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SOCIAL-EMOTIONAL HEALTH AND RESILIENCE OF TEACHERS IN SLOVAKIA

Veronika Boleková¹, Henrieta Rolková², Silvia Majerčáková Albertová², Eva Szobiová³, Erik Radnoti², Katarina Hennelová³

¹ Department of Clinical Psychology, Pan European University, Slovakia

² Department of School and Organizational Psychology, Pan European University, Slovakia

³ Department of General Psychology, Pan European University, Slovakia

ABSTRACT

The present study examined social-emotional health and resilience of teachers in Slovakia, constructs which are relevant to requirements teachers have been facing over past years. Social-emotional health has been considered in terms of covitality construct as a synergistic effect of positive mental health. Covitality consists of twelve psychological indicators grouped into four domains - belief-in-self, belief-in-others, emotional competence and engaged living. Resilience has been conceptualized as a personality characteristic which reduces negative effects of stress and increases adaptation. The first aim of the present study was to examine level of covitality, its domains and indicators, and level of resilience of teachers in Slovak schools. The second aim was to examine the relationship between covitality and resilience. The sample consisted of 400 Slovak teachers who completed Social-Emotional Health Survey-Teachers (SEHS-T) and Resilience Scale (RS) during months of May through June 2021. Results indicated high level of covitality for 91.3%, and average level for 8.8% teachers. Resilience was rated at very low and low level by 6.8%, below average level by 17.8%, average level by 28%, and high level by 13.3% teachers. Most teachers rated resilience at an above average level (34.3%). Correlational analysis revealed moderate positive associations between all domains of covitality and resilience. Three covitality domains - engaged living, belief-in-self and emotional competence, and seven covitality indicators - self-efficacy, zest, self-regulation, optimism, cognitive reappraisal, gratitude and colleague support, were identified as predictors of resilience. Findings are discussed in terms of prediction and support of social-emotional health and resilience of teachers in Slovakia.

Keywords: social-emotional health, covitality, resilience, teacher, resilience predictors

Introduction

In recent years health-related issues have been considered of utmost importance nationwide, Europewide and worldwide. Individual states have actively participated, through state health legislations, in enhancing processes related to health and its prevention, as well as in defining the sources of health hazards. One of the primary tasks of state health legislation in Slovakia according to the Strategic framework 2013–2030 is to improve health and minimize health discrepancies related to sudden and unexpected lifestyle changes (Slovak Medical Chamber, 2013).

Teacher profession is very demanding in terms of workload and places exceptional demands upon teachers and their personality (Paulík, 2017). One of key requirements placed upon teachers by society are characteristics of "good" teacher which include professional and social competence, qualification, personal maturity and resilience (Black & Howard-Jones, 2000; Paulík, 2017). Personality characteristics that were identified as related to teacher job performance during selection and education of future teachers are conscientiousness and emotional stability (Dvorská, 2018). Excessive psychological workload of teachers often takes its toll in the form of health problems what is consequently affecting students in educational process (Čáp & Mareš, 2001). Research on consequences of teacher stress in Slovakia and Czech Republic found that the most common reasons associated with stress are excessive administrative burden, lack of free time, insufficient school facilities, unhealthy interpersonal relationships with colleagues, school management and students (Křivohlavý, 1998; Paulík, 2017; Vančová, 2017; Zelina, 1997) and inadequate support from school management (Křivohlavý, 1998). Similarly, results from school climate research indicated that Slovak teachers provided lowest ratings for peer and adult relations and school physical environment (Gajdošová & Majerčáková Albertová, 2019). Research on stress and coping in elementary and high school teachers revealed that the most significant stressor was excessive workload and constant expectations placed upon quality of work performance (Dvorská, 2018). According to Zelina (1997) 29% of Slovak teachers reported burnout and this number was expected to increase due to higher average age of teachers (Onderčová, 2003; Vančová, 2018).

As previously stated, there is an urgent need to pay attention to health, satisfaction, wellbeing and psychological resilience of teachers who are, together with parents, involved in raising fully functioning individuals. Education should provide opportunities not only for development of performance-focused cognitive and academic skills but also for development of social-emotional competencies in the forms of engaged living, belief in self, belief in others as important factors of student and teacher mental health (Renshaw et al., 2014). Research on social-emotional health of Slovak teachers, conducted on a specific sample of inclusive school teachers prior the COVID-19 pandemic, showed that teachers rated their social-emotional health at high average to high level (Bisaki, 2018).

The COVID-19 pandemic has brought about significant problems in youth and adult mental health (Majerčáková Albertová & Gajdošová, 2021; Nozdrovická, 2020). Research on attitudes of Slovak population conducted by Slovak Academy of Sciences found frequent reports of loneliness, anxiety, anger, nervousness and depressive symptoms, in youth particularly symptoms of anxiety, depression and stress were present (Urban, 2020 in Nozdrovická, 2020). After several months of pandemic over fourth of participants reported declines in mental health, 44.4% reported nervousness, 39.4% anger, 28.3% loneliness and 25% anxiety. Overall 48.2% of respondents experienced depressive symptoms (Nozdrovická, 2020). Another research on mental health of Slovak elementary school students conducted during the second wave of COVID-19 pandemic found that 54% of students reported feelings of loneliness, 24% of students reported anxiety and depressive symptoms and 54% of students reported problems with attention (Majerčáková Albertová & Gajdošová, 2021).

Stemming from the tradition of positive psychology and its focus on human strengths, the social-emotional health model understands health as an interplay of twelve psychological indicators associated with positive growths and improved quality of life (Renshaw et al., 2014). These indicators are grouped into four domains: belief in self, belief in others, emotional competence and engaged living (Renshaw et al., 2014). Greater number of positive psychological indicators is related to more optimal individual development (Lee & Yoo, 2015). Furlong et al. (2013) introduced the construct of covitality which represents "synergistic effect of positive mental health resulting from the combination of multiple positive psychological strengths" (p. 758).

Resilience, according to Wagnild & Young (1993), is a "personality characteristic that moderates the negative effects of stress and promotes adaptation" (p. 165). Resilience which is at the core of coping is "frequently attributed to the individuals who, in the face of overwhelming adversity, are able to adapt and restore equilibrium to their lives and avoid potentially deleterious effects of stress" (Wagnild & Young, 1993, p. 165). Resilience is a universal capacity for successful coping with life challenges or adversities and fosters positive adaption in the context of changes. As a multifactorial psychological phenomenon it is one of those complex dispositions that promote optimal individual development in the context of past and present adversity. Resilience enables the individual to precede and overcome adversities, cope with challenging situations and adapt to challenges throughout the lifespan. It is a complex disposition which provides the individual with opportunities to develop competencies in challenging times (Szobiová et al., 2014).

Wagnild (2016) found that resilience differentiates between individuals with good and ill health. Individuals with poor health scored low in resilience, while individuals with fair and excellent health scored respectively in resilience. Werner (2005) showed that higher resilience is related to self-esteem, activity, specific skills and belief in others in the sense of social support, similarly to some covitality indicators. In Slovak research strong associations between social-emotional health and resilience were also established on a sample of high school students (Kapušová & Szobiová, 2018; Szobiová et al., 2020). Aldridge et al. (2015) found that wellbeing (mental, physical and social wellbeing) and resilience were moderately related, while other authors examined associations between resilience and health, wellbeing and quality of life (Windle, 2011), as well as resilience and covitality (Mortazavi & Yarohali, 2015).

Given the negative consequences of COVID-19 pandemic and the need to promote mental health of teachers, the aim of the present study was to determine the level of social-emotional health, its domains and psychological indicators, the level of resilience and to examine whether there are relationships between covitality, its domains, indicators and resilience, on a sample of 400 teachers from Slovakia.

Current study

The present study, conducted within the research project *"Supporting teachers to face the challenge of distance teaching"* was designed based on the presented evidence on the relationships between covitality and resilience (Mortazavi, & Yarohali, 2015; Werner, 2005; Windle, 2011). The study aimed to examine social-emotional health and resilience on a sample of 400 Slovak teachers.

Following research objectives were identified:

- 1) To examine the level of covitality, domains and indicators of socialemotional health
- 2) To examine the level of resilience
- 3) To investigate relationships between resilience and covitality
- To examine differences in covitality and resilience is respect of selected sociodemographic factors.

Method

Participants and procedure

The study sample included 400 teachers from various regions of Slovakia, 359 females (89.8%) and 41 males (10.3%). Participants were divided into 5 age-related categories. The category up to 30 years included 20 participants (5%), category 31-40 years included 98 participants (24.5%), category 41–50 years 132 participants (33%), category 51–60 years 121 participants (30.3%), category above 60 years 29 participants (7.3%).

278 (69.5%) of participants were elementary school teachers, 122 (30.5%) of participants were high school teachers. 251 (62.8%) of participants resided in urban areas and 149 (37.3%) in rural areas. 5 categories were formed based on the length of teacher experience: 1. group of teachers with experience up to 5 years consisted of 39 (9.8%) participants, 2. group with 6–10 years of experience had 40 (10%) participants, 3. group of teachers with 11–20 years had 119 (29.8%) participants, 4. group of teachers with 21–30 years consisted of 110 (27.5%) participants and 5. group of teachers with above 31 years of experience had 92 (23%) participants.

Data were collected online through Google forms platform during the months May to June 2021. Teachers were approached through regional pedagogical centres. They were provided information about the purpose of the study and confidentiality. The administration time was approximately 15 minutes. All ethical aspects were considered and approved by the authors' university ethics committee.

Measures

Social-Emotional Health Survey-Teachers (SEHS-T; Furlong & Gajdošová, 2017) is a measure of social-emotional health for teachers which was adapted from the Social-Emotional Health Survey-Higher Education (SEHS-HE; Furlong et al., 2017). SEHS-T assesses latent trait covitality and four primary domains - belief-in-self (BIS), belief-in-others (BIO), emotional competence (EC) and engaged living (EL). The first domain, BIS, consists of 3 subscales derived from the social-emotional learning theories and selfdetermination theory: self-efficacy, persistence and self-awareness. The second domain, BIO, has 3 subscales related to resilience construct: family support, institutional support and colleague support. The third domain, EC, consists of 3 subscales based on constructs from social-emotional learning theories: cognitive reappraisal, self-regulation and empathy. The last domain, EL, consists of 3 subscales based on positive psychology constructs: gratitude, zest and optimism (Renshaw et al., 2014). Overall SEHS-T consists of 12 subscales and 48 items rated on a scale from 1 (very much unlike me) to 6 (very much like me), with covitality scores ranging between 48 to 288. The level of covitality is interpreted as low, moderate and high, as shown in Table 1. Bisaki (2018) found that internal consistency of SEHS-T was .93, with covitality domains ranging between .76 to .89. Internal consistency of SEHS-T in the present study was assessed with Cronbach's alfa and was ranging from .84 (EC), .87 (BIS), .86 (BIO), to .91 (EL). Covitality showed strong internal consistency with Cronbach's $\alpha = .95$.

SEHS-T	HS-T High level Moderate level I > 208 128-207		Low level	Min.	Max.
			< 127	48	288
SEHS-T	High level	Moderate level	Low level	Min.	Max.
Domains	> 52	32-51	< 31	12	72
SEHS-T	High level	Moderate level	Low level	Min.	Max.
Indicators	> 18	11-17	< 10	4	24

Table 1. Scoring of Social-Emotional Health Survey-Teachers

Resilience scale RS (Wagnild & Young, 1993) is a measure used to assess individual resilience with two subscales: personal competence and acceptance of self. RS contains of 25 items which are rated on a 7-point Likert style scale (1 = strongly disagree to 7 = strongly agree). Total score ranges between 25 to 175 and is interpreted as shown in Table 2. Wagnild & Young (1993) analysed 12 studies conducted with RS with samples of varied age, education and socioeconomic background and found Cronbach's alpha coefficients ranging between .72 to .94. In Slovak research Szobiová et al. (2014) examined concurrent validity on a sample of 492 university students with Child and Youth Resilience Measure (CYRM) and found moderate correlation coefficients and good internal consistency (α = .85). In the present study reliability of RS was assessed with Cronbach's alpha coefficient. Reliability of the 25-item measure was very satisfactory, α = .94.

Table	2.	Scoring	of	Resi	lience	Scal	e
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Resilience Scale	Moderately high and high level	Moderately low to moderate level	Low level	Min.	Max.
RS	> 145	116-144	< 115	25	175

Data Analyses

Internal consistency was assessed with Cronbach's alpha coefficients. Relationships were analysed with Spearman's rank correlation coefficients. The Chi-Square statistic and Cramer's were used for testing relationships on categorical variables. Normal distribution of data was assessed via histograms, skewness and kurtosis of analysed variables. Due to non-normally distributed data, non-parametric tests, Mann-Whitney U Test (gender, residence, type of school) and Kruskal-Wallis Test (age, length of teacher experience) were used for comparison of differences between the groups. Effect sizes were calculated with Eta coefficients (η^2). Stepwise multivariate linear regression analysis was used to determine which domains and indicators of social-emotional health are predictors of resilience.

Results

Social-emotional health

Based on results of frequency analyses, high level of covitality was found in 91.3% (N = 365) participants and moderate level in 8.8% (N = 35) participants. None of the participants reported low level of covitality. Results for individual domains are shown in Table 3.

Levels of Covitality Domains	Belief-in-Self	Belief-in- Others	Emotional Competence	Engaged Living
Low	1 / 0.3%	3 / 0.8%	0 /0%	2 / 0.5%
Medium	46 / 11.5%	51 /12.8%	34 / 8.5%	66 / 16.5%
High	353 /88.3%	346 / 86.5%	366 / 91.5%	332 / 83%

Table 3. Levels of Social-Emotional Health Domains

Item frequency analysis indicated that in the domain BIS, participants responded with 5 to 6 points (on a scale from 1 = very much unlike me to 6 = very much like me), to almost all items for individual psychological indicators self-efficacy and self-awareness (70–85% of participants), with an exception of an item in indicator persistence, in particular item assessing problems with attention (61.6%), where 40% of teachers reported problem with concentration.

In the domain BIO, over 70% of participants reported high scores in indicator family support and colleague support. In indicator school support, 35.6% of teachers reported strong sense of togetherness at school. 51.8% of participants rated this item at medium level and 12.8% negatively (1 and 2 scale points).

Responses in the domain EC were rated with scale points 5 to 6. In empathy indicator, 90% of participants responded with highest scores to following items: "I feel badly when my colleagues are put down"(93.8%), "I'm aware of others hardships" (91.8%) and "I try to understand how other people feel and think" (85.6%).

In the domain EL, only indicator gratitude was assessed with points 5 to 6 by over 90% of participants (*"When I reflect on my life, there is much to be grateful for*" (95.8%), or "*I appreciate those who are close to me*" (98.5%). In this domain, in particular in indicators zest and optimism, scores were found to be lower, e.g. for item "*I feel energetic in my life right now*" only 49.5% of participants used high ratings, 42.3% used medium ratings and 8.3% reported lack of energy.

Descriptive statistics results showed that covitality median (Mdn = 242) and scores for covitality domains (BIO and EC, Mdn = 61 and BIS and EL, Mdn = 60) were at high level. Covitality empirical range was 130–288, empirical maximum of four covitality domains was at 72 points, minimums were at EL = 16, BIS = 19, BIO = 25, EC = 36, as presented in Table 4.

	Covitality	BIS	BIO	EC	EL
Mean	238.65	59.65	59.50	60.67	58.84
Median	242.00	60.00	61.00	61.00	60.00
SD	24.75	7.22	8.14	6.53	8.04
Skewness	76	75	-1.03	63	89
Kurtosis	1.23	2.06	1.46	.57	1.80
Minimum	130.00	19.00	25.00	36.00	16.00
Maximum	288.00	72.00	72.00	72.00	72.00

Table 4. Descriptive statistics of covitality and covitality domains

Table 5. Descriptive statistics of covitality indicators Belief-in-Self and Beliefin-Others

	Self-effi- cacy	Persis- tence	Self-aware- ness	Family support	Institu- tional support	Col- league support
Mean	20.03	19.02	20.59	20.97	18.11	20.42
Median	20.00	19.00	21.00	22.00	19.00	21.00
SD	2.84	3.09	2.62	3.54	3.58	3.86
Skewness	97	60	99	-1.68	89	-1.51
Kurtosis	2.21	.51	2.42	3.30	.70	2.77
Minimum	6.00	5.00	6.00	4.00	5.00	4.00
Maximum	24.00	24.00	24.00	24.00	24.00	24.00

Table 6.	Descriptive statistics of covitality indicators Emotional Competer	ice
	and Engaged Living	

	Cognitive reap- praisal	Empathy	Self-regu- lation	Gratitude	Zest	Opti- mism
Mean	18.54	21.56	20.58	22.70	18.45	17.68
Median	19.00	22.00	21.00	24.00	19.00	18.00
SD	3.34	2.39	2.42	2.10	3.67	3.56
Skewness	52	-1.22	62	-2.65	64	60
Kurtosis	.04	1.99	.16	10.90	.31	.69
Minimum	7.00	11.00	12.00	7.00	5.00	4.00
Maximum	24.00	24.00	24.00	24.00	24.00	24.00

Differences in covitality medians between males (Mdn = 239) and females (Mdn = 242.3) were very low and statistically insignificant, as per results of Mann- Whitney U test (p = .83) and Eta coefficient of small effect size ($\eta^2 = .00001$). Similarly, differences in covitality between urban (Mdn = 243.23) and rural teachers (Mdn = 238.20) were low, statistically insignificant (p = .33), with small effect size ($\eta^2 = .002$). Differences in covitality between high school teachers (Mdn = 243.8) and elementary school teachers (Mdn = 241.16) were low, statistically insignificant (p = .10) of small effect size ($\eta^2 = .007$).

Teachers of all ages scored high in covitality, with teachers up to 30 years lower (Mdn = 232) compared to teachers above 60 years (Mdn = 251). Differences in age categories are statistically insignificant (p = .33), with small effect size ($\eta^2 = .01$).

Length of teacher experience did not differentiate between the groups, all teachers scored high in covitality, with lowest scores found in teachers with up to 5 years of experience (Mdn = 238) and highest in teachers with 6–10 years of experience (Mdn = 245). Differences were statistically insignificant (p = .78), with small effect size ($\eta^2 = .004$).

Resilience

According to frequency analysis results, very low level of resilience was found in 2.3% (N=9) of participants, low level in 4.5% (N=18), below average level in 17.8% (N=71), average level in 28% (N=112), and high average level in 34.3% (N=137) of participants, with 13.3% (N=53) participants scoring at high level.

Item frequency analysis showed that 84% of teachers provided positive ratings to item "My life has meaning". Teachers rated independence (83.5%), pride in accomplishment, (81.6%), reliability (78.6%), ability to cope in life (82.6%) with highest scale scores 6 and 7 (1 = strongly disagree to 7 = strongly agree). Limits of Slovak teachers were found in admitting of problems (29.5% does not admit a problem, 25% has difficulties with admitting a problem). 39.8% teachers are able to face adversities, 35.8% do not dwell on things they can't do anything about, 53.3% are able to get through hard times, 61% reported they have enough energy for everyday activities and 63.3% reported they are able find a way out of difficult situation.

Median score of resilience was 145, at high level of resilience, with empirical range 28 to 175. Descriptive statistics are reported in Table 7.

Median resilience score in females was 144.79 and males 142.00, difference was 2.79. Differences tested with Mann-Whitney U test were not statistically significant (p = .52), effect size was small ($\eta^2 = .001$).

	Resilience
Mean	142.08
Median	145.00
SD	18.71
Skewness	-1.27
Kurtosis	4.60
Minimum	28.00
Maximum	175.00

Table 7. Descriptive statistics for resilience

Median scores for age categories of teachers started at youngest category of teachers up to 30 years with lowest scores (Mdn = 131.5). Highest scores in resilience were found for eldest teacher category above 60 years (Mdn = 151). Differences between these groups were statistically significant (p < .001), with small effect size ($\eta^2 = .04$).

Differences between categories of urban (Mdn = 145.83) and rural teachers (Mdn = 143.37) were small, statistically significant (p = .03), with small effect size ($\eta^2 = .01$).

Groups of teachers according to length of professional experience differed in level of resilience. Results are presented in descending order: teachers with 11–20 years of experience (Mdn = 147), teachers with more than 30 years of experience (Mdn = 145.16), teacher with 6–10 years of experience (Mdn = 141.33) and teacher with up to 5 years of experience (Mdn = 139.5). Differences between the groups were not statistically significant (p = .07), with small effect size ($\eta^2 = .02$).

Elementary school teachers reported lower resilience (*Mdn* = 143.28) in comparison to high school teachers (*Mdn* = 148.44). Difference was statistically significant (p = .002), with small effect size ($\eta^2 = .02$).

Relationships between resilience and covitality

Significant positive strong correlation was found between resilience and covitality. Significant positive correlations were found also between resilience and four domains ($r_s = .49$ to $r_s = .72$; p < .01). Moderate to strong positive corrections were shown between resilience and covitality indicators zest, self-efficacy, optimism, cognitive reappraisal, persistence, self-awareness, gratitude, institutional support and self-regulation. Three covitality indicators are in weak, yet significant relationship with resilience: empathy, family support and colleague support (Table 8).

	Resilience
Covitality	.76**
BIS	.68**
BIO	.49**
EC	.61**
EL	.72**
Self-efficacy	.66**
Persistence	.54**
Self-awareness	.53**
Family support	.39**
Institutional support	.44**
Colleague support	.31**
Cognitive reappraisal	.63**
Empathy	.39**
Self-regulation	.40**
Gratitude	.45**
Zest	.66**
Optimism	.65**

 Table 8.
 Correlations between resilience and covitality, covitality domains and indicators

Note. N = 400; **p < .01

According to cross tabulation report, out of participants with average covitality level, 20% reported very low resilience, 28.6% low, 40% below average level and only 2.9% above average level of resilience. Out of participants with high covitality level, 0.5% reported very low resilience level, 2.2% low, 15.6% below average and 29.9% average resilience level. High covitality level and above average resilience level was reported by 37.3% participants while high level in both variables was reported by 14.5% participants, as seen in Table 9.

The strength of association between all covitality categories and resilience was moderate (X^2 (5, N = 400) = 135.08, p < .001, V = .58)

			Level o	of resilie	ence				Total
			Very low	Low	Below average	Average	Above average	High	
V	Average level	% within covitality index	20.0	28.6	40.0	8.6	2.9		100.0
		% within resilience	77.8	55.6	19.7	2.7	0.7		8.8
talit		% of total	1.8	2.5	3.5	0.8	0.3		8–8
Covit	High level	% within covitality index	0.5	2.2	15.6	29.9	37.3	14.5	100.0
		% within resilience	22.2	44.4	80.3	97.3	99.3	100.0	91.3
		% of total	0.5	2.0	14.3	27.3	34.0	13.3	91.3
Tota	al	% within covitality index	2.3	4.5	17.8	28.0	34.3	13.3	100.0
		% within resilience	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		% of total	2.3	4.5	17.8	28.0	34.3	13.3	100.0

Table 9. Crosstabulation between resilience and covitality

Covitality domains and indicators as predictors of resilience

Based on results of regression analysis, three covitality domains ($R^2 = .61$; p < .001), EL ($\beta = .42$), BIS ($\beta = .33$) and EC ($\beta = .15$) and seven covitality indicators ($R^2 = .62$; p < .001), self-efficacy ($\beta = .34$), zest ($\beta = .17$), self-regulation ($\beta = .13$), optimism ($\beta = .20$), cognitive reappraisal ($\beta = .13$), gratitude ($\beta = .12$) and colleague support ($\beta = -.08$), were identified as predictors of resilience.

Discussion

The aim of current study was to examine the level of covitality and resilience in Slovak elementary and high school teachers, to investigate relationships between these constructs and to identify differences based on sociodemographic variables.

Results showed that over 90% of Slovak teachers reported high level of covitality and over 80% of teachers reported high level of covitality domains (BIS, BIO, EC, EL). These results are in line with previous research conducted in Slovak inclusive school prior the pandemic according to which Slovak teachers rated social-emotional health at high average to high level (Bisaki, 2018). Overall, Slovak teachers rated highly their emotional competences, in particular empathy, self-awareness, self-efficacy, as well as belief in others, in particular family support. Limits were identified in support of school as an institution, in particular in the sense of togetherness and colleague support, and in optimism of teachers in pandemic times.

Positive results were found for resilience with 47% teachers at an above average level, out of which 13% teachers were highly resilient and 34% teachers had resilience at an above average level. 25% teachers scored below average and 28% at average level of resilience. Although these results are in support of findings by Wagnild & Young (1993), they are on the contrary to research by Tusaie et al. (2007) who found that approximately one third of population achieves high resilience level.

Sociodemographic variables, age, gender, place of residence, type of school, length of teacher experience, yielded several significant results. In terms of age, highest level of resilience was found for teachers above 60 years, while lowest level of resilience was reported by youngest teachers below 30 years of age. Although this difference was significant, effect size was low. These findings are in line with previous literature according to which resilience increases with age (Wagnild & Young, 1993; Wagnild, 2016).

Length of teacher experience was another sociodemographic variable that accounted for differences between teachers in resilience, although not significantly. Teachers with less than 5 years of experience reported lowest level of resilience on the contrary to teachers with 11 to 20 years of experience who reported highest level of experience. Teachers with over 31 years of experience scored slightly lower in resilience.

Results also revealed that level of resilience differed significantly among elementary and high school teachers. Elementary school teachers who reported average resilience level, scored lower than high school teachers who were at high resilience level. These findings suggest that elementary school teachers might benefit from activities targeted towards resilience development as research has also shown that elementary school teachers are more prone to stress (Paulík, 2017; Vančová, 2017; Zelina, 1997). Their work-related stress has been previously associated with administrative burden, lack of free time, insufficient school facilities, unhealthy interpersonal relationships with colleagues, school management and students (Paulík, 2017; Vančová, 2017; Zelina, 1997). Resilience as a way of coping and diminishing consequences of stress while increasing adaptation thus appears an important protective factor in mental health of teachers (Rutter, 2012; Šolcová, 2009; Wagnild & Young, 1993). In the present study no gender differences were not found which are findings in line with previous research (Mesárošová et al., 2014; Wagnild & Young, 1993; Wagnild, 2016). Small differences in resilience were identified between teachers working in urban and rural schools.

Results demonstrated moderate positive associations between covitality, four covitality domains and resilience. Positive associations were found also between twelve covitality indicators and resilience – moderate between zest, self-efficacy, optimism, cognitive reappraisal, persistence, self-awareness, gratitude, institutional support and self-regulation, and weak yet significant between empathy, family support and colleague support and resilience. These findings are in support of previous research on associations between these constructs (Renshaw et al., 2014; Kapušová & Szobiová, 2018; Mortazavi & Yarohali, 2015; Szobiová et al., 2020; Wagnild & Young, 2016), yet they extend the current knowledge on asample of elementary and high school teachers.

Another significant finding of the present study is that three domains, EL, BIS and EC, and seven covitality indicators, self-efficacy, zest, selfregulation, optimism, cognitive reappraisal, gratitude, colleague support, were identified as predictors of resilience. Previous research on predictors of resilience established some interesting results on personality traits and health-related characteristics indicating presence of covitality indicators (Szobiová et al., 2014; Mesárošová et al., 2014). Mesárošová et al. (2014) found that social support explained significant percentage of variance in resilience in the resilience model. In the present study indicator addressing social support was the indicator of colleague support. Szobiová et al. (2014) found that resilience examined in the model of individual resilience predicted lower neuroticism, higher extraversion, consciousness, creativity, tolerance and good interpersonal relationships. In the present study it may be assumed that resilience predictors engaged living, zest, colleague support, cognitive reappraisal and self-regulation shared some similarities with those previously identified (Szobiová et al., 2014).

Despite presented findings, several limitations need to be addressed. The size of the study sample and low variability in terms of gender should be considered when interpreting the results. Second, data was collected with surveys which are sensitive to providing socially desirable answers. Third, the cross-sectional design did not allow to measure teacher experience at various time points. Nevertheless, the present study opens numerous paths for future research on social-emotional health and resilience in teachers. Teachers as providers of education, are exposed to demanding situations on a daily basis and are expected to act promptly and professionally at all times. By promotion of teacher mental health and resilience, quality of school environment, effectivity of educational process and social

climate in schools may be enhanced, positively affecting mental health of other involved individuals, i. e. students and other school employees. Multidisciplinary professional teams which have lately become reality in some Slovak schools could provide practical application of effective tools and strategies targeting teacher mental health and resilience.

This study was conducted as part of the research project Erasmus + "Supporting teachers to face the challenge of distance teaching (PERSONA)", which primary aim is, based on research results, to introduce effective complex program for teachers targeting mental health and personal competencies to help them cope with present requirements in the field of education.

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Veronika Bolekova:
https://orcid.org/0000-0003-2076-1096
Henrieta Rolkova
Silvia Majercakova Albertova:
https://orcid.org/0000-0003-3634-8431
Eva Szobiova:
https://orcid.org/0000-0001-6731-8441
Erik Radnoti:
https://orcid.org/0000-0002-1647-1689
Katarina Hennelova
Corresponding Author: Silvia Majercakova Albertova, Ph.D., Department of School and Organizational Psychology, Paneuropean University,

Bratislava, Slovakia. Email: silvia.albertova@paneurouni.com

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