

# RELATIONSHIP OF HARDINESS, OPTIMISM AND PROFESSIONAL LIFE STRESS AMONG HOUSE-JOB DOCTORS

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## ABSTRACT

**Objective:** This study investigated the relationship of hardiness, optimism and professional life stress among house-job doctors serving in five public teaching hospitals in Lahore, Pakistan.

**Methodology:** A cross-sectional survey research design was used in this research using a purposive sample of 200 (118 males and 82 females). Personal views survey third edition (PVS-III), life orientation test revised (LOT-R) and professional life stress scale (PSS) were used to measure the hardiness, optimism and stress respectively. The Statistical Package for the social sciences (SPSS) version 20.0 for window was used for analysis of data.

**Results:** Male constituted 59% of the sample with age ranging from 22 to 32 years for both genders. Hardiness and optimism accounted for 29% variance on professional life stress. The relationship of hardiness and professional life stress was significant ( $p < 0.001$ ).

**Conclusion:** Hardiness was found as significant predictor of professional life stress among house-job doctors. However there was absence of any relationship between optimism and professional life stress.

**Key Words:** Hardiness, Optimism, Professional life stress, House-job doctors

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## INTRODUCTION

The structural problem of health care system requires serious attention<sup>1</sup>. Doctors, especially house-job doctors are working in unprivileged conditions. Poor pay and bad working conditions are some of the issues which have been agitating young doctors severely. Consequently, the young doctors have been adopting extreme measures such as going on strikes, closing down outdoor patient services (OPDs) and marching on roads in protest<sup>2</sup>. The legitimate demands of house-job doctors have been ignored repeatedly. As such the young doctors are left with no option but to live and work under stress. Professional life stress adversely affects performance, productivity, job satisfaction and health of professionals<sup>3</sup>. Cooper and Catwright report dysfunctional impact of stress on both organizations and individuals<sup>4</sup>. The present research investigated the relationship of hardiness, optimism and professional life stress among house-job doctors in five teaching hospitals of Lahore City, Pakistan.

Lazarus and Folkman argued that the individual in stress use external and internal resources to reduce stress<sup>5</sup>. These personality resources have been found to

buffer the impact of stress among health professionals. In one of the most in-depth studies to examine personality and stress, Kobasa et al<sup>6</sup> found that individuals high in hardiness tended to experience less stress and hardy individuals have the ability to behave in an adaptive manner when stress is experienced. Similarly, Seligman<sup>7</sup> suggested that optimism could be learned and help people to achieve more and to maintain better health.

Stress is the perceived discrepancy between internal and external demands of the individual and his perceived ability to handle the situation. Stress at work is also termed as work-stress and occupational stress. However, these terms are synonymously used for professional life stress. Professional life stress refers to "a large number of work-related environmental conditions or specific events thought to impact the health and wellbeing of the worker"<sup>8</sup>.

Researchers have discovered numerous stress triggering variables that doctors and nurses usually come across, such as, emotional demands of patients and their families, death and dying, conflicts with administrators, inadequate staffing and work overload<sup>9</sup>. Likewise, prior research findings have linked professional life stress to absenteeism, negative outcomes of illness, decreased

productivity and performance deterioration<sup>10</sup>. Opposite to that, hardiness and optimism have been found buffer against stress among health professionals<sup>11-14</sup>.

The concept of hardiness refers to "a combination of attitudes that provides the courage and motivation to do the hard, strategic work of turning stressful circumstances from potential disasters into growth opportunities"<sup>15</sup>. Maddi et al<sup>16</sup> propose that hardiness is a personality characteristic that tells how an individual handles stress. Hardy people have a strong sense of control over their lives. Moreover, the hardy people see change as a challenge rather than threat. Thus, they are able to cope with the stress associated with threat because every threat is perceived as challenge by them<sup>17,18</sup>.

The optimistic people believe that good outcomes will occur even when one is confronted with major obstacles<sup>19,20</sup>. According to Scheier et al<sup>20</sup> optimism refers to an individuals' dispositional tendency of holding a generalized positive expectancies even when confronted with adversity or difficulty in their lives. Researchers argue that in the face of difficult situations the optimistic people exhibit positive emotional reactions and expectations<sup>20</sup>. They expect to have positive outcomes even when things are difficult and tend to be confident and persistent<sup>21</sup>.

The current research was important for several reasons. First, this study generated additional knowledge about the relationship between hardiness and optimism (as independent variables) and professional life stress (as dependent variable) in a sample of house-job doctors working in different public teaching hospitals in Lahore, Pakistan. Second, study of variables influencing workplace stress is also important because stress has various devastating effects on the workplace environment of doctors and improving their hardiness may increase their ability to deal with workplace stress<sup>22</sup>. Third, in Pakistan, doctors are working in un-privileged conditions and therefore, are more prone to develop stress. Evaluation of professional life stress, hardiness and optimism may enable employers to assist healthcare professionals in using effective stress reducing coping strategies.

Forth, people in hospital administration, who provide continuing education to the healthcare professionals, may find this study significant because understanding of the associations between the study variables may help them to assist the house-job doctors to learn hardiness and optimism skills and thereby be able to reduce the stress in their general practice as medical officers. Fifth, understanding the relationship among hardiness, optimism and professional life stress could be beneficial for senior medical faculty who supervise house-job doctors. Finally, this study will also be helpful in training and counseling of doctors regarding work-

place stress reduction.

Based on the literature review pertaining to the relationships among the variables used in the current research the following hypothesis was formulated. "Hardiness and optimism would significantly predicts professional life stress among house-job doctors".

## METHODOLOGY

A purposive sample of 200 house-job doctors (118 males and 82 females) was derived from the total number of house-job doctors working in the five public teaching hospitals of Lahore. The sample was drawn from five different teaching hospitals of Lahore City of Pakistan (Ganga Ram Hospital, Jinnah Hospital, Mayo Hospital, Fatima Memorial Hospital and General Hospital). Purposive sampling strategy was used to recruit the study sample which involves the selection of cases that are likely to be information-rich with respect to the purpose of the research.

Before data collection permission was obtained from the Department of Psychology, University of Punjab, Lahore and from the relevant hospitals administration. An informed consent was also filled by each of the participant to protect human subjects. The risks and benefits related to this research were explained to every participant. It was also explained to all the participants that identity and confidentiality will be maintained and only group data information will be reported.

Demographic information form was developed by the researcher in order to gather information about age, education, gender, marital status, duration of house-job in months, field of specialization, number of dependent children, past or current psychiatric history, history of any physical illness and history of any other stress reported by the research participants.

Personal views survey III (PVS-III) measures the dispositional hardiness of an individual<sup>23</sup>. PVS-III is a self-reported instrument consisting of 18 items. Maddi<sup>23</sup> reported that hardiness has high internal consistency because of its Cronbach alpha value ( $\alpha = 0.84$ ).

Professional life stress scale (PLSS) was developed by Fontana<sup>24</sup> to determine the degree to which professional life situations are experienced as stressful by an employee. It consists of 24 items with diverse multiple choice answers. Fontana<sup>24</sup> and Abouserie<sup>25</sup> reported well with its Cronbach alpha value ( $\alpha = 0.74$ ).

The Life orientation test (LOT-R) measures dispositional positive expectancies of an individual<sup>26</sup>. LOT-R is a self-report instrument consisting of 10 items. Scheier and Carver<sup>26,27</sup> reported Cronbach alpha value ( $\alpha = 0.76$ ).

A total of five public hospitals of Lahore were ap-

proached. The consent form was individually administered for participation in this research project prior to the administration of PVS-III, PLSS and LOT-R. Rapport was established by assuring the participants of the confidentiality of their personal information in order to elicit their true responses without any fear or inhibitions.

The Statistical Package for the social sciences (SPSS) version 20.0 for window was used for analysis of data obtained from questionnaires. Hierarchical multiple regression analysis was used to find out predictive association of hardiness and optimism as independent variables and stress as outcome variable. The relationships between hardiness (as measured by PVS-III), optimism (as measured by LOT-R) and professional life stress (as measured by PLSS) were investigated using Pearson product-moment correlation.

Significant research ethics were followed during data collection. Firstly, written permissions to use the scales was obtained from corresponding authors of the scales. Secondly, a written agreement to participate in the research was filled out from participants. Thirdly, purpose of the research project was briefed to them, and were fully allowed to quit from the research at any point of time. Finally, they were also ensured that information taken from them will be kept confidential.

## RESULTS

Demographic data for gender, age, marital status, number of children, job duration, specialization, history of mental illness, history of physical illness and history of any other stress were shown in table 1. Male constituted 59% of the sample with age ranging from 22 to 32 years for both the genders. Participants in this study were predominantly unmarried (91%  $n = 182$ ), only 9% ( $n = 18$ ) were married with 38.89% having children. Job duration of majority of the house-job doctors (69%) ranged from 3 to 7 months. None of the participants reported history of any previous mental illness or having ever been treated previously for mental health conditions, either as an indoor patient or an outdoor patient. Physical retardation or major physical illness was reported by 3% participants. History of stress other than professional life stress was reported by 16% of the house-job doctors.

using Pearson product-moment correlation, preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Table 2 shows value of "r" depicting strength of relationship among variables along with "p" value which depicts level of significance. For current research, level of significance was set 0.05 which means values having p-value less than 0.05 are significant. Table 2 shows that majority of the study variables were significantly correlated with each other for example professional life

stress and commitment ( $r = -0.48$ ,  $p < 0.01$ ), professional life stress and control ( $r = -0.52$ ,  $p < 0.01$ ), professional life stress and challenge ( $r = -0.16$ ,  $p < 0.01$ ), professional life stress and total hardiness ( $r = -0.51$ ,  $p < 0.01$ ). Optimism was not significantly correlated with stress and hardiness.

Table 3 showed the results of regression analyses. Model 1 which included demographic variables was not significant,  $F(6, 192) = 0.55$ ,  $p = 0.765$ . The demographic variables accounted for only 2% of the variance in professional life stress scores. The model 2 including hardiness and optimism was significant  $F(8, 190) = 9.32$ ,  $p < 0.001$ . Hardiness and optimism jointly accounted for 27% of variance in professional life stress scores.

Overall demographics, hardiness and stress explained 29% variability in professional life stress. These results indicated that hardiness ( $\beta = -0.38$ ,  $t = -5.62$ ,  $p < 0.001$ ), was statistically significant predictor of professional life stress of house-job doctors. Hardiness correlated negatively with professional life stress of house-job doctors.

## DISCUSSION

The findings of the current research supported the objective of the study stating a negative predictive relationship between hardiness and professional life stress. Findings revealed hardiness as significant predictor of professional life stress. This shows that more hardy the house-job doctors; they experienced less professional life stress. This finding is consistent with previous researches results about the relationship between hardiness and professional life stress among healthcare professionals. Delahaj et al<sup>28</sup> argued that hardiness influenced the way people responded to a stressful situation and negatively correlated with stress. This negative predictive relationship between hardiness as independent variable and stress as dependent variable has been reported in other previous studies as well<sup>29-36</sup>.

The results of the current research showed absence of any relationship between optimism and professional life stress among house-job doctors. This finding did not support the study objective that optimism would significantly predict professional life stress among house-job doctors. However, there was apparent negative correlation between optimism and professional life stress. This finding is consistent with the results of previous research reporting absence of any relationship between optimism and professional life stress<sup>37</sup> and inconsistent with the previous research findings which revealed significant negative relationship between optimism and professional life stress<sup>38,39</sup>.

The findings seem to be meaningful in the light of overall uncertainty and insecurity of Pakistani society due to political and economic instability. The people of

**Table 1: Demographic characteristics of the sample (n=200)**

Characteristics	n	%
<b>Gender</b>		
Male	118	59%
Female	82	41%
<b>Age</b>		
22 – 26	183	92%
27 – 32	17	08%
<b>Marital Status</b>		
Married	18	09%
Unmarried	182	91%
<b>Children</b>		
Yes	8	4%
No	192	96%
<b>Duration of Job</b>		
3 – 7 months	137	69%
8 – 12 months	63	31%
<b>Specialization</b>		
Cardiology	1	1%
E.N.T	3	2%
Medicine	81	40%
Surgery	29	14%
Psychiatric	13	7%
Gynecology	11	6%
Ophthalmology	57	28%
Miscellaneous	5	2%
<b>History of Physical Illness</b>	6	3%
<b>History of Mental Illness</b>	0	0%
History of any other Stress	32	16%

**Table 2: Inter-correlations among professional life stress, hardiness and optimism (n =200)**

	Variables	M	SD	1	2	3	4	5	6
1	PLS Total	21	7.0	-					
2	Hardiness	31	5.8	-.51**	-				
3	Commitment	11	2.7	-.48**	.82**	-			
4	Control	11	2.5	-.52**	.80**	.54**	-		
5	Challenge	10	2.4	-.16*	.68**	.31**	.30**	-	
6	Optimism	15	3.2	-.04	.02	-.01	.04	.01	-

Note. PLSS = professional life stress; LOT-R = life orientation test; PVS-III = hardiness (commitment, control & challenge).

\*\*p < 0.01, \*p < 0.05

**Table 3: Hierarchical multiple regression analysis predicting professional life stress among the house-job doctors from hardiness and optimism (n=200)**

Steps and predictor variable	$\Delta R^2$	SEB	$\beta$
Step 1			
Control variables	0.02		
Age		0.40	0.02
Gender		1.13	0.08
Marital status		2.24	- 0.06
Duration of house job		0.17	- 0.04
Number of children		2.64	0.11
Monthly income		0.00	- 0.01
Step 2	- 0.27***		
Hardiness		0.08	- 0.52***
Optimism		0.14	- 0.03
Total $\Delta R^2$	0.29***		

Note. \*p < 0.05, \*\*\*p < 0.001

Pakistan are not only surrounded by the dangers across the borders but also facing many challenges within the country. For example, terrorism, un-employment, poverty, structural problems in organizations and clashes of institutions. The situation of education and health is also vulnerable. In the context of current situation of Pakistan, it seems difficult for a person to be optimistic and positive. Another reason behind the inconsistent finding could be the cultural and religious differences of the respondents. Cultural and religious norms and values play important role in the development of personality characteristics. The concept of optimism or perception of an optimistic person is different in Pakistani society because being much ambitious or optimist is not commendable in Pakistani society.

### LIMITATIONS

Like many other studies the present research also has some limitations. This study used self-report measures of all the study variables. Another limitation of this study was its cross-sectional survey research design which did not allow any trend analysis. Thus, a longitudinal research design is recommended for trend analysis of the study variables for the sample of house-job doctors.

### CONCLUSION

Hardiness was found as significant predictor of professional life stress. However there was absence of any relationship between optimism and professional life stress among house-job doctors.

### IMPLICATIONS

On the whole, the current research has several implications. First, it contributed to the literature on har-

diness, optimism and professional life stress pertaining to house-job doctors. Second, the findings of this study further highlight the importance of concepts of hardiness, optimism and professional life stress in the work environment of house-job doctors because the workplace where they work is full of stressors. Third, the findings of this study also provide academics of medical education with clues regarding management of workplace of the house job doctors. The findings of this study have theoretical implications because they provided a scientific body of knowledge pertaining to the house-job doctors in Pakistan.

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