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Professional Burnout and its Relation to Self-Efficacy and Perceived Stress: The Case of Lithuanian Teachers

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Abstract

In modern society, problems related to a teacher's personality, mental and physical health, and emotions and competencies, are becoming more and more relevant. In Lithuania, compared with other European countries, teachers experience specific difficulties at work: they have to work in the conditions of constant reforms and changes, and face growing competition due to the decrease in students and schools. The majority of the studies on burnout, self-efficacy and perceived stress attempted to find the relationship between personal or organizational variables and burnout. Hence, the relationship between teachers' professional burnout, self-efficacy and perceived stress in the school environment is an area that needs to be actively researched in Lithuania. The research aim of this study was to reveal and characterize teacher burnout, self-efficacy and perceived stress in the Lithuanian school context. The quantitative research design with questioning survey was chosen for the study. Sample size consisted of 427 Lithuanian teachers. Research results revealed the highest scores for exhaustion and the lowest for cynicism; at a time when the teacher experiences professional burnout, cynicism is observed as the weakest characteristic; no significant differences were found according to educational level or work experience; significant differences were identified according to age, for exhaustion and overall burnout level among teachers; most of the teachers in Lithuanian sample perceive a moderate stress level in the school environment; overall burnout has a significant correlation with self-efficacy and stress among Lithuanian teachers.

1 Introduction

In today's fast-paced world, the teacher's problems related to psychological, mental and social health, and the teacher's personal aspects, become one of the most acute problems that are inseparable from the teacher's professionalism. Therefore, it is natural that scientific research is becoming more and more relevant, aiming to reveal and identify psychological problems related to one of the main participants in the educational process – the teacher (Stočkus, 2014). Who is a teacher and what is his or her mission these days? The question is philosophical, but it is understood that the role of the teacher in the educational process is significant. So, it is extremely important to study the mental health of the teacher, his or her professional burnout at work, and the coherence of the teacher's personality in general (Želgienė, 2015).

In Lithuania, compared with other European countries, teachers experience specific difficulties at work: they have to work in conditions of constant reform and change, and face growing competition due to the decrease in students and schools. The social situation leads to the fact that there is an increasing amount of work with students from social risk families, children left behind by emigrant parents, and children from families experiencing economic deprivation. These students need more attention and time. Teachers of preschool educational institutions and general education schools are faced with the social diversity of pupils. In addition to objective professional challenges, such as a high workload, the number of students in classes or kindergarten groups, long working hours, low salaries, there are emotional difficulties, lack of autonomy at work, difficult relationships with colleagues, problems with student behavior, and a growing level of student violence, manifested also through bullying in schools. Continuous intensive communication leads to "oversaturation" of social contacts. All these reasons cause professional burnout syndrome, and increase teachers' sense of insecurity and job dissatisfaction (Abromaitienė, 2014).

Teacher burnout is a multidimensional and multidisciplinary concept, which is based on emotional exhaustion, referring to the depletion of the teacher's emotional sources and enthusiasm for teaching; depersonalization, denoting the teacher's detachment from and development of negative attitudes towards learners; reduced sense of personal accomplishment, signaling the teacher's perceptions of under-accomplishment and ineffectiveness in teaching (Maslach & Jackson, 1981). Environmental qualities (work overload, types of student behavior, role conflict, type of student), social support, parent/community relationships, and characteristics of the institution could lead to a negative/positive classroom climate, and affect teachers' exhaustion at school (Grayson & Alvarez, 2008; Rey et al., 2012). Maslach and Leiter (1999) highlight the simultaneous effect of teacher-student interaction, teachers' personal qualities, school environment, and the

larger social context on teacher burnout. Teacher burnout may be the result of an interaction between personal (gender, age, marital status, years in pedagogical profession, locus of control, self-esteem, self-efficacy) and organizational variables (access to facilities, social support, working conditions, school structure) (Slegers, 1999). Teachers who cannot build organizational interpersonal relations, and do not receive professional support within the school, feel professionally exhausted (Friedman, 2003).

Teacher professional burnout is related to professional self-efficacy. Teacher professional self-efficacy is a predictor of their professional burnout (Ventura et al., 2015). Self-efficacy is considered a stable personal characteristic related to self-regulation mechanisms (Judge et al., 1997, 2007, 2012; Bono, 2001). Self-efficacy implies self-confidence in generating effective action plans, handle difficulties, managing emotions, stress, and anxiety, and exercising control (Bandura, 2012). From this point of view, professional self-efficacy is likely to affect enriched perceptions of teacher job characteristics. Self-efficacy affects both workplace and psycho-social wellbeing of teachers (Bargsted et al., 2019), which includes job satisfaction, performance and work conditions. Self-efficacy plays a mediating role in the relationship between work design and work outcomes (Choi, 2016).

Teacher professional burnout is closely related to teacher perceived stress, which includes: i) emotional exhaustion, meaning being emotionally overextended and exhausted by one's work; ii) depersonalization, characterized by exhibiting negative, cynical attitudes toward others and treating people as objects; iii) experiencing negative assessment of the performance of teachers; iv) teachers being doubtful about making a difference in their job, and losing awareness of their personal competence (Draper et al., 2004; Zautra et al., 2002).

The majority of the studies on burnout, self-efficacy and perceived stress attempted to find the relationship between personal or organizational variables and burnout. So, the relationship between teachers' professional burnout, self-efficacy and perceived stress in the school environment seems to be a relatively underresearched area. In an attempt to contribute to the current literature by filling these gaps and providing perspectives from Lithuania, we investigated teacher professional burnout and its relationship with teachers' self-efficacy and stress in the context of Lithuanian schools.

The research aim was to reveal and characterize teacher burnout, self-efficacy and perceived stress in the Lithuanian school context.

2 Discourse of studies of teacher burnout in the Lithuanian context

Today, our society and school are changing a lot. We are looking for the most effective means to implement the ever-accelerating changes in the education system. The education system and society require of a teacher an independent personality that reveals itself creatively already at school. It is natural that new and higher demands are placed on teachers. Special attention is paid to the teacher's profession and personality (Kalvaitis, 2016). The teacher is distinguished from the whole; specific expectations, high standards and requirements are placed on him or her. In this way, society not only expresses respect for the educator, but above all assigns responsibility. Trakšėlys and Martišauskinė (2013) state that in order to perform the functions assigned by society, teachers must change as the educational environment itself changes. At the beginning of the 21st century, the very purpose of education has also changed – it has become not the transfer or acquisition of knowledge, but the development of competences. The teacher's work process is often analyzed, and the results evaluated. The work of a teacher requires many intellectual and physical resources; society perceives the teacher as the guide to the future, on whom the quality of the growing generation depends. Martišauskienė (2016) states that the most important uniqueness of education work is that the teacher is an essential instrument who supports the entire educational process with the power of his or her spirit, and fuels it with spiritual energy. All this is much more than just the knowledge and skills of a teacher, which are needed by people of all professions. Many teachers intuitively rely on their spiritual potential, but a professional teacher should understand the totality of these processes.

As the rhythm of life and work intensifies, the study of the concept of professional burnout becomes an increasingly relevant problem in our country (Kavaliauskienė & Balčiūnaitė, 2014). It is generally accepted that the burnout syndrome is one of the biggest challenges in the modern professional work environment, and the concept of burnout at work is of increasing interest to the academic community in Lithuania. Studies (Kavaliauskienė & Balčiūnaitė, 2014; Martinkienė et al., 2016; Merkys & Bubelienė, 2013; Stočkus, 2014) aimed to identify the signs and causes of this phenomenon, and to distinguish risk and protective factors. In Lithuania, research is conducted on the topic of burnout at work, but most of the research in this field (Kavaliauskienė & Balčiūnaitė; Pacevičius, 2006; Stočkus, 2014) analyzed connections of burnout with the teacher's age and gender. However, attention is not paid to the characteristics of the teacher's personality or personality traits: such as a person's tendency to experience negative feelings, openness to new experiences, or impulse control; their perfectionism, as in how much a person makes adequate demands on him or herself at work, how strongly he or she concentrates on failures, or how he or she perceives the expectations of colleagues, students and their parents in relation to him or herself.

The phenomena of burnout, self-efficacy and stress are not new, but research on teacher professional burnout, self-efficacy and stress, and their interrelationships in Lithuania, is still relatively recent. Professional burnout is a complex phenomenon that has received a lot of attention from researchers in various countries over the last decade. However, this phenomenon is little known in Lithuania, and only a few can tell what burnout syndrome is. In Lithuania, burnout syndrome is particularly common among teachers (Račkauskaitė, 2010). Professional burnout can be defined as a complex process consisting of three components: emotional exhaustion (manifested by overwork, physical and mental exhaustion, inability to meet the demands); depersonalization (manifested by a formal attitude to the work performed, duties, indifferent or negative reaction to the service contingent) and reduced effectiveness (reflecting a feeling of incompetence, lack of work achievements and efficiency). It is a process that develops over a long period of time, manifests itself individually, is of varying intensity and is characterized by both mental and physical symptoms (Bulotaitė & Lepškieienė, 2006). Teachers, unlike representatives of other professions, are more characterized by early-developing professional burnout syndrome. Being responsible for children's education and well-being often gives job satisfaction, but it is not uncommon for educators to feel physically and emotionally drained. People whose profession requires taking care of others use up their positive emotional resources over a period of time, and they become unable to resist stress. If such a state continues for a long time, complete exhaustion of physical and mental strength is possible, and such a state affects a person's motivation, attitude and behavior (Račkauskaitė, 2010).

The connections between the teaching profession and higher stress were recognized long before the professional burnout syndrome was described in scientific studies (Merkys & Bubelienė, 2013). The authors claim that the understanding of the complexity of the teacher's profession is traditionally reflected in legal acts regulating the professional activity of the pedagogue, labor relations, and workload. It is precisely because of the difficulty of this profession that in many countries there are extended vacations for teachers, early retirement, formally shortened working hours, and grants from the state or regional administration aimed at improving the living conditions of teachers. In different countries, these preferential conditions differ in one way or another, but various attempts to make the work of a teacher easier are a cross-culturally universal phenomenon. These benefits aim to increase the attractiveness of the teaching profession in the labor market, and thus at least compensate the teacher for the difficult and psycho-emotionally exhausting work.

Satisfaction or dissatisfaction with one's choice of profession indicates a subjective evaluation of this experience, which can be linked to further professional plans. Satisfaction with one's chosen occupation is said to be associated with future career decisions (Pociūtė, 2010). The perception of teachers' individual compatibility

with the profession takes place through the expression of personality traits significant to teachers, which they use to describe suitability for professional activity. According to the research, the openness of the teacher to the world is extremely important – teachers should be inclined to know themselves and to analyze their personality traits (Šedžiuvinė, 2005).

Teachers' professional burnout is associated with a significant decrease in efficiency, productivity and detachment from work and profession, and not least with a sense of loss of control and self-control at work. The hypothesis tested in the study (male teachers feel more stressed due to work problems than female teachers) was not confirmed – both male and female teachers feel equally stressed due to work problems (Gedvilienė & Didžulienė, 2020).

In the scientific literature, it is increasingly emphasized that burnout is not caused by stress in general, but by stress arising from long-term and intense communication at work (Martinkienė et al., 2016). It also refers to risk groups, which include people with certain characteristics. First of all, these are people who experience a constant internal conflict because of their work. In many cases, these internal conflicts arise for people who experience contradictions between work and family, or who constantly have to prove their competence and professionalism at work. The second risk group includes people who have experienced constant fear of job loss. The third group includes people who enter an unusual, new work environment where high demands and expectations are placed on them, and people are expected to show high efficiency and quick results (Pacevičius, 2006).

In this context, we posed the following research questions:

- Q 1. What are the differences in the characteristics of professional burnout experienced among teachers by educational level, work experience, and age?
- Q 2. How does teacher self-efficacy occur, and what are its differences according to the teacher's educational level, work experience, age and gender?
- Q 3. What are the characteristics of the perceived stress of a teacher, and what are the differences between perceived stress according to the teacher's educational level, years of work experience, age and gender?
- Q 4. How are the relationships between teachers' professional burnout, self-efficacy and perceived stress characterized?

3 Methodology

Research design

Quantitative research design was used for this study. Quantitative research design relates to the design of a research project which uses quantitative research methods. Quantitative research design is aimed at discovering how many people think, act or feel in a specific way. Quantitative projects involve large sample sizes, concentrating on the quantity of responses. The standard format in quantitative research

design is for each respondent to be asked the same questions, which ensures that the entire data sample can be analyzed fairly (Apuke, 2017). Quantitative research design tends to favor closed-ended questions. Providing respondents with a set list of answers, they will not normally be able to give lengthy open-ended responses. This design ensures that the process of quantitative research is far more efficient than it would be if qualitative-style open ended questions were employed. It is more efficient because it is then not necessary to carry out the time-consuming process of coding vast quantities of open-ended responses (Verhoef & Casebeer, 1997).

Quantitative research is the process of collecting and analyzing numerical data. It can be used to find patterns and averages, make predictions, test causal relationships, and generalize results to wider populations (Bhandari, 2023). The purpose of quantitative research is to attain greater knowledge and understanding of the social world. Researchers use quantitative methods to observe situations or events that affect people. Quantitative research produces objective data that can be clearly communicated through statistics and numbers. We do this in a systematic scientific way so the studies can be replicated by someone else (Burrell & Gross, 2017).

Sample

In the study, the random sampling method was applied. Random sampling is a part of the sampling technique in which each sample has an equal probability of being chosen. A sample chosen randomly is meant to be an unbiased representation of the total teacher population (Nikoloploulou, 2023).

Sample size consisted of 427 Lithuanian teachers. The sample size was calculated according to the general recommendations of Nqrđi (2003), Neuman (2007) and Suskie (1996): thirty respondents are the minimum sample size. The rule of thumb is based on the idea that 30 data points should provide enough information to make a statistically sound conclusion about a population. This is known as the Law of Large Numbers, which states that the results become more accurate as the sample size increases.

According to the Ministry of Education, Science and Sports of the Republic of Lithuania in 2021 data, the professional community of Lithuanian teachers consists of about 27,664 teachers. 427 teachers participated in the survey, i.e., the research sample represents 1.54 percent from the size of the professional population of teachers in Lithuania. This means that the minimum sample size is exceeded by 14.23 times. However, the sample size shows that the obtained results cannot be generalized to the entire population of Lithuanian teachers, so the answers should be evaluated as assumptions for existing trends.

The main part of the sample by gender is women (90.2%), and 3.8% research participants do not indicate their biological sex, marking "other". There are similar proportions in the sample of respondents according to the level of education:

49.6 percent have obtained a university bachelor's degree; 41.0% of a sample have obtained a master's qualification degree. By age, the second part of the sample consisted of teachers who are 30–44 years old (32.6%) and 45–54 years old (34.9%). This means that the sample size consists of teachers of active professional age. The respondents' work experience ranges widely – from one year to more than twenty-five years. The majority of respondents were teachers who have more than twenty-five years of teaching experience (37.5%) (see Table 1).

Table 1: Socio-demographic characteristics of the sample

	Number of respondents	Percentage
Gender		
Male	26	6.1
Female	385	90.2
Other	16	3.8
Educational level		
BA (non-university)	22	5.2
BA (university)	212	49.6
Master's	175	41.0
PhD	6	1.4
Other	12	2.7
Age		
21–29 years	31	7.3
30–44 years	139	32.6
45–54 years	149	34.9
55–64 years	90	21.1
65 years and more	11	2.6
Not identified	7	1.6
Work experience		
Up to 1 year	9	2.1
1–5 years	59	13.8
6–10 years	45	10.5
11–15 years	41	9.6
16–20 years	56	13.1
21–25 years	57	13.3
More than 25 years	160	37.5

Data collection and tool

Data were collected from November 2022 to March 2023, through survey by using questionnaire on teachers' professional wellbeing, which was originally developed by ©Teaching To Be¹ project team. The only pre-test data in the whole sample of teachers were analyzed in this study.

The tool consisted of two dimensions:

I. Organizational dimension with the following indicators – organizational belonging, teacher autonomy, recognition/appraisal, collaborative work, cooperating with colleagues, shared leadership, institutional relationship, conflict resolution, organizational climate, support from leader, student motivation, instruction, classroom management, discipline, and possibility to access professional training.

II. Individual dimension, with the following indicators: self-efficacy, professional growth, teacher burnout, job satisfaction, meaning of work, professional identity, job crafting, peer recognition, beliefs and values, self-concept, self-regulation, autonomy, positive emotion, resilience, self-awareness, frequency of negative and positive experiences, satisfaction with life, social competencies, quality of relationships, work-family conflict, critical thinking, self-assessment, responsible decision-making, and growth mindset.

In this manuscript, the results from researching three indicators: teacher professional burnout (job burnout); self-efficacy (a teacher's professional self-efficacy); and perceived stress (teacher stress) are presented:

Teacher professional burnout. Job burnout is a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach, 2003) and is the result of prolonged distress involving physical, emotional and mental fatigue. Teachers' professional burnout means dissatisfaction with certain needs – increasing frustration with mental and physical symptoms that reduce self-esteem (Vollmer, 1998) and long-term human response to constant emotional and interpersonal stress at work (Maslach, 2003). Burnout develops over a long period of time through the periodic accumulation of negative emotions, and it is important to recognize it in time. The Bergen Burnout Inventory (BBI) (Salmela-Aro et al., 2011; Salmela-Aro et al., 2011; Feld et al., 2014) was a part of the research tool in the study and it comprised three core dimensions: exhaustion at work; cynicism toward the meaning of work; and sense of inadequacy at work. Exhaustion refers to the draining of emotional energy and feelings of chronic fatigue; cynicism describes having a distant and negative attitude toward one's job, and reduced professional efficacy refers to the belief that one is no longer effective in fulfilling one's job responsibilities (Maslach et al., 1996; Maslach & Leiter, 1997). For every dimension was used 6-point rating scale ranging from *strongly disagree* (1) to *strongly agree* (6).

1 Erasmus+ Project "Teaching To Be: supporting teachers' professional growth and well-being in the field of social and emotional learning", No. 626155-EPP-1-2020-2-LT-EPPKA3-PI-POLICY

Self-efficacy. Teachers' professional self-efficacy is defined as a judgment of one's own capabilities to bring about desired outcomes of student engagement and learning, even when students are difficult or unmotivated (Tschannen-Moran & Woolfolk Hoy, 2001). The tool for teachers' self-efficacy measurement was based on Skaalvik & Skaalvik (2007) *Norwegian Teacher Self-Efficacy Scale (NTSES)* which includes the following sub-scales: instruction/teaching, adapting instruction/teaching to individual needs, motivating students, maintaining discipline, and cooperating with colleagues and parents. Responses were given on a 7-point scale from *not certain at all* (1) to *absolutely certain* (7).

Perceived stress. Teacher stress can be defined as the physical, emotional, and mental strain experienced due to the demands and challenges associated with their profession. It is the result of various factors that teachers encounter in their roles, both inside and outside the classroom. Teacher stress can manifest in different ways and may vary in intensity among individuals. *The Perceived Stress Scale (PSS)* originally developed in 1983 (Cohen et al., 1983, 1988), remains a possibility to identify how different situations affect feelings and perceived stress. The questions in this scale ask about one's feelings and thoughts during the last month. For each question, here are provided the following alternatives to choose: 0 – *never*, 1 – *almost never*, 2 – *sometimes*, 3 – *fairly often*, 4 – *very often*. There were provided two sub-scales within the PSS: i) Perceived helplessness (items 1, 2, 3, 6, 9, 10) – measuring an individual's feelings of a lack of control over their circumstances or their own emotions or reactions; ii) Lack of self-efficacy (items 4, 5, 7, 8) – measuring an individual's perceived inability to handle problems. Scores on the PSS range from 0 to 40, with higher scores indicating higher perceived stress. Scores ranging from 0–13 would be considered low stress. Scores ranging from 14–26 would be considered moderate stress. Scores ranging from 27–40 would be considered high perceived stress.

The internal consistency of every dimension with particular scales and sub-scales were calculated via Cronbach's alpha. > 0.7 was used as a benchmark value for Cronbach's alpha. At this level and higher, the items are sufficiently consistent to indicate the measure is reliable (Frost, 2023). Typically, values near 0.7 are minimally acceptable but not ideal. Internal consistency calculations of the tool's three dimensions (scales) from the Lithuanian sample demonstrated acceptable internal consistency (> 0.7 for burnout, > 0.8 for self-efficacy and > 0.7 for stress).

Table 2: Reliability of the tool scales

Scale/sub-scale	Original	Lithuanian case
TEACHER BURNOUT		
Exhaustion	0.70	0.766
Cynicism	0.82	0.774
Inadequacy	0.71	0.780
Overall burnout	0.85	0.878
TEACHER SELF-EFFICACY		
Instructing	0.81	0.873
Adapting instructions to individual needs	0.87	0.898
Motivating students	0.91	0.893
Maintaining discipline	0.90	0.908
Cooperating with colleagues and parents	0.74	0.849
TEACHER STRESS		
Perceived helplessness	0.87	0.898
Lack of self-efficacy	0.74	0.795
Overall perceived stress	0.83	0.814

Researchers were aware that Cronbach's alpha is a measure of reliability but not validity. It can indicate whether responses are consistent between items (reliability), but it cannot determine whether the items measure the correct concept (validity). In this light, researchers saw obtaining a satisfying and acceptable Cronbach's alpha (at least) as a necessary step for establishing reliability of the tool (Frost, 2023). Questionnaires were distributed online, using the platform www.apklausa.lt, taking into consideration that all Lithuanian teachers use internet tools and were able to access the questionnaire.

Data analysis

Descriptive statistics were applied for sample presentation: frequency, percentage, and graphs. ANOVA was applied in order to compare variables according to demographics. Correlation and linear analysis was applied to define relationships between variables. In all cases significance level was identified as 0.05.

Research ethics

The studies involving human participants were reviewed and approved by Committee for Educational Research Ethics, Educational Research Institute, Vytautas

Magnus University (February 17, 2022, Protocol No. 5), and from the Research Board of Vytautas Magnus University (March 1, 2022, Protocol No. 17). The participants provided their written informed consent to participate in this study.

4 Results

Teacher (professional) burnout

Teachers’ burnout calculations had different methodology, and the results were calculated as averages overall and for sub-scales (minimum 1, maximum 6). The highest scores are for exhaustion and the lowest – for cynicism (see Figure 1).

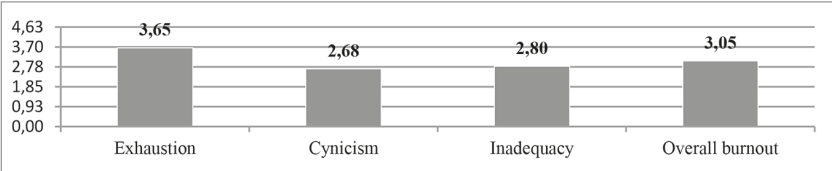


Figure 1: Overall teachers’ (professional) burnout (averages)

No significant differences were found according to educational level or work experience; however significant differences were identified according to age for the exhaustion sub-scale (see Figure 1).

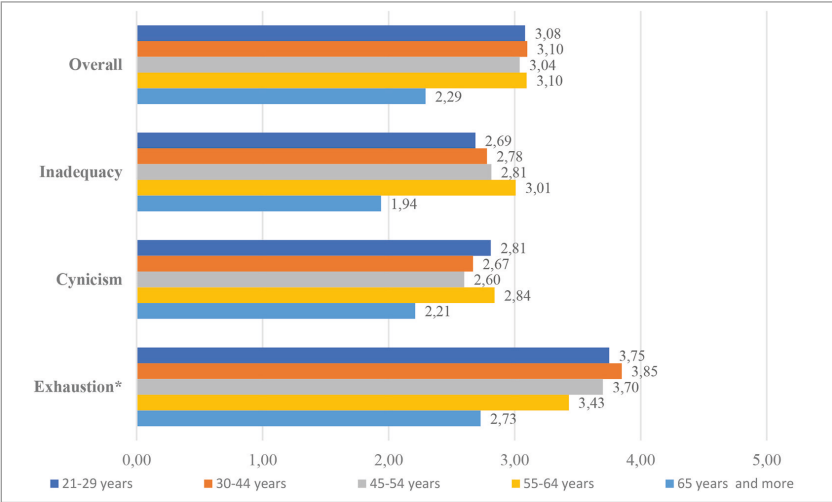


Figure 2: Teacher burnout according to age (*p<0,05)

Teachers aged over 65 years demonstrated significantly lower exhaustion level (ANOVA $F(5, 421) = 3.750, p = 0.002$) than other age groups' teachers. No significant differences were calculated for other sub-scales or overall burnout level according to the age.

Teacher self-efficacy

Teachers' self-efficacy results are presented in Figure 3. Each sub-scale consisted of 4 items. The sum of each sub-scale was calculated (possible minimum was equal to 4, possible maximum was equal to 28). The highest sums are for *Instruction/teaching* and *Cooperating with colleagues and parents*. The lowest sum was for *Motivating students*.

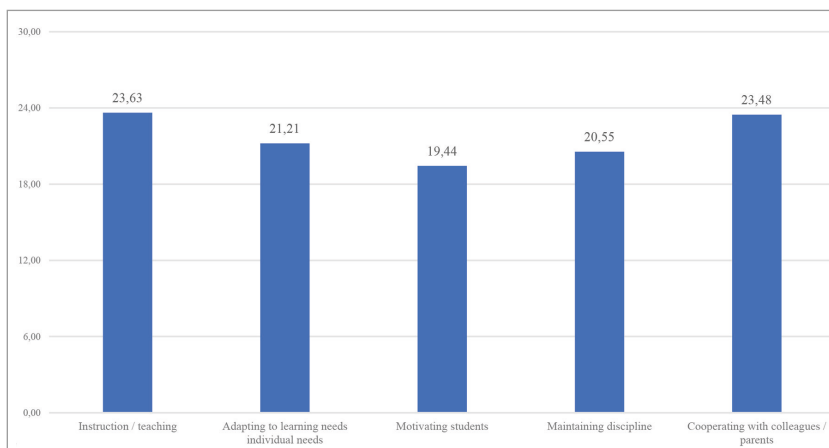


Figure 3: Teacher's self-efficacy

No significant differences were identified according to teachers' educational level. As the male group is significantly smaller than the female, no comparisons were made according to gender.

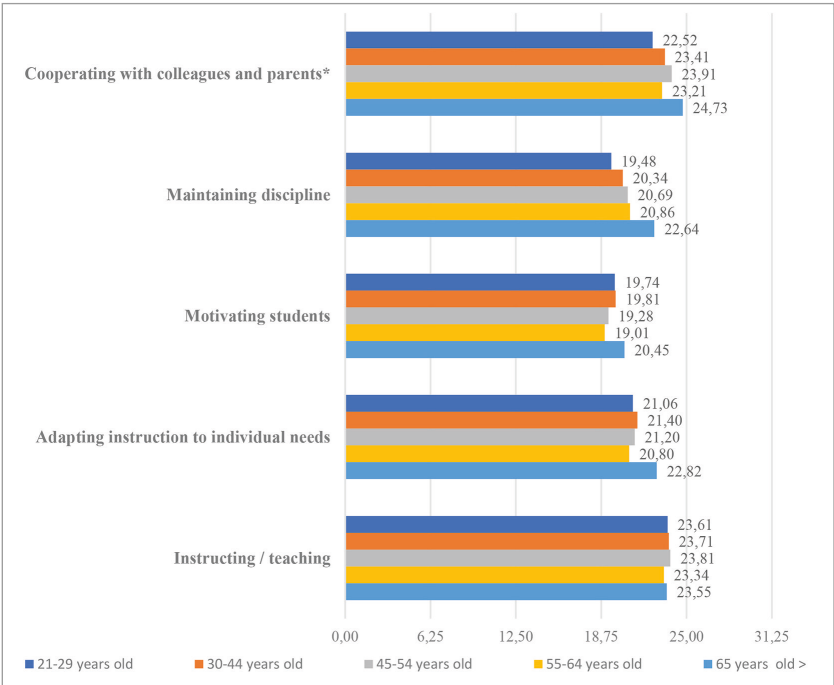


Figure 4: Teachers' self-efficacy according to age (*p<0,05)

The significant differences according to age were identified for sub-scale *Cooperating with colleagues and parents* (calculated ANOVA $F(5, 421) = 2.292, p = 0.045$). Older teachers report that they cooperate more effectively with colleagues and students than younger colleagues. No significant differences were identified for other teachers' self-efficacy sub-scales according to the teachers' age.

Figure 5

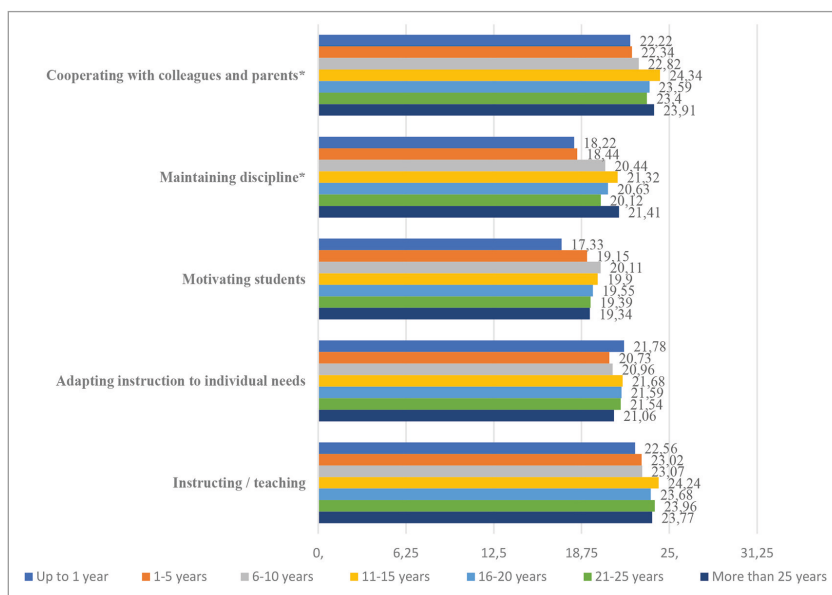


Figure 5: Teachers' self-efficacy according to work experience (* $p < 0,05$)

The significant differences according to work experience were identified for two following sub-scales: *Maintaining discipline* (calculated ANOVA $F(6, 420) = 3.761, p = 0.001$) and *Cooperating with colleagues and parents* (calculated ANOVA $F(6, 420) = 2.781, p = 0.012$). No significant differences were identified for other self-efficacy sub-scales according to the years of work experience.

Teachers' stress

Perceived overall stress was calculated as sum (range 0-40), and the average is 18.19 ($SD\ 6.07$), so the overall stress level was evaluated as moderate. The sum of perceived helplessness items might be from 0 to 24, and sum of lack of self-efficacy from 0 to 16. Averages of calculated sums were 11.93 and 6.26 respectively. 19.4% (83 teachers) of teachers perceived low level of overall stress, 73.1% (312 teachers) – perceived moderate level of stress, and the rest of teachers 7.5% (32 individuals) perceived high level of stress.

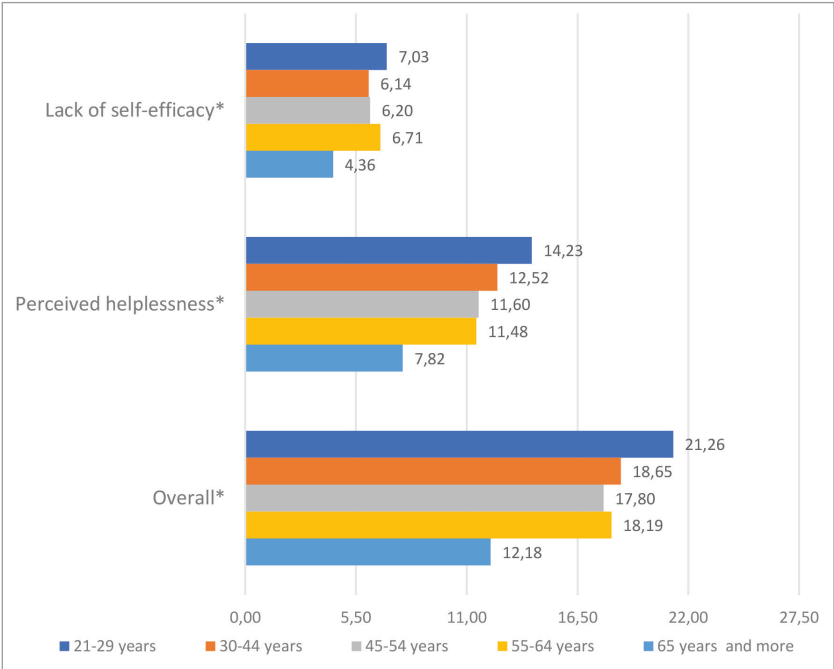


Figure 6: Teachers' perceived stress according to age (*p<0,05)

Overall perceived stress level, as well as both sub-scales stress level, were significantly different according to age: young teachers' (21–29 years old) stress levels were significantly higher level and older teachers (65 and over years old) perceived lower level of stress (see Figure 6). ANOVA for overall perceived stress was $F(5, 421) = 5.301, p = 0.000$; for perceived helplessness $F(5, 421) = 3.963, p = 0.002$; for lack of self-efficacy $F(5, 421) = 3.552, p = 0.004$. This is confirmed by stress groups' analysis (see Table 2): most teachers over 65 years old experienced lower level of stress. All other groups according to the age experienced mostly moderate stress level ($\chi^2=25.186, df=8, p=0.001$).

Table 3: Teachers' perceived stress according to age groups

Stress level groups		Low stress level	Moderate stress level	High stress level	Total
21–29 years old	Frequency	2	22	7	31
	%	6.5%	71.0%	22.6%	100.0%
30–44 years old	Frequency	27	99	13	139
	%	19.4%	71.2%	9.4%	100.0%
45–54 years old	Frequency	31	110	8	149
	%	20.8%	73.8%	5.4%	100.0%
55–64 years old	Frequency	14	72	4	90
	%	15.6%	80.0%	4.4%	100.0%
65 years old and more	Frequency	6	5	0	11
	%	54.5%	45.5%	0.0%	100.0%
Total	Frequency	80	308	32	420
	%	19.0%	73.3%	7.6%	100.0%

Perceived stress level is not significantly related to educational level or work experience of teachers.

Relationship between teacher burnout, self-efficacy and perceived stress

The correlations between teacher self-efficacy and teacher burnout are weak; the essential trends are worth discussing (see Table 4):

Teacher self-efficacy during teaching and teacher professional burnout are negative and very low, but there is only one insignificant negative – between teaching and exhaustion. When correlating teaching relationships with cynicism, inadequacy, and overall burnout, the relatively strongest relationship is between teacher self-efficacy during instruction/teaching and teacher cynicism (the more effective the teaching, the less cynicism the teacher displays, and the more teacher cynicism, the less efficacious teaching).

Teacher adaptation of instruction/teaching to individual student needs is weakly correlated with the burnout variables, but all correlations are significant. The strongest correlation is between the teachers' adaptation of teaching to individual students' needs and the teacher's cynicism: the more effective the adaptation of teaching, the less cynical the teacher is. The same trend is observed with other correlations: the more effective the adaptation of the teacher's teaching to the individual needs of the students is, the less the teacher experiences exhaustion and inadequacy.

Correlations between the teacher's effectiveness in motivating students and the variables of professional burnout are low positive, but significant. The strongest correlation is between teacher effectiveness in motivating students to learn and teacher cynicism: the more effective the motivation, the less cynicism the teacher expresses. Similar trends are observed in other correlations: the more effective student motivation is, the less the teacher feels exhausted or inadequate.

Correlations between teacher-maintained positive discipline and professional burnout variables are very low positive (very weak), but significant. The weakest correlation is between positive discipline maintained by the teacher and burnout experienced by the teacher: the stronger the positive discipline maintained in the classroom, the less burnout the teacher feels. The strongest correlation between positive discipline and teacher cynicism: the more positive discipline, the lower the teacher's cynicism.

The correlation between the teacher's cooperation with colleagues and parents and the variables of professional burnout is very low and negative, although it is significant: the stronger the cooperation with teacher colleagues and parents, the less expressed cynicism (stronger correlation) and inadequacy. A non-significant negative correlation prevails between a teacher's effective cooperation with fellow teachers and parents and burnout.

Correlation between all variables of a teacher's perceived stress with all variables of professional burnout are moderate positive. The correlations between perceived hopelessness and general burnout (the more hopelessness is experienced, the stronger the general professional burnout of the teacher) and between perceived powerlessness and burnout (the more consciously perceived and experienced powerlessness, the stronger the burnout is experienced) are stronger than the correlations between the teacher's perceived hopelessness and the teacher's cynicism (the stronger the teacher experiences helplessness, the stronger the cynicism is expressed) and between the teacher's perceived helplessness and the teacher's inadequacy (the stronger the teacher's experience of helplessness, the stronger the experienced feeling of inadequacy).

The correlations between the teacher's lack of self-efficacy (as a perceived stress variable) and the teacher's professional burnout variables are positive, very low, but significant. The weakest/lowest correlation is between lack of self-efficacy and burnout, and the strongest/highest is between lack of teacher self-efficacy and inadequacy (the stronger the sense of teacher self-efficacy, the stronger the experience of inadequacy). The trends of the other two positive, very weak correlations are similar - the stronger the teacher experiences the feeling of lack of self-efficacy, the stronger the teacher's cynicism and general professional burnout.

The correlation between teacher-perceived general stress and teacher burnout variables is positive and moderate. The strongest significant correlation is between the teacher's perceived general stress and experienced general professional burnout

– the stronger the perceived general stress, the stronger the experienced general professional burnout. The other three moderately strong correlations show the following tendencies: the stronger the perceived general stress experienced by the teacher, the stronger the teacher's cynicism and inadequacy.

Table 4: Correlations between teacher professional burnout, self-efficacy and perceived stress

		Teacher burnout: Exhaustion	Teacher burnout: Cynicism	Teacher burnout: Inadequacy	Overall burnout of teachers
<i>Teacher self-efficacy: Instruction/ teaching</i>	Pearson Correlation	-.040	-.181**	-.159**	-.142**
	Sig. (2-tailed)	.411	.000	.001	.003
	N	427	427	427	427
<i>Teacher self-efficacy: Adapting instruction/ teaching to individual needs of students</i>	Pearson Correlation	-.164**	-.276**	-.247**	-.259**
	Sig. (2-tailed)	.001	.000	.000	.000
	N	427	427	427	427
<i>Teacher self-efficacy: Motivating students</i>	Pearson Correlation	-.201**	-.340**	-.299**	-.316**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	427	427	427	427
<i>Teacher self-efficacy: Maintaining discipline</i>	Pearson Correlation	-.169**	-.275**	-.210**	-.246**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	427	427	427	427
<i>Teacher's self-efficacy: Cooperating with colle- agues and parents</i>	Pearson Correlation	-.082	-.214**	-.172**	-.175**
	Sig. (2-tailed)	.091	.000	.000	.000
	N	427	427	427	427

<i>Teacher's perceived stress: Perceived helplessness</i>	Pearson Correlation	.614**	.559**	.510**	.641**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	427	427	427	427
<i>Teacher's perceived stress: Lack of self-efficacy</i>	Pearson Correlation	.160**	.240**	.258**	.249**
	Sig. (2-tailed)	.001	.000	.000	.000
	N	427	427	427	427
<i>Teacher's perceived stress: Overall perceived stress by teachers</i>	Pearson Correlation	.577**	.567**	.535**	.639**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	427	427	427	427

Overall burnout has a significant correlation with self-efficacy and stress. However, correlations between burnout and self-efficacy are very weak and positive, and significant. Correlations between perceived helplessness and all burnout dimensions as well overall stress and all burnout dimensions are moderate positive ($r > 0.5$) and significant.

Linear regression results confirmed that overall burnout might be significantly affected by only one variable of self-efficacy (ability to motivate students) and both variables of perceived stress such as perceived helplessness and lack of self-efficacy ($R^2 = 0.446$, $F(3, 423) = 113.737$, $p = 0.000$) (see Table 5).

Table 5: Coefficient matrix of linear regression: teacher self-efficacy and perceived stress

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.872	.246		7.600	.000
Teacher perceived stress: Perceived helplessness	.121	.008	.581	15.215	.000
Teacher perceived stress: Lack of self-efficacy	.052	.014	.137	3.714	.000
Teacher self-efficacy: Motivating students	-.031	.009	-.127	-3.330	.001

The main factor which impacts burnout is perceived helplessness ($\beta=0,581$). Exhaustion significantly affects only perceived helplessness ($R^2 = 0.377$, $F(1, 425) = 257.726$, $p = 0.000$, $\beta = 0.614$).

5 Discussion

Differences in the characteristics of professional burnout experienced by teachers according to their educational level, work experience, and age

The research results revealed the highest scores for exhaustion and the lowest for cynicism. This may mean that when a teacher experiences professional burnout, exhaustion is the strongest. Exhaustion at both physical and psychological levels constitutes the core dimension of professional burnout. It is characterized as a state of physical and emotional exhaustion due to prolonged exposure to work-related problems (Mijakoski et al., 2022).

From our research results it is evident that at a time when the teacher experiences professional burnout, cynicism is observed as the weakest characteristic. Cynicism is described as resistance to change, the result of negative experience with earlier reforms, or no faith in change for the better. Cynicism is expressed by tendency to mistrust others, undermine positive motives of their actions, have a pessimistic outlook on the world (Chudzicka-Czupala et al., 2014).

In our study, teachers over 65 years old demonstrated significantly lower exhaustion levels than other age groups' teachers. Conversely, in previous studies younger teachers reported significantly higher emotional exhaustion than older teachers (Anderson & Iwanicki, 1984; Byrne, 1991; Russell et al., 1987). Noor and Zainuddin (2011), on the other hand, in their sample of female teachers found that older female teachers experienced more emotional exhaustion than younger teachers did. However, our study did not test the difference between teacher genders in the professional burnout variable, because actually more than three-fifths of the sample is female. These findings show that the demographic variable of age is not constant and cannot be a key argument in the assessment of teacher exhaustion.

In our study, no significant differences were found according to teachers' educational level or work experience, however significant differences were identified according to age for exhaustion and overall burnout level among teachers. In the study, age was the strongest predictor for emotional exhaustion and depersonalization, while teachers' rank is the best predictor for personal accomplishment. Mota and Rad (2023) found significant differences for sex, with men reporting higher exhaustion than women. Researchers found significant differences between other sociodemographic characteristics and burnout among Iranian teachers. However, the effect of demographic characteristics of teachers on exhaustion is not that

silent. The variety of exhaustion (in)dependencies on age in different countries allows us to assume that the relationship between exhaustion and the age of the teacher is contextual, i.e., is related to the specifics of the educational system of a particular country.

The correlates of exhaustion were identified according to socio-demographic factors such as sex, age, marital status, and school (organizational) and work-related factors among teachers, including the years of teaching, class size, job satisfaction, and the subject taught among Hong Kong teachers (Agyapong et al., 2022).

Occurrence of teacher self-efficacy and its differences according to the teacher's education, work experience, age and gender

Our research highlighted that the highest sums are for *Instruction/teaching* and *Cooperating with colleagues and parents* among Lithuanian teachers. De Jong et al. (2019) provide arguments that teacher collaboration in secondary schools can form a fruitful context for teacher professional learning. Short-term collaboration initiatives depend on the prior existence of collaborative cultures.

In our study, the lowest sum was found for *Motivating students*, and no significant differences were identified according to educational level in the sample of Lithuanian teachers. However, Can (2015) found that factor level is high, and age, educational level and status have significant effects on motivational factors, yet, gender, marital status and income are not influential on motivational factors among teachers in Turkey. Researchers highlighted that younger teachers and those holding a master's degree are more affected by motivational factors than the others. Such contrasting results between teachers of different schools show that demographic factors are important in assessing teacher self-efficacy.

Our research showed the significant differences according to age were identified for sub-scale *Cooperating with colleagues and parents*. Older teachers cooperate more effectively with colleagues and students than their younger colleagues in Lithuania. Collaborating with other relevant stakeholders such as parents, colleagues, and a school's leadership team is critical for creating a positive work environment. A positive workplace has the potential to contribute to teachers' professional wellbeing (Nwoko et al., 2023).

The significant differences according to work experience were identified for two following sub-scales: *Maintaining discipline* and *Cooperating with colleagues and parents*. Teachers who have worked in a school for 11–15 years and longer than 25 years are more effective in maintaining positive discipline in a classroom and cooperating with colleagues and parents than those who have 1–10 years and 16–25 years of work experience in a school in Lithuanian context.

Such results allow us to say that the teacher's practical experience in working with students at school is a strong factor that will be related to professionalism, competence, reliability and authority for the school community, and especially for

fellow teachers, student parents and students (Graham et al., 2020). However, it is difficult to find objective arguments why exactly such a distribution is based on the teacher's practical work experience in Lithuanian sample, because groups with 16–25 years of schoolteacher's experience cannot be called inexperienced. Thus, another assumption would be that the teacher's work experience in the school is not a key argument for self-efficacy in terms of maintaining positive discipline and cooperating with colleagues and parents. Such an assumption is justified by the result from our research that no significant differences were identified for other self-efficacy sub-scales according to the years of work experience.

Characteristics of the perceived stress of teacher and differences between perceived stress according to the teacher's educational level, years of work experience, age and gender

Our study revealed that the most teachers in the Lithuanian sample perceive a moderate stress level in the school environment. Young teachers' stress levels were significantly higher in comparison to teachers over 65 years old who perceived lower levels of stress. Kavita & Hassan (2018), in their study, highlighted that teachers who have teaching experience between 11–15 years experienced more stress, and teachers aged between 31–50 years experienced more stress compared to the younger age group (20–30 years) and older age group (51–60 years). Thus, the teacher's age, as one factor, is not an argument in assessing the teacher's perceived stress level. However, by linking age and work experience as one, such a complex factor could be evaluated as having an impact on the level of stress experienced by the teacher at school. This assumption is confirmed by the result of our research, that perceived stress level is not significantly related to teacher work experience.

Research findings in our study showed that perceived stress level is not significantly related to the educational level of a teacher. Malik et al. (1991) provide arguments that grade level taught, not the educational level of a teacher, has a negative effect on teacher stress, whereas teaching experience did not account for a significant portion of the variance in the dependent variable. These results suggest that it might be beneficial to school administrators and others to focus more on possibly strong effects of grade level taught on teacher stress, rather than concerning themselves with alleviating the stress experienced by novice teachers. Teachers with more experience (more than 30 years) had the lowest scores in emotional exhaustion, which is related to perceived stress (Teles et al., 2020). The evidence based on these studies allows us to say that the level of education of the teacher is not an influencing factor on the experience of stress.

Relationships between teachers' professional burnout, self-efficacy and perceived stress

Our study revealed that overall burnout has a significant correlation with self-efficacy and stress among Lithuanian teachers. The crucial factor influencing 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 (Smetackova, 2017).

However, correlations between burnout and self-efficacy are positive, however weak, in Lithuanian sample. This may reflect the tendency that the more effective teachers are in teaching, cooperating, motivating students, and maintaining positive discipline, the more cynical they are; inadequate, but at the same time more exhausted. Meanwhile Savaş et al. (2015) found an inversely proportional result: the correlation test between teacher self-efficacy scores and burnout scores of the participants put forward a medium, negative and significant correlation between these variables. This result indicates that the increase of participants' scores in self-efficacy was accompanied with a significant decrease in burnout.

Our study revealed that overall burnout might be significantly related to perceived helplessness and insufficiency of self-efficacy. It shows that teachers' emotions and the burnout, stress and self-efficacy are interrelated (Burić et al., 2020).

6 Conclusions

This study adds to our understanding of socio-emotional professional being of teachers in Lithuania in regard to professional burnout, self-efficacy and perceived stress in the teaching profession.

The results showed the following tendencies regarding Lithuanian teachers' professional burnout, self-efficacy and perceived stress:

Lithuanian teachers' age as an independent variable does not have a significant effect on the level of teacher experienced exhaustion. Yet, when the teacher's age and work experience are integrated and treated as one complex variable, it becomes meaningful in explaining teacher exhaustion and professional burnout. This shows that it is important to contextualize the quantitative variables in specific context, and to interpret the correlations without breaking away from the particular context by seeing it through specific educational system and educational institutions. Lithuanian teachers' self-efficacy is not related significantly to educational level and age. However, work experience makes the difference in teacher's self-efficacy: teachers who have more work experience tend to feel more effective in maintaining positive discipline in the classroom when working with students, and collaborate more effectively with fellow teachers and parents.

Overall, Lithuanian teachers perceive moderate level of stress. Stress level is related to the teacher's age: younger teachers perceive higher level stress than older teachers. However, this relationship can be objectively explained only by connecting the teacher's age with their professional practical experience. Age itself, without pedagogical experience, has no significance in explaining the perceived stress experienced by the teacher in the school environment.

Teacher powerlessness and perceived stress have significant positive relationships with the components of professional burnout, cynicism, inadequacy and general burnout. This shows the need in the education system and the school environment to realize the importance of the socio-emotional health of the teacher. Therefore, it is necessary to develop teachers' socio-emotional competences, helping them to strengthen their resistance to stress (resilience) and to develop social and professional flexibility, adaptability and other general/generic/core competences, which create prerequisites for teachers to successfully navigate in the professional field and effectively perform professional duties and obligations. It also prevents teachers from leaving the profession early, or retiring early.

This study has empirical and practical implications: it is relevant to study the problems of teachers' professional burnout, stress, self-efficacy in connection with contextual qualitative variables and specifying the interrelationships between variables in order to identify specific problems and provide empirical evidence to solve them. From a practical point of view, the results show that the socio-emotional state of teachers should not be dismissed as an insignificant aspect. Therefore, the school administration must make efforts to develop a positive school climate which supports the socio-emotional state of the teacher. At the same time, the school administration must pay greater attention to the development of teachers' socio-emotional competences, without ignoring their importance in the teacher's professional life.

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