THE CZECH CITIZENS' OPINIONS ON THE HEALTH AND QUALITY OF LIFE OF SCHOOL-AGE YOUTH

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Abstract: *A representative sociological research of the views held by the citizens of the Czech Republic regarding the health and quality of life of school-age youth was conducted at the end of 2010. In its course, 1793 randomly selected Czech citizens were questioned, using the form of a structured interview. Most Czech citizens consider the current health condition of our schoolchildren to be good. The health status of the young people in our schools is rated as 70% positive on average. The Czech citizens, for the most part, believe that primary school activities contribute to a higher quality of young people's lives. As to the possibility of students being overloaded with scholastic duties, the public slightly favors the opinion that such overloading occurs frequently or occasionally – about 2/5 of the respondents take that position. The notion that the youngsters are overloaded by schoolwork is more prevalent among women, the youngest age groups, and the citizens with basic education.*

Key words: *school-age youth, adolescent health, young people's quality of life, school and the quality of life, overloading of students*

Problem

A "Long-Term Program of Health Improvement for the Population of the Czech Republic" by which the Czech government adopted the World Health Organization program called HEALTH 21 in 2002, represents a qualitatively new approach to building health education and health care. Its "main objective is to protect and develop human health during the entire life, reduce the incidence of diseases and injuries, and limit the suffering that they cause to people". One of the main thrusts of these programs is prevention. A number of objectives set out in these materials is directed to children and adolescents as the segments of populations where social and health-oriented habits that can affect an individual for life are being formed. For example, the 4th objective of the "Long-Term Program…" requires "to create conditions, by the year 2020, for young people to be healthier and more able to fulfill their role in society". This is no small task, especially in light of the subsequent statement that "despite good medical care for this segment of population, the health of children and adolescents does not show a significant improvement. The number of allergic diseases and the diseases of the nervous and musculoskeletal system is increasing, the growth of behavioral disorders

persists, the number of serious injuries is on the rise. The youth mortality has been stagnant for the last 10 years...".

At present, health education transcends the capabilities of the health care system and so it is becoming a task for social science, where the school involvement, public awareness, and social interaction are essential to create a healthy lifestyle. This is a very demanding job, especially when measured by specific efficiency.

The efforts of health institutions in this direction are closely paralleled by important documents of our school administration, namely *General Educational Programs*, that outline a new strategy of education, inclusive of an explicit section devoted to health education. In one of its educational areas (5.8 "Man and Health") the *General Educational Program for Basic Education (GEP-BE)* says that education has to inspire "the students to learn and know themselves as living beings, to understand the value of health, the purpose of health-saving prevention, and the depth of the problems associated with diseases or other impairment of health". This educational area is then presented in concrete terms in Educational Module "Health Education" that imparts the fundamental knowledge about man along with preventive protection of his health.

The *GEP-BE* contains a number of important ideas that structure the school-based health education in a novel way, and point to new opportunities of linking the health education provided at schools with that offered by healthcare institutions. By health education provided by these institutions, J. Holčík (2010) means

1. patient education
2. health risk warnings, and
3. health education.

Health education is defined in various ways (see for example Marádová 2006, Čevela, Čevelová, Dolanský 2009; Machová, Kubátová et al. 2009; Liba 2010; etc.). It is typically an educational activity that endeavors to obtain health-related information, knowledge and skills, leads to a lifestyle harmonious with the medical science, promotes health awareness, and encourages responsibility for one's own health.

Like any institutional learning, health education does not start from zero but it builds on a certain level of knowledge and skills that people already possess, that can be developed or might even have to be re-shaped. With that in mind, we wanted to find out what ordinary people think about the health and quality of life of our youth, since that could be a good starting point for meaningful health education. We consider it important to bring these ideas to light because it is from them that the parents' implicit educational programs evolve, and the public forms the image of contemporary schools as one of the factors.

The survey of citizens' views on the current health of students and the importance of primary schools in improving the quality of their lives included some factors that characterize young people's life. We focused on the phenomenon of loading, or more precisely overloading, the students, which the public often perceives in its own way. We have previously looked at the issues of student workload in a relatively extensive research (Řehulka, E. 1987), and it turned out that the public is much interested in this topic, has its own original opinions about it, and often judges the quality of a given school by it.

Finally, we posed one more question which may be a factor in the student's lifestyle, and that was the hour when the classes should begin, arguably a moment from which the workday unfolds and a key to the day's timing.

Research

The research was conceived as sociological, and the field survey was done by means of standardized controlled conversations of the interviewer with the respondent. The research intent, and the research project, were prepared during September and October 2010.

The data collection was handled by agencies INRES-SONES in the entire Czech Republic (CR).

The statistical data processing was done by SASD 1.4.5 program for statistical analysis of social data. Performed were the 1st degree sorting and contingency tables of selected indicators for the 2nd degree sorting. The strength of correlation for selected indicators was checked by the chi-square test, and other test criteria were applied as per indicator nature. This analysis allowed to interpret the data and prepare the appropriate tables and charts.

The data was obtained from a group of 1793 individuals selected at random by means of quotas. The group is a representative sample of the Czech population aged 15 and above. Its representativeness was derived from the basic pool of Czech population of people 15 years of age and older.[1]

From the standpoint of gender, the group consisted of 874 (48.7%) men and 919 (51.3%) women, which corresponds to the CR population aged 15 years and older. In terms of relative frequency, the sample does not deviate from the population, which means that the research does represent the CR population 15 years of age and older, as far as the gender is concerned.

The age groups in combination with the gender groups are represented in the sample by the following percentages:

AGE	***MEN***		***WOMEN***	
	%	***DEVIATION***	***%***	***DEVIATION***
15–19 years	3.5	- 0.1	3.6	+0.1
20–24 years	4. 1	0.0	3.9	+0.1
25–34 years	10.2	+0.3	9.0	-0.3
35–44 years	8.5	-0.1	8.4	+0.3
45–54 years	7.8	0.0	7.5	-0,1
55–64 years	7.8	-0.1	8.6	+0.1
Over 65 years	6.9	0.0	10.2	-0.2

Table 1: Sample Composition by Gender and Age

[1] See Age Distribution in the Population of the Czech Republic in 2009. Status as of 12/31/2009. Prague, Czech Statistical Bureau, 2010.

Compared to the age distribution of the population, the deviation does not exceed 0.3%. It can be therefore inferred that the results of the research are representative of the individual age groups of the CR population aged 15 years and older.

The geographic or regional categorization of respondents followed the administrative map of the CR in effect since 2001.

REGION DESIGNATION	%	DEVIATION
PRAHA	12.0	-0.1
STŘEDOČESKÝ	11.4	-0.2
JIHOČESKÝ	6.0	-0.1
PLZEŇSKÝ	5.5	0.0
KARLOVARSKÝ	2.9	0.0
ÚSTECKÝ	8.0	+0.1
LIBERECKÝ	4.2	+0.1
KRÁLOVÉHRADECKÝ	5.5	+0.2
PARDUBICKÝ	4.8	-0.1
VYSOČINA	5.0	+0.1
JIHOMORAVSKÝ	11.1	+0.1
OLOMOUCKÝ	6.1	0.0
ZLÍNSKÝ	5.5	-0.2
MORAVSKOSLEZSKÝ	12.0	+0.1

Table 2: Sample Composition by Regions

When compared to the population composition, the maximum deviation is 0.2%.

It can be stated that the research results are representative of the CR population 15 years of age and older in terms of gender, age, and region.

A preliminary analysis of the collected data showed that of those aspects that might describe or characterize the given sample, the requisite differentiation function is best performed by the basic demographic indicators, namely the facts of gender, age, and regional association.

Consequently, those indicators appear more or less regularly in the following presentation, albeit only when the appropriate correlation makes sense and the detected differences are sufficiently large to justify their presentation.

Among the indicators whose representativeness was not monitored but noted in the survey, were education, marital status, number of children, place of residence, occupation, net monthly income of the family, and religious attitude. The existence of a statistically significant link is pointed out in all cases.

In the course of the field investigation, the questioners approached a total of 1988 randomly selected citizens with a request for an interview on the issues of people's health and healthy lifestyle. 195 respondents declined the interview, or 9.8% of all contacted persons. Conversely, 1793 respondents, or 90.2% of candidates, consented to the interview.

The pattern of interview denial in terms of gender and age is apparent from the following table:

AGE	*MEN*		*WOMEN*		*TOTAL*	
	REFUSAL	*%*	*REFUSAL*	*%*	*REFUSAL*	*%*
15–19 years	8	4.1	5	2.6	13	6.7
20–24 years	7	3.6	6	3.1	13	6.7
25–34 years	23	11.8	21	10.8	44	22.6
35–44 years	22	11.3	19	9.7	41	21.0
45–54 years	15	7.7	17	8.7	32	16.4
55–64 years	17	8.7	18	9.2	35	17.9
65 and older	11	5.6	6	3.1	17	8.7
TOTAL	103	52.8	92	47.2	195	100.0

Table 3: Refusal to Participate in the Research by Gender and Age

A gender analysis of the refusal to participate in research indicates that women were more willing to participate in the research than men. The least willing to participate were the men and women in the 25–44 year age brackets. The willingness to participate in the research was lower in the 25–64 age category, whereas the most willing participants were respondents in both the youngest and the oldest age groups.

In general, the rate of refusal to participate in the survey was low.

As for the reasons, the most common cause for refusing to participate was a lack of time (cited by 69.3% of respondents). The second most frequent cause was no interest in the project or indifference to it (14.2% of respondents). Another 7.8% of the respondents expressed distrust in the research or doubts about its purpose, 4.2% of respondents declined on the grounds of considering this type of research useless, 3.5% voiced a concern that the collected information may be misused (although the survey was anonymous). The remaining 1.0% stated reasons of health, reasons not mentioned above, or gave no explanation for the refusal.

Results

First we asked how the public perceived the current state of health of school-age youth. The question was phrased as follows: *"State your health rating of our school-age youth in percent, with 100% being the best possible health and 0% the worst possible health?"*

As apparent from the question, the respondents were asked to quantify their position with a specific number within the range of 0% to 100%. The indicator was therefore structured as continuous, but it was later segmented into the following intervals for evaluation purposes: "0%–20%; 21%–40%; 41%–60%; 61%–80%; 81%–100%."

The analysis of responses to this question indicates that the CR citizens assess the **current state of health of our school-age youth** as predominantly good. The weighted arithmetic average is 68.975, which means that the average rating of the health status of

our students is approximately 70%, where 100% represents the best and 0% the worst possible health.

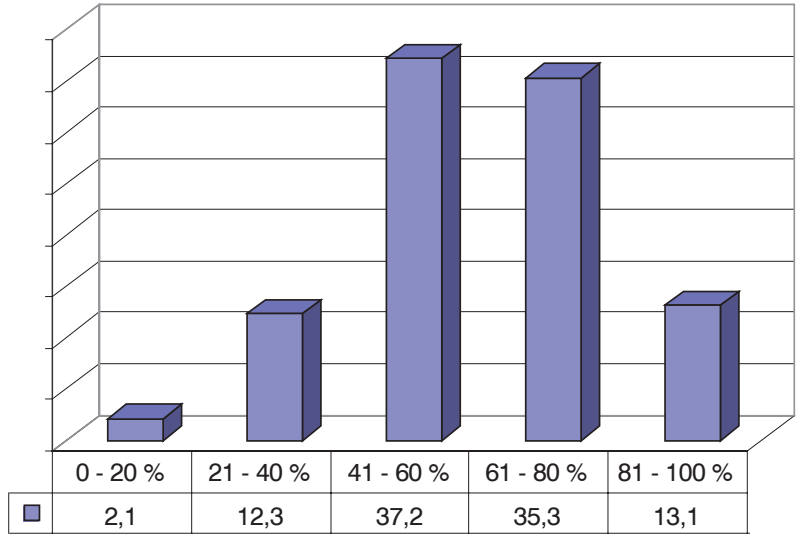


Fig. 1: Assessment of Health in School-Age Youth (in %) (N = 1776)

A subsequent analysis, based on the second degree sorting, did not identify any statistically significant correlation between the health rating for the current school-age youth and socio-demographic factors. This means that the health status is perceived similarly by men and women and by different age groups. No differences were found by education, marital status, size of the place of residence, region, or any other indicator. This means that the opinion of the CR citizens on the health of the current schoolchildren is essentially homogeneous and, on average, rated at 70% out of the possible 100%.

Another area tracked by the research were the citizens' views on primary schools from the perspective of the students' quality of life. The citizens were asked whether the primary schools contribute to a higher quality of life and whether it does not overload the children. Concurrently, the citizens were asked for an optimal time of the day to begin the instruction.

The next question deals with **the impact of primary schools on the quality of students' lives,** formulated as closed, with the following wording: *"Do you think that our primary schools contribute to a higher quality of life of the students?"* The respondents had the following options: *"1) yes, substantially; 2) yes, partially; 3) I don't know; 4) only little; 5) not at al"*.

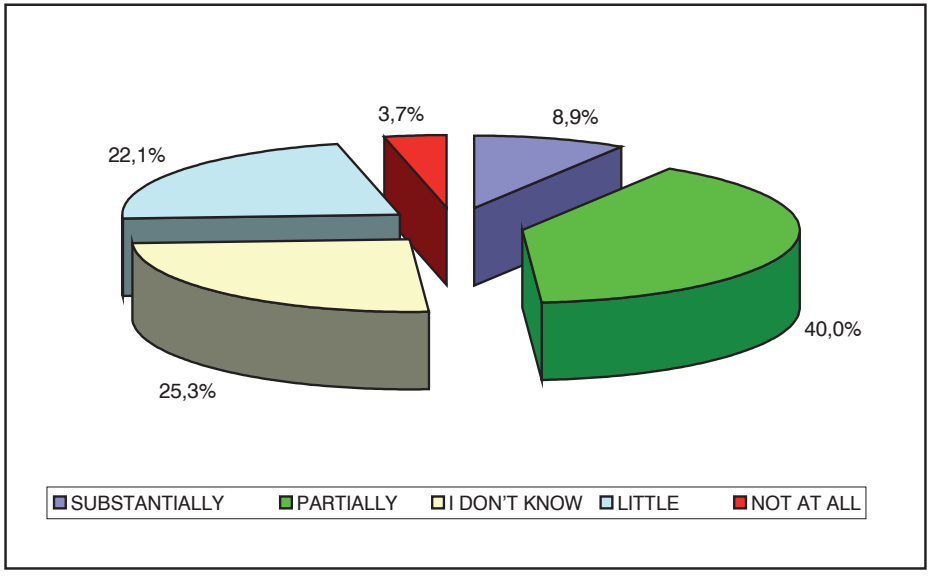


Fig. 2: Do Primary Schools Contribute to a Higher Quality of Students' Lives?
(N = 1792)

An analysis shows that almost (48.9%) of CR citizens sees the role of primary school as positive and think that it does help improve the quality of life for the young, partially or substantially. Another ¼ (25.3%) of citizens is not clear on the issue and unable to assess the situation, while the remaining ¼ (25.8%) of citizens sees the primary schools to be of little or no benefit in improving the young people's quality of life.

The analysis of statistically significant correlations failed to prove a link between gender and the position on this question. Men and women hold similar opinions on this matter. In the case of age, there is a tendency of the younger age groups to view the role of school in terms of its impact on the quality of life more critically than the older age groups. The chi-square statistic (χ^2) of the test of independence for age differentiation has the value of 51.721 with 24 degrees of freedom at the significance level $\alpha = 0.001$. This means that the views on this issue are dependent on age. Also detected was a correlation with education. The respondents with basic schooling more often state that the primary school does not improve the students' quality of life or otherwise choose the answer "I don't know" more frequently; the respondents who state that they learned a trade also significantly prefer the "I don't know" option, whereas the college-educated respondents, more than others, consider the role of school in that sense to be positive. The statistic (χ^2) of the chi-square test of independence for different levels of education has the value of 51.540 with 12 degrees of freedom at the significance level $\alpha = 0.001$. This means that the views on this subject are education-dependent. It is also logical that the respondents who are single and without children elected the answer "I don't know" more often than others.

It can be said that the CR citizens, for the most part, believe that the primary school activities contribute to a higher quality of life for the young people. This opinion is held more often by older citizens, with a higher, usually college-type, education.

Another school-related question we looked at was **the issue of possible overloading of schoolchildren.** The inquiry about this issue was formulated as closed, and worded as follows: *"Do you think that our students are overloaded with schoolwork?"* The respondents could choose from the following answers: *1) yes, frequently; 2) yes, occasionally; 3) I don't know; 4) only rarely; 5) not at all".*

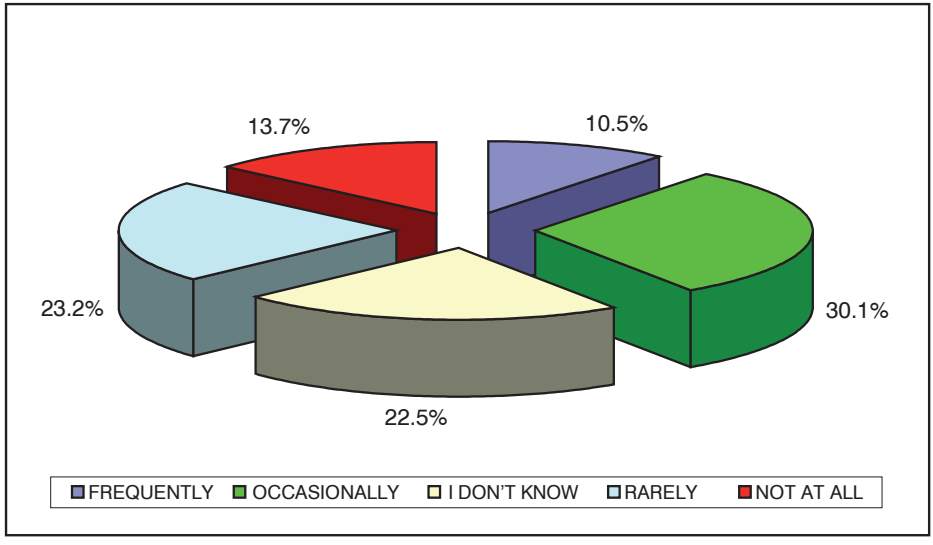
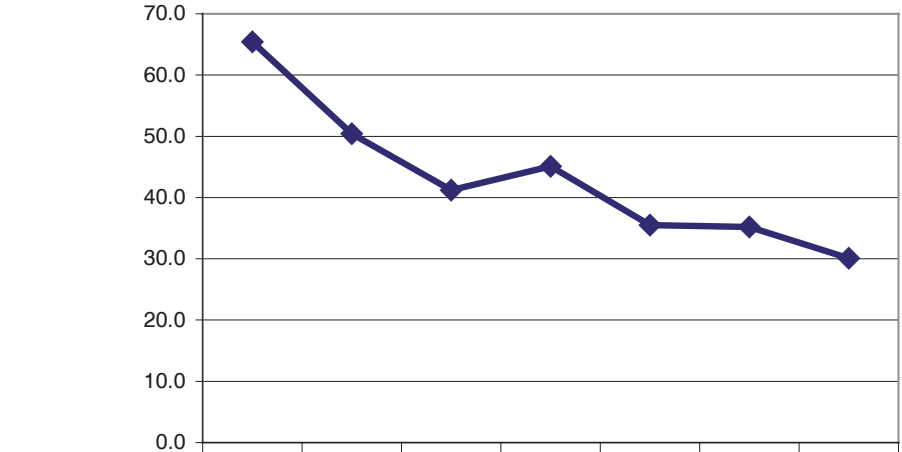


Fig. 3: Are Our Students Overloaded with School Work? (N = 1792)

With regard to potential overloading of students with schoolwork, the CR citizens are inclined to think that such overloading happens frequently or occasionally, since about 2/5 (40.6%) respondents take that position. A sizeable portion of the population (22,5%) is not clear on this matter, and the remaining 36,9% believe that overloading happens rarely or not at all.

The opinions about student overloading show some statistically significant correlations. Men, more often than women, state that overloading does not occur at all or choose the "I don't know" answer. Women, more than men, are inclined to believe that students do get overloaded. The statistic (χ^2) of the chi-square test of independence for the two genders is 26.912 with 4 degrees of freedom at the significance level $\alpha = 0.001$. This means that the position on this issue is dependent on the respondent's gender.

There is a strong link between the opinion on student overloading and age. The strongest conviction that overloading happens is in the youngest age groups. This conviction grows weaker with age, being the smallest is the highest age group. The correlation is evident from the following graph, showing a sum of responses "frequently" and "occasionally".



	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	over 65 years
FREQUENTLY - OCCASIONALLY	65.4	50.4	41.2	45.1	35.5	35.2	30.1

Fig. 4: Are Our Students Overloaded with School Work?
The Sum of Responses "Frequently" and "Occasionally" by Age (in %) (N = 1792)

The statistic (χ^2) of the chi-square test of independence for various ages yields the value of 151.545 with 24 degrees of freedom at the significance level $\alpha = 0.001$. The value of the test of independence for age is 0! It is therefore certain that the views on this issue depend on the respondent's age. Convinced of overloading are primarily those who are presently affected by it, i.e. the students of secondary schools, who predominate in the youngest age group.

The age-related nature of responses to this question is also evident in the fact that this conviction is typical for individuals who, in terms of marital status, are single.

Also identified was the link of this indicator to education. The citizens with the basic education are convinced about overloading more than others and the blue-color workers choose "I don't know" more often. In this case, age may be the underlying factor since most students of the secondary and trade schools are among the respondents with the basic education. The chi-square statistic (χ^2) of the test of independence for division by education is 60.858 with 12 degrees of freedom at the significance level $\alpha = 0.001$.

Along with the question of the effect that primary schools may have on the young people's life, and the issue of student overloading, we also surveyed some opinions on the organization of children's workday as a potentially important factor in their lifestyle. In this particular study, we present only the views of the CR citizens **on the most appropriate time to begin the classes,** an oft-debated topic. The question was posed as closed and articulated as follows: *"At what time of the day, in your opinion, should the instruction at primary schools begin?"* The respondents could choose one of the following answers: "1) at 6 a.m.; 2) at 7 a.m.; 3) at 8 a.m.; 4) at 9 a.m.".

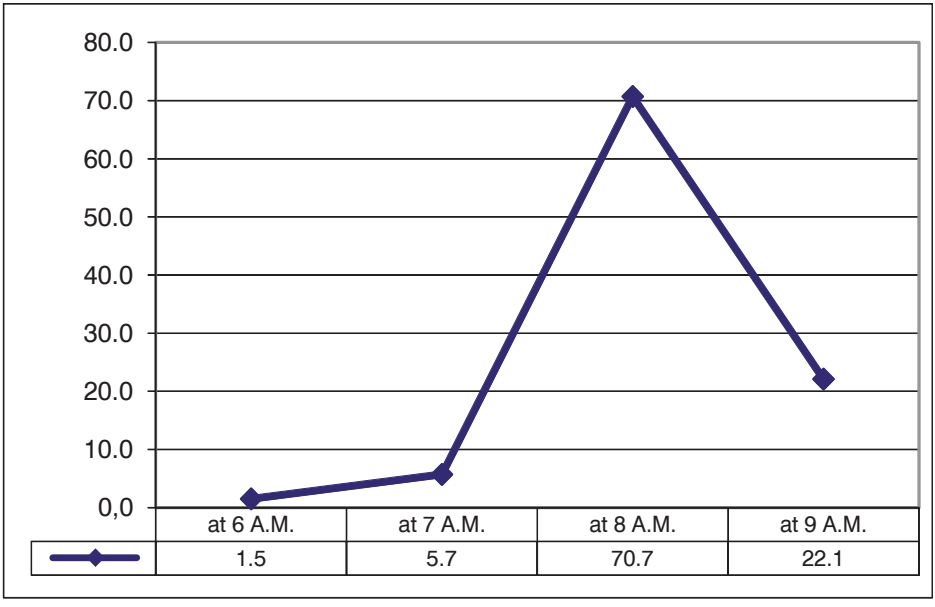


Fig. 5: The Most Appropriate Time to Begin Instruction (in %) (N = 1793)

The CR citizens clearly think that the best time to commence the instruction is at 8 a.m. This hour was favored by 7/10 (70.7%) respondents. A smaller portion (22.1%) recommended to begin the classes at 9 a.m., the other times were mentioned only exceptionally.

Men and women have the same opinion when to start the classes; there were no gender-based, statistically significant differences. It is true though that the lowest age groups (15–19 years and 20–24 years) have significantly more often than others recommended that the classes start at 9 a.m. This distinction is statistically significant. The chi-square statistic (χ^2) of the test of independence for division by age has the value of 83.715 with 18 degrees of freedom at significance level $\alpha = 0.001$. In other words, the respondents who currently attend school, in greater measure than others would like to move the starting time to 9 a.m. The age factor comes through in the marital status as well: the nine o'clock start was recommended especially by the respondents who indicated that they were single. The same starting hour is also significantly favored by those who indicated that they had a basic education. Conversely, the tradesmen, more than others, recommend to begin the classes at 7: 00 a.m. The chi-square statistic (χ^2) of the test of independence for division by education has the value of 50.871 with 9 degrees of freedom, at the significance level $\alpha = 0.001$. It can be said that the opinion on the optimal hour when to begin instruction is influenced by the degree of education attained.

Discussion

The results reached in this study were not unexpected. They show the conventional views that the public has on the important issues concerning our young

people and the current school system. From a certain perspective, the results of our research may be interpreted as positive; statistically speaking, there are no clearly negative conclusions. It is only natural to be pleased that the health situation of our schoolchildren looks good, but the other side of the coin is the need to explore the circumstances of the 30% of youngsters who are not in the first category. This is, of course, only an initial and general study, the results of which should serve as a springboard for further investigation. Another problem is the public perception and valuation of health. A number of current conceptual changes in the assessment of health may spark off a discussion about specific results; some of our surveys show that even educators are not sure where they stand on these issues (Řehulka, E. 2011, 2007, 2000, Řehulka, E., Řehulková, O. 1998b).

The questions of influence that schools exert on the quality of life of their students are equally debatable. Even though these topics are not talked about openly, the public scrutinizes the school for signs of psychological lapses, reacts sensitively to the issues of authority, bullying, school climate, often expects the school to resolve problems that the family cannot handle, or is critical when the kids in fact mirror the deficiencies of the society as a whole. However, when it comes to shaping the quality of life of the young people, the overall image of school is positive. An interesting comparison would be to juxtapose our findings with the results of a more broadly conceived publication by I. Možný (2002).

Seemingly minor issue of contemporary school is the question of overloading, which, unlike the previous discussions (see Řehulka E. 1987), now centers around the meaningfulness of scholastic instruction. The issue of school overloading must be defined if we want to institute some educational and preventive measures. We have already stated that "to prevent an overload, it is necessary to become acquainted with the specificity of the school in terms of students' social background, demographics of the environment, precepts of the pedagogical work, etc. which, in their entirety, are the factors that strongly determine the process of student overloading" (Řehulka, E. 1987 p. 130).

Traditional views came through in the question when to begin the classes, with eight o'clock being the customary hour to start and often a factor in transportation arrangements or family schedule. Extending work or entertainment (e.g. television) in the evening inspires, particularly in the young people, a desire for a later start, as practiced in most West-European countries. In general though, the public wants to stay with the traditional timing of the day, and that is necessarily true for the scholastic duties as well.

Conclusions

The citizens of the Czech Republic consider **the current state of health of our school-age youth** to be predominantly good. The average rating of our schoolchildren in terms of health condition is around 70%, where 100% stands for the best and 0% for the worst possible health. This opinion is homogeneous and, statistically speaking, the various groups of citizens do not differ significantly in their assessment.

The Czech citizens, for the most part, believe that primary schools activities contribute to a better quality of life for the young people. This opinion is more often held by older citizens with higher education, usually on a college level.

When it comes to potential overloading of students with scholastic duties, the Czech citizens slightly favor the notion that overloading does occur frequently or occasionally, the opinion shared by about 2/5 respondents. A sizeable portion of the citizenry (22.5%) does not have a clear-cut opinion on this matter, and the remaining 36.9% think that overloading happens rarely or not at all. The belief that schoolchildren get overloaded at school is favored more by women, by the youngest age groups, and by citizens with basic education.

The Czech citizens clearly consider 8 a.m. to be the most appropriate time to commence the instruction. This hour was chosen by 7/10 (70.7%) respondents. Fewer people (22.1%) recommends to begin at 9 a.m.; the other hours are rarely mentioned. To begin the classes later (at 9:00 a.m.), is preferred especially by the youngest age groups, i.e. by those who presently attend school.

NÁZORY OBČANŮ ČESKÉ REPUBLIKY NA ZDRAVÍ A KVALITU ŽIVOTA ŠKOLNÍ MLÁDEŽE

Abstrakt: Reprezentativní sociologický výzkum týkající se názorů občanů České republiky na zdraví a kvalitu života školní mládeže proběhl v závěru roku 2010. V jeho rámci bylo formou řízených rozhovorů osloveno 1793 náhodně vybraných občanů České republiky. Občané České republiky hodnotí současný zdravotní stav naší školní mládeže převážně jako dobrý. Průměrné hodnocení zdravotního stavu naší školní mládeže je cca 70 % pozitivní. Platí, že občané ČR ze z větší části domnívají, že základní škola svou činností přispívá ke zvyšování kvality života dětí a mládeže. Z hlediska možného přetěžování dětí a mládeže školními povinnostmi mírně převažuje mezi občany ČR názor, že k takovému přetěžování dochází často nebo občas – stanovisko zastávají cca 2/5 respondentů. K tomu, že škola děti a mladé lidi přetěžuje, se více přiklánějí ženy, nejmladší věkové skupiny a občané se základním vzděláním.

Klíčová slova: školní mládež, zdraví mládeže, kvalita života mládeže, škola a kvalita života, přetěžování dětí a mládeže