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## SELF-EFFICACY AND BURNOUT SYNDROME AMONG TEACHERS

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### Abstract

Since the burnout syndrome is highly prevalent in the teaching profession, there is a great need to identify protective factors from chronic stress and long-term professional dissatisfaction among teachers. One of these could be self-efficacy. This study examines the connection between burnout syndrome and self-efficacy among the teachers at Czech grammar schools. The sample consists of 2394 teachers at Czech grammar schools. The survey instrument were two questionnaires which included: 1) Shirom-Melamed Burnout Scale and 2) Czech Teachers Self-efficacy Scale which was developed within the study. Both instruments showed good reliability (over .90) and other acceptable psychometrics. The findings revealed that the correlation between burnout and self-efficacy was significant and different rates of burnout among teachers with high self-efficacy and low self-efficacy. In conclusion, the study detected a negative correlation between self-efficacy and burnout syndrome. A strong correlation was found between emotional burnout and self-efficacy. The correlations between burnout subscales and self-efficacy subscales were also considered. The differences based on gender, teaching experience and educational level were also considered with regard to burnout and self-efficacy.

*Keywords:* Teachers, burnout syndrome, self-efficacy, grammar school, Czech

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## **1. Introduction**

Teaching is a very stressful occupation (Johnson et al., 2005). Existing studies show that most teachers experience stress during their work and identify the following sources of stress that decrease job satisfaction and increase the risk of burnout: role conflict and ambiguity, time pressure, inadequate salary and perceived low status of the profession, student misbehavior and relationships with supervisors (Carlson & Thompson, 1995; Chan, 1998; Caprara et al., 2006). Long-term stress can result in chronic exhaustion that closely correlates with the burnout syndrome. Hence, in order to avoid burnout syndrome, it is necessary to eliminate stress.

### *1.1. Avoiding stress*

Based on the existing research (Lazarus & Folkman, 1984; Brouwers, & Tomic, 2000) we can conclude that there are two basic ways how individuals can cope with stress. Firstly, an individual is able to manage stress when s/he experiences it in a certain situation. The individual can use positive, successful coping strategies that not only bring relief but also actively change the situation (Lazarus & Folkman, 1984). However, some individuals develop negative, unsuccessful coping strategies which can relieve the person of the stress burden for the moment, but do not change the stressor at all which keeps producing stress.

Secondly, an individual avoids getting into stressful situations by using his/her professional skills to manage difficult moments. These skills relate both to pedagogical practices (how to discipline students, how to teach in strongly diverse classes etc.) and to pedagogical beliefs (how gifted are minority students, teacher's classroom management skills, etc.). The set of pedagogical beliefs that the teacher has about himself/herself is referred to as teacher's self-efficacy.

### *1.2. Teacher self-efficacy*

Based on the social cognitive theory, teacher self-efficacy can be defined as the teacher's beliefs in his/her own ability to plan, organize, and carry out different educational activities that are essential for achieving pedagogical goals. It affects how teachers perceive environmental opportunities and obstacles and how much effort and what activities they are willing to invest in overcoming these obstacles (Pajares, 1997; Bandura, 2006). Guskey and Passaro (1994) emphasize that teachers with high self-efficacy believe in their personal influence, power, and impact on the educational process, including students' learning (internal dimension) and factors outside the classroom (external dimension). Guskey and Passaro (1994) define preference for the internal dimension in the teacher's self-efficacy as his/her belief or

conviction that he/she can influence how well students learn, even those who may be difficult or unmotivated (1994, p. 4).

Although the link between teachers' self-efficacy and students' achievements was confirmed by several studies (Collie, Shapka, & Perry, 2012, Caprara, Barbaranelli, Steca, & Malone, 2006), we find Guskey and Passaro's definition can be considered to be too reductive; hence, leading to a preference to conceptualize teachers' self-efficacy as set of professional beliefs that encompasses all key challenges in teachers' everyday work. Teachers with high levels of self-efficacy are able to successfully manage these challenges (including problems relating to students' behaviour and learning, communication with parents and colleagues, school administration, long-life learning etc.) so they do not experience them as stressful, unlike teachers with low levels of self-efficacy. This means that teachers' high self-efficacy can be considered a factor protecting them from experiencing stress, including permanent strong stress potentially leading to the burnout syndrome.

### *1.3. Teacher burnout syndrome*

Burnout is defined as a deep and permanent exhaustion with many emotional, physical, cognitive and social symptoms, resulting from long term occupational stress, particularly in occupations with incessant human interactions and high responsibility for others (Brouwers, & Tomic, 2000; Johnson et al., 2005).

Burnout is a multidimensional construct. According to Maslach's theory, the characteristics of burnout syndrome include emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, Jackson, & Leiter, 1996). Additionally but varying somewhat from Maslach et al., Shirom and Melamed (2006) identified three dimensions: physical fatigue, emotional exhaustion and cognitive weariness. Both approaches are similar as both emphasise the emotional dimension. That is why newer studies focus on the emotion-regulation ability, which represents a core component of emotional intelligence and refers to the capacity to regulate one's own and others' emotional states (Brackett et al., 2010). The emotion-regulation ability influences how teachers express emotions, manage stress, and interact with the others (Gross, 2002) and it therefore correlates with the burnout syndrome (Brackett et al., 2010). It must be noted here that the practical emotion-regulation abilities are not only important in this respect, but also, teachers' belief about these abilities. This means that emotion-regulation is part of teachers' self-efficacy.

A moderate correlation between the teachers' self-efficacy and teachers' burnout was confirmed by several studies. Chwalisz, Altmaier and Russell (1992) found that teachers who scored low in self-efficacy reported a higher degree of burnout unlike the teachers with high

self-efficacy scores. Brouwers and Tomic (2000) showed that self-efficacy has a longitudinal effect on depersonalization and a synchronous effect on personal accomplishment, while the direction was reverse for the relationship between self-efficacy and emotional exhaustion. Skaalvik and Skaalvik (2007) found a strong relationship between teachers' self-efficacy and burnout, and specifically for emotional exhaustion (Skaalvik, & Skaalvik, 2014). However, more studies on this issue, especially with respect to different educational systems, are needed to understand the precise mechanism underlying the relationship between teachers' self-efficacy and teachers' burnout. Without such extensive understanding, it is not possible to conclude that self-efficacy works as a factor protecting from burnout nor is it possible to find the most efficient ways to support teachers' self-efficacy in order to avoid burnout.

## **2. Purpose of the study**

Building on the findings from previous research, this study focuses on the relationship between the burnout syndrome in grammar schoolteachers and their professional self-efficacy. The data were collected from Czech teachers who had not previously participated in any international research on this topic. The Czech educational system is different from the systems in the U.S.A., the West European or Scandinavian countries where the majority of research studies comes from. The study conducted in the Czech Republic as a new research location in this field can be considered a validation of previous findings about correlation between the burnout and self-efficacy as concepts that are not culture-dependent.

A large-scale survey was conducted that included various variables. This study incorporated some variables such as gender, level of education, or the length of teaching experience and the analyses is presented in this paper. Other variables which included family background, healthy lifestyle, job satisfaction, specific characteristics of the school, depression, social support, and coping strategies have been analysed and presented in other publications.

This paper presents an analysis covering the fundamental topic of his research – links between teachers' self-efficacy and the burnout syndrome. It is hypothesised that there is a negative correlation between burnout and self-efficacy (Hypothesis 1). Teachers with high self-efficacy scores report low burnout symptoms, and vice versa. Furthermore, it is assumed that teachers with low self-efficacy in dimensions relating to interactions with students, parents or colleagues report high burnout symptoms especially in the emotional dimension (Hypothesis 2). Finally, it is hypothesized that a correlation between emotional dimensions of burnout and self-efficacy is stronger in female teachers vs. compared to male teachers (Hypothesis 3).

### **3. Method**

#### *3.1. Participants*

The study included 2,394 teachers working in Czech grammar schools. The set of respondents comprised 358 male (15%) and 2036 female (85%) teachers. Their average length of teaching experience in number of years was 21.42 (SD=10.67). Czech grammar schools operate on two educational levels – the primary school education which lasts five years and the lower-secondary school education which lasts four years. As each educational level requires specific teacher training, the sample included 976 primary education teachers (41%), 859 lower-secondary education teachers (36%), and 559 teachers specializing in both levels (23%). Teachers were asked to participate in the study via emails which were sent to the principals of all grammar schools in the Czech Republic. The sample consists of teachers who were willing to participate in the research which could cause a bias. However, a comparison of all teachers working in grammar schools in the Czech Republic in 2016 (according to the statistics of the Ministry of Education for 2016) showed that the sample used in the present study was representative in terms of gender and educational levels.

#### *3.2. Measures*

##### *3.2.1. Burnout measure*

Burnout was measured using the Shirom-Melamed Burnout Scale (Shirom & Melamed, 2006). The Shirom-Melamed Burnout Scale (SMBM) was used instead of Maslach Burnout Inventory (MBI-GS) which is the most frequently used measure in this field. Although, both measures provide reliable results on burnout, there exists “evidence to the construct validity of the SMBM relative to that of the often-used MBI-GS” (Shirom & Melamed, 2006, p. 194).

The Shirom-Melamed Burnout Scale conceptualizes burnout through three dimensions: physical fatigue, emotional exhaustion and cognitive weariness. Each dimension consists of several items evaluated on a 7-point Likert scale ranging from “never or almost never” to “always or almost always”. High summary scores are indicative of burnout. The three-factor structure of the Shirom-Melamed Burnout Scale and its excellent psychometrics, including high reliability, were confirmed for the Czech version (Ptacek et al., in print). The original SMBM includes 14 items divided into three subscales. However, for the purpose of this study, only 13 items were used because in the Czech language two items referring to physical exhaustion are too close in meaning and show an unacceptably high correlation. The norms (the mean scores) were adapted to 13 items in total.

### 3.2.2. *Teacher Self-Efficacy measure*

Perceived self-efficacy was measured using the Czech Teacher Self-Efficacy Scale (Smetackova, Topkova & Vozkova, in print). As the relevance of professional skills for individual teachers is determined by the specific cultural and institutional conditions, it was strongly felt that only questionnaires corresponding to the structure of the educational system should be used. Teacher self-efficacy scales used in most international studies are derived from educational systems that differ greatly from the Czech system. The scale used in this study was developed specifically by the researcher for the Czech educational system with regard to Bandura's instructions (Bandura, 2006).

The Czech Teacher Self-Efficacy Scale (CTSES) includes 45 items measured on a 5-point scale ranging from "never" to "always". Each item starts with a formulation: "I am convinced that I can do..." and the particular professional skill follows. The content of items resulted from an analysis of the Czech national educational documents and the previous findings about the competencies needed in the Czech schools (for more details see Smetackova, Topkova & Vozkova, in print). The instrument was developed through a qualitative and quantitative study and later piloted in a quantitative study (N=583). The reliability of the final scale is 0.94 (Cronbach Alpha) which means that the overall consistency of the measure is high and thus the CTSES score can be interpreted as a level of teacher self-efficacy. The CTSES consists of six subscales: Pedagogical Approach, Student Diversity, Collaboration with Parents, Discipline, Influence on School Management, Cooperation among Teachers and Professional Development. The identified subscales loosely correspond to six dimensions of teacher self-efficacy defined by Skaalviks (2007) and seven dimensions defined by Bandura (2006). However, the items of CTSES respect specific features of the Czech educational system in terms of organization and terminology.

### 3.3. *Procedure*

The heads of all grammar schools in the Czech Republic were asked to cooperate in the study and were mailed questionnaires with a request to hand out the questionnaires to every teacher in their school accompanied by a letter explaining the nature and general aim of the study. The National Institute for Further Education, school trade unions and the different teachers' associations were also asked to inform their members about this research. An online version of the questionnaire was available to the respondents for completion for 13 weeks during the winter of 2016 and spring of 2017.

### 3.4. Data analysis

Data were analysed using the IBM SPSS analytics software. In the first step, the collected data to the Czech Teacher Self-Efficacy Scale and the Shirom-Melamed Burnout Scale was mapped out. In both cases, the structuring of the data allowed the use of parametric tests. We also measured the reliability using the Cronbach Alpha to verify that the scales had the same validity for this sample as for other studies. In the second step, the mean values on both scales were determined including the total mean value and mean values in individual subgroups. The differences between the mean values were compared by performing a t-test. In the third step, the correlation for both scales was analyzed. In the last step, an ANOVA to find the statistical significance of mutual relationships among variables was performed. As the goal and hypotheses tested in this article were rather straightforward, it was not considered necessary or relevant to use advanced procedures such as structural equation modelling.

## 4. Results

### 4.1. Czech Teacher Self-Efficacy Scale

The psychometric quality of the Czech Teacher Self-Efficacy Scale for the research sample was first tested. Reliability measured by Cronbach Alpha was .948. The factor structure of the 45-item CTSES by means of exploratory factor analysis with Varimax rotation and eigenvalues was greater than 1. The analysis extracted six factors consistent with the theoretical model of teacher self-efficacy subscales (see 3.2.2). These factors explained 56% of the variance in the equation. Expected factor loadings were greater than .6 for the thirty-eight items, while no factor loadings were less than .3. The data shape measured by kurtosis and skewness for all items showed a normal distribution. In conclusion, the CTSES was found to be an appropriate tool for measuring self-efficacy of the teachers in this research.

In the following section, mean differences in teacher self-efficacy between the gender, educational levels and teaching experience are examined. Self-efficacy is reported in standard scores (z-scores). On average, participants' self-efficacy was rather low contrary to expectations. Most teachers perceived professional competency sometimes or rarely ( $M = -.158$ ,  $SD = .990$ , minimum =  $-6.54$ , maximum =  $2.67$ ). The highest level of self-efficacy was reported in the dimensions "Collaboration with Parents" ( $M = .395$ ,  $SD = .825$ , minimum =  $-4.50$ , maximum =  $2.44$ ) and "Professional Development" ( $M = -.335$ ,  $SD = 0.904$ , minimum =  $-3.79$ , maximum =  $1.99$ ). On the contrary, the lowest self-efficacy was reported in the dimension "Pedagogical Approach" ( $M = -1.122$ ,  $SD = 0.924$ , minimum =  $-6.71$ , maximum =  $1.29$ ). Low self-efficacy was also found in the dimensions "Students Diversity" ( $M = -.24$ ,  $SD = 0.859$ ,

minimum=-5.52, maximum=2.31), “Discipline” (M=-.27, SD=0.85, minimum=-4.85, maximum=2.0) and “Cooperation among Teachers” (M=-.121, SD=1.0, minimum=-4.75, maximum=2.13). In the dimension “Influence on School Management”, slightly positive self-efficacy was found (M=.101, SD=0.801, minimum=-3.79, maximum=2.15). The means of standard scores show that the Czech teachers have moderately weak self-efficacy which is the lowest in their educational goals and practices. The pedagogical approach is considered to be the crucial aspect of teaching beliefs and thus, these findings have important consequences for the risky aspects of teachers’ identity.

Men had higher self-efficacy scores than women,  $t(2390)=-4.942$ ,  $p < .001$ . This pattern holds for five of the six subscales. The only exception was “Pedagogical approach” when men and women do not significantly differ.

The length of teaching practice also influenced self-efficacy,  $\chi^2(8, N=2392)=125.1$ ,  $p < .001$ . As was expected, self-efficacy beliefs of the youngest group of teachers were significantly lower than those of the four groups with longer teaching experience both in the total scale, and all subscales. A difference between the groups with the shortest and the longest teaching experience varied from .5 to .9 point of the standard scores, where the highest gap (.9) existed in the total scale and in the “Pedagogical approach” scale.

The effect of educational level was also observed and was confirmed as significant,  $\chi^2(4, N=2392)=60.9$ ,  $p < .001$ . It was unclear how to interpret the data for group of teachers working at both educational levels (with respect to a request of specific training for each educational level). Hence, the means only for primary-level teachers and lower-secondary level teachers was compared. The t-test showed a significant gap in the total scale and all subscales between these two groups in favour of the primary-level teachers. Self-efficacy of the lower-secondary level teachers was significantly lower than that of the primary-level teachers.

#### 4.2. *Burnout syndrome*

Burnout was assessed with the Shirom-Melamed Burnout Scale (2006). As in the case of the previous scale, the psychometric quality of the scale for our sample was tested first. The reliability measured by Cronbach Alpha was .939. The factor structure of the 13-item SMBS was explored by means of exploratory factor analysis with Varimax rotation and eigenvalues greater than 1. The analysis extracted six factors that were consistent with the theoretical model of SMBS. These factors explained 81% of the variance in the equation. The expected factor loadings were greater than .7 for all items. Thus, the SMBS proved to be an excellent tool for measuring the sample’s burnout.

In following paragraphs, the mean differences in teachers' burnout between the gender, the levels of education and the years of teaching experience are presented. The burnout is reported in means (sum divided by number of items) and interpreted by norms given by Shirom and Melamed (2006) and Ptacek et al. (in print). All items were scored on a 7-point frequency scale, ranging from 1 (almost never) to 7 (almost always). On average, teachers reported mild burnout –  $M=3.14$ ,  $SD=1.05$ . No burnout was reported by 16% teachers, very mild burnout 31.9%, mild burnout 32.7%, burnout 15.1%, serious burnout 3.6% and very serious burnout .7%. The strongest burnout was reported on physical scale ( $M=3.55$ ,  $SD=1.31$ ), milder burnout on cognitive scale ( $M=3.03$ ,  $SD=1.23$ ) and the lowest on emotional scale ( $M=2.66$ ,  $SD=1.11$ ).

Men and women do not differ in the total burnout score. However, a significant gender gap was found on the emotional subscale,  $t(2390)=4.688$ ,  $p<.001$ , and on the physical scale,  $t(2390)=-2.068$ ,  $p<.05$ . While male teachers reported stronger emotional burnout, female teachers reported stronger physical burnout.

With respect to educational level, no significant difference was found between primary-level teachers and lower-secondary level teachers both on the total scale, and on the physical scale. However, the emotional burnout was slightly stronger among the lower-secondary level teachers,  $t(1831)=-2.448$ ,  $p<.05$ , and the cognitive burnout among the primary-level teachers,  $t(1831)=2.674$ ,  $p<.01$ .

The effect of years of teaching practice was not clear. The burnout varied across five groups of teachers with different lengths of teaching practice,  $\chi^2(20, N=2392)=41.58$ ,  $p<.01$ . The youngest group reported the lowest burnout on the total scale and all three subscales. However, the second youngest group with 6 to 15 years teaching practice reported the strongest burnout on the total scale, physical subscale and emotional subscale. The oldest group with over 36 years teaching practice reported a very mild burnout similar to the youngest group. It can be concluded that there is no obvious decreasing or increasing pattern of burnout across groups with different teaching practice. However, it can also be concluded that teachers with 6 to 15 years teaching practice are the group most in danger of burnout. The explanation should take in information about family and housework as well as information about extra responsibility at work which could result in the highest working load for this group especially.

#### *4.3. Relationship between teacher self-efficacy and burnout*

As both monitored variables showed a decreasing distribution and described the Czech teacher population in a useful and relevant way, the next step in the data analysis was to test how the burnout is associated with self-efficacy. First, intercorrelations between subscales within both scales were considered. The intercorrelations among burnout subscales were

strong – from .47 to .68, and among self-efficacy subscales even stronger – from .51 to .79. The correlation between the total burnout scale and its subscales varied from .69 (emotional burnout) to .9 (physical burnout). The correlation between the total self-efficacy scale and its subscales varied from .71 for Professional development to .93 for Pedagogical approach.

Second, a correlation between the self-efficacy scale and the burnout scale was studied. A negative correlation was found between total scores,  $-.293$ ,  $p < .001$ , as was expected. It means that teachers reporting stronger burnout scored lower in the self-efficacy scale, and vice versa. The correlation between self-efficacy and burnout was weaker for female teachers ( $-.284$ ) than for male teachers ( $-.358$ ). The strongest relationship between the total self-efficacy score and the burnout subscale was found for emotional burnout ( $-.375$ ), while for the other two dimensions the scores were only  $-.243$  and  $-.193$ . Relationships between the total burnout score and self-efficacy subscales were similar to each other; they varied from  $-.203$  to  $-.294$ . The strongest were correlations with Pedagogical approach and Discipline. In all cases, the correlations were highly significant ( $p < .001$ ). The correlations between burnout and the self-efficacy subscale was in all cases stronger for male than female teachers, except with respect to Cooperation with colleagues.

The third step was a multiple linear regression analysis. The analysis was carried out in order to predict to what extent the teachers' self-efficacy and its subscales would explain their burnout level. In doing so, the variables gender, years of teaching experience and level of education were statistically controlled. With the burnout level as a dependent variable, the total score of self-efficacy beliefs was tested in a regression equation as the independent variable (model 1), followed by control variables (model 2). Finally, the self-efficacy subscales were added as the independent variables (model 3).

Through multiple linear regression, a significant regression equation was found for all three models. Statistics for Model 1 were  $F(1, 2390)=224.215$ ,  $p < .001$ , with an  $R^2$  of .086, for Model 2  $F(4, 2387)=65.665$ ,  $p < .001$ , with an  $R^2$  of .099, and Model 3  $F(10, 2381)=36.193$ ,  $p < .001$ , with an  $R^2$  of .132. In Model 1, the participants' predicted burnout level was equal to  $3.096 - .311$ , where CTSES was measured in standard scores (z-scores). The teachers' burnout level decreased .311 score for each standard score. Teachers' self-efficacy was a significant predictor of burnout level,  $p < .001$ . In Model 2, the participants' predicted burnout level was equal to  $2.683 - .348$  (CTSES)  $- .046$  (educational level)  $+ .103$  (gender)  $+ .098$  (teaching experience). Teachers' burnout level decreased .348 score for each standard score of self-efficacy; experienced teachers reported .098 burnout score more than beginners; also lower secondary level teachers reported .046 burnout score more than primary level teachers and female teachers reported .103 burnout score more than male teachers. From four independent

variables in Model 2, only self-efficacy and teaching experience were significant predictors of burnout,  $p < .001$ . In model 3, participants' predicted burnout level was equal to 2.715 – .755 (CTSES); – .025 (educational level); + .061 (gender); + .104 (teaching experience); + .552 (CTSES Students diversity); + .066 (Cooperation with parents); + .019 (Collaboration with colleagues); + .021 (Professional development); – .044 (Influence on school management); and – .110 (Discipline). From eleven variables in Model 3, one was excluded (Pedagogical approach), six were insignificant and four were significant predictors of burnout,  $p < .001$ . The teachers' burnout level decreased .755 score for each standard score of total self-efficacy score and .044 of Discipline subscale, while the burnout level increased .552 score for each standard score of Students diversity subscale and experienced teachers reported .104 burnout score more than beginners.

## 5. Discussion

This study consists of three basic analyses which addressed the hypothesis derived from previous research. First, a negative correlation was assumed between burnout and self-efficacy. The first hypothesis was confirmed. Teachers who scored high in the self-efficacy reported low burnout symptoms, and vice versa. The results of the hierarchical regression analyses showed that in all three models, total self-efficacy was significantly related to the burnout level. The direction of its relationship supports the assumption that professional self-efficacy can prevent burnout syndrome. This study is consistent with Skaalviks' (2007) and other studies which established a close relationship between self-efficacy and burnout.

However, some of self-efficacy subscales were not related to the burnout level and one subscale (Student diversity) had a negative effect. It means that teachers should be especially encouraged in specific aspects of self-efficacy. School bodies should be also aware that some educational characteristics as heterogenous classes are potentially dangerous for burnout development even if teachers feel strong in handling diverse groups.

Second, a stronger connection was assumed between emotional burnout and interactive subscales of self-efficacy such as Collaboration with colleagues, Cooperation with parents, Discipline and Student diversity. However, the second hypothesis was not confirmed. The correlations between emotional burnout and interactive subscales were similar to others. However, the intercorrelation analysis showed that emotional burnout works differently from two other burnout dimensions and is closely linked to self-efficacy. Emotional burnout has the weakest correlation with the total burnout scale and its subscales and, in at the same time, the strongest correlation with the total self-efficacy scale. It shows that emotional burnout represents a specific feature of burnout which is closely connected to the capacity for

emotional regulation and thus, to teachers' beliefs. Our results are consistent with Brackett's et al. (2010) findings about emotion-regulation ability. The potential of emotional regulation for professional development should be studied in detail.

Third, a stronger correlation was assumed for female compared to male teachers between emotional dimensions of burnout and self-efficacy. The third hypothesis was not confirmed either. Compared to female teachers, male teachers showed stronger correlation between self-efficacy and burnout, including emotional burnout. These results do not concur with the findings by Maslach et al. (1996) and Schwarzer and Hallum (2008).

## **6. Conclusion and Implications**

This study follows the line of inquiry for causes of burnout in teaching profession. As confirmed by many studies, the crucial factor causing burnout is a lack of professional skills resulting in teachers facing stressful situations more often than teachers whose competencies are higher. Thus, it may be assumed that it is not only competency itself but also "simply" the belief about competency (self-efficacy) is helpful. Numerous studies on teacher self-efficacy show that self-efficacy is a fundamental prerequisite for professional achievements and satisfaction.

This study has confirmed the close relationship between burnout and self-efficacy among Czech grammar school teachers. More importantly, this study has established the specific role of emotional burnout and its close correlation to self-efficacy as compared to physical and cognitive burnout. Teaching is a highly emotional practice; thus, it is vital to both teachers' professional excellence and learners' academic success that more research attention is given to the role of emotion-regulation in teachers' lives.

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## **References**

- Bandura, A. (2006). Guide for Constructing Self-efficacy Scales. In Pajares, Frank, Urdan, T. C. *Self-efficacy Beliefs of Adolescents*. Greenwich, Conn.: IAP - Information Age Publishing.
- Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, 47(4), 406-417. <https://doi.org/10.1002/pits.20478>

- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher education*, 16(2), 239-253. [https://doi.org/10.1016/S0742-051X\(99\)00057-8](https://doi.org/10.1016/S0742-051X(99)00057-8)
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of school psychology*, 44(6), 473-490. <https://doi.org/10.1016/j.jsp.2006.09.001>
- Carlson, B. C., & Thompson, J. A. (1995). Job burnout and job leaving in public school teachers: Implications for stress management. *International Journal of Stress Management*, 2(1), 15-29. <https://doi.org/10.1007/BF01701948>
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189. <https://doi.org/10.1037/a0029356>
- Chan, D. W. (1998). Stress, Coping strategies, and psychological distress among secondary school teachers in Hong Kong. *American Educational Research Journal*, 35, 145-163. <https://doi.org/10.3102/00028312035001145>
- Chwalisz, K., Altmaier, E. M., & Russell, D. W. (1992). Causal attributions, self-efficacy cognitions, and coping with stress. *Journal of social and clinical psychology*, 11(4), 377-400. <https://doi.org/10.1521/jscp.1992.11.4.377>
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, 39(3), 281-291. <https://doi.org/10.1017/S0048577201393198>
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American educational research journal*, 31(3), 627-643. <https://doi.org/10.3102/00028312031003627>
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of managerial psychology*, 20(2), 178-187. <https://doi.org/10.1108/02683940510579803>
- Lazarus, R., & Folkman S. (1984). *Stress, Appraisal and Coping*. New York: Springer.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual*. Palo Alto, Calif: Consulting Psychologists Press.
- Pajares, F. (1997). Current directions in self-efficacy research. *Advances in motivation and achievement*, 10(149), 1-49.
- Ptacek, R., Raboch, J., Kebza, V., Solcova, I., Vnukova, M., Hlinka J., Harsa, P., & Strakaty, S. (in print). Czech version of Shirom-Melamed Burnout Scale. *Czechoslovak Psychology*.
- Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied psychology*, 57(1), 152-171. <https://doi.org/10.1111/j.1464-0597.2008.00359.x>
- Shirom, A., & Melamed, S. (2006). A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*, 13(2), 176. <https://doi.org/10.1037/1072-5245.13.2.176>
- Skaalvik, E. M., Skaalvik, S. (2007). Dimensions of Teacher Self-efficacy and Relations with Strain Factors, Perceived Collective Teacher Efficacy, and Teacher Burnout. *Journal of Educational Psychology*, 99(3), 611-625. <https://doi.org/10.1037/0022-0663.99.3.611>

- Skaalvik, E. M., & Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological reports, 114*(1), 68-77. <https://doi.org/10.2466/14.02.PR0.114k14w0>
- Smetackova, I., Topkova, P., & Vozkova, A. (in print). Vývoj a pilotáž škály učitelské self-efficacy. *Life-long learning*.