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Procedia - Social and Behavioral Sciences 55 (2012) 294 – 300

Procedia
Social and Behavioral SciencesINTERNATIONAL CONFERENCE ON NEW HORIZONTS IN EDUCATION
INTE2012**Stress, Proactive Coping and Self- Efficacy of Teachers**

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Abstract

In this paper we point to mutual relations of experienced teacher's stress (in all areas – cognitive, emotional, physical and social) with coping strategies (Proactive coping, Reflective coping, Strategic planning, Preventive coping, Instrumental support seeking, Emotional support seeking, Avoidance coping) and with self-efficacy of teachers. Based on professional resources, we assumed and discovered a considerable positive relation between proactive coping and self-efficacy by 291 teachers from Slovak republic. In the context of teachers experiencing stress we assumed and discovered that the more teachers prefer proactive coping with load, the smaller is their level of experienced stress (this is valid also for individual areas of experienced stress – cognitive, emotional, physical and social). We also assumed and discovered considerable negative correlation between self-efficacy of teachers and experiencing stress (in all observed areas). Above mentioned fact shows the significant coherence of personal characteristics and features (proactive approach and perceived self-efficacy) connected with effective stress coping in all its levels – cognitive, emotional, physical and social.

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Keywords: Teacher's Stress; Coping Strategies; Proactive Coping; Teachers Self-Efficacy.

1. Introduction

Teacher's profession as a component of coadjutant professions belongs to those that impose significant requirements on the person performing them from emotional, cognitive, social and also physical side. In the context stated by Kyriacou (1996), he used the term "teacher's stress", which he further defines as situations, in which teachers feel angry, aggrieved, nervous, disappointed, when they feel tension or anxiety as a result of some fact, which is related to their pedagogical activity. Kyriacou (2001) states that teacher's stress represents a complex of interactions between coping mechanisms, personal features and environment, which are in a mutual relationship. Based on works of Kyriacou

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(1996, 2001), Kyriacou & Sutcliffe (1977), Židková & Martinková (2003), Kačmárová & Kravcová (2011), Mrozek (2010), Miškolciová (1997), to most significant stressors within teacher's profession belong: inappropriate conditions in the classroom and lack of proper material equipment in school; low teacher's salary; frequent reorganization in school and change of school programs; violation of education process and bad conduct of pupils; time stress; various teacher's roles: teacher, mother/father, trainer, advisor; absence of relaxation as a result of intensive work load and work at home related to school; responsibility towards students, parents, school administrative/school management; conflicts with colleagues, with the management, with parents; problems in career (lack of perspective, little possibilities for personal development and professional growth, insufficient evaluation of teacher's work by society).

Jennet et al. (2003, in Skaalvik & Skaalvik, 2010) states, that the majority of teachers copes with stress successfully. Nevertheless, long-time influence of stressors in connection with non-effective coping strategies can lead to burnout. Burnout is often described as the syndrome of emotional exhaustion, depersonalization and reduction of personal success. (Maslach et al., 1996). Maslach et al. (1996) identified emotional exhaustion as the key aspect of burnout, while Pines and Aronson (1998) included physical exhaustion characterized by low energy and chronic exhaustion.

Authors Hennig and Keller (1996) divide strategies for coping with stress to professional area, private relationships, life attitude and health. According to authors, there are three bases for stress prevention: 1) decrease of stress situations throughout the work day; 2) reduction of emotional excitement appearing together with stress and 3) change of way of dealing with stress situations, which the individual can't influence. In the context of above mentioned an effective method for coping with stress load in teacher's profession can be considered the proactive coping. Proactive coping is oriented to achieving targets and includes future requirements, which can lead to self-development. (Greenglass, 2002, Šolcová, Lukavský & Greenglass, 2006). Swarzer et al. (1999) describes proactive individual as ingenious, responsible, scrupulous, who bears responsibility for his/her own results and applies the vision of success. Proactive coping includes target environment and persistent heading towards set goal. Proactive individual accumulates resources, he/she is able to mobilize all resources if necessary, he/she consecutively avoids the sources of exhaustion, owns highly developed social skills of how to mobilize resources.

Next to proactive coping, an important personal resource of coping with stress and load can be considered also self-efficacy of an individual, which according to Schwarzer (1992) is focused on broad and settled sense of personal competences to deal effectively with various stress situations. Pajares (2005) describes self-efficacy as the expression of will, energy and self-resolution. Self-efficacy of a teacher is described as a factor of personal resource, which probably protects teachers from experience with tension at work as well as from gradation of burnout. Teacher self-efficacy is studied as a personal resource factor that may protect from the experience of job strain and, thus, make the escalation of burnout less likely (Schwarzer & Hallum, 2008). A teacher's self-efficacy is therefore a major source of motivation and commitment in all aspects of teaching (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, in Moé et al., 2010), affecting student achievement and motivation (Bandura, 1993, 1997; Ross, 1998, in Moé et al., 2010), student self-efficacy (Ashton & Webb, 1986; Ross, 1998, in Moé et al., 2010), and the teacher's own job satisfaction (Caprara, Barbaranelli, Borgogni, & Steca, 2003; Caprara, Barbaranelli, Steca, & Malone, 2006, in Moé et al., 2010). Nevertheless, in reality the teachers can become easily unsatisfied with their job if they don't believe that they are able to face difficult tasks, which they might encounter during performing their occupation. Instead, the teachers who have a high level of self-efficacy show a high level of elation in their occupation (Allinder, 1994). Self-efficacy influences the effort that was entered into teaching: high self-efficacy is consistent with better planning and organization, a higher tendency to try out new approaches (Guskey, 1998; Stein & Wang, 1998, in Moé et al., 2010). Teacher burnout has been shown to be moderately strong related to teacher self-efficacy (Skaalvik & Skaalvik, 2010).

Aim of our research is to analyse the coherences of experienced teacher's stress (in all areas – cognitive, emotional, physical and social), strategies of dealing with stress load (Proactive coping, Reflective coping, Strategic planning, Preventive coping, Instrumental support seeking, Emotional support seeking, Avoidance coping) and self-efficacy. We assume a significant positive relation between proactive coping and self-efficacy of teachers. In the context of teacher's experiencing of stress we assume, that the more the teachers prefer proactive coping with stress load, the significantly lower is the

level of experienced stress by them (valid also for individual areas of experiencing stress – cognitive, emotional, physical and social). We also assume significant negative correlation between self-efficacy of teachers and experiencing stress (in all areas – cognitive, emotional, physical and social).

2. Methodology

2.1. Measures

To identify the level of stress and burnout syndrome by teachers, we used Questionnaire for identification of stress levels and burnout syndrome from Henning and Keller (1996). The questionnaire is dedicated to define the level of stress influence on central psycho-physical functions and how strong is the general inclination to stress and burnout syndrome. Henning and Keller (1996) specify four levels of reaction on stress: 1) Cognitive level: negative picture of own abilities, loss of self-confidence, a negative up to cynic attitude towards pupils or their parents; loss of interest for happening in own occupation field; problems with concentration and escape from reality. 2) Emotional level: Irritation and impulsive behaviour; nervousness; and internal tension; affective exhaustion; anxiety, feeling of helplessness; self-remorse, feeling of hopelessness; loss of joy from work and feeling of non-appreciation. 3) Physical level: quick exhaustion; increased tendency to diseases; vegetative problems (heart, breathing, digestion); headaches, sleep disorders; high blood pressure; muscle tension (stiff neck, shoulders, back muscles pain); vertigo and nausea; appetite disorders. 4) Social level: decrease of educational commitment; limitation of contacts with colleagues and friends; problems in family and personal life; neglecting own hobbies and indulgences. Every area is measured by 6 questions, while the respondent answers on a scale: always (4 points), often (3 points), sometimes (2 points), rarely (1 point) and never (0 points). Level of inclination to stress and burnout syndrome is moving from 0 to 96 points, the higher the number of points, the higher the level of experienced stress.

To identify the strategies of coping with stress load, we used Proactive Coping Inventory (PCI) from authors Greenglass et al. (1999). PCI questionnaire consists from 7 scales: Proactive coping – 14 items, Reflective coping - 11 items, Strategic planning, Preventive coping, Instrumental support seeking, Emotional support seeking, Avoidance coping), it is created altogether from 55 statements to which the respondent gives answers on a scale: (1) not at all true, (2) barely true, (3) somewhat true, (4) completely true.

To find out the self-efficacy of teachers, we used Teacher Self-Efficacy Scale (Schwarzer et al., 1999). The scale consists of 10 statements to which the respondent gives answers on a scale: (1) not at all true, (2) barely true, (3) moderately true, (4) exactly true.

2.2. Participants

The research sample was created from 291 teachers from Slovak republic. 146 teachers acted on the second level of primary education, 145 teachers on high schools. From the total number, 79% were females (N=230) a 21% males (N=61). Average age of research sample was 41,66 years; age scope was 24 to 68 years. Average length of teaching practice was 16,8 years (minimum 1 year, maximum 41 years of teaching practice).

We didn't discover differences by teachers in observed variables (Proactive coping, Reflective coping, Strategic planning, Preventive coping, Instrumental support seeking, Emotional support seeking, Avoidance coping, Teacher self-efficacy, Stress, Cognitive level of stress, Emotional level of stress, Physical level of stress, Social level of stress) or from the aspect of sex, or the duration of teaching practice.

3. Results

Descriptive indicators (Table 1) are the representation of gross score (minimum, maximum, average and standard deviation) in observed variables. In the area of stress experiencing and burnout by teachers, we discovered that in average are teachers in the light stress level. Most intensive reaction to

stress is visible in teachers’ physical symptoms, but average values also in this area show only mild level of stress experiencing. In the level of burnout (score over 73 points) appeared 3 teachers (females).

Table 1 Descriptive Statistic of Variables

	Minimum	Maximum	Mean	Std. Deviation
Proactive coping	28,00	56,00	41,73	4,27
Reflective coping	18,00	44,00	33,92	4,74
Strategic planning	5,00	16,00	11,73	2,07
Preventive coping	17,00	40,00	30,20	4,28
Instrumental support seeking	10,00	32,00	23,84	3,85
Emotional support seeking	5,00	20,00	15,43	2,92
Avoidance coping	3,00	12,00	7,24	1,99
Teacher Self-Efficacy	16,00	40,00	30,48	3,71
Stress level	1,00	80,00	28,55	11,99
Cognitive level of stress	1,00	18,00	6,55	3,19
Emotional level of stress	1,00	20,00	7,93	3,57
Physical level of stress	1,00	21,00	8,24	3,72
Social level of stress	1,00	22,00	5,77	3,51

Table 2 Correlation Analysis of Teachers Self-Efficacy and Coping Strategies

N=291		1.	2.	3.	4.	5.	6.	7.	8.
1.Proactive coping	Pearson Correlation	1	,608**	,440**	,446**	,223**	,281**	-,011	,403**
	Sig.(2-tailed)		,000	,000	,000	,000	,000	,847	,000
2.Reflective coping	Pearson Correlation	,608**	1	,415**	,432**	,371**	,324**	,061	,303**
	Sig.(2-tailed)	,000		,000	,000	,000	,000	,300	,000
3.Strategic planning	Pearson Correlation	,440**	,415**	1	,410**	,334**	,194**	,119*	,160**
	Sig.(2-tailed)	,000	,000		,000	,000	,001	,042	,006
4.Preventive coping	Pearson Correlation	,446**	,432**	,410**	1	,377**	,273**	,103	,168**
	Sig.(2-tailed)	,000	,000	,000		,000	,000	,079	,004
5.Instrumental support seeking	Pearson Correlation	,223**	,371**	,334**	,377**	1	,618**	,053	,010
	Sig.(2-tailed)	,000	,000	,000	,000		,000	,366	,863
6.Emotional support seeking	Pearson Correlation	,281**	,324**	,194**	,273**	,618**	1	-,009	,135*
	Sig.(2-tailed)	,000	,000	,001	,000	,000		,876	,022
7.Avoidance coping	Pearson Correlation	-,011	,061	,119*	,103	,053	-,009	1	-,306**
	Sig.(2-tailed)	,847	,300	,042	,079	,366	,876		,000
8.Teachers Self-Efficacy	Pearson Correlation	,403**	,303**	,160**	,168**	,010	,135*	-,306**	1
	Sig.(2-tailed)	,000	,000	,006	,004	,863	,022	,000	

Table 3 Correlation Analysis of Proactive Coping, Teachers Self-Efficacy and Stress of Teachers

N=291		1.	2.	3.	4.	5.	6.	7.
1.Proactive coping	Pearson Correlation	1	-,286**	-,283**	-,286**	-,124*	-,302**	,403**
	Sig.(2-tailed)		,000	,000	,000	,035	,000	,000
2.Stress level	Pearson Correlation	-,286**	1	,863**	,907**	,805**	,869**	-,264**
	Sig.(2-tailed)	,000		,000	,000	,000	,000	,000
3.Cognitive level of stress	Pearson Correlation	-,283**	,863**	1	,717**	,527**	,762**	-,306**
	Sig.(2-tailed)	,000	,000		,000	,000	,000	,000
4.Emotional level of stress	Pearson Correlation	-,286**	,907**	,717**	1	,684**	,717**	-,212**
	Sig.(2-tailed)	,000	,000	,000		,000	,000	,000
5.Physical level of stress	Pearson Correlation	-,124*	,805**	,527**	,684**	1	,525**	-,086
	Sig.(2-tailed)	,035	,000	,000	,000		,000	,144
6.Social level of stress	Pearson Correlation	-,302**	,869**	,762**	,717**	,525**	1	-,314**
	Sig.(2-tailed)	,000	,000	,000	,000	,000		,000
7. Teachers Self-Efficacy	Pearson Correlation	,403**	-,264**	-,306**	-,212**	-,086	-,314**	1
	Sig.(2-tailed)	,000	,000	,000	,000	,144	,000	

In the area of analysis of relation between proactive coping and self-efficacy of teachers (Table 2), we observed highly significant positive correlation ($r = ,403$), which means that teachers which are proactive have also high self-efficacy. Self-efficacy of teachers significantly correlates with some other coping strategies: reflective coping ($r = ,303$); preventive coping ($r = ,168$); emotional support seeking ($r = ,135$); strategic planning ($r = ,106$).

In the area of analysing the relation between proactive coping and stress experiencing (Table 3) we discovered significant negative correlation ($r = -,286$), which shows that the more the teacher is proactive, the significantly lower is his/her experienced stress. Likewise, we noticed a significant negative correlation between proactive coping and individual areas of reaction to stress - cognitive ($r = -,283$), emotional ($r = -,286$), physical ($r = -,124$) a social ($r = -,302$).

In the area of analysing the relation between self-efficacy of teachers and experiencing stress (on all areas – cognitive, emotional, physical and social- Table 3), we discovered significant negative correlation ($r = -,264$), which shows that the higher is the teacher's self-efficacy, the lower is his/her experienced stress. Likewise we noticed significant negative correlation between self-efficacy of teachers and three areas of reaction to stress - cognitive ($r = -,306$), emotional ($r = -,212$) a social ($r = -,314$). We haven't noticed a significant correlation with self-efficacy in the physical area, although the direction of this correlation is negative.

4. Discussion and Conclusion

Our performed research had the ambition to contribute to clarification of relations between teacher's stress and teacher's personal features related to coping with load – proactive coping and self-efficacy of teachers. Lazarus (1991, in Schwarzer & Schulz, 2001) considers stress as active, developing process, created by causal precursors, mediating processes and direct effects. He assigns to causal precursors personal variables and environmental variables. Mediated processes deal with coping and evaluation of requirements and resources. Experienced stress and coping bring direct effects related to psychological state of well-being, somatic health and social interaction.

In our research we verified the causal connection of experienced stress of teachers with self-efficacy as personal variable. We discovered, that the stronger is teacher's sense of self-efficacy, the more he/she believes that he/she is able to positively influence his/her students and accepts also the responsibility for motivation of students and makes also necessary progress for this kind of behaviour, the weaker is his/her reaction to stressors in physical, emotional, cognitive and social form, and so his/her psychic as well as his/her physical functions are not significantly influenced by the affection of stress.

Our research has shown also mediating processes of stress reaction while we primarily focused on analysis of relation between proactive coping and levels of stress by teachers. Proactive coping is described as highly effective strategy from the aspect of health support, while at the same time it integrates processes of individual management of life quality (Greenglass, 2002). As Greenglass (2002) points out, Greenglass, Schwarzer & Taubert (1999) or Ruiselová (2009) traditional conceptions and understanding of stress show a more reactive coping of stress. While reactive coping strategies are focused on experienced stress situations or stress in the past, to decrease the risk of unsuccessful solution of a situation, proactive coping on the other hand focuses on future, on own internal sources, which enable the enforcement of personal aims and plans, enable to understand the problem situation as a challenge, while risks and at the same time requirements are compared to aims which are to be achieved. In general it is possible to state a significant positive direction and motivation of a person which is connected with the term proactive. In our research we also found out, that the more the teachers are internally psychically motivated to pass obstacles, perceive problems as challenges and try to analyze the risks and demands in connection with aims, to which they are systematically heading, the weaker is their reaction to stressors in physical, emotional, cognitive and social form, and so their physical cognitive and also emotional processes and conditions, as well as their physical function and social characteristics (decrease of education commitment; limitation of contacts with colleagues and friends; problems in family and private life, neglecting own hobbies and past times) are not significantly related to stress effect.

Like Schwarzer (1992) describes the self-efficacy of human in the effect of broad and stable sense of personal competences to deal and act effectively with various stress situations, so we also decided to connect it on the level of self-efficacy of teacher with his/her proactive coping as effective coping strategy. We found out, that the higher is the self-efficacy of teachers, the higher is their proactive coping. Proactive teacher is also the field and source of motivation and success of his/her students.

The construct of self-efficacy suggests a protective effect when coping with adversity. An optimistic belief in one's competence to deal with daily challenges enhances the motivation to engage in constructive ways of coping. Thus, self-efficacious teachers would perceive the objective demands of daily teaching as being less threatening than those teachers do who harbour self-doubts about their professional performance. Successful adaptation to stressful demands, in turn, would prevent the emergence of job burnout. (Schwarzer & Hallum, 2008).

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