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OCCUPATIONAL STRESS IN UNIVERSITY: PERCEIVED CAUSES AND COPING STRATEGIES

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Abstract: *This study investigated perceived occupational stress and stress coping strategies in a sample of 70 university teachers. Data was collected using a Perceived Stress Sources Inventory and Occupational Stress Indicator (coping Scale). The results indicate that university teachers confront especially with the necessity of compromise between the amounts of professional tasks, the needed time for doing the work and the quality of activity. The main sources of pressure are great volume and variety of the tasks, reduced remuneration, difficult promotion, conflict between profession and family life, conflict between research and didactic activity, time pressure and unrealistic deadlines. In comparison to other occupational groups, university teachers employ greater use of all types of coping strategies. In addition, compared with their male counterparts, women academics generally experience higher overall levels of stress in their jobs and use social support as a way to cope better with the demands placed upon them.*

Keywords: *occupational stress, sources of pressure, coping strategies*

1. INTRODUCTION

The major changes that took place into our society have imposed pressure on university teachers and have therefore created reasons as to why the study of academic stress is growing increasingly important. In an attempt to minimize its negative effects, stress researchers have conducted numerous studies to identify potential risk factors for occupational stress. Different stressors have been recognized, some residing within employee cognitions, others relating to environmental sources of stress, such as organizational constraints and interpersonal conflict at work.

2. METHODOLOGY

In the present research, the perceived sources of academic stress and the coping strategies are studied in a sample of 70 university teachers. The perceived sources of stress were assessed using an inventory that contained some demographic questions too. Each of the 56 items was measured from a range representing (1) total disagreement to (6) total agreement. The instrument was based on an interview applied to the teachers and on a literature review concerning the academic stress. Coping strategies were measured using Occupational Stress Indicator - OSI (coping Scale) which contains 6 subscales as follows: *social support, home/ work relationships, task strategies, involvement, logic*, and *time*.

3. RESULTS

3.1. Sources of pressure. Table 1 includes the inventory's 56 items and their perception

as stressful factors. The results show that the most pressing source is *the great volume and variety of the tasks*, with an average of 5.11, while the source perceived as the least stressful is *the tendency that others take the credit for my work*, with an average of 2.71 (score 1 indicates a low pressure of the source and 6 shows that the item provides a great stress). The results are convincing if we are thinking that the university teachers have responsibilities in three areas: didactical, research and administrative. Analyzing the most pressing identified sources, we can see some connections between them. First, most of them refer to the work conditions and the status and promotion possibilities provided by this profession. Secondly, the great volume and variety of the university activities have at least two effects: the didactic and e research activities become secondary towards the administrative ones, when the main activities should be documentation, research, courses development, writing scientific papers, working with students; on the other hand, a great amount of work transfers at home (courses preparation, writing papers, documentation, research, etc.), and the interference of the two zones (work and family) generates tensions. In addition, career promotion and material and professional acknowledgment demand many years of sustained effort and are based upon European norms (international visibility of the research, ISI articles or articles in international data bases), while university as organization offers little support for acquiring the promotion conditions; in many cases teachers produce, communicate and finance themselves the scientific research.

With regard to gender, women obtain bigger scores for all the stress sources than men, which mean that the academic environment is perceived as more stressful for women.

Contradiction between research activity and the didactic one is a greater stress factor for women than for men – $t(68) = 3.09$; $p<0.003$. The explanation is that having lower academic titles, women have a more loaded didactic norm, so that the problem is finding the time for doing the research. In addition, research outputs are a fundamental condition for promotion, and a pressure factor for the women engaged in this process. Besides, *difficult promotion* is a more stressful source for women, $t(68) = 3.13$; $p < 0.003$.

Because women have more family responsibilities, factors as *work – family interference* and *conflict between professional activity and personal life* are experienced as more stressful by the women – $t(68) = 3.57$; $p < 0.001$, and $t(68) = 4.46$; $p < 0.000$.

Significant differences are registered for factors that imply interpersonal relationship: *human relations* , $t(68) = 2.31$; $p < 0.025$; *competence acknowledgment*, $t(68) = 3.32$; $p < 0.001$; *sharing relevant information*, $t(68) = 2.52$; $p < 0.014$; *the lack of regular feed-back*, $t(68) = 2.86$; $p < 0.006$; *reduced collaboration in problem solving*, $t(68) = 2.31$; $p < 0.024$; *taking personally students' critics* , $t(68) = 2.22$; $p < 0.030$; *poor management support*, $t(68) = 2.59$; $p < 0.012$. These results show the bigger concentration of women on relations and team work. When these are defective, they are experienced as more stressful factors. The fact that women invest a great deal in human relationships can be explained by the difference in identity development for men and women. For men, identity development is a process that involves getting autonomy, independence implying assertiveness growth, competition spirit, aiming your own interest, while for women identity develops through training responsibility and attachment, that are specific to human relations.

Difficult access to recent information, $t(68) = 2.94$; $p < 0.004$, *responsibilities uncertainties*, $t(68) = 3.87$; $p < 0.000$, poor *work procedures*, $t(68) = 3.64$; $p < 0.001$ represent another significant more stressful sources for women. Also, *rapid changes in the system* and *deficient preparation for managing the change* are stress factors in a greater manner for women than for men – $t(68) = 2.17$; $p < 0.033$, and $t(68) = 2.24$; $p < 0.028$.

Seniority which brings consolidation of personal position through academic and scientific titles operates differently in perceiving academic stress sources. We grouped the subjects into three seniority categories (i.e. 1 – 6 years, 7 – 15 years and 16

– 40 years). The feeling of personal and professional competence grows through the years, and that is the reason why, at the beginning of university career, teachers feel more acute the discrepancy between the demands and competences. Analyses revealed younger's bigger need for confirmation and feed-back ($F = 6.93$; $p = 0.002$), the need for sharing relevant information ($F = 3.25$; $p = 0.045$), and the greater pressure for factors that involve professional competence ($F = 4.13$; $p = 0.02$) and defining work procedures ($F = 4.63$; $p = 0.013$). Being on the professional accomplishment road, the young people perceive as more stressful the fact that professional activity hogs most of their time, influencing their personal life by delaying events like marriage, foundation of a family, etc. ($F = 3,62$; $p = 0,032$).

3.2. Coping strategies used by academics

The ability to cope with the demands arising in one's environment is a crucial factor in determining the levels of stress that an individual experiences (Travers)

Respondents were asked to rate on a scale of 1 to 6, 28 items describing coping strategies. The most frequently used strategies in order of preference, were: "having stable relationships", "using selective attention", "trying to recognize your own limitations", "prioritizing", "planning ahead" and the least frequent methods were: "force one's behaviour and lifestyle to slowdown", "seeking support from supervisors", "delegation" and "trying to avoid the situation". We made comparisons between academics' scores and those of normative data and other occupational groups. Table 2 shows that university teachers use greater amounts of all type of coping strategies than the norms provided by the authors of the OSI, except "time management". This result is confirmed by the fact that academics indicated "the time pressure and unrealistic deadlines" as one of the main source of stress.

Compared to their male counterparts, women employ greater use of coping strategies like "buy time and stall the issue", ($t(68)= 3,71$; $p< .000$), seek as much social support as possible" ($t(68)= 3,85$; $p< .000$), "having a home that is a refuge" ($t(68)= 2,51$; $p< .014$). As for men, they employ coping strategies like "try to deal with the situation objectively, in an unemotional way" ($t(68)= 2,13$; $p< .039$), "try to stand aside and think through the situation" ($t(68)= 2,07$; $p< .042$), "resort to rules and regulations" ($t(68)= 2,64$; $p< .010$), "accept the situation and learn to live with it" ($t(68)= 2,03$; $p< .046$).

Differences in the use of coping strategies were found with regard to the age of teachers. Along with the ageing process we noticed a progressive increase in the use of strategies like: "resort to rules and regulations" ($F= 8,88$; $p< .000$), "plan ahead" ($F= 2,98$; $p< .057$), "look for ways to make the work more interesting" ($F= 4,49$; $p< .015$), "have stable relationships" ($F= 3,95$; $p< .024$); "use selective attention" ($F= 4,00$; $p< .023$). The 24 – 35 years segment uses strategies like: resort to hobbies and pastimes" ($F= 3,45$; $p< .037$), "having a home that is a refuge" ($F= 3,04$; $p< .054$). "Delegation" is more specific to the 36 – 50 years category. A similar effect produces the seniority or the job tenure. Along with the refinement of professional competencies, we noticed a progression in the use of coping strategies like: "resort to rules and regulations" ($F= 9,85$; $p< .000$), "plan ahead" ($F= 3,65$; $p< .031$), "look for ways to make the work more interesting" ($F= 5,17$; $p< .008$), "having stable relationships" ($F= 3,88$; $p< .025$); "using selective attention" ($F= 4,04$; $p< .022$).

3.3. Relations between variables. The total of the 56 items of the *Perceived Sources of Stress*

Inventory gives a summary measure of the level of stress that an individual experiences. We correlated this score with the scores of the coping strategies scales in order to identify individual's ability to cope with the demands arising in his work environment. Analyses revealed a negative association between the *perceived stress* and the coping mechanisms from *logic* category ($r = -236$; $p < .05$), meaning that as the feeling of pressure increases, distractions, negative thoughts, and anxiety conquer individual's brain and don't let him to be creative, rational and make good decisions.

4. CONCLUSIONS

The assessment of stress potential of specific aspects in the university system revealed that teachers confront especially with the necessity of compromise between the amounts of professional tasks, the needed time for doing the work and the quality of activity. Another main problem is the system financing issue. The main sources of stress identified by the research group are, in order, *the great volume and variety of the tasks*, *reduced remuneration comparing with the effort and responsibilities involved, difficult promotion, the fact that teachers have to finance themselves their scientific research, interference of the profession with family life, the contradiction between research and didactic activity, time pressure and unrealistic deadlines.*

Work overload is the most cited stress source specific to the academic environment [2, 6, 3]. Blix et al. [1] have discovered that the great volume of work is the main cause for leaving the profession, and Stewart and Spence [8] identified a negative relationship between the great volume of work and the low moral of faculties' members. Thorsen [9] revealed the fact that rather the big quantity of work and not the nature of it is the main factor of stress.

Compared with their male counterparts, women academics generally experience higher overall levels of stress in their jobs and use social support as a way to cope better with the demands placed upon them, whereas men employ *logic* coping strategies. The research literature stresses the importance of support networks in enabling individuals to cope with the stress they experience [4, 7, 10, 11, 5].

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Table1. Perceived sources of academic stress

Sources of pressure	N	Minimum	Maximum	Mean	Std. dev.
Great volume and variety of the tasks	70	1.00	6.00	5.11	1.30
Low remuneration compared with the work involved	70	1.00	6.00	4.92	1.21
Difficult promotion	70	1.00	6.00	4.87	1.17
Financing your own research	70	1.00	6.00	4.81	1.19
Work – family interference	70	2.00	6.00	4.70	1.14
Scientific research vs. didactic activity	70	1.00	6.00	4.54	1.53
Time pressure and unrealistic deadlines	70	1.00	6.00	4.50	1.89
Economic profitability vs. work quality	70	1.00	6.00	4.45	1.58
The size of group students and didactic norms	70	1.00	6.00	4.41	1.46
Professional activity vs. personal life	70	1.00	6.00	4.32	1.59
Student centred teaching	70	1.00	6.00	4.21	1.50
Over sizing the work formations	70	1.00	6.00	4.20	1.80
Presence of the students in syncope	70	1.00	6.00	4.20	1.45
The lack of regular feed-back	70	1.00	6.00	4.18	1.40
The conflict between needs and superiors' vision	70	1.00	6.00	4.17	1.55
Competition between the colleagues/ departments	70	1.00	6.00	4.17	1.60
Rapid and constant changes in the system	70	1.00	6.00	4.15	1.36
Initial selection of the students	70	1.00	6.00	4.11	1.89
The lack of student effort in their own training	70	1.00	6.00	4.10	1.74
Social perception of the university	70	1.00	6.00	4.05	1.45
Students' lack of intellectual effort	70	1.00	6.00	4.05	1.76
The lack of involvement in decision making	70	1.00	6.00	4.01	1.63
Students interested of the diploma	70	1.00	6.00	4.00	1.76
Accreditation and reaccreditation of the specializations	70	1.00	6.00	4.00	1.54
Hierarchical nature of the educational system	70	1.00	6.00	3.98	1.71
Depreciation of teacher's status	70	1.00	6.00	3.97	1.86
Bologna system	70	1.00	6.00	3.97	1.25
Permanent documentation	70	1.00	6.00	3.92	1.85
Professional competition	70	1.00	6.00	3.88	1.76
Reduced collaboration in problem solving	70	1.00	6.00	3.87	1.67
Poor opportunities for career decisions	70	1.00	6.00	3.87	1.48
Disloyal competition of private universities	70	1.00	6.00	3.85	1.63
Poor work procedures	70	1.00	6.00	3.80	1.38
Society pressure	70	1.00	6.00	3.78	1.42
Responsibilities uncertainties	70	1.00	6.00	3.77	1.52
To be at student's disposal	70	1.00	6.00	3.72	1.85

Evaluation through students	70	1.00	6.00	3.60	1.84
Emotional involvement in relationships with the students	70	1.00	6.00	3.60	1.60
Poor management support	70	1.00	6.00	3.58	1.68
The way your colleagues do their job	70	1.00	6.00	3.58	1.74
Work climate discipline	70	1.00	6.00	3.51	1.75
Defective preparation for change implementation	70	1.00	6.00	3.47	1.49
Human relations	70	1.00	6.00	3.47	1.56
Testing the teacher's tolerance	70	1.00	6.00	3.45	1.59
Poor material endowment	70	1.00	6.00	3.45	1.57
Accent on quantity in research	70	1.00	6.00	3.44	2.06
Deficient competences	70	1.00	6.00	3.44	1.78
Sharing information	70	1.00	6.00	3.37	1.69
Difficult access to recent information	70	1.00	6.00	3.30	1.52
Profession as a deadfall	70	1.00	6.00	3.25	1.75
Incompatibility between the tasks and competences	70	1.00	6.00	3.15	1.72
Competence acknowledgment	70	1.00	6.00	3.14	1.52
Obsolescence of the speciality domain	70	1.00	6.00	3.02	1.71
Testing the teacher's professional limits	70	1.00	6.00	2.95	1.55
Taking personally students' critics	70	1.00	6.00	2.94	1.58
The tendency that others take the merit for my accomplishments	70	1.00	6.00	2.71	1.47

Table 2. *Comparisons of academics' stress-coping strategies with other occupational groups*

Strategy			**Occupational groups**							
	OSI normative data (N= 156) *		University teachers (N= 70)		Pre-university teachers (N= 1776)*		Management consultants (N= 105)*		Middle managers (N= 48)*	
	Media	*σ*	*Media*	*σ*	*Media*	*σ*	*Media*	*σ*	*Media*	*σ*
Social support	13.54	3.56	16.92	2.88	15.48	3.36	14.21	2.61	13.77	2.28
Task strategies	20.51	2.90	29.08	4.42	25.90	3.79	25.78	2.89	24.94	3.11
Logic	11.75	1.77	12.58	2.60	12.59	2.38	12.80	1.78	12.60	1.62
Home/ work relationship	14.98	3.57	16.62	3.23	16.43	4.04	13.46	3.84	14.48	2.81
Time	14.23	2.14	13.87	2.81	14.74	2.21	14.35	1.74	13.50	1.57
Involvement	18.32	3.02	27.37	3.95	24.30	3.60	22.38	2.85	22.33	2.36

** Adaptation after Travers and Cooper (1996)*