Introduction
The semantic differential is a relatively frequent method used for the measurement of attitudes both in the Czech Republic and abroad; not only in the field of education from a pedagogical and psychological perspectives. It appears however that simple acceptance of existing semantic differential scales is not always adequately transferable to other socio-cultural environments. This can cause substantial inconsistencies in the comparison of the attitudes of culturally differing groups of respondents using the same measuring instrument.

Methods
The semantic differential is a research technique developed in 1950s in the USA by professor Osgood for measuring individual, psychological meanings of words or attitudes towards something. The basic dimensions of the semantic space were determined by means of a factor analysis and the three most important factors were determined by means of this analysis: Evaluation factor, Potency (power) factor, Activity factor. However, when a checking factor analysis was performed in the Czech sociocultural conditions it was found that only two factors significantly contributed to the dispersion of the values. Extraction of three factors leads to relatively unreliable measurement where one scale measures different factors for different concepts.

The first factor was marked as the evaluation factor in compliance with C. Osgood. The second factor is a combination of the initial potency and activity factors and it was called the energy factor.

Results
The research suggests that simple acceptance of an existing semantic differential might bring inaccurate results in case of an intercultural comparison of attitudes. The factor analysis suggests that in all countries involved in our research the evaluation of the concepts is optimally determined always from the same scales 3 and 7. On the contrary, in the Czech Republic, the energy of the concepts is optimally determined from scales 2 and 8, while in Polish and Slovak students the best scales for the measurement of the energy factor were 6 and 8. It is therefore obvious that the use of individual SD scales without verification of their factor structure would bring inaccurate results in an international comparison.

Overall, statistically significant differences were observed between students’ attitudes in all three countries. These differences were most obvious especially in the energy of the concepts; statistically significant differences in terms of the highest energy expenditure were observed only in students in the Czech Republic. The differences in the evaluation of the concepts were not so distinct. Remarkable partial significant differences were identified for the concepts of Diet, Drugs, Alcohol, My future success at work, Physical health, Risky sexual behaviour, My professional preparation (best evaluated by students in Poland), I (best evaluated by students in Slovakia) and Balanced diet (best evaluated in the Czech Republic).

The research study also focused on other variables that can affect the students’ attitudes to lifestyle. These were possible differences between genders, correlation between attitude to health and parents’ education, eating habits, students’ leisure and physical activities and overall PC time. Regarding the length of this paper these effects are not considered.

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