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Perceived stress and strategic approach to coping among health professionals in private practice

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Abstract

This research was focused on a sample of Romanian health professionals (N = 60; Mage = 38.9 SD = 7.11) and had the purpose of investigating the way their perceived level of stress and coping strategies were associated with depression anxiety and general stress. The data were collected using three self-report questionnaires: Strategic Approach to Coping Scale (SACS; Hobfoll et al., 1998), Perceived Stress Scale (PSS; Cohen et al., 1983) and Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995). The results revealed that depression, anxiety and stress were significantly correlated with avoidance, assertive action and seeking social support.

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Keywords: stress; coping; depression; anxiety; healthcare professionals

1. Introduction

Studies conducted during the past 30 years strongly support the idea of a significant connection between the stress experienced by health care employees and a multitude of symptoms and syndromes which lead to psychological and physical dysfunctions (Erlen & Sereika, 1997; Rodham & Bell, 2002). The pressure in health domain labor and occupational stress lead most often to burnout phenomenon installation, also leading to affecting and even disrupting the family lives of the employees (Ganster, & Schaubroeck, 1991; Cohen, Janicki-Deverts, & Miller, 2007).

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Nica-Udangiu, Prelipceanu & Mihăilescu (2000) place the phenomenon of stress at the basis of crisis development, having the potential of triggering psychiatric symptoms which need to be approached. The same authors point out that despite the wide information available towards stress, it is difficult to resume to one strict definition to describe and explain it but they do point out that it is the only medical term which includes both the cause and effect of the patient's/subject's complaints. Among the most long – term and commonly used definitions of stress, the authors remind us of a rather medical one belonging to Guillemin (Nica - Udangiu, Prelipceanu & Mihăilescu, 2000) which described stress as a state translated through a specific syndrome corresponding to all non-specific modifications which occur upon biological system; the stress stimuli triggers a sequence of reactions namely the alert, the oposition and the exhaustion.

Dispenza (2008), author specialized in neuroscience, offers a complete and comprehensive description of stress, regarding its mechanisms and trajectory from the psychological stimulus towards the complex effects it triggers on a physical and chemical level within the human body. The author differentiates between the chronic and acute stress, a classification which we find to be crucial in approaching subjects confronting stress nowadays. The mentioned difference stands in the fact that acute stress is described as a short-term reaction which is rapidly solved and passed and which allows the body to return to its natural homeostasis in a rather quick way, having the opportunity to relax and let go of the challenging state of alert.

In other words, acute stress is a natural and useful reaction to threat or encountered problems which are inevitable. On the other hand, Dispenza (2008) brings to our attention that humans are unfortunately more affected by chronic stress. The author offers an explanation to support this fact: it seems that social humans are no longer allowed to choose between “fight or flight” so, as a consequence, we become continuously exposed to stress factors which we react to by anticipating, repressing, rationalizing and becoming worried or choose compromise in order to overcome different situations. Dispenza (2008) also brings to attention two aspects related to the stress humans are exposed to which we also find to be important to point out so that continuous seeking of solutions can be supported: 1) due to our brain construction which encompasses extremely numerous synaptic connections, we have the capacity to trigger stress by remembering past events, namely without being in contact with the concrete stimulus and 2) emotional stress, also among humans, has the capacity of triggering physical stress which is further connected to chemical stress, circle of effects which contributes to chronic effects and impairment of health and well-being.

The present study proposes the main objective of identifying and investigating the way in which stress and coping strategies correlate to the anxious-depressive symptoms assessed within a sample of participants, medical practitioners which conduct their professional activity within a private hospital in Bucharest.

2. Method

2.1. Participants

The study has involved the participation of 60 subjects, out of which 38 female and 22 male, medical personnel (physicians, medical nurses) employed in a private sector hospital from Bucharest, Romania. The participants have completed a brief questionnaire containing demographic data and instruments administered within our research design.

The obtained demographic information has shown that the 60 participants are aged between 27 and 55 years old, M_{age} = 38.9 SD = 7.11). A call of participation to the study has been displayed on the hospital's notice board. The participation was volunteer and requested the medical personnel to be employed in the hospital for at least one year, no matter the department or medical specialty. All participants received previous instructions and confidentiality of data they provided has been guaranteed.

2.2. Instruments

The SACS is based on the multiaxial model of coping (Hobfoll, Dunahoo, Monnier, Hulsizer, & Johnson, 1998) that takes both individualistic and communal aspects of coping into account and moves beyond the individualistic perspective, considering social aspects of coping as well. The SACS has 52 items which are distributed to 9 subscales: Assertive Action, Social Joining, Social Support, Cautious Action, Instinctive Action, Avoidance,

Indirect Action, Antisocial Action, and Aggressive Action. The SACS produces 9 scores for each subscale, ranging from 4 to 45. The Romanian version applied in the use of the present research study has been translated and validated for Romanian population in 2011 by a team composed by Budău, Ciucă, Miclea and Albu.

The Perceived Stress Scale (PSS; Cohen, Kamarch, & Mermelstein, 1983) is a self-reported questionnaire that was designed to measure "the degree to which individuals appraise situations in their lives as stressful" (Cohen et al., 1983, p. 385). The instrument has 10 items with the answers measured on a Likert type scale. The Cronbach's alpha coefficient for internal reliability was 0.75.

The Depression Anxiety Stress Scale (DASS-21R, Lovibond, & Lovibond, 1995/2011) is an instrument with 21 items which is composed by three assessment scales regarding: depression, anxiety and stress. DASS has been constructed in order to assess states, and not individual features. The instrument utilized in the present study has been translated and validated on Romanian population by Perțe şi Albu în 2011.

3. Results

Considering that the assumption of normality was met for all distributions, we applied a Pearson's correlation test in order to analyze the way health professionals' perceived level of stress, coping strategies and symptoms of depression, anxiety and stress were related one to another.

Table 1. PSS perceived stress, SACS coping strategies, DASS depression, anxiety and stress – Pearson's correlation coefficient, means, standard deviations and scales' internal consistency (Cronbach's α).

		1	2	3	4	5	6	7	8	9	10	11	12	13
PSS	1. Perceived stress	1												
SACS	2. Assertive Action	-.37**	1											
	3. Social Joining	-.22	.27*	1										
	4. Social Support	-.33**	.07	-.01	1									
	5. Cautious Action	-.05	-.05	.04	-.12	1								
	6. Instinctive Action	-.02	-.02	-.14	.07	-.28*	1							
	7. Avoidance	.37**	-.23	-.25	-.22	.17	-.16	1						
	8. Indirect Action	-.07	.15	.08	-.31*	.00	-.09	-.21	1					
	9. Antisocial Action	.02	.01	-.25*	-.07	-.08	.00	.11	.14	1				
	10. Aggressive Action	-.22	.17	.07	.07	.09	.00	-.22	-.04	-.04	1			
DASS	11. Depression	.51**	-.33**	-.22	-.36**	-.09	-.22	.33**	.03	.07	-.03	1		
	12. Anxiety	.56**	-.36**	.04	-.41**	.30*	-.20	.38**	.06	-.10	-.28*	.43**	1	
	13. Stress	.65**	-.33**	-.25	-.34**	.16	-.32*	.54**	.00	-.04	-.12	.51**	.56**	1
Cronbach's α		.85	.70	.81	.81	.76	.79	.69	.82	.75	.80	.80	.82	.84
Mean		14.67	29.63	16.08	16.98	15.12	16.30	18.50	11.03	12.90	17.08	4.05	5.87	8.75
Standard Deviation		4.70	6.219	4.39	7.64	4.96	5.15	5.00	3.31	3.90	4.05	2.41	2.81	3.65

Note. $N = 60$;* $p < .05$; ** $p < .01$

The obtained results indicated that the perceived level of stress accounted for 26% of the variation in depression, 31% of the variation in anxiety and 42% of the variation in symptoms of stress, all three relationships being positive. The magnitude of the associations was high. Moreover, the tendency to seek social support was more probable as the stressful situations were appraised as being less intense.

On the other hand, it was noticed that as their scores regarding symptoms of depression, anxiety and stress increased, they seemed to be less inclined to use the coping strategies of assertive action and seeking social support. In addition, it was revealed a decrease in stress symptoms, with an increase in applying instinctive action ($p < .05$). The effect sizes were moderate. Conversely, the avoidance coping strategy was positively correlated with depression, anxiety and stress. The association with stress symptoms was strong.

Considering all these relationships between variables, we further had the purpose of assessing the degree to which assertive action, seeking social support and avoidance coping strategies could be predicted based on the combination of perceived stress and symptoms of depression, anxiety and stress, while also aiming to identify the best explanation model in each case. Thus, for each coping strategy we conducted a backward multiple regression analyses in which the predictor variables were participants' scores on PSS and DASS scales. The statistical

requirements regarding influential cases, levels of collinearity and independence of errors, necessary for this type of procedure, were met.

Table 2. Multiple regression analyses using backward method. Predictors – DASS and PSS scores; Outcome variables – assertive action, social support, avoidance coping strategies.

Outcome		Assertive Action				Social Support			Avoidance			
		M_1	M_2	M_3	M_4	M_1	M_2	M_3	M_1	M_2	M_3	M_4
Predictors		S				S			S			
		D	D			D	S		D	S		
		A	A	A		A	D	D	A	D	S	
		PS	PS	PS	PS	PS	A	A	PS	A	A	S
R^2		.191	.190	.171	.137	.216	.215	.211	.312	.311	.310	.301
$R^2_{adjusted}$		.133	.146	.142	.122	.159	.173	.183	.262	.275	.285	.289
ΔR^2		.19**	-.002	-.018	-.034	.216**	-.001	-.005	.312**	.000	-.002	-.008
F_{ANOVA}		3.25**	4.36**	5.89**	9.20**	3.79**	5.12**	7.60**	6.23**	8.44**	12.77**	25.01**
B	S	-.10				-.14	-.18		.65	.63**	.66**	.75**
	D	-.38	-.41			-.59	-.62	-.71	.12	.10		
	A	-.38	-.42	-.49		-.71	-.74	-.84**	.18	.17	.19	
	PS	-.20	-.23	-.32	-.48**	-.07			-.02			
SD	S	.29				.35	.32		.21	.19	.18	.15
	D	.38	.36			.46	.44	.41	.28	.27		
	A	.34	.32	.32		.41	.39	.35	.25	.24	.23	
	PS	.22	.20	.19	.16	.27			.16			
β	S	-.06				-.07	-.08		.47	.46**	.48**	.54**
	D	-.14	-.16			-.18	-.19	-.22	.05	.05		
	A	-.17	-.19	-.22		-.26	-.27	-.31**	.10	.09	.11	
	PS	-.15	-.18	-.24	-.37**	-.04			-.02			

Note. M_1 = the first regression model; M_2 = the second regression model; M_3 = the third regression model; M_4 = the fourth regression model; S = Stress DASS; D = Depression; A = Anxiety; PS = Perceived Stress; $N = 60$; * $p < .05$; ** $p < .01$.

The results of the regression analyses revealed that in the case of all three coping strategies (assertive action, seeking social support and avoidance), there were not statistically significant differences regarding the amount of variation explained by the regression models specific to each outcome variable. However, based on the ANOVA values obtained in each situation, it was noticed that the initial model for each coping strategy was good in predicting the outcome variable, but that with each new model this ability improved significantly. Thus, these results along with the ones obtained for the coefficients of regression suggested that assertive action was best predicted by perceived stress, avoidance was best predicted by stress symptoms, while seeking social support was best predicted by the combination of anxiety and depression symptoms, noting that only anxiety had a significant individual contribution to the model.

4. Conclusions

The persons who provide healthcare services are exposed to highly stressful situations, as the nature of their profession implies dealing with illness and human suffering, managing difficult job tasks, having demanding working programs, while trying not to neglect their physical and mental health, personal life and well-being. Therefore, a thorough analysis of the health professionals' level of stress, ways of coping with stressful situations and both psychological and physical associated symptoms, should represent a central topic for as many studies as possible, in order to gain a more precise understanding of the aspects regarding the prevention and treatment of the problems that could arise in this context.

Thus, our research had the purpose of investigating the degree to which the perceived level of stress and coping strategies of a sample of Romanian health professionals were associated with symptoms of depression anxiety and general stress.

Our results were consistent with previous studies (e.g., Wolfgang, 1988; Firth-Cozens, & Greenhalgh, 1997; Moore, & Cooper, 1996) revealing that the participants' symptoms of depression, anxiety and stress were more severe, as their tendencies to avoid problems and appraise life situations as being stressful, were higher. Moreover,

the ones who applied more frequently assertive action and seeking social support as coping strategies tended to report lower levels of stress, as well as to complain lesser of symptoms of depression, anxiety and stress.

However, due to some important methodological weaknesses, such as using a correlational design, applying only self-report methods for collecting data, and including a non-representative sample of participants, we recommend to cautiously interpret these results. Thus, our findings could represent only a starting point for future research by offering some limited clues regarding the fact that the health professionals' perceived level of stress and symptoms of depression, anxiety and stress might be related to certain coping strategies such as avoidance, seeking social support and assertive action.

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