

# SLOVAK UNIVERSITY STUDENTS' HEALTH IN THE CONTEXT OF TRAIT EMOTIONAL INTELLIGENCE

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## Abstract

The study theoretically and empirically analyzes trait emotional intelligence (EI) potential in the context of health (health domains and attitude by WHO and BMI index) by self-report tools: trait EI (global level, factors: well-being, self-control, emotionality, sociability) by TEIQue-ASF (Petrides, 2009) and health domains (physical health, psychological health, social relations, environment) and general health attitude by WHOQOL-BREF (WHO, 1996) and BMI index of future teachers as potential educational leaders in Slovakia (N=107,  $M_{age}=22.3$ ,  $/SD=2.9$ ; 83% of females). Statistically significant positive moderate to strong relations between trait EI (and its factors) and health domains and global health attitude were proved (up to 40% of global health is predicted by trait EI). While BMI was neither in relation with trait EI nor health. There were significant differences between overweight and healthy weight in health domains and attitude in favor to healthy weight ones. The study emphasizes the importance of socio-emotional learning of educational emotionally intelligent leaders. The study is a part of a research project "Psychological Approach to Creation, Implementation, and Verification of Educational Leader's Competence Model Development (APVV-17-0557)".

**Keywords:** *Trait emotional intelligence, health, BMI, socio-emotional learning, educational leaders.*

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## 1. Introduction

In the current post-pandemic period, it is more important than ever to care, support and promote an individual's health, physical and mental, at all levels of schools, not excluding universities. Social, emotional and mental health difficulties at schools have changed also the role of an educational leader. The mental health and wellbeing at schools become a priority for leaders. The attention is drawn to understanding others, understanding factors affecting health, developing strategies for health to be cared, developed, and managed at schools. Only a healthy leader at school can mobilize and influence others, for the purpose of addressing and reaching common school aims guiding a healthy individual into this world as „*healthy citizens are the greatest asset any country can have*“ (W. S. Churchill).

Health is explained as a state of complete physical, mental and social well-being, not only as a lack of illness or weakness (WHO, 2018, 2019, 2020). Data from Slovak official studies indicate that between 2009 and 2019, there is mental disorder increase up to 42.8% (NCZISK, 2021); especially up to 72% in the emerging adulthood period following pandemic period (Hajduk, 2021). A lot of experts agree one of the protective factors to prevent or mitigate the impact of emotional disorders, is emotional intelligence (EI) (Gebregergis et al., 2020; Biolik-Moron, 2021), EI as an ability (Martins et al., 2010) and EI as a personality trait (Petrides, 2009, Schutte et al., 2007). The research aim was to explore trait EI in the context of health explained by WHO of university students, future teachers at schools. In line with the mentioned research results, we stated a research hypothesis and question.

RH1: *We presuppose there is positive relation between trait EI, health and BMI of university students.*

RQ1: *Is there a significant difference between underweight, healthy weight vs. overweight ones and trait EI and attitudes to health?*

## 2. Method

### 2.1. Research sample

The research sample consisted of 107 university students, future teachers of various subjects (average age: 22.3  $/SD=2.9$ ; 83% of females) from three universities in Slovakia preparing future teachers. All the participants signed informed consent, and were participating in the research voluntarily.

## 2.2. Method

Two self-report measures and BMI calculation were used.

WHOQOL-BREF quality of life inventory (1996) developed by WHO to determine the health domains and health attitude. We used a shorten form from WHOQOL-100. It measures life quality via four domains (physical health, mental health, relationships, environment). It contains of 26 questions scaled on a 5-point Likert scale (1-strongly disagree to 5-strongly agree), a higher rating indicates a higher level of health.

Trait EI was assessed by the short Slovak version of the Trait Emotional Intelligence Questionnaire-Adolescent's Short Form (TEIQue-ASF, Kaliská, Heinzová & Nábělková, 2019) created by Petrides (2009). The instrument consists of 30 items scaled by a 7-point Likert scale (1-completely disagree to 7-completely agree), a higher rating indicates a higher level of trait EI.

Body mass index (BMI) as a measure of body fat based on height and weight.

## 3. Results

According to the descriptive indicators the data were normally distributed. Descriptive indicators indicate the global trait EI level ( $AM=5.08$ ) of this research sample is reaching the 61<sup>st</sup> percentile according to the Slovak percentile norms for the Arising Adulthood period of a norm sample ( $N=1264$ ;  $AM_{age=21.2}$ ;  $/SD=.7$ ), Kaliská, Heinzová, & Nábělková, 2019, p. 78). The BMI index refers to normal or healthy weight (18.5-24.9). All of the observed inner consistencies of the instruments estimated by Cronbach's alpha coefficients reached acceptable values (TEIQue:  $\alpha=.897$ ; WHOQOL-BREF:  $\alpha=.854$ ).

We were interested in RH1: *We presuppose there is positive relation between trait EI, health and BMI of university students* and the results are presented in Table 1.

Table 1. Correlation analysis of the variables.

		2	3	4	5	6	7	8	9	10	11 BMI
TEIQue-SF	1 Well-being	.52 ***	.62 ***	.27 **	.79 ***	.43 ***	.68 ***	.34 ***	.46 ***	.61 ***	-.00
	2 Self-control		.46 ***	.46 ***	.76 ***	.39 ***	.51 ***	.31 **	.32 ***	.46 ***	.07
	3 Emotionality			.42 ***	.83 ***	.41 ***	.45 ***	.38 ***	.46 ***	.54 ***	-.04
	4 Sociability				.63 ***	.15	.27 **	.23 *	.14	.22 *	.15
	5 Global trait EI					.46 ***	.61 ***	.41 ***	.46 ***	.59 ***	.05
WHOQOL-BREF	6 Physical health						.57 ***	.32 **	.57 ***	.82 ***	-.12
	7 Psychological health							.40 ***	.43 ***	.77 ***	-.10
	8 Social relations								.48 ***	.61 ***	-.18
	9 Environment									.82 ***	-.02
	10 Global health										-.12

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ;

All the factors and global trait EI is significantly moderately to strongly related to all health domains and global health attitude. BMI index is neither related significantly to trait EI nor to health domains. The regression analysis between global level of trait EI and global health attitude estimated up to 40% of global health attitude prediction by global level of trait EI ( $F(1,134)=65.42$ ,  $p \leq .001$ ).

Then we asked RQ1: *Is there a significant difference between underweight, healthy weight vs. overweight ones and trait EI and health domains and attitude?* The results are presented in Table 2.

We decided to analyze trait EI and health domain differences according to a student's weight only for female group as there was only 17% of males. There were no differences in these three groups in trait EI ( $F(2,85)=.325$ ,  $p=.723$ ). The only significant differences in health domains and global health attitude with a large effect size were between healthy and overweight females in favor to healthy weight ones.

Table 2. Health domain and health attitude differences between underweight, healthy weight and overweight (BMI index) of the research sample.

Females (N=89)		BMI ≤18.5 Underweight (N=12)	18.6 ≤ BMI ≤ 24.90 Healthy weight (N=58)	BMI ≥ 24.93 Overweight (N=19)	p (between groups)	Healthy vs. Overweight	Hedge's g index
WHOQOL-BREF	Physical health	M=3.77	M=4.14	M=3.42	.004	.001	1.08
		SD=.65	SD=.56	SD=.92			
	Psychological health	M=3.73	M=3.96	M=3.07	.000	.000	1.31
		SD=.22	SD=.51	SD=1.05			
	Social relations	M=3.93	M=4.00	M=3.28	.013	.003	1.03
		SD=1.12	SD=.64	SD=.86			
	Environment	M=3.85	M=3.97	M=3.47	.042	.012	.80
		SD=.19	SD=.58	SD=.74			
	Global health attitude	M=3.80	M=4.02	M=3.33	.000	.000	1.29
		SD=.28	SD=.41	SD=.81			

#### 4. Conclusions

Analysis of the relations between trait EI and health support our expectations as a higher level of trait EI presupposes (up to 40%) a better attitude to health, and individual's life health quality. According to trait EI, we can state if an individual can control, regulate, manage emotion of his/her own and of the others, s/he can live a better healthy life. Another importance is there are significant differences between those who are overweight and healthy weight, as the healthy weight ones score higher in all health aspects.

Efforts to improve mental and physical health resulted in the establishment of the Mental Health Council by Ministry of Health in Slovakia (2021), and these efforts need to be coordinated by the Ministry of Education in Slovakia as well. WHO (2018, 2020) also emphasizes as a top priority the focus on an individual's socio-emotional health via supporting socio-emotional learning. This creates a baseline for educational prevention programs.

We are aware also of several limitations of our research, e.g., choice of university students; the specific research sample does not allow to generalize the results to other subject groups; usage of self-report instruments may be influenced by the desirability effect, and the study design itself.

A school needs a healthy emotionally intelligent educational leader who will be at his/her best when making important decisions affecting other people's lives and the power and organizational health as such. *Your health is what you make of it. Everything you do and think either adds to the vitality, energy and spirit you possess or takes away from it.* (A. Wigmore)

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