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The Relationship between School Climate, Self-Esteem and Coping Strategies among Secondary School Teachers and Headmasters

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ABSTRACT

The aim of the research was to map the coping strategies used by secondary school teachers and headmasters and at the same time to reveal the correlation with the school climate, self-esteem, and other variables. A questionnaire battery was used consisting of OSI-R (Inventory of Occupational Stress), which evaluates emotional and cognitive stress management and coping strategies (personal resources for coping with stress), one-dimensional assessment scale to determine the social climate among the teaching staff, and the Rosenberg self-esteem scale. The research sample consisted of 250 secondary school teachers and 377 headmasters from the Czech Republic. The existence of a significant positive relationship was confirmed between a positive perception of the school climate and all coping strategies - social support, relaxation, self-care, and rational/cognitive coping. Headmasters have significantly higher self-esteem compared with secondary school teachers and they have a significantly better perception of the school climate than the group of teachers.

Keywords
Coping Strategies, Headmasters, Social Climate, Stress, Teachers

Introduction

The accelerating pace of work but also personal life can lead to many factors that have a negative effect on an individual's health. Undoubtedly, one of these factors is stress – it can be assumed that increasing workload and stress among teachers may lead to poor work performance, i.e. quality of teaching, and may also result in a negative perception of the climate in the workplace. In this paper, we therefore focused on evaluating the school climate of secondary school teachers and principals in relation to their self-esteem and stress management.

Literature Review

The term climate comes from Greek and refers to atmospheric conditions of a specific zone; idiomatically we can speak of an atmosphere in an environment. In an educational environment, we can speak of a school climate, teaching staff climate, or class climate. The school climate is affected by a number of factors, such as the place where the school is located, size of the school, number of students, specialization of the school (languages, sport...), structure of the teaching staff, etc. It includes the overall quality of the school environment and comprises the following dimensions:

- *Ecological* (material and aesthetic aspects of the school);
- *Demographic* (people in the school in terms of their qualities and competences);
- *Social* (methods of communication and cooperation between individuals and groups in the school);
- *Cultural* (value models and norms, cognitive and evaluation procedures, public opinion, symbolism of the school) [1].

The school climate does not originate by itself and at once, but is shaped over a long period of time. According to Grecmanová [2] *"the climate originates as a reflection of objective reality (environment) in the subjective perception, experiencing and evaluation of its assessors."* It consists of variables that first need to be identified and investigated with respect to possible correlations. The climate should always be assessed as a whole rather than a mere sum of parts. This also applies to various types of educational climate (school climate, teaching staff climate, communication climate, etc.), its alternatives (emotional climate of lessons, working climate, social school climate,

etc.) and types (school climate with a great interest in people but little interest in work tasks, democratic climate, progressive school climate, pluralist and open school climate, etc.).

The main component of the social climate (which is the key aspect of the present study) is the teaching staff climate represented especially by interpersonal relationships and social processes in the school. The teaching profession not only involves contact with students and parents, but working in a specific school and with a specific headmaster and specific colleague teachers. The teaching staff is a distinct social group typical of the school, which has its own social climate, leading personalities, its own perception, experiencing, evaluation, and responses to what is happening in the school and around it. The teaching staff climate is affected by the structure of teachers and the personality of the headmaster and other leading employees [3]. The teaching staff climate certainly affects the teachers' motivation and their attitude to the school, their colleagues, managers, and other actors, including students. As suggested by Urbánek [4] *"in researching teachers and their professional characteristics, the issue of interpersonal relationships between teachers and the social climate of the teaching staff has so far been neglected. But in terms of professional stress factors, professional relationships with colleagues and especially school managers play a crucial role."* This statement was one of the starting points of the present study.

In a different publication Urbánek [5] states that *"the teaching staff climate is indicative of specific qualities of professional and extra-professional interactions between the teachers and at the same time of the quality of social relationships with the school management."* Halpin and Croft [6], taking into account the specificities of school management and the teaching staff, distinguished the teaching staff climate as open and closed.

The open climate is vivid and vibrant. The teachers' duties and social needs are linked together and are balanced. The school is characterized by mutual trust, the teachers are committed to their educational work, their behaviour is open and unpretended, they have high work morale and support each other. The teaching staff is not overloaded, emphasis is on personal contact and authentic conduct. The headmaster sets an example for the others, cooperates with the subordinates, and they work together to achieve common goals. The rules of conduct and school functioning are clear and consistent.

The closed climate is the very opposite. The people are frustrated, the teachers are reluctant to become personally engaged in educational work, they are apathetic and indifferent to the results of their work. The school is dominated by mutual distrust. The headmaster and the teachers perform their activities only formally. Their work assignments and social needs are not balanced. The headmaster is impersonal, does not show understanding for the subordinates, the prevailing management style is formal and bureaucratic, the teachers become withdrawn and pretend activity ([6]; [7]).

The central effort of each organization, including schools, should be to create a positive climate, because in any institution or group the climate has the key effect not only on human psyche, but also significantly influences the professional performance of individuals and the whole group. The collocation positive climate evokes the idea of a good climate, a good environment in which it is enjoyable to be, move, and work. A positive school climate is jointly built by all actors involved – students, teachers, educators, headmaster, non-teaching staff, operational staff, and parents; each of these actors contributes to the creation of the school climate without realizing it [8].

Not only students but also teachers need a positive climate for their activities. The main creators of a positive school climate are the director and the teaching staff. In order to satisfy all actors, the school climate must be considered from the perspective of students, but also teachers, parents and public [17]. The school climate from the perspective of teachers is affected by many factors, some of which are listed by Petlák [8] as follows:

- Calm and creative school climate;
- Climate, in which new educational and didactic approaches to learners are searched for;
- Democratic school management;
- Respect of school management for the staff;
- Mutual respect in interpersonal relationships;
- Creative cooperation between staff members;
- Space for self-actualization (study, supporting innovative approaches to education);
- Overall motivating environment.

The issue of school climate and teaching staff has been addressed by many authors. Foreign authors include for example Halpin & Croft [8]; Thomas [9]; Walber [10]; Anderson [11]; Kottkamp et al.

[7]; more recent publications include Bulach and Malone [12] or Vartia [13], [14]. Prominent Czech authors are Urbánek ([4], [5], [15], Ježek [16], Grecmanová [1], [2] etc.

The school climate was also addressed by Čech [17] in his research study aimed at bullying among teachers. The research study suggested that almost three quarters of the respondents assessed social relationships in their schools as friendly. In these schools the probability of negative forms of behaviour among the teaching staff was low because in well-functioning professional teams the relationships are maintained and supported, and any signs of undesirable behaviour are not accepted. As the author suggested however, a degree of risk was associated with nearly one fifth of the respondents, who assessed professional relationships as correct, albeit not friendly. This type of environment is more prone to behaviours with signs of mobbing. Even a greater risk was present in schools where almost eight percent of the respondents identified professional relationships as negative. In this type of environment one can expect frequent conflicts and inability to resolve these conflicts. Naturally, in this type of environment, negative forms of behaviour are more likely to occur.

Materials and methods

Objective of the paper

The aim of the research was to map secondary school teachers' and headmasters' coping strategies and at the same time to reveal the correlations between school climate assessment, self-esteem, teachers' length of experience, and other variables. The objective was detailed by means of 3 research hypotheses, which were subsequently tested.

H1: Headmasters show a higher stress management capability than secondary school teachers.

H2: Headmasters show a higher degree of self-esteem than secondary school teachers.

H3: Headmasters have a more positive perception of the social climate in school than secondary school teachers.

The hypotheses are based on the assumption that headmasters are those who should have high stress coping capabilities in the context of school management and thus should have a higher degree of self-esteem related to managerial ambitions. At the same time, they set and determine the functioning of the school including the social climate and therefore they will have a more positive perception of the climate compared with teachers.

Research sample

The research study was conducted between 10/2019 and 12/2019 and was designed as a quantitative survey. Data collection was performed in an electronic way using Google forms, which met the methodological and research criteria of online research relevance (e.g., high degree of security, archiving and encoding during data transfer, access via generated password). The research sample was established by deliberate sampling: from among all secondary schools in the Czech Republic (256), a total of 100 schools were randomly selected (drawing), whose teachers were asked to participate in the research study. During the period of data collection, a total of 627 completed questionnaires were returned. None of the questionnaires was excluded due to missing data.

The sample of respondents comprised 250 secondary school teachers (average age 47.12, SD 9.28) and 377 headmasters (average age 48, 15, SD 8, 21). The length of working experience ranged from one to 56 years (average work experience was 20.58; SD 10.71). Participation in the research study was voluntary and anonymity of the respondents during data collection was ensured.

Research methods

Data collection was performed by means of the following methods: Uni-dimensional assessment scale of teachers' climate perception (adapted from Čech [17]). The uni-dimensional assessment scale was used to measure the social climate in the work environment. Using 14 bipolar adjectives and an 8-point scale, the respondents indicated their perception of group climate in their work team. The scale starts with a positive climate characteristic and moves to the opposite pole with a negative characteristic. Cronbach's α for 14 questionnaire items was 0.97, which suggests a high degree of reliability of the method.

OSI-R – Occupational Stress Inventory developed by Osipow [18] and published in the Czech Republic by company Psychodiagnostika Brno. The questionnaire comprises 3 parts: 1. Occupational Role Questionnaire ORQ, 2. Perceived Stress Questionnaire PSQ, 3. Personal Resource Questionnaire PRQ, which contains the following four scales:

1. *Recreation* – measures the extent to which an individual enjoys and relaxes during regular recreation and leisure activities that are considered relaxing and satisfactory.
2. *Self-care* – measures the extent to which an individual pursues regular personal activities that reduce and mitigate chronic stress (regular exercise, sleep, balanced diet, avoiding habit-forming substances).
3. *Social support* – measures the extent to which an individual feels supported and helped by the environment.
4. *Rational/cognitive coping* – measures the extent to which an individual has and uses cognitive skills in occupational stress. After arriving home from work, the person is able to stop thinking about work and knows that there are other jobs that he/she could do.

The questionnaire was purchased from Psychodiagnostika Brno. In the present study, only the third part of the OSI-R Inventory was used for the purposes of the identification of personal coping strategies.

The Rosenberg self-esteem scale is an instrument designed by Morris Rosenberg in 1965 as a unidimensional construct providing information about the global relationship to the self. The questionnaire was originally designed for adolescents and later extended to cover the entire population. The scale contains 10 questions - the overall score ranges from 0 to 30 points.

The sociodemographic questionnaire focuses on sociodemographic data such as age, gender, length of teaching experience, length of employment in the current school, region, school size, specific position within school.

Data processing and evaluation

In the first stage, the data were transformed into an xls format compatible with MS Excel 2013, which can easily handle data exported from the electronic questionnaire.
During the second stage, the data were formally and logically checked. Further data processing was performed using the STATISTICA programme, version 13. An analysis of results distribution confirmed the normal distribution of data; for this reason a parametric statistical approach was selected, specifically descriptive statistics Pearson correlation and T- test. The tests were conducted at a 5% level of significance.

Data analysis, results

The following results relate to the testing of research assumptions. The authors of the present study tested whether there was a relationship between coping strategies, school climate, teachers' length of experience, and other variables.

Table 1. School climate, self-esteem, and coping strategies among secondary school teachers

Variables	*Age*	*Teaching Ex.*	*Practise*	*RE*	*SC*	*SS*	*RC*	*Rosenberg*	*Climate*
Age	1	.84*	.56*	.15*	.13*	.11	.19*	-.14*	.01
Teaching Ex.	.84*	1	.66*	.13*	.13*	.11	.14*	-.14*	.04
Practise	.56*	.66*	1	.12	.08	.04	.09	-.08	-.00
RE	.15*	.13*	.12	1	.39*	.34*	.42*	-.10	.28*
SC	.13*	.13*	.08	.39*	1	.21*	.38*	-.20*	.12
SS	.11	.11	.04	.34*	.21*	1	.47*	-.22*	.27*
RC	.19*	.14*	.09	.42*	.38*	.47*	1	-.21*	.20*
Rosenberg	-.14*	-.14*	-.08	-.10	-.20*	-.22*	-.21*	1	-.10
Climate	.01	.04	-.00	.28*	.12	.27*	.20*	-.10	1

*level of significance $\alpha = 0.05$

Table 1 shows the results of the correlations between the variables in the monitored sample of secondary school teachers. The results suggest that age is positively correlated with the monitored coping strategies. A significant positive correlation was observed on the recreation scale ($r = 0.15$, $p = 0.00$). It is assumed that with higher age, teachers increasingly use the advantages of free ti-

me, relax more, and engage in activities that bring rest and satisfaction. A significant positive correlation was also observed on the self-care scale (r= 0.13, p = 0.00). These results suggest that with increasing age, secondary school teachers care more for themselves and their health than their younger colleagues. A significant positive correlation was also observed on the rational/cognitive coping scale (r = 0.19, p = 0.00). This implies that older teachers have a number of people around them who they can talk to about their occupational problems and who they can rely on. They are able to separate work and entertainment. The results of the research suggest that with increasing age, teachers care more for themselves and their health, are able to resolve problems in a constructive way, and pay attention to their mental hygiene. Similarly, a significant positive correlation was observed between the length of teaching experience and recreation (r = 0.13, p = 0.05), self-care (r = 0.13, p = 0.00), rational/cognitive coping (r = 0.16, p = 0.00), and social support (r = 0.15, p = 0.00). A significant negative correlation was observed between age and self-esteem (r = -0.14, p = 0.00). The school climate variable was positively correlated with recreation (r = 0.28, p = 0.00), social support (r = 0.27, p = 0.00), and rational/cognitive coping (r= 0.20, p=0.00).
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Table 2. School climate, self-esteem and coping strategies among secondary school headmasters

Variables	*Age*	*Teaching Ex.*	*Practise*	*RE*	*SC*	*SS*	*RC*	*Rosenberg*	*Climate*
Age	1	.89*	.64*	.11*	.12*	-.01	.09	-.09	.01
Teaching Ex.	.89*	1	.69*	.10*	.12*	-.03	.05	-.12*	.00
Practise	.64*	.69*	1	.06	.12*	.07	.09	-.10*	-.01
RE	.11*	.10*	.06	1	.46*	.31*	.40*	-.07	.20*
SC	.12*	.12*	.12*	.46*	1	.32*	.39*	-.14*	.10*
SS	-.01	-.03	.07	.31*	.32*	1	.40*	-.14*	.28*
RC	.09	.05	.09	.40*	.39*	.40*	1	-.05	.15*
Rosenberg	-.09	-.12*	-.10*	-.07	-.14*	-.14*	-.05	1	-.16*
Climate	.01	.00	-.01	.20*	.10*	.28*	.15*	-.16*	1

*level of significance $\alpha = 0.05$

Table 2 shows the results of the correlations between the variables in the monitored sample of secondary school headmasters. The results suggest that age is positively correlated with two of the monitored stress coping strategies. A significant positive correlation was observed on the recreation scale (r = 0.11, p = 0.05). It is assumed that with higher age, headmasters increasingly use the advantages of leisure, relax more, and engage in activities that bring rest and satisfaction. A significant positive correlation was also observed on the self-care scale (r= 0.12, p = 0.05). These results suggest that with increasing age, secondary school teachers care more for themselves and their health than their younger colleagues. Similarly, a significant positive correlation was observed between the length of teaching experience and self-care (r = 0.12, p = 0.05). A significant negative correlation was observed between the length of teaching experience and self-esteem (r = -0.12, p = 0.05). The school climate variable was positively correlated with all stress coping strategies, while a negative relationship was observed between perceived climate and headmasters' self-esteem. Figures must be created at a minimum resolution of 300 dpi to avoid bad printing quality. For fuzzy or jagged figures, authors are required to replace it or send the original figure file to us for reproduction.

Table 3. Comparison of the monitored variables between secondary school teachers and headmasters

Variables	*Mean no*	*Mean yes*	*t-value*	*df*	*p*	*Valid N no*	*Valid N yes*	*Std. Dev.No*	*Std. Dev.Yes*
RE	28.49600	28.67905	-0.34305	625	0.731678	250	377	6.80553	6.36149
SC	27.39200	26.73210	1.14148	625	0.254109	250	377	6.96162	7.17041
SS	42.59600	43.00000	-0.69178	625	0.489333	250	377	7.34470	7.03525
RC	35.99600	35.74801	0.44758	625	0.654614	250	377	6.93197	6.69969
Rosenberg	8.65600	9.94430	-2.04383	625	0.041389	250	377	5.99344	8.68844
Climate	82.53600	90.10875	-5.20816	625	0.000000	250	377	19.21117	16.84776

Table 3 shows the results of the statistical test of differences in the perception of the social climate, self-esteem, and stress coping strategies between secondary school headmasters and teachers. No statistically significant differences were confirmed in any of the stress coping strategies between secondary school headmasters and teachers, which means that Hypothesis 1 was not confirmed. However, a statistically significant difference was observed in the degree of perceived self-esteem ($t = -2.04$, $p = 0.05$). A higher degree of self-esteem was observed among headmasters compared with teachers, which means that Hypothesis 2 was confirmed. A significant difference was also observed in the perception of the social climate between secondary school headmasters and teachers. The average values suggested more positive perception of the social climate by secondary school headmasters as opposed to teachers, which means that Hypothesis 3 was confirmed.

Conclusion

The school climate represents the overall quality of the school environment, including demographic, ecological, cultural, and social aspects. The school climate is the result of its long-term development and is assessed with regard to the above mentioned aspects. As far as the aim of the paper is concerned, focus was on the social climate represented especially by interpersonal relationships among teachers and complex social processes in schools. The quality of the climate among teachers is reflected in the teachers' personal attitudes to their profession. The climate affects their motivation, attitudes to their school, colleagues, leading employees, and students, and last but not least it affects the ability to withstand stressful situations. The effort of schools should be to develop a positive climate because it directly affects the teachers' work performance. A positive climate is characterized by mutual trust and respect between teachers and also with respect to leading employees and students. Other features include high work morale, motivation for the teaching profession, mutual cooperation, or the possibility of self-actualization. The opposite of a positive climate (also referred to as open) is a closed climate. This type of climate is characterized by increased frustration, demotivation, mistrust, tension, and formal execution of activities. Negative social relationships may lead to the development of work-related stress, the long-term effect of which may trigger mental problems, disorders, and a negative self-concept.

The main objective of the research presented in this paper was to perform a quantitative analysis of the coping strategies among secondary school teachers and headmasters and at the same time explore the correlations with school climate assessment, self-esteem, length of teaching experience, and other variables. For this purpose, a total of three hypotheses were defined and tested. The data suggested that the age of secondary school teachers was positively correlated with the monitored coping strategies. Older teachers care more for their mental hygiene. In their free time they pursue activities that bring relaxation and satisfaction, they care more for themselves and their health, and are able to separate work and entertainment. Similarly, a significant positive correlation was observed between the length of teaching

experience and the mentioned mental hygiene aspects. A significant negative correlation was observed between age and self-esteem, while the school climate variable was positively correlated recreation, social support, and rational/cognitive coping.

Similar results were also confirmed by the data in the monitored sample of secondary school headmasters. With increasing age and length of teaching experience, headmasters care more about the principles of mental hygiene. A negative correlation was observed between the length of teaching experience and self-esteem. The school climate variable was positively correlated with all stress coping strategies, while a negative relationship was observed between perceived climate and headmasters' self-esteem.

Based on the results of the research, no statistically significant differences were observed in any of the coping strategies between secondary school headmasters and teachers. However, a statistically significant difference was observed in the degree of perceived self-esteem; secondary school headmasters have a higher degree of self-esteem compared with elementary school teachers. A significant difference was also observed in the perception of the social climate between secondary school headmasters and teachers; headmasters have a more perception of the social climate.

It is clear that the teaching profession entails considerable personality requirements. It is therefore desirable to create a positive and open climate in the workplace, which can in the long term contribute to better work performance and employee health. In addition to a positive work climate, it is also desirable for each individual to find and actively use appropriate coping strategies as part of mental hygiene and prevention against occupational stress, which may lead to, inter alia, the burnout syndrome.

The results of the research suggest that older people with longer teaching experience are more consistent in using the strategies that help them relax and in this way care for their mental health more than their younger colleagues. The question that arises is whether it would be desirable to support the development of coping strategies also in the younger generation of teachers. The use of coping strategies could help them manage occupational stress, they would better cope with frustration and pressure, and would be more satisfied with their profession. These composed and professionally satisfied individuals would be more likely to remain in the teaching profession, which would decrease the degree of staff fluctuation in education. In this process, the key role is played by headmasters, who set the aspects of the social climate and the conditions for the teaching profession.

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