THE RELATIONSHIP BETWEEN COPING STRATEGIES AND SCHOOL CLIMATE PERCEPTION AMONG SECONDARY SCHOOL TEACHERS

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Abstract
Stress in the teaching profession is an important issue which deserves deeper professional attention. It is closely linked to work overload, inappropriate coping strategies, but also a shortage of teachers and a high degree of staff turnover. 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. The aim of the research was to map secondary school teachers’ coping strategies and at the same time to reveal the correlation with school climate assessment, teachers’ length of experience, and other variables. The survey was designed as a quantitative research. 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), and a one-dimensional assessment scale to determine the social climate among the teaching staff. The research sample consisted of 253 secondary school teachers from the Olomouc Region, of whom 76 were men and 177 were women. The age range of the entire sample was from 22 to 68 years (mean age 47.94 years; SD 9.58). The existence of a significant positive relationship was confirmed between the positive perception of the school climate and all coping strategies monitored – social support, relaxation, self-care, and rational/cognitive coping.

Keywords: Stress, coping strategies, school climate, teachers.

1 INTRODUCTION
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 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 [1] “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 also working in a
specific school and with a specific headteacher 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 responding 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 headteacher and other leading employees [2]. 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 [3] “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 [3] states that “the teaching staff climate is indicative of specific qualities of professional and extra-professional interactions between teachers and at the same time of the presented quality of social relationships with the school management.” Halpin and Croft [4], taking into account the specificities of managing schools 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 headteacher 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 constant.

- 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 headteacher and the teachers perform their activities only formally. Their work assignments and social needs are not balanced. The headteacher is impersonal, does not show understanding for the subordinates, the dominant management style is formal and bureaucratic, the teachers become withdrawn and pretend activity [4, 5].

The central effort of each organization, including schools, should be to create a positive climate, because in any institution or group the climate has a 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, headteacher, non-teaching staff, operational staff, and parents; each of these actors contributes to the creation of the school climate without realizing it [6].

Not only students but also teachers need a positive climate for their activities. The main creators of a positive school climate are the headteacher 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 the public [7]. The school climate from the perspective of teachers is affected by many factors, some of which are listed by Petlák [6] as follows:

- Calm and creative school climate;
- Climate, in which new educational and didactic approaches to learners are looked 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 [4, 6, 8], more recent publications include [9, 10, 12]. Prominent Czech authors are Urbánek [13], Ježek [14], Grecmanová [1] etc.
The school climate was also addressed by Čech [15] in his research study aimed at bullying among teachers. The research study suggested that almost three quarters of respondents assessed social relationships in their schools as friendly. In these schools the probability of negative forms of behaviour among the teaching staff is 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 suggests however, a degree of risk is associated with nearly one fifth of respondents, who assessed professional relationships as correct, albeit not friendly, which is an environment more prone to behaviours with signs of mobbing. Even a greater risk is present in schools where almost eight percent of respondents identified professional relationships as negative. In this type of environment one can expect frequent conflicts and the inability to resolve these conflicts. Naturally, in this type of environment, negative forms of behaviour are more likely to occur.

**Occupational stress.** Stressful situations may have a negative effect on an individual’s mental balance and bring changes in perception, behaviour, and thinking. Stress may trigger, cause or accompany the onset of most mental difficulties and later mental disorders [16], as well as the onset of psychosomatic problems [17], burnt-out and decreasing the level of empathy [18]. The teaching profession is classified in the group of helping professions. The teaching profession is one of the professions that includes regular interpersonal interactions with students, colleagues and last but not least parents [19, 20].

Research aimed at teachers’ workload is addressed by a number of Czech authors, e.g. Paulík [21] performed a research study aimed at workload among elementary school teachers and their self-evaluation of health. The results of the research suggest that teachers consider subjectively perceived workload more intensive than non-workload. In their research study, Řehulka and Řehulková [22] observed that about 40% of female teachers had an increased neuroticism level, and about 10% were identified as individuals who should search for professional help. A research study aimed at mental strain in elementary school teachers performed by Blažková, Malá [23] confirmed that 80% of teachers were affected by high mental strain, and decreased resistance to stress was observed in 25% of teachers. As far as their somatic condition is concerned, 60% of teachers showed problems with performance, physical condition, and vegetative imbalance, while 75% of teachers suggested frequent subjective mental difficulties.

## 2 METHODOLOGY

### 2.1 Objective of the paper

The aim of the research was to map secondary school teachers’ coping strategies and at the same time to reveal the correlation with school climate assessment, teachers’ length of experience, and other variables.

### 2.2 Research sample

The research study was conducted between 10/2018 and 12/2018 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 Olomouc Region (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 253 completed questionnaires were returned. None of the questionnaires was excluded due to missing data.

The sample of respondents comprised 253 secondary school teachers, of whom 177 were women (average age 47.12, SD 9.28) and 76 were men (average age 49.86, SD 10.05). The age range of whole the research sample was 22 to 68 years (average age 47.94 years; SD 9.58). 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.

### 2.3 Research methods

Data collection was performed by means of the following methods:
Uni-dimensional assessment scale of teachers’ climate perception (adapted from Čech, [24]). 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 [25]. 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 [26] and published in the Czech Republic by 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 uses, 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 s.r.o.

In the present study, only the third part of the OSI-R Inventory was used for the purposes of identification of personal coping strategies.

The Rosenberg self-esteem scale is an instrument designed by Morris Rosenberg in 1965 as a uni-dimensional construct providing information about the global relationship to the self [26]. 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.

Sociodemographic questionnaire

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.

2.4 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 normal data distribution; for this reason a parametric statistical approach was selected, particularly descriptive statistics and Pearson correlation. The tests were conducted at a 5% level of significance.

3 RESULTS

The following results relate to testing of research assumptions. The authors of the present study identified whether there is a relationship between coping strategies, the school climate, teachers’ length of experience, and other variables.
Table 1. All Groups Correlations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age</th>
<th>Teaching exp.</th>
<th>Employment in current school</th>
<th>RE</th>
<th>SC</th>
<th>SS</th>
<th>RC</th>
<th>Self-esteem</th>
<th>Climate sum</th>
</tr>
</thead>
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<td>.580*</td>
<td>.166*</td>
<td>.151*</td>
<td>.159*</td>
<td>.211*</td>
<td>-.159*</td>
<td>.0122</td>
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<td>.676*</td>
<td>.151*</td>
<td>.150*</td>
<td>.151*</td>
<td>.166*</td>
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<td>.0464</td>
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<td>.105</td>
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<td>.001</td>
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<td>.349*</td>
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<td>.389*</td>
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<td>-.108</td>
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<td>.281*</td>
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</tbody>
</table>

Legend: *statistical significance, RE- Recreation, SC- Self-care, SS- social support, RC- Rational/cognitive coping

Table 1 presents the results of correlations between the variables in the entire sample of secondary school teachers. The results suggest that age is positively correlated with all monitored coping strategies. A significant positive correlation was observed in the Recreation scale (r=0.16, p=0.00). It can be assumed that with increasing age the teachers use the advantages of leisure time more, relax more and are engaged in activities that could bring satisfaction. A significant positive correlation was also observed in the Self-care scale (r=0.15, p=0.00). These results suggest that with increasing age the secondary school teachers care more about themselves and their health than the younger ones. A significant positive correlation was also observed in the Social support scale (r=0.15, p=0.00) and Rational/cognitive coping (r=0.20, p=0.00). A significant negative correlation was observed between the age (r=-0.15, p=0.00), the length of teaching experience (r=-0.14, p=0.00) and some of the monitored coping strategies except the Recreation scale. The school climate variable correlated positively with the Recreation scale (r=0.28, p=0.00), Social support scale (r=0.27, p=0.00) and Rational/cognitive (r=0.19, p=0.00).

Table 2. Gender=female Correlations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age</th>
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<th>RE</th>
<th>SC</th>
<th>SS</th>
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<th>Self-esteem</th>
<th>Climate sum</th>
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</thead>
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<td>.122</td>
<td>.132</td>
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<td>.167*</td>
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<td>.045</td>
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<td>.147</td>
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<td>.361*</td>
<td>.428*</td>
<td>-.158*</td>
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<tr>
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<td>.082</td>
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<td>1.000</td>
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Legend: *statistical significance, RE- Recreation, SC- Self-care, SS- social support, RC- Rational/cognitive coping
Table 2 presents the results of intercorrelations between selected variables in the sample of secondary school teachers. Similar to Table 1, a significant positive correlation was observed between the variables and some of the individual coping strategies. As far as age is concerned, a significant positive correlation was observed in the Rational/cognitive coping scale. Similar results were also observed in the sample of elementary school teachers (see Table 3), but a significant correlation between age and self-esteem in men was not confirmed. The significant positive correlations were observed between the perception of the school climate and most of the coping strategies. According to the results we can state that a positive perception of the school climate and positive acceptance of the co-workers have a positive impact on the teachers constructive dealing with stress. Teachers who experience positive school climate enjoy leisure activities more, have strong social support and have better rational coping with stressful situations.

Table 3. Gender=male Correlations.

<table>
<thead>
<tr>
<th>Variable</th>
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Legend: *statistical significance, RE= Recreation, SC= Self-care, SS= social support, R/C= Rational/cognitive coping

**4 CONCLUSION**

The present study focuses on the factor of interior school relationships with an emphasis on the teaching staff climate and an analysis of the social climate with respect to relevant variables. Specifically, the authors examined whether positive perception of the school climate was reflected in the respondents' coping strategies. According to relevant literature, research aimed at teachers' workload is addressed by a number of Czech authors, e.g. Paulík [21] performed a research study aimed at workload among elementary school teachers and their self-evaluation of health. The results of the research suggest that teachers consider subjectively perceived workload more intensive than non-work load. In their research study, Řehulka and Řehulková [22] observed that about 40% of female teachers had an increased neuroticism level, and about 10% were identified as individuals who should search for professional help. A research study aimed at mental strain in elementary school teachers performed by Blažková, Malá [15] confirmed that 80% of teachers were affected by high mental strain, and decreased resistance to stress was observed in 25% of teachers. The main objective of the study was to map secondary school teachers' coping strategies and at the same time to reveal the correlation with school climate assessment, teachers' length of experience, and other variables. The obtained results indicate a significant positive correlation in the Recreation scale. It can be assumed that with increasing age the teachers use the advantages of leisure time more, relax more and are engaged in activities that could bring satisfaction. A significant positive correlation was also observed in the Self-care scale which suggest that with increasing age the secondary school teachers care more about themselves and their health than the younger ones. A significant positive correlation was also observed in the Social support scale and Rational/cognitive coping. This implies that older teachers have 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 about themselves and their health, are able to resolve problems in a constructive way, and pay attention to their mental hygiene. The school climate variable correlated positively with the
Recreation scale Social support scale and Rational/cognitive. According to the results we can state that a positive perception of the school climate and positive acceptance of the co-workers have a positive impact on the teachers constructive dealing with stress. Teachers who experience positive school climate enjoy leisure activities more, have strong social support and have better rational coping with stressful situations.

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