

CAUSES, THE IMPACT OF STRESS AND WAYS OF DEALING WITH THE STRESS OF SUBJECT TEACHERS IN PRIMARY SCHOOL AND THE ROLE OF PROFESSIONAL ASSOCIATE PEDAGOGUE

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Abstract

The paper deals with the problem of teacher stress and teachers' attitudes towards stress exposure. The aim of the research was to examine the sources of stress in primary school teachers, the ways in which they deal with stress, and how stress affects them. Also, this research aimed to reveal the opinion of the respondents about the professional associate - pedagogue and how he/she can help them in some segments of work. The research was conducted on a sample of 346 subject teachers in primary school. The results were processed using the SPSS program using descriptive and inferential statistics procedures (t-test for independent samples and correlation analysis). The results of the research shows that teachers believe that underestimation in society is the biggest source of stress (AS = 4.1). They also point out to a large extent political interference (AS = 3.88), injustice in employment (AS = 3.76), and insufficient rewarding of excellence (AS = 3.74). Research has also shown that stress has the greatest impact on teacher health (AS = 3.03). As for coping techniques, they answered that they do not blame themselves for everything that happens at school (AS = 3.73) and that they set a time for rest (AS = 3.55). When it comes to issues related to the professional associate - pedagogue, most respondents believe that the pedagogue should deal more with students and less with administration (AS = 4.2). T-test for independent samples revealed statistically significant differences in student disobedience and classroom discipline ($p < 0.001$) and parents' treatment of teachers ($p < 0.01$) with respect to age. The results of the research show that many factors affect teachers' stress, from society, parents to classroom work, and such a situation significantly affects teachers. Emphasis on the care and satisfaction of workers should be an imperative of every job, including teaching, and it should go from the school level, where it would be more dedicated to cooperation and respect, to external associates who would help teachers to the state that would change its approach to education.

Keywords: sources of stress, coping with stress, the impact of stress, pedagogue

Sažetak

Rad se bavi problemom učiteljskog stresa i stavovima učitelja o izloženosti stresu. Cilj istraživanja bio je ispitati izvore stresa kod učitelja predmetne nastave u osnovnoj školi, načine na koje se nose sa stresom te kako stres utječe na njih. Također, istraživanjem se želio dobiti uvid u mišljenje ispitanika o stručnom suradniku – pedagogu i mogućnostima pružanja pomoći u nekim segmentima posla. Istraživanje je provedeno na uzorku od 346 učitelja predmetne nastave u osnovnoj školi. Rezultati su obrađeni pomoću programa SPSS postupcima deskriptivne i inferencijalne statistike (t-test za nezavisne uzorke te korelacijska analiza). Rezultati istraživanja pokazuju da učitelji smatraju da je podcijenjenost u društvu najveći izvor stresa (AS = 4,1). U velikoj mjeri ističu i političko uplitanje (AS = 3,88), nepravdnost prilikom zapošljavanja (AS = 3,76) te nedovoljno nagrađivanje izvrsnosti (AS = 3,74). Istraživanje je također pokazalo da stres najviše utječe na zdravlje učitelja (AS = 3,03). Što se tiče tehnika suočavanja sa stresom odgovorili su da ne krive sebe za sve što se dogodi u školi (AS = 3,73) i da si odrede vrijeme za odmor (AS = 3,55). Kada je riječ o pitanjima koja se odnose na stručnog suradnika – pedagoga, većina ispitanika smatra da se pedagog treba više baviti učenicima a manje administracijom (AS = 4,2). T-testom za nezavisne uzorke utvrđene su statistički značajne razlike kod neposluha učenika i razredne discipline ($p < 0,001$) i ophođenja roditelja prema učiteljima ($p < 0,01$) s obzirom na dob. Rezultati istraživanja pokazuju da mnogi čimbenici utječu na stres učitelja, od društva, roditelja pa sve do rada u učionici, što značajno utječe na učitelje. Naglasak na brizi i zadovoljstvu radnika trebao bi biti imperativ svakog posla, pa tako i učiteljskog, što je odgovornost same škole u njegovanju suradničkih odnosa i uvažavanja, potom vanjskih suradnika u pružanju pomoći učiteljima, a zatim i države koja bi trebala promijeniti svoj pristup školstvu.

Ključne riječi: izvori stresa, pedagog, suočavanje sa stresom, utjecaj stresa

INTRODUCTION

Faced with changes in both the world and society, many professions are undergoing radical changes, including one of the oldest professions, which is the teaching profession. Changes in education are happening all the time, and the school year 2019/2020 was especially relevant due to two major events, namely the teachers' strike and the transition to online teaching. These two events have spawned some problems that teachers face and can be a source of their stress and strongly influence them. Teachers in many studies report high stress at work, and if this stress is combined with poor coping strategies, major consequences can be suffered (Herman, Prewett, Eddy, Savala, and Reinke, 2020). One of the most common definitions of stress is that of Kyriacou (2001), which states that stress is a condition in which teachers are angry, depressed, anxious, and nervous as a result of their occupation. Stress observed from the perspective of a pedagogical point of view encompasses social situations in the school and work tasks related to the teacher's personality and his ability to overcome them (Foro, 2015). Nasser Abu Alhiya (2015) states that teachers experience stress when the complexity of a situation exceeds their ability and they cannot cope with it. There are various problems in schooling that can cause teachers to experience stress, ranging from the ones outside of school to the state of the school itself.

Thus Kyriacou (2001) cites poor student attitudes toward school, lack of motivation, disobedient students and classroom discipline, rapid curriculum changes, poor working conditions, deadline pressures, peer relationships, and feelings of underestimation in society. Another source of stress is the school's professional leadership. Research has shown that teachers working in an environment with professional leadership (principal) report less stress than those working in schools with unprofessional leadership (Hariss, 1999, according to Šimunović and Turk, 2012; Prilleltensky, Neff, and Bessell, 2016). Greenberg, Brown, and Abernavoli (2017) also cite the impossibility of involvement in school decision-making and conflict with management if they choose to engage in decision-making. Slišković (2011) also states that work outside the legal framework can be one of the sources of stress because work and social life cannot be balanced, so work spills over into social life. Clipa (2017) also adds high administrative requirements and fulfillment of documentation, poor salaries, insufficient support in the inclusion of students with disabilities, and various seminars and training that take place outside working hours. Richards (2012) also points out disrespect for those outside the teaching profession as another source of stress.

Taking into account all possible sources of stress, the question arises as to what kind of impact can such exposure to stress leave. Greenberg, Brown, and Abernavoli (2017) state that constant exposure to stress can have a major impact on a teacher's physical health. They point out that they feel headaches, abdominal pain, and have high blood pressure (Richards, 2012). Other authors add that teacher exposure to stress may affect poorer student grades and their satisfaction with school (Ramberg, Brolin Laftman, Akerstedt, and Modin, 2019; Herman, Prewett, Eddy, Savala, and Reinke, 2020). Research has shown that teachers who had high levels of stress at the beginning of the year later showed less effective teaching strategies, did not give clear instructions, and did not know how to manage the classroom (Greenberg, Brown, and Abernavoli, 2017). Teachers in such situations create a negative attitude towards school and may become ineffective (Clipa, 2017), cynical, emotionally exhausted, and depressed (Mearns and Cain, 2003). The impact of stress is manifested in another trend, and that is the trend of leaving the teaching profession in some countries (Greenberg, Brown, and Abernavoli, 2017). Richards (2012) also states that stress negatively affects teachers' private lives.

There are numerous studies and papers that list the ways teachers can deal with stress. Thus Trankiem (2009) states that teachers should make a list of stressful situations and try to find a solution for each. Reić-Ercegovac, Koludrović, and Jukić (2010) believe that teachers should be encouraged to develop emotional competencies in order to cope better with stress. It has also been proven that good cooperation between students, parents, and teachers can reduce stress (Slavić and Rijavec, 2015). Kyriacou (2001) mentions two techniques: the immediate action technique, which reveals what causes stress, and the palliative technique, in which the sources of stress are only mitigated. Tummers (2015) singles out six tips on how to reduce stress, and they relate to reducing overtime, finding some more hobbies in life, realizing that they can't always solve everything, finding support in the workplace, being aware of how they

spend their time and not to talk about school after school. Clipa (2017) also adds going to a psychologist and taking medications that help. Richards (2012) points out that teachers need to set aside time for themselves, exercise, eat healthily, get some sleep, set aside time for family and friends, meditate, and include humor in teaching. The educator, as a professional associate of the broadest profile in schools, can be of great help to teachers in many of their problems at school. These problems can be easily solved if the teacher and the pedagogue build a collaborative relationship in which they will discuss the problems together and accept the suggestions (Jurić, 2004).

EMPIRICAL RESEARCH METHODOLOGY

Goal

The aim of the research was to examine the sources of stress in primary school teachers, the ways in which they deal with stress, and how stress affects them. Also, this research sought to gain insight into the opinion of respondents about the professional associate - pedagogue and how he can help them in some segments of work.

Hypotheses

H1 - The most common sources of stress are expected to be related to student behavior

H2 - Stress is expected to be as most influential on teachers' health and their relationship with students and other colleagues

H3 - Teachers are considered to mainly use palliative techniques in dealing with stress

H4 - Teachers are expected to work most closely with the educator on issues related to students and documentation

H5 - Statistically significant differences are expected in the sources of stress, the impact of stress, ways of coping with stress, and cooperation with the pedagogue with regard to the age of the respondents and the place where they work

H6 - The connection between the sources of stress, the stress impact on teachers, the desire to cooperate with a professional associate - pedagogue, and work experience is expected

Respondents

The research was conducted on a sample of 346 subject teachers in primary school aged 24 to 64 years. Respondents are members of the Facebook group Nastavnici.org and 45 Minutes and employees of three primary schools in the area of Đakovo. Of the total number of respondents, 29 are male and 317 are female. Most respondents have 0 to 5 years of work experience (N = 103), and the least number of respondents have more than 30 years of work experience. Most teachers work in one school (N = 284), followed by two schools (N = 55),

three teachers in three schools, and two teachers in more than three schools. Most teachers work in schools with more than 500 students (N = 106). The majority of respondents work in the city (N = 207), while a smaller part work in the village (N = 90) and the suburbs (N = 11).

Instrument

For the purposes of this research, a survey questionnaire was developed which was divided into five parts. The first part of the survey questionnaire consists of eight questions with general information about teachers: age, gender, place of work, years of experience, the subject they teach, the number of schools they work in, and the type of contract they have. The second part of the survey questionnaire refers to the sources of teacher stress and contains 14 questions. Respondents were asked to circle on the Likert scale (1 - strongly disagree, 2 - generally disagree, 3 - neither agree nor disagree, 4 - mostly agree and 5 - strongly agree) how much they agree with the statement that a particular variable is a source of stress for them. The third part of the survey questionnaire consisted of 12 questions on the impact of stress on teachers. Respondents were supposed to mark the value that applied to them on the Likert scale (1 - Not at all, 2 - Inconspicuous, 3 - Sensitive, 4 - Disruptive, 5 - Disabled). The fourth part of the questionnaire consisted of eight questions related to how teachers deal with stress. Respondents were asked to circle on the Likert scale (from 1 - I do not agree at all to 5 - I completely agree) how much they agree with the stated statements. The last part of the questionnaire referred to the attitudes of teachers about the professional associate - pedagogue and the form of help he can provide. Respondents were asked to circle the extent to which they agree with the above statements on the Likert scale (from 1 - I do not agree at all to 5 - I completely agree). Also, under each part was the possibility of open answers.

Procedure

The survey was conducted during November 2020 using a survey questionnaire developed via the Google form. The questionnaire was delivered to two teacher groups on Facebook and employees in three schools in the Đakovo area. The questionnaire was set up on 23 November and respondents were able to complete it by 30 November. Respondents were told that the survey was anonymous and that the data would be processed in bulk. It was also pointed out that if they have questions or ambiguities regarding the survey questionnaire, that they can contact the researcher. The collected data were entered and processed using the statistical program for computer data processing SPSS by procedures of descriptive and inferential statistics (ANOVA, t-test, and correlation analysis).

The results

The results of descriptive statistics of sources of stress (Table 1) show that teachers mostly agree with the statement that underestimation in society is a source of stress (AS = 4.1). Teachers also point out to a large extent political interference (AS = 3.88), injustice in em-

ployment (AS = 3.76), and insufficient reward for excellence (AS = 3.74). When we add up the average values of the variables, students' interest in work, students' disobedience and class discipline, and students' inviolability, we can conclude that teachers generally agree or completely agree that these variables are a source of stress (AS = 3.57). As the least source of stress, teachers mentioned underestimation in the team (AS = 2.6) and poor attitude in the team (AS = 2.82). Analyzing the issue of open-ended type, some other sources of stress that are most mentioned have been singled out. One of them is the problem of the school principal. Teachers state in a large number of responses that they suffer mobbing by the principal, that the principal runs the school poorly, and that he is often elected politically. Another problem that teachers cite is too much documentation that they have to keep, which takes up time they could devote to students. The last problem mentioned is inadequate working conditions, poor infrastructure, and lack of basic materials for work.

Table 1 Representation of the average value of the agreement with statements about the sources of teacher stress

Variable	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly disagree		AS	Σ	
	N	%	N	%	N	%	N	%	N	%		N	%
Students' lack of interest in work	14	4.0	64	18.5	70	20.2	137	39.6	61	17.6	3.48	346	100
Student disobedience and classroom discipline	26	7.5	73	21.1	54	15.6	118	34.1	75	21.7	3.41	346	100
Insufficient teacher salary	18	5.2	52	15.0	80	23.1	104	30.1	92	26.6	3.58	346	100
Underestimation in society	15	4.3	24	6.9	43	12.4	94	27.2	170	49.1	4.1	346	100
Bad relationship in the team	80	23.1	61	17.6	91	26.3	70	20.2	44	12.7	2.82	346	100
Underestimation in the collective	93	26.9	80	23.1	79	22.8	60	17.3	34	9.8	2.6	346	100
Parents' treatment of teachers	16	4.6	29	8.4	82	23.7	107	30.9	112	32.4	3.78	346	100
Untouchability of students	20	5.8	27	7.8	67	19.4	114	32.9	118	34.1	3.82	346	100
Misunderstanding the instructions of higher authorities	26	7.5	48	13.9	74	21.4	108	31.2	90	26.0	3.54	346	100
Political interference	15	4.3	37	10.7	58	16.8	102	29.5	134	38.7	3.88	346	100

Variable	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly disagree		AS	Σ	
	N	%	N	%	N	%	N	%	N	%		N	%
Injustice in employment	18	5.2	39	11.3	78	22.5	83	24.0	128	37.0	3.76	346	100
Insufficient autonomy in work	37	10.7	78	22.5	95	27.5	78	22.5	58	16.8	3.12	346	100
Poor criteria for promotion	22	6.4	36	10.4	98	28.3	99	28.6	91	26.3	3.58	346	100
The insufficient reward for excellence	17	4.9	34	9.8	85	24.6	96	27.7	114	32.9	3.74	346	100

Table 2 Representation of the average value of the level of stress impact on teachers

Variable	Not at all		Imperceptibly		Noticeably		Disturbing		Disabling		AS	Σ	
	N	%	N	%	N	%	N	%	N	%		N	%
My sleep	41	11.8	93	26.9	119	34.4	77	22.3	16	4.6	2.81	346	100
My preparation for classes	34	9.8	103	29.8	145	41.9	61	17.6	3	0.9	2.7	346	100
Going to work	64	18.5	139	40.2	99	28.6	42	12.1	2	0.6	2.36	346	100
Entering in classroom	119	34.4	141	40.8	69	19.9	16	4.6	1	0.3	1.96	346	100
My teaching	85	24.6	149	43.1	88	25.4	23	6.6	1	0.3	2.15	346	100
Relationship with students	90	26.0	146	42.2	89	25.7	20	5.8	1	0.3	2.12	346	100
Relationship with my colleagues	70	20.2	148	42.8	103	29.8	23	6.6	2	0.6	2.25	346	100
Contribution to the team	77	22.3	147	42.5	96	27.7	21	6.1	5	1.4	2.2	346	100
Relationship with my family	75	21.7	84	24.3	124	35.8	52	15.0	11	3.2	2.54	346	100
My health	30	8.7	80	23.1	117	33.8	87	25.1	32	9.2	3.03	346	100
My future	42	12.1	78	22.5	128	37.0	71	20.5	27	7.8	2.89	346	100
My desire to do work as a teacher	57	16.5	82	23.7	104	30.1	76	22.0	27	7.8	2.8	346	100

The results of descriptive statistics on the impact of stress on teachers (Table 2) show that stress has the greatest impact on teachers' health (AS = 3.03) and on their sleep and sleep (AS = 2.81). It should also be noted that teachers generally pointed out that stress significantly affects their future (AS = 2.89) and desire to do the teaching (AS = 2.8). It was found that stress had the least effect on their entry into the classroom (AS = 1.96), relationship with students (AS = 2.12), and teaching (AS = 2.15). Analyzing open-ended questions, it was found that stress affects their health. Some of the impacts are weight loss and gain, heart problems, back pain, stomach upsets, migraines, vision loss, panic attacks, and depression.

Table 3 Representation of average values of stress coping technique in teachers

Variable	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		AS	Σ	
	N	%	N	%	N	%	N	%	N	%		N	%
I write down the stressful situations that happened to me	267	77.2	50	14.5	22	6.4	4	1.2	3	0.9	1.34	346	100
I try to reduce overtime work	42	12.1	57	16.5	88	25.4	116	33.5	43	12.4	3.18	346	100
I try not to talk about school after school	30	8.7	48	13.9	72	20.8	145	41.9	51	14.7	3.4	346	100
I seek the help of experts	154	44.5	87	25.1	61	17.6	31	9.0	13	3.8	2.02	346	100
I read literature on ways to deal with stress	122	35.3	71	20.5	75	21.7	55	15.9	23	6.6	2.38	346	100
I participate in lectures on stress education	128	37.0	87	25.1	79	22.8	41	11.8	11	3.2	2.19	346	100
I set a time to rest	26	7.5	50	14.5	70	20.2	109	31.5	91	26.3	3.55	346	100
I don't blame myself for everything that happens at school	17	4.9	45	13.0	64	18.5	108	31.2	112	32.4	3.73	346	100

The results of descriptive statistics of coping techniques (Table 3) show that from the offered answers they chose not to blame themselves for everything that happens at school (AS = 3.73), to determine the time for rest (AS = 3.55). and to try not to talk about school after

school (AS = 3.4). Respondents were the least likely to record the least stressful situations that occurred (AS = 1.34) and sought professional help (AS = 2.02).

Analyzing open-ended questions, the two most common types of answers can be singled out. The first group of answers is related to relaxation techniques, where respondents single out that they most often exercise, read books, meditate and try to enjoy life. The second group of answers is related to the separation of private from business life, where respondents state that the two should never be mixed because then the family suffers.

Table 4 Representation of the average value of variables related to cooperation with a professional associate pedagogue

Variable	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree		AS	Σ	
	N	%	N	%	N	%	N	%	N	%		N	%
It helps me sort out the paperwork	115	33.2	74	21.4	56	16.2	66	19.1	35	10.1	2.51	346	100
He advises me on matters of class discipline	101	29.2	67	19.4	66	19.1	71	20.5	41	11.8	2.66	346	100
He advises me on parenting issues	80	23.1	66	19.1	60	17.3	91	26.3	49	14.2	2.9	346	100
It supports me in preparing classes	175	50.6	62	17.9	62	17.9	31	9.0	16	4.6	2.0	346	100
He advises me on school-related issues	91	26.3	62	17.9	67	19.4	82	23.7	44	12.7	2.79	346	100
Organizes workshops to improve the work of the school	94	27.2	61	17.6	77	22.3	70	20.2	44	12.7	2.74	346	100

The results of descriptive statistics of cooperation with a professional associate - pedagogue (Table 4) show that the pedagogue and the teacher most often cooperate on issues related to relations with parents (AS = 2.9). The least number of respondents agree with the statement that the pedagogue provides them with support regarding the preparation of classes (AS = 2.0), as many as 175 respondents (50.6%) stated that they do not agree at all with this statement. Teachers pointed out the most that they would like the pedagogue to deal more with students and less with administration (AS = 4.23), as many as 193 (55.8%) respondents stated that they fully agree with the above statement. Regarding the statement that educators

should give concrete examples of how to solve a problem, as many as 259 (75%) respondents generally agree with this statement or completely agree with this statement. Analyzing open-ended questions, we can single out the teachers' key statements about the professional associate - pedagogue. Teachers most often state that the educator places himself/herself above them, does not cooperate with them, and often supervises them. They also cite the problem of the incompetence of some pedagogues, some of whom came to work through the political line and do not know how to do their job. Teachers also want the pedagogue to respect them more, deal less with administration, and more with students.

Table 5 T-test results for independent samples

Variable	age	N	AS	SD	t
Student disobedience and classroom discipline	age (to 40 years)	226	3.59	1.21	4.75***
	Age (more than 40)	120	3.08	1.24	

Note: $p < 0.05^*$; $p < 0.01^{**}$; $p < 0.001^{***}$

Variable	age	N	AS	SD	t
Parents' treatment of teachers	age (to 40 years)	226	3.92	1.08	3.11**
	age (more than 40)	120	3.53	1.17	

Note: $p < 0.05^*$; $p < 0.01^{**}$; $p < 0.001^{***}$

Prior to performing the t-test, the age-related variable was recoded. Respondents were divided into two groups: those up to 40 years and those older than 40 years. The T-test for independent samples was used to examine the differences in sources of stress between the two groups. A statistically significant difference was found in student disobedience and class discipline with respect to age ($t = 4.75$, $p < 0.001$). Higher stress was expressed in those up to 40 years ($AS = 3.59$) than in those older than 40 years ($AS = 3.08$). Also, a statistically significant difference was found in the treatment of parents towards teachers with regard to age ($t = 3.11$, $p < 0.01$), with higher stress expressed in those younger than 40 years ($AS = 3.92$) than in those older than 40 years ($AS = 3.53$).

Table 6 Correlation analysis

Before conducting the correlation analysis, all variables on the sources of stress, the impact of stress, coping with stress, cooperation with the pedagogue, and the desire to cooperate were summed up and new variables were created.

Variable		The impact of stress	Coping with stress	Cooperation with the pedagogue	Years of service	Desire for cooperation
Sources of stress	r	0.48**	0.17**	-0.04	-0.08	0.23**
	N	346	346	346	346	346
The impact of stress	r	-	0.18**	-0.03	-0,09	0.25**
	N	-	346	346	346	346
Coping with stress	r	-	-	0.11*	-0.01	0.18**
	N	346	346	346	346	346
Cooperation with the pedagogue	r	-	-	-	-0.17**	-0.02
	N	346	346	346	346	346
Years of service	r	-	-	-	-	-0.01
	N	346	346	346	346	346

Note: $p < 0.05^*$; $p < 0.01^{**}$; $p < 0.001^{***}$

Table 6 shows the analysis of the relationship between sources of stress, the impact of stress, coping with stress, cooperation with the pedagogue, and years of experience. A weak positive correlation was found between the source of stress and the impact of stress ($r = 0.48$, $p < 0.01$), ways of coping with stress ($r = 0.17$, $p < 0.01$) and the desire to cooperate with the pedagogue ($r = 0.23$, $p < 0.01$). A weak positive correlation was also found between the influence of stress and coping with stress ($r = 0.18$, $p < 0.01$) and the desire to cooperate ($r = 0.25$, $p < 0.01$). A weak positive correlation was also found between coping with stress and cooperation with the pedagogue ($r = 0.11$, $p < 0.05$) and the desire to cooperate ($r = 0.18$, $p < 0.01$). A negative low correlation was found only between cooperation with the pedagogue and years of service ($r = -0.17$, $p < 0.01$).

DISCUSSION

H1 - The most common sources of stress are expected to be related to student behavior

Comparing the results of stress sources, teachers most agree with the statement that underestimation in society is a source of stress (AS = 4.1). It is followed by political interference (AS = 3.88) and injustice in employment (AS = 3.76). We can conclude that the most common sources of stress are those related to respect for the profession and the work of teachers and respect for their qualities. Guglielmi and Tatrow (1998) also state that teachers are dissatisfied with their professional status and are often the target of criticism, and the lack of adequate recognition and loss of reputation of the profession is also mentioned by Marušić (2007). When we add up the average values of the variables student interest in work, student disobedience, and class discipline, and student intangibility, we can conclude that teachers generally agree or fully agree that these variables are a source of stress (AS = 3.57). And in research conducted by Richards (2012), student lack of motivation and the need for commitment to each student individually are among the most common sources of stress. As the least source of stress, teachers cited underestimation in the collective (AS = 2.6) and poor attitude in the collective (AS = 2.82). It is the good atmosphere in the team that can reduce the impact of other sources of stress. Peer suggestions and encouragement can help in many segments of work (Kiryacou, 2001). In the open answers, the problem of a bad relationship with the principal and poor school management was most often singled out. Similar results were obtained by Prilleltensky, Neff, and Bessell (2016) who argue that a principal with his or her poor leadership style, organization, and demands can create a poor and unfavorable climate in the school. The principal should be a person who will encourage people, give them suggestions, not control and create a bad atmosphere.

H2 - Stress is expected to be as most influential on teachers health and their relationship with students and other colleagues

Comparing the results of descriptive statistics on the impact of stress on teachers, it was found that it has the greatest impact on teachers' health (AS = 3.03), on their sleep and sleep (AS = 2.81). It should also be noted that teachers generally pointed out that stress significantly affects their future (AS = 2.89) and desire to do the teaching (AS = 2.8). Results that talk about the impact of stress on physical health were also obtained by Greenberg, Brown, and Abe-navoli (2017) in their study where as many as 46% of respondents answered that they suffer from chronic fatigue, and 51% said they have poor sleep and poor health. Radeka and Sorić (2006) came to the result that about 5% of teachers are very dissatisfied with the job, and 7.36% would never decide on the job again. Although the desire to work as a teacher may be decreasing, the situation in Croatia is such that it is another relatively stable job and that is why it is rare to give up.

H3 - Teachers are considered to mainly use palliative techniques in dealing with stress

The results of descriptive statistics of coping techniques show that teachers answered that they do not blame themselves for everything that happens at school (AS = 3.73), that they set a time for rest (AS = 3.55), and that they try not to talk about school (AS = 3.4). Also, in open-ended responses, they emphasized that they more often practice yoga, practice, walk, or read. Similar recommendations such as meditation, rest, exercise, and time-taking for themselves are cited by Richards (2012) and Jagarinec (2019) in their research. Respondents were the least likely to write the least stressful situations that occurred (AS = 1.34) and seek professional help (AS = 2.02). Among the methods of coping with stress, the least common are those methods that directly reveal what causes stress and how to deal with stress and the most commonly used techniques that mitigate the effects of stress and relax (Kyriacou, 2001).

H4 - Teachers are expected to work most closely with the educator on issues related to students and documentation

The results of descriptive statistics of cooperation with a professional associate - pedagogue show that the pedagogue and the teacher most often cooperate on issues related to relations with parents (AS = 2.9). The least number of respondents agree with the statement that the pedagogue provides them with support in preparing classes (AS = 2.0). Teachers pointed out the most that they would like the pedagogue to deal more with students and less with administration (AS = 4.23). The educator, as an expert, should take equal care of students, teachers, and school development. Due to the vaguely defined responsibilities of a pedagogue, he/she often knows how to be an administrative employee (Staničić and Resman, 2020), which teachers point out as bad in their answers. Sometimes because of all this, there is no time for students, but again there are individuals who do not provide enough support to teachers and students even though they can. Also, some pointed out a bad relationship with an educator who does not respect them as professionals, often puts himself/herself above them, and often does not understand their problems. Such behavior cannot be tolerated because the pedagogue needs to be on a par with teachers and his professional ethics implies that he/she respects all colleagues as professionals (Staničić and Resman, 2020).

H5 - Statistically significant differences in sources of stress are expected with regard to the age of the respondents and the place where they work

The results of the t-test for independent samples found statistically significant differences with respect to age in the two variables, student disobedience and class discipline ($p < 0.001$) and parental treatment of teachers ($p < 0.01$). Koludrović (2009) states that some research shows that younger teachers are more stressed than older ones because they initially had unrealistic

expectations, while other research shows the opposite. It is also possible that colleagues with more experience have already encountered a multitude of situations that no longer created stress for them. The results of the t-test for independent samples showed that there were no statistically significant differences in the sources of stress with respect to the workplace. Research conducted by Tomašević, Horvat, and Leutar (2016) also confirms the thesis that there are no statistically significant differences between teachers working in the countryside and those working in the city. The results of research conducted by Millicent and Sewell (1999) show different results where teachers who worked in urban schools showed higher levels of stress than teachers who worked in rural schools. The differences were in poorer working conditions, inadequate work equipment, and poor relations with colleagues. The results in this study can be explained by the insignificant difference between rural and urban schools, where both are equally equipped and have equal working conditions.

H6 - The connection between the sources of stress, the impact of stress on teachers, the desire to cooperate with a professional associate - pedagogue, and work experience is expected

Correlation analysis showed a significant positive correlation between the desire to cooperate with the pedagogue and the source of stress ($p < 0.01$), the impact of stress ($p < 0.01$), and coping strategies ($p < 0.01$). A positive low correlation was also found between cooperation with the pedagogue and coping with stress ($p < 0.05$). We can explain this result by the fact that teachers who are more faced with stress are the ones who need more help, and the pedagogue is the one who can give them support in some segments of their work and therefore want to cooperate more. Also, those who had greater cooperation and felt that the educator was helping them were more likely to face stress. A negative low correlation was observed between the cooperation with the pedagogue and the years of service ($p < 0.01$). Often, even in open answers, teachers with many years of experience pointed out that they do not want to listen to someone who is much younger than them and who does not have that much experience. They also pointed out that everything that this pedagogue would know if they knew how to solve it. Younger colleagues often resort to the help of professional services until they manage to cope at school.

CONCLUSION

The paper deals with the issue of teacher stress and cooperation with a professional associate - pedagogue. The second, third, and sixth hypotheses were confirmed, the fifth was partially confirmed, while the first and fourth were rejected. Research has shown that the greatest stress in teachers is caused by underestimation in society, which is a much bigger problem than insufficient salaries or student behavior. It is a man's sense that someone appreciates

him and the work that encourages him to work harder. Stress affects their health the most, where teachers have given some worrying answers. Such a situation should not be ignored and teachers should be offered help in this regard. Research has shown that teachers use coping strategies, so they mostly rest, read, don't think about school after school, run and exercise. It should be noted that the pedagogue in a large number of schools is the only professional associate in schools and that with good cooperation the pedagogue and the teacher could solve many problems that teachers cite as stressful. Teachers expressed a desire for greater cooperation with the pedagogue and for him/her to be more involved in the work of the school. Future research should focus on interviews and focus groups with teachers, as teachers in large numbers answered the open-ended question posed in the questionnaire and presented many problems that could be learned more about this type of research. Furthermore, all this should be applied in practice and through workshops, groups, and daily cooperation to improve the situation as it is now.

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