stress can be described as a response syndrome of negative affect usually accompanied with pathogenic physiological changes resulting from a more or less significant failure of coping mechanisms activated upon the onset of various demands of the teaching profession, and mediated by cognitive assessment. The assessment result is a statement to the effect that work demands exceed (or do not use up) the teacher's work capacity and are therefore a threat to his wellbeing and self-appraisal. Causes of teacher stress are not discussed in detail in this paper. The reader can be referred to a number of other papers (see, e.g., J. Daniel, 2002, J. Průcha 2002, K. Paulík, et al, 2009, M. Popelková, A. Šišková, M. Zaťková, 2010 and others). From the above definition, the probability of certain consequences of teacher stress on the objectively existing or subjectively perceived health status can, among other things, be inferred. In addition to the more or less significant health problems, negative consequences of teacher stress include occupational dissatisfaction, emotional exhaustion (burnout), loss of interest in working as a teacher and tendency to absenteeism, etc. (for more information, see, e.g., K. Paulík, 2007, 2009 and others).

In this connection, a question may arise as to how increased demand on teachers in connection with the execution of their job is reflected in their self-assessment of their own health status. Our objective is to seek possible answers to the above question taking also into account possible differences between men and women teachers.

At the general level, the relationship between workload and health was studied by, e.g., V. Kebza (2005). Detailed studies into the relationship between workload and teachers' health were conducted by, e.g., B. Vašina and M. Valošková (1998), J. Průcha (2002) and K. Paulík et al. (2009). Information on teachers' health can be obtained from both teachers' subjective self-assessments and from real-life incidence of medically diagnosed illnesses that can be linked to the demands of the teaching profession. Regarding subjective health, survey results (see, e.g., B. Vašina, M. Valošková, 1998) seem to suggest that teachers evaluate their own health as poorer and complain about various psychological and physical problems in connection with demands of their profession more often than it is common among the unsorted economically active population. The increase in perceived health problems is linked, among others, to a decrease in job satisfaction. Also, as pointed out by various authors (see, e.g., K. Paulík et al, 2009) the intensity of health problems and the feeling of a general worsening of health of teachers increases with advancing age and the length of their teaching career. According to German sources (see J. Průcha, 2002) neurotic problems amongst teachers with fewer than

10 years of teaching experience were found in 8.3% but in up to 31% amongst teachers with 20 or more years of teaching.

Sickness absence from work is considered as a relatively valid indirect indicator of work-related stress (see, e.g., C. Kyriacou, J. Sutcliffe, 1979). Data on sickness absence frequency and length from different countries show a similar trend. The lowest morbidity is reported in summer holiday months and, during the school year, immediately after and before them. A marked increase in absence occurs in the autumn months of October and November (which very probably also reflects the negative effect of climatic factors). Sickness absence from work amongst teachers peaks in December and March.

Although the connection between stress and negative changes of health status are not unambiguous and no scientific evidence of a causal relationship between stress and somatic disease has been made available (see, e.g. V. Kebza, 2005), there is a strong likelihood that the existence of stress at work is projected into health and, at the very least, influences its subjective assessment. There can be no doubt that, for instance, stress affects immune system function (I. Šolcová, V. Kebza, 2007). Workplace stress can thus be ranked among risk factors for human health under certain conditions. In view of the fact that teachers - just like a majority of working age adults - spend a best part of the day in workplaces and, moreover, their job is among those that quite often affect the workers' private life after working hours (see, e.g., J. Průcha, 2002), teacher stress can be ranked among important factors that probably influence the health and life expectancy of teachers.

## Survey

The **sample surveyed** consisted of teachers from Czech primary schools recruited for cooperation by informed distributors from among university students. The structure of the sample surveyed is in Table 1.

Table 1 Sample surveyed

	Number	Age		Length of teaching experience	
		Mean	Standard deviation	Mean	Standard deviation
Males	176	40.75	11.37	15.56	11.41
Females	791	41.06	10.06	16.43	10.35
Males+Females	967	41.00	10.31	16.28	10.56

For data acquisition, we used the **questionnaire** with items that we had used in various combinations for some time. In this case, we used items that directly tell how respondents, using a scale of 1 to 5, rate:

1. their occupational and non-occupational loads (I generally perceive (a) demands of my job (b) demands of life outside workplace as: 1 – not at all stressful, 2 – mildly stressful, 3 – moderately stressful, 4 – very stressful, 5 – extremely stressful“);
2. job satisfaction and satisfaction in one’s life outside workplace (How satisfied are you with your (a) job (b) life: 1 – completely dissatisfied, 2 – rather dissatisfied, 3 – neither dissatisfied nor satisfied, 4 – rather satisfied, 5 - very satisfied“);

3. your health (1 very poor ..... 5 excellent);
4. importance attributed to your teaching profession generally (1 absolutely unimportant... 5 very important);
5. days of sickness absence from work during last calendar year.

We also asked about the respondents' age, length of teaching experience (in years) and gender.

Table 2 Means and standard deviations of survey variables

		Males	Females	Males+Females
Occupational load	mean	2.93	3.05	3.03
	SD	0.93	0.83	0.85
Non-occupational load	mean	2.67	2.68	2.68
	SD	0.69	0.78	0.76
Life satisfaction	mean	3.77	3.88	3.86
	SD	0.82	0.66	0.69
Job satisfaction	mean	3.57	3.74	3.71
	SD	0.83	0.81	0.82
Job importance:	mean	3.96	4.15	4.12
	SD	0.91	0.80	0.82
No. of sickness absence days	mean	4.85	6.34	6.07
	SD	7.34	12.92	12.12
Self-perceived health status	mean	3.82	3.88	3.87
	SD	0.93	0.79	0.82

The perceived work-related load of the entire group was of an average magnitude (level 3 on a five-point scale). The result of self-assessed health status was near Level 4, i.e. „in good health“. Most people, more specifically 57.9 % (55.7 % males and 58.5 % females) in the group defined their health as „fair“. A total of 39.1 % of respondents (38.6 % males and 39.2 % females) considered themselves as of being in excellent health or in good health and only 3.0 % of all the respondents (5.7 % males and 2.3 % females) as being in poor health or very poor health. The extent to which the teaching profession was important for their lives was on average described by the respondents as „quite important“ (Level 4). No statistically significant differences between males and females on the basis of the means of survey variables were found in the study (t- test). This was also true about their evaluations of work-related and non work-related loads whose comparison may help us get a better insight into self-perceived challenges of the teaching profession. Both males and females considered teaching loads higher than life's load (t-test females: 9.25, males: 2.98, which in both cases is at the significance level of 1 %).

Table 3 Correlations of self-assessments of one's health

	Work load	Life's load	Life satisfaction	Job satisfaction	Job importance	sickness absence	Age	Practice
Males	-0.178+	-0.019	0.199++	0.234++	0.011	-0.192+	-0.221++	-0.201++
Females	-0.125++	-0.154++	0.180++	0.082+	0.014	-0.214++	-0.184++	-0.190++
Males + Females	-0.135++	-0.128++	0.186++	0.116++	0.016	-0.204++	-0.192++	-0.192++

The table shows values of Pearson's correlation coefficient

+ 5% level of significance

++ 1% level of significance

It follows from Tab. 3 that subjective assessments of one's own health in the entire group has statistically significant, albeit mostly low, negative correlations with workplace and non-workplace loads and positive correlations with work satisfaction and satisfaction with one's life in general. Symptomatic is also the significant - albeit low - negative correlation of health perception and age and the length of teaching experience. A similar situation exists in a negative correlation between the number of days of sickness absence from work and perception of one's own health. Differences between males and females were in the subjective perception of one's life's load that showed a significant (albeit low) correlation with subjective perception of one's health in females. Correlations of the length of sickness absence from work of female and male teachers as a kind of an objective index of health are given in Tab. 4.

Table 4 Correlations of sickness absence

	Work load	Life's load	Life satisfaction	Job satisfaction	Job importance	Age	Practice
Males	0.047	0.039	-0.018	-0.043	-0.162+	-0.152+	-0.149++
Females	0.118++	0.081+	-0.001	-0.021	-0.049	-0.034	-0.043
Males+Females	0.109++	0.076+	-0.001	-0.019	-0.057	-0.047	-0.052

The table shows values of Pearson's correlation coefficient

+ 5% level of significance

++ 1% level of significance

The number of teachers' days of sickness absence from work showed statistically significant correlation in the entire group with teaching loads and loads in life in general. In both cases, this was particularly true about females. In the male group, correlations were less pronounced. On the other hand, a statistically significant negative correlation between absence days and age, length of teaching career and the importance they attributed to their profession was found in the male group only. All these correlations were again very low.

For the purpose of analysing differences between selected variables and perception of load, satisfaction, degree of importance attributed to the teaching profession and sickness absence from work between males and females, we divided each of the two groups into two based on their self-perceived health status. The first group consisted of

respondents who rated their health as good. The second group included respondents who subjectively perceived themselves as not having good health and considered themselves in poor health or not in particularly good health. In tab. 6, the two groups are identified as “healthy” and “unhealthy”.

Table 5 Means and standard deviations with respect to self-perceived health status

		Healthy men	Healthy women	Unhealthy men	Unhealthy women
Occupational load	mean	2.86	2.99	3.06	3.44
	SD	0.92	0.83	0.87	0.71
Non-occupational load	mean	2.67	2.62	2.71	3.23
	SD	0.68	0.77	0.82	0.86
Life satisfaction	mean	3.84	3.93	3.29	3.56
	SD	0.78	0.63	1.02	0.90
Job satisfaction	mean	3.67	3.76	3.29	3.67
	SD	0.77	0.82	1.02	0.83
Job importance	mean	3.96	4.15	3.94	4.23
	SD	0.87	0.82	0.94	0.66
No. of sickness absence days	mean	4.06	5.12	6.06	15.21
	SD	7.12	11.28	8.92	26.79

A t-test performed showed that none of the differences between men and women were statistically significant. In other words, there were no discernible differences between men and women in the groups that perceived their health as fairly or completely good or rather poor or very poor.

The analysis of relationships between perceived occupational load and perceived health in the whole group of respondents was based on the data given in Tab 6.

Table 6 Perception of occupational load and self-perceived health status of men and women

Occupational load	Healthy	Unhealthy	Total
High	191	22	213
Low	187	6	193
Total	378	28	406

Teachers in the „healthy“ and „unhealthy“ columns in the table are those who chose options 4 or 5 on the health evaluation scale (good health and excellent health) and option 1 and 2 („very poor or poor health“), respectively. Similarly, persons with high loads were defined as those who chose numbers 4 or 5 on the occupational load assessment scale (high or extremely high loads) and persons with low loads were defined as those who chose numbers 1 or 2 (minimum or moderate loads). We performed the chi-square test only on the data from the entire group because the number of men and women in the „unhealthy“ group was very low (6 in total, of which 4 were men and 2 were women). The final result of the chi-square test (0.82) indicates that the difference was not statistically significant. To ascertain differences between sexes, we investigated relationships between occupational load assessments and self-perceived health separa-

tely for men and women using Fisher’s test for a 2x2 table (the results are in Tables 7 and 8 for men and women, respectively).

Table 7 Self-perception of workload and health in men

Occupational load	Healthy	Unhealthy	Total
High	29	6	35
Low	39	4	43
Total	68	10	78

Table 8 Self-perception of load and health in women

Occupational load	Healthy	Unhealthy	Total
High	162	16	178
Low	148	2	150
Total	310	18	328

No statistically significant relationship between perceived occupational load and self-perceived health status was found when the relationship data were analyzed separately for men and women teachers.

## Discussion

Workload and satisfaction data ascertained in our respondents are similar to those obtained from teachers participating in our previous studies (e.g. K. Paulík et al, 2009). The existence of a relatively high self-perceived teachers’ workload was evident from significantly higher reported occupational workload than life’s load. This difference has been repeatedly reported in a number of studies. It is sometimes reported by both men and women, but in some cases it has been particularly stressed by women.

There were no significant differences in self-perceived health status between men and women in our group. This result is different from those obtained in our previous study (K. Paulík, 1999, 2001), in which male teachers from primary and secondary school self-evaluated their health as statistically significantly better than female teachers, who also reported more psychological and physical problems. Similar differences were also reported by, e.g., B. Vašina and M. Valořková, 1998.

Self-perception of our respondents’ health corresponded to the “good health” rating on the scale. In the entire group, that rating has the statistically expected significant, albeit mostly low, negative correlations with occupational and non-occupational loads and positive correlations with work satisfaction and satisfaction with one’s life in general. The low correlation figures suggest that these probable relationships are influenced by some other factors not monitored in the present study. Symptomatic is also the significant- albeit low - negative correlation of health perception and age and the length of teaching experience. A similar situation exists in a negative correlation between the number of days of sickness absence from work and perception of one’s own health. In view of correlation coefficient values, differences between men and women should not be overemphasized. Of the two, only women showed a statistically significant negative correlation with one’s life’s load in self-assessment of one’s health as a subjective health status indicator (health

ratings decrease with an increase in load). On the contrary, the objective health status indicator, which in our study was the number of days of sickness absence from work in the past calendar year, correlated with the importance attributed to the profession, length of teaching career and age in men only. This suggests that the relationship between age and self-assessment of one's health is rather complicated. Results of another study of ours (K. Paulík, V. Gajda, 2008) indicate that neither age nor the length of teaching career influence neither self-assessment of work load nor job satisfaction of women teachers directly, but they proved to be an important mediating factor in the work satisfaction - workload relationship, and therefore some indirect connection with self-perceived health status can also be expected. This assumption is corroborated by some other studies (K. Paulík et al, 2009) that highlighted the length of the teaching career as the mediating factor in the work load - self-perceived health status relationship. Both genders tended to assess their health status more negatively with an increasing length of their teaching career.

## Conclusions

Our study present a framework view of a set of complicated issues with full awareness of obvious limitations of the approach used. The results obtained are indicative of what could have been expected at the general level. Certain connections between the perception of occupational and non-occupational loads and of self-assessment of the health status are probably not always the same in men and in women. The techniques of statistical analysis used, however, allow for only an approximate delineation of those differences. Moreover, we should also assume that some more influences are at play. For their more precise identification, more complicated and sophisticated statistical techniques would have to be used that would help to get a better understanding of relationships between variables, also with respect to their causality.

This paper reports some results from a project supported by GACR grant No. 406/09/0726 "Coping with Load by Men and Women".

## PERCEPCE PRACOVNÍ ZÁTĚŽE UČITELŮ A UČITELEK A SUBJEKTIVNÍ ZDRAVÍ

**Abstrakt:** Příspěvek se zabývá souvislostmi subjektivního zdraví a percipované zátěže muži a ženami vykonávajícími učitelkou profesí. U výzkumného souboru učitelů působících na druhém stupni základních škol v ČR (N= 967) byl podpořen předpoklad o relativně vysoké míře subjektivní pracovní zátěže učitelství. Subjektivního hodnocení vlastního zdraví vykazovalo smysluplné, ale nízké korelace se zátěží i spokojeností učitelů. Rozdíly mezi učiteli a učitelkami byly zjištěny v některých souvislostech subjektivních a objektivních ukazatelů zdraví, věku, délky učitelského zaměstnání a míře důležitosti přičítané profesí.

**Klíčová slova:** učitelský stres, učitelská profese, subjektivní zdraví, genderový aspekt v učitelské profesi