# Behavior of Personality Type Toward Stress and Job Performance: A Study of Healthcare Professionals

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### **ABSTRACT**

Background: The present paper has examined the sources of stress among the healthcare professionals and the difference between responses of personality type A and type B healthcare professionals toward stressful situations. Further, the difference in the performance of both the personality types has been studied. The relationship between stress and performance among the healthcare professionals in general and with respect to personality type A and type B healthcare professionals in particular has also been investigated. Methods: A total of 160 healthcare professionals of Post Graduate Institute (PGI), Chandigarh, were subjects of this study. Results: Identification with patients, deterioration and complication in the patient condition, and job criticism emerged to be the sources of stress. Significant difference between personality type A and personality type B professionals' response pertaining to identification with the patients only has been reported. However, type A individuals showed slightly higher inclination as compared to type B individuals on majority of stressful situations. It was further noted that type A individuals had scored higher on almost all the performance indicators as compared to personality type B individuals. The mean difference between the personality types was found to be significant for two performance dimensions, i.e., relationship with colleagues, and teaching and training. Conclusions: The stressful situation relationship with patients was found to have significantly negative impact on the performance factors such as good clinical care and rapport with patients. Daily work was also found to be negatively related to good medical practice.

**Keywords:** Good medical practice, healthcare professionals, job performance, personality, stress

# **Introduction and Literature Review**

Healthcare professionals owe the responsibility of delivering quality healthcare services. The ever-increasing demand of healthcare services and the sensitivity of the work at hospitals have increased the levels of job stress on the individuals working in it. Especially, the amount of work pressure on doctors has increased enormously.<sup>[1]</sup> Occupational stress has emerged to be a special health risk among healthcare workers.<sup>[2]</sup> It has been reported that many senior doctors suffer high levels of stress as a result of their work, consequently impairing their health, which in turn affects their ability to provide high quality care to patients.<sup>[3]</sup> Stressful conditions make health staff in general and doctors in particular susceptible to more physical and emotional morbidity.<sup>[4]</sup> Professional dissatisfaction, poor work performance, and burnout as the outcome of stress have been reported among physicians.<sup>[5]</sup>



Studies have revealed that the causes of stress among healthcare professionals include: (a) emotional and physical needs of patients, pressures to perform consistently and optimally under changing conditions for physicians; (b) inadequate staffing levels; (c) long working hours; (d) exposure to infectious diseases and hazardous substances leading to illness or death; (e) demands of the job and lack of communication; (f) career development; (g) problems with patients; (h) problems with work/home interface and social life; (i) working environment; and (j) workload. [5-9] The stressors may be varied in number and type; nevertheless, one's physiological, psychological, and social makeup determines the attitudes associated with the stress, making it stimulating and exciting to some, whereas others may feel stressed and burned. [10]

However, the difference in the response of the individuals to similar stressors under similar work conditions and situations may be attributed to the personality of the individual and particularly to the type of the personality. Personality is more or less stable and enduring organization of a person's

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characteristics, temperament, intellect, and physique, which determine his/her unique adjustment to the environment.[11] Personality factors have shown inclination toward stress, anxiety, and other occupational health outcomes in different areas of medicines, and these factors may contribute to the perception of job dissatisfaction and stress.[12] A longitudinal study indicated that personality and learning style of the doctors are correlates of approaches to work, workplace climate, stress, burnout, and satisfaction.[10] Numerous lists of personality traits describing an individual's behavior have been developed. Recent research has examined people using extensive lists of personality dimensions and has distilled them into Big Five.<sup>[13]</sup> Though the Big Five personality is being extensively used in studying the personality, it remains undeniable fact that the five factors are akin to type A/type B orientation.

Famous researchers Friedman and Rosenman<sup>[14]</sup> believed that people belong to either of the two basic types of behavior or personality, type A and type B. Type A behaviors include being ambitious, competitive, alert, impatient, and aggressive. They are always in a hurry, to the point of appearing "driven," showing chronically high levels of arousal. They exhibit "deadline urgency" (having to get things done by a certain time) and extreme competitiveness, even in leisure pursuits. Type B personalities may be equally ambitious, but do not appear to be "driven." Their job ambitions do not dominate their entire lives. They find time for family and friends, and tend to choose leisure pursuits that are less competitive than type A's choice.<sup>[15]</sup> Research studies have reported that doctors with type A personality were inclined to more stress as compared to doctors of type B personality; however, type A doctors showed slightly better performance than type B ones.<sup>[16]</sup> Another study discovered that type A personality individuals were compulsive, workaholic, aggressive, and competitive, whereas type B individuals were less aggressive, more relaxed, and set fewer deadlines.[17] The growing stress level among the healthcare professionals has become a matter of concern. It may have positive aspect in that some individuals may feel challenged and may be able to raise their productivity to meet the increasing demand. However, the ability of the individual to take stress positively or negatively may be related to the personality type of the individual, which may have its own consequences upon work performance.

In a nutshell, the delivery of high-quality medical care contributes to improved health outcomes of the patients, which may be affected by the psychological and emotional state of the healthcare professionals. The present study has attempted to study the sources of stress among healthcare professionals and the behavior of the personality types A and B toward stress. Further, the performance of both personality types and the relationship between stress and performance with respect to personality type A and type B healthcare professionals have also been examined.

# **Methods**

# Study design

The following hypotheses were tested:

- H<sub>1</sub>: There shall be significant differences between personality type A and type B for stressful situations.
- H<sub>2</sub>: There shall be significant differences between personality type A and type B for performance dimensions.
- H<sub>3</sub>: There is negative relationship between perceived stress among healthcare professionals and performance.

# **Participants**

The sample for this study included 160 healthcare professionals of PGI, Chandigarh, consisting of nurses, junior residents, senior residents, physiotherapists, and interns. The questionnaires were distributed to 200 respondents. But some were not returned and a few were incomplete, finally making the sample size of 160. The sample consisted of 26% males and 74% females; 22% were married while 78% were unmarried. The distribution of the participants according to their age group is as follows: 65% in 18–25 years, 25% in 26–33 years, 6% in 34–41 years, 3% in 42–49 years. and only 1% were above 50 years of age. The sample consisted of 30% junior residents, 16% senior residents, 9% physiotherapists, 37% nurses, and 8% interns. The study was conducted during 2010–2011.

#### **Measures**

To achieve the objective of the study, a questionnaire was designed to collect the information from the healthcare professionals. The questionnaire consisted of four parts: A, B, C, and D. Part A was framed to collect personal information of the respondents. Part B solicited information on the personality type of healthcare professionals, with the Bortner's[18] scale. In the present study, the number of respondents belonging to personality type A was 110 and personality type B was 50. Part C was framed to identify the sources of stress among healthcare professionals, with stressful situation questionnaire[19] addressing different stressful situations such as relationship with patients, family rejections, identification with patients, deterioration and complication, job criticism, private life, and daily work. Part D elicited the responses of the healthcare professionals on the different criteria of job performance, such as good clinical care, good medical practice, relationship with colleagues, relationship with patients, and teaching and training based on the National Health Services (NHS) professionals' survey. [20]

# **Results and Discussion**

Identification with the patients (M = 3.42) emerged to be the most stressful situation, followed by deterioration and complication in patient condition (M = 3.38) and job criticism (M = 3.09), while family rejection (with mean value M = 2.41) was noted to cause least stress among healthcare professionals [Table 1]. Sufferings of patients, which these professionals see and face daily (particularly the severely handicapped patients),

may cause stress in their minds, the feeling of which lasts even in their off hours of work. The finding supports the study by Ramirez et al., [21] where dealing with patients' pain was noted to be one of the stressors. Family rejection has been found to be the least stressor, which indicates that these professionals get enough support, encouragement, and continuous appreciation from their family. It is evident from the results [Table 2] that personality type A individuals obtained higher performance scores (mean values) as compared to type B individuals on four stressful situations, which are identification with patients, deterioration and complications, relationship with patients, and private life. Personality type B professionals scored better as compared to personality type A professionals in stressful situations such as job criticism, daily work, and family rejections. It was also noticed that the mean difference between personality type A and personality type B healthcare professionals was significant for one stressful situation, that is, identification with patients (t = 2.05, P < 0.05). Thus, the hypothesis H<sub>1</sub>, i.e., "There shall be significant differences between personality type A and type B for stressful situations," may be partially accepted.

Both personality type A and personality type B professionals obtained mean values more than average on performance dimensions [Table 3]. Further, it is observed that personality type A individuals scored better on majority of the performance factors, with the highest mean obtained for teaching and training (M = 4.13), followed by relationship with patients (M = 4.08), relationship with colleagues (M = 4.05), and good clinical care (M = 3.89), whereas personality type B individuals showed higher mean value for good medical practice (M = 3.76) [Table 4]. The results further reveal that the effect of personality type showed significant difference in relationship with colleagues (t = 3.95, P < 0.01) and teaching and training (t = 3.02, P < 0.01). The personality type A healthcare professionals obtained higher total mean than personality type B individuals. It can be said that that personality type A healthcare professionals perform better than type B professionals. The results conform to the study of Kazmi et al.[16] Thus, the hypothesis H2, i.e., "There shall be significant differences between personality type A and type B for performance dimensions," may be partially accepted.

The correlation analysis [Table 4] reveals that the stressful situation relationship with patients showed negative and significant correlation with good clinical care (r = -0.197, P < 0.05) and rapport with patients (r = -210, P < 0.01). It can be said that if the healthcare professionals are not able to communicate properly with the patients or if they are unable to build good relationship with the patients, they will not be able to provide good clinical care. Daily work showed negative and significant correlation with good medical practice (r = -198, P < 0.05). Daily work was also found to be

Table 1: Mean and standard deviations of stressful							
situations							
Stressful situations	Mean	SD					
Relationship with patients	3.00	0.58					
Family rejections	2.41	0.99					
Identification with patients	3.42	0.56					
Deterioration and complication	3.38	0.64					
Job criticism	3.09	0.65					
Private life	2.93	0.98					
Daily work	2.88	0.63					

Table 2: Means, SD, and t values showing differences between personality types in stressful situations

Stressful situations	Typ	e A	Type B		t	
	Mean	SD	Mean	SD		
Relationship with patients	3.01	0.59	2.91	0.50	0.66	
Family rejections	2.38	0.99	2.71	1.06	-1.29	
Identification with patients	3.45	0.52	3.16	0.76	2.05*	
Deterioration and complication	3.38	0.60	3.31	0.93	0.45	
Job criticism	3.07	0.64	3.23	0.76	-0.92	
Private life	2.98	0.98	2.59	0.94	1.55	
Daily work	2.88	0.64	2.95	0.57	-0.48	
*P < 0.05						

*p	<	0.05
1	_	0.05

Table 3: Means, SD, and t values showing differences between personality types on performance dimensions								
Performance/ stressful situations	Good clinical care	Good medical practice	Relationship with colleagues	Rapport with patients	Teaching and training			
Relationship with	-0.197*	-0.075	-0.030	-0.210**	-0.068			
patients	0.013	0.345	0.703	0.008	0.390			
Family rejections	-0.085	-0.031	-0.118	-0.088	-0.058			
	0.283	0.700	0.136	0.270	0.469			
Identification with	0.077	0.043	0.100	0.151	0.038			
patients	0.332	0.589	0.208	0.057	0.630			
Deterioration and	0.056	0.072	0.054	0.023	0.132			
complication	0.485	0.368	0.500	0.775	0.095			
Job criticism	0.058	-0.060	0.046	0.000	0.028			
	0.467	0.455	0.562	0.998	0.726			
Private life	0.075	0.097	-0.017	0.068	0.028			
	0.346	0.222	0.835	0.395	0.826			
Daily work	-0.142	-0.198*	-0.151	-0.143	-0.102			
	0.073	0.012	0.056	0.070	0.201			

\*P < 0.05, \*\*P < 0.01

negatively significantly related to good medical practice. Hence, if the healthcare professionals become overloaded with work involving frequent interruptions, it may create stress affecting good medical practice. The findings are similar to a study which reported that due to tiredness, pressure of overwork lowered the standards of medical care.<sup>[22]</sup> Moreover, higher occupancy and overburden may not enable them to add to their medical

Table 4: Personality type and performance indicators

Performance indicators	A		В		t
	Mean	SD	Mean	SD	
Good clinical care	3.89	0.50	3.72	0.72	1.25
Good medical practice	3.75	0.79	3.76	0.85	-0.29
Relationship with colleagues	4.05	0.63	3.38	0.86	3.95**
Rapport with patients	4.08	0.66	3.80	0.96	1.09
Teaching and training	4.13	0.89	3.41	1.18	3.02**
**P < 0.01					

knowledge upgradation. The findings also indicate that some of the determinants of stressful situations were negatively correlated with the performance indicators. The results may support the findings of a study where stress in doctors was found to be related to lower quality of clinical supervision. [23] A positive relationship can also be seen between some stressful situations and performance dimensions. Thus, the hypothesis H<sub>3</sub>, i.e., "There is negative relationship between perceived stress among healthcare professionals and performance," may be partially accepted.

In case of personality type A healthcare professionals [Table 5], relationship with patients showed negative significant correlation with good clinical care (r = -0.220, P < 0.01) and rapport with patients (r = -236, P < 0.01). Daily work was negatively and significantly related to good medical practice (r = -177, P < 0.05). In case of personality type B healthcare professionals [Table 6], daily work was negatively and significantly related to relationship

Γ	Γable 5: C	orrelation	ı values of	f stressf	ul situatio	ons and pe	rformanc	e dimension	s in person	ality	
				type A	healthca	re professi	onals				
								_			

type 11 healtheare professionals							
Performance/stressful situations	Good clinical care	Good medical practice	Relationship with colleagues	Rapport with patients	Teaching and training		
Relationship with patients	-0.102	-0.223	-0.123	-0.099	-0.218		
	0.697	0.389	0.639	0.706	0.401		
Family rejections	-0.145 $0.578$	-0.378 .137	-0.418 0.095	-0.297 $0.248$	-0.373 0.141		
Identification with patients	0.374	-0.124	0.046	0.509	0.063		
	0.139	0.636	0.861	0.037	0.811		
Deterioration and complication	0.466	0.009	-0.157	0.498*	0.077		
	0.060	0.973	0.546	0.042	0.770		
Job criticism	0.075	-0.530*	-0.142	-0.090	-0.212		
	0.775	0.029	0.586	0.731	0.414		
Private life	0.236	0.125	-0.297	0.272	0.022		
	0.362	0.631	0.248	0.291	0.934		
Daily work	-0.337	-0.399	-0.505*	-0.406	-0.533*		
	0.186	0.113	0.039	0.106	0.028		

<sup>\*</sup>Correlation is significant at 0.05 level (2-tailed)

Table 6: Correlation values of stressful situations and performance dimensions in personality type B healthcare professionals

		cype = meantinear	Prorecordinate		
Performance/stressful	Good clinical	Good medical	Relationship with	Rapport with	Teaching and
situations	care	practice	colleagues	patients	training
Relationship with patients	-0.220**	-0.060	-0.039	-0.236**	-0.067
	0.008	0.476	0.640	0.005	0.426
Family rejections	-0.065	0.014	-0.039	-0.042	0.018
	0.443	0.870	0.642	0.618	0.827
Identification with patients	-0.011	0.074	0.057	0.051	-0.013
-	0.897	0.380	0.497	0.548	0.882
Deterioration and complication	-0.050	0.084	0.093	-0.101	0.140
	0.552	0.317	0.268	0.231	0.096
Job criticism	0.064	0.007	0.110	0.025	0.091
	0.447	0.932	0.190	0.771	0.278
Private life	0.038	0.095	-0.021	0.025	-0.016
	0.656	0.260	0.802	0.769	0.846
Daily work	-0.113	-0.177*	-0.100	-0.105	-0.039
	0.179	0.034	0.236	0.213	0.642

<sup>\*\*</sup>Correlation is significant at 0.01 level (2-tailed) \*Correlation is significant at 0.05 level (2-tailed)

with colleagues (r = -505, P < 0.05) and teaching and training (r = -533, P < 0.05). Deterioration and complications in patient condition showed positive and significant correlation with rapport with patients (r = 498, P < 0.05), whereas job criticism was significantly and negatively related to good medical practice (r = -530, P < 0.05). Conditions and complications of the patient's ailments seen for a long time and the feeling of suicide by such patients may have sensitized the doctors, nurses, or others for more empathy, rapport, and care for such patients. However, job criticism was found to be negatively significantly related to good medical practice. This leads to the impression that the dissatisfaction from job, lesser pay, and limited autonomy in decision making affects the good medical practice and medical knowledge. Daily work was also negatively and significantly related to relationship with colleagues, and teaching and training. This means that daily routine and the higher occupancy in the work influences the relationship of the professionals with their colleagues, and moreover, reduces their willingness to help the students and colleagues in teaching and training.

# **Conclusions and Recommendations**

Stress should not always be considered as a negative condition. However, optimal stress always gives individuals an added edge to do their best in challenging situations. More important is managing and handling stress properly, thereby negating its effect on the performance. Stress can be modified with counseling and behavior modification training. Some stress coping strategies like meditation, yoga, exercises, listening to music, spending time with nature, and proper sleep are always helpful in reducing stress. Stress management programs that teach individuals about the nature and sources of stress, the effects of stress on health, and personal skills to reduce stress, for example, time management or relaxation exercises, should be organized. The authorities need to see and ensure that the workload is within the limits of capabilities and resources of these professionals. Cognitive behavioral training can improve the ability to cope with stress over the long term and that the beneficial use of leisure time should be discussed as a part of cognitive behavioral training. Tables have been shifted to the end of the manuscript for convenience. They will appear at appropriate places in the final proof.

# References

- Polanyi MF, Frank JW, Shannon HS, Sullivan TJ, Bertera RL. Promoting the determinants of good health in the workplace. Setting for health promotion: Linking theory and practice. In: Poland B, Green LW, Rootman I, editors. Sage:Oaks, CA; 2000. p. 138-74.
- 2. Berger A. Surviving (and even enjoying) medicine. Student BMJ 2000;8:175-216.
- 3. British Medical Association. Work related stress among senior doctors. BMA: London; 2000.
- 4. Gautam M. Women in medicine: Stresses and solutions. West J Med 2001;174:37-41.

- 5. Newbury-Birch D, Kamali F. Psychological stress, anxiety, depression, job satisfaction, and personality characteristics in preregistration house officers. Postgrad Med J 2001;77:109-11.
- Naiz U, Sehar H, Alis. Stress in women physicians in Pakistan. Pak J Med Sci 2003;19:89-94.
- 7. Rout UR. Stress amongst district nurses: A preliminary investigation. J Clin Nurs 2000;9:303-9.
- 8. Aziz A. Sources of perceived stress among American medical doctors: A cross-cultural perspective. Cross Cultural Manage: An Int J 2004;11:28-39.
- Dasgupta H, Kumar S. Role stress among doctors working in a government hospital in Shimla (India). Eur J Soc Sci 2009;9:356-70.
- 10. McManus IC, Keeling A, Paice E. Stress burnout and doctors' attitude to work are determined by personality and learning style: A twelve year longitudinal study of UK medical graduates. BMC Med 2004;2:29. Available from: http://www.biomedcentral.com/1741-7015/2/29. [Last accessed on 15 April 2012].
- 11. Larsen RJ, Buss DM. Personality Psychology Domains of Knowledge about Human Nature.2<sup>nd</sup> ed.McGraw Hill: New York; 2005.
- 12. Wilkinson J, Benjamin A, Wade W. Assessing the performance of doctors in training. BMJ 2003;327:91-2.
- 13. Barrick MR, Mount MK. The big five personality dimensions and job performance: A metaanalysis. Pers Psychol 1991;44:1-26.
- 14. Friedman M, Roseman R. Type A behavior and your heart. In: Alfred A, editor. Knopf: New York; 1974.
- 15. Stress and anxiety. Available from: http://www.palgrave.com/psychology/malim/pdfs/chap\_11.pdf.
- Kazmi R, Shehla A, Khan D. Individual Differences and Stress-Performance Relationship Proceedings 2<sup>nd</sup> CBRC, Lahore, Pakistan November 14, 2009; 2009.
- 17. Doctor RM, Doctor JN. Stress in M. V. S. Ramachaurdrans (Ed.). Encyclopaedia of Human Behaviour. 1994;4:311-23.
- 18. Bortner RW. A short rating scale as a potential measure of pattern A behavior. J Chronic Dis 1969;22:87-91.
- Oubina VM, Calvo MC, Rios LF. Occupational stress and state of health among clinical psychologists and psychologist. Psychol Spain 1997;1:63-71.
- 20. A handbook of NHS professionals, appraisers and appraisees;2006.
- 21. Ramirez AJ, Graham J, Richards MA, Cull A, Gregory WM. Mental health of hospital consultants: the effect of stress and satisfaction at work. Lancet 1996;347:724-8.
- 22. Firth-Cozens J, Greenhalgh J. Doctors' perceptions of the links between stress and lowered clinical care. Soc Sci Med 1997;44:1017-22.
- 23. Self reported stress amongst London doctors in training is associated with self reported medical error and below average performance as doctor. Available from: http:// www.ama-assn.org/resources/doc/physician-health/ icph 2010-smith-paice.pdf. [Last accessed on 15 May 2012].

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