

Hardiness and Coping as Predictors of Professional Life Stress among House-job Doctors

Yousaf Jamal

Department of Psychology, Government College Township

Yasmin Nilofer Farooqi

Department of Psychology, University of the Punjab

This study investigated the relationship between hardiness and coping as independent variables and professional life stress as dependent variable using a convenient sample of 200 (118 male and 82 female) house-job doctors serving in five public teaching hospitals of Lahore, Pakistan. A cross sectional survey research design was used in this research. Hardiness was measured through Personal Views Survey, Third Edition, (Maddi, 2001), Coping Orientation to Problem Experienced (Carver, Scheier & Weintraub, 1989) was used to measure coping and Professional Life Stress Scale (Fontana, 1989) was used to measure the work place stress of the participants. Hierarchical Multiple Regression Analyses revealed that hardiness, problem-focused coping, avoidance coping and emotion-focused coping significantly predicted professional life stress. The present findings provided some information about hardiness, coping and professional life stress pertaining to house job doctors in Pakistan.

Keywords: hardiness, coping strategies, professional life stress, house-job doctors.

The present research investigated relationship of hardiness and coping as predictor and professional life stress as outcome variable among house-job doctors in five teaching hospitals of Lahore, Pakistan.

The structural problem of health care system requires serious attention (Islam, 2002). Medical professionals, especially young doctors (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 are left with no option but to live and work under stress. Only a few empirical studies have examined prevalence of stress, causes of stress, role of hardy personality in coping with professional life stress among house-job doctors (Malik & Rehman, 2003). Thus, it was needed that the relationship between hardiness and coping strategies as predictors and professional life stress as outcome be studied among house-job doctors.

The current research is important for several reasons. First, this study generated additional knowledge about the relationships between hardiness and coping as independent variables and professional life stress as dependent variable in a sample of Pakistani house-job doctors. Second, study of variables influencing workplace stress is also important because stress has various devastating effects on the workplace environment and improving an individual's hardiness may increase his ability to deal with workplace stress (Jalali & Amarqan, 2015). Furthermore, inexorable stress can have serious harmful effects on an individual's physical and psychological health (Yew, Lim, Haw & Gan, 2015). Finally, in Pakistan, doctors are working in un-privileged conditions and, therefore, are more prone to develop stress. Evaluation of professional life stress and hardiness may enable employers to assist healthcare professionals in using effective stress reducing coping strategies.

Seyle (1983) considered stress to be a physical response. Later on, several writers referred to stress as a mind-body phenomenon (Monat, Lazarus, & Reevy, 2007). 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" (Hurrell, Nelson, & Simmons, 1998, p. 368).

Researchers have discovered numerous job stressors that doctors and nurses usually come across: emotional demands of patients and their families, death and dying, conflicts with administrators, inadequate staffing and work overload (McCranie, Lambert, & Lambert, 1987). Likewise, prior research findings have linked professional life stress to absenteeism, negative outcomes of illness, decreased productivity and performance deterioration (Malik & Rehman, 2003). On the other hand, hardiness and coping strategies have been found to reduce or neutralize stressors among health professionals (Monat et al., 2007; Ghiyasvandian & Gebra, 2014; Jalali & Amarqan, 2015). These findings support the theory that stress is experienced in work situations and appraisal of stress is dependent on a variety of factors including individual's hardiness and coping (Rasouli, Hosseini & Dokanee, 2012; Chai & Low, 2015).

Coping refers to "cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the persons" (Folkman & Lazarus, 1988a, p. 310). Coping helps advance a sense of increased control over the situation and is characterized by dynamics and changes that are a function of continuous appraisals and reappraisals of the shifting person-environment relationship (Folkman et al., 1986). Researchers argue that the effects of stress are directly linked to coping strategies (Ghiyasvandian & Gebra, 2014; Chai & Low, 2015; Ramezanli et al., 2015; Shiferaw et al. 2015; Skaalvik & Skaalvik, 2015).

Kobasa (1979a) suggest that some people are more resistant to stress and better able to cope with it than others. They further argue

that personality characteristics like hardiness protect individuals from the negative effects of stress. Moreover, this characteristic of hardiness enables the individual to set goals, make commitments, cope with adversity and pain, and to recover from trauma and stress (Rasouli, Hossenian & Dokanee, 2012). For the past two decades, hardiness as a personality trait has been identified as a convincing buffer in relationship between stress and illness. Theoretically hardiness protects health and improves occupational performance by its impact on coping process (Maddi et. al., 2006). Committed people have self-control and value challenges and are more likely to be motivated to react to stressors by increased interaction. In this dynamic interaction, they are trying more to investigate, persuade, and learn from events. On the other hand, less hardy personalities frequently engage in regressive strategies. This explains decreased rather than increased interaction with stressors (Rasouli, Hossenian & Dokanee, 2012; Jalali & Amarqan, 2015).

Hypothesis

Hardiness and coping would be significant predictors of professional life stress.

Method

Sample

A purposive sample of two hundred 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, Pakistan (Ganga Ram Hospital, Jinnah Hospital, Mayo Hospital, Fatima Memorial Hospital and General Hospital).

Instruments

Personal Views Survey, Third Edition (PVS-III): Personal Views Survey III (PVS-III) measures the dispositional resilience of an individual (Maddi, 2001). PVS-III is a self-reported instrument consisting of 18 items. According to Maddi (2004) nine of the 18 items of PVS III are negatively worded and are, therefore, reverse scored. Maddi et al. (2006) reported that hardiness has high internal consistency because of its Cronbach Alpha value ($\alpha = 0.84$).

Professional Life Stress Scale (PLSS): Professional Life Stress Scale (PLSS) was developed by Fontana (1989) to determine the degree to which professional life situations are experienced as stressful by an employee. PLSS is a self-reported instrument consisting of 24 items. The items have diverse multiple optional responses. Fontana and Abouserie (1993) reported good with the Cronbach Alpha value $\alpha = 0.74$.

Coping Orientation to Problem Experienced (COPE): The Coping Orientation to Problems Experienced (COPE) was developed by Carver, Scheier, and Weintraub (1989) to measure how people cope with stressful life events. It contains 28 items on 4-point rating scale. The scale consists of 15 sub scales which are categorized into three main coping strategies named as: Problem-focused coping, Emotion-focused coping and avoidance coping. The COPE is a very useful instrument widely use worldwide and found equally reliable in Pakistan. However, Carver (2007) proposed few changes in COPE according to the Pakistani sample. COPE has strong psychometric properties with Cronbach Alpha value 0.92, test-retest reliability value 0.86 (Carver, Scheier, & Weintraubs 1989). For the current sample Cronbach Alpha value

was found ($\alpha = 0.74$) indicating good reliability for the scale for local sample.

Procedure

A total of five public hospitals of Lahore were approached. The participants were briefed about the nature and purpose of the current research. The consent form was individually administered to each of the participants to obtain their written consent for participation in this research project prior to the administration of PVS-III, PLSS and COPE. 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.

Results

The Hierarchical Multiple Regression Analysis was performed in three steps to determine the relationship of demographic variables (age, gender, marital status, duration of house job, no of children and monthly income) emotion-focused, avoidance coping hardiness and problem-focused as predictors and professional life stress as outcome variable. In the first Model age, gender, marital status, duration of house job, no of children and monthly income were entered. In the second Model, emotion-focused and avoidance coping were entered as the independent variables. In the third Model, hardiness and problem-focused coping were entered.

Table 1

Hierarchical Multiple Regression Analysis Predicting Professional Life Stress among the house-job doctors from Hardiness, Problem-focused Coping, Emotion-focused Coping and Avoidance Coping (N=200)

Steps and predictor variable	ΔR^2	SEB	B
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			
Emotion-focused Coping	0.10***	0.08	1.6*
Avoidance Coping		0.09	1.4*
Step 3			
Hardiness	0.24***	- 0.38	0.08***
Problem-focused Coping		- 0.25	0.04***
Total ΔR^2	0.36***		

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

Table 1 shows the results of regression analyses. Model 1 which included demographic variables was not significant, $F(6,192) = 0.49$, $p = 0.84$. The demographic variables accounted for only 2% of the variance in professional life stress scores. The model 2 including emotion-focused coping and avoidance coping was significant $F(8,190) = 10.87$, $p < 0.001$. Emotion-focused coping and avoidance coping jointly accounted for 10 % of variance in professional life stress scores.

The model 3 including hardiness and problem-focused coping was significant $F(10,188) = 36.23$, $p < 0.001$. Problem-focus

coping, emotion-focused coping and avoidance coping jointly accounted for 24% of variance in professional life stress scores.

Overall hardiness, problem-focused coping, emotion-focused coping and avoidance coping explained 36% variability in professional life stress and problem-focused coping turned out to be the strongest predictor of professional life stress. These results indicated that hardiness ($\beta = -0.38, t = -5.65, p < 0.001$), problem-focused coping ($\beta = -0.25, t = -3.18, p < 0.001$), emotion-focused coping ($\beta = 0.16, t = 2.5, p < 0.05$), and avoidance coping ($\beta = 0.14, t = 2.27, p < 0.05$) were statistically significant predictors of professional life stress of house-job doctors. Hardiness and problem-focused coping correlated negatively with professional life stress whereas emotion-focused coping correlated positively with professional life stress of house-job.

Discussion

The hypothesis “Hardiness and coping would be significant predictors of professional life stress” guiding the current research provided the outline for the discussion of the findings of the current research. Responses from 200 house-job doctors were the origin for the following findings.

The current research results supported the above mentioned hypothesis. Hardiness and coping strategies significantly predicted professional life stress of house-job doctors. The main findings indicated that hardiness and problem-focused coping strategy were negatively correlated with professional life stress; hardiness accounting for 8% and problem-focused, emotion focused, and avoidance coping accounted for 26% of variance in professional life stress scores of house-job doctors. The findings further suggest that none of the demographic variables (age, gender, marital status, duration of house job, no of children and monthly income; accounted for 2% variance) significantly predicted professional life stress of house-job doctors.

These findings of the current research are in line with the past results indicating hardiness as significant predictor of professional life stress (Rasouli, Hossenian & Dokanee, 2012; Jalali & Amarqan, 2015). These researchers suggested that hardiness could reduce the negative effect of stress. Stress reducing effects of hardiness have been reported by several researchers (Monat et al., 2007; Polman & Nicholls, 2009; Bartone, 2012). Being hardy helps the individuals in coping with their stress. More hardy people experience low level of stress. Thus, by implications, increasing the hardiness of house-job doctors would help them in reducing their stress level. The effects of problem-focused coping strategy and emotion-focused coping strategy on professional life stress have been studied by several researchers. All these researches showed that individuals using problem-focused coping strategy were more adjusted as compare to those who often used emotion-focused and avoidance coping strategies (Delahaij, Gaillard, & Van Dam, 2010; Ghiyasvandian & Gebra, 2014; Chai & Low, 2015; Shiferaw et al., 2015; Skaalvik & Skaalvik, 2015). Thus, the present findings imply that training for increasing the hardiness level and application of problem-focused coping strategy would enable house-job doctors to be able to overcome their professional life stress.

Conclusions

The basic conclusion is that the results of the Hierarchical Multiple Regression performed in the study indicated that hardiness and problem-focused coping accounted for 26 % of the variance in

professional life stress. Hardiness was the significant predictor of professional life stress.

Limitations and Recommendations

Like many other studies the present research also has some limitations. This study used self-report measures of all the study variables. As such, the present findings have the usual problems of using self-report measures. Second, this study used 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. Third, the present findings have limited generalizability because research sample included house-job doctors of public hospitals of Lahore city only. A representative probability sample of house-job doctors from all over Pakistan is recommended for such a study so that the findings may have maximum external validity.

Implications

The current research provided a relook into the relationship of hardiness and coping as predictors and professional life stress as outcome variable. On the whole, the current research has several implications. First, it contributed to the literature on hardiness coping and professional life stress pertaining to house-job doctors. Second, the findings of this study further highlight the importance of concepts of hardiness, coping and professional life stress in the work environment of house-job doctors because the workplace where they work is full of stressors. Third, findings of this study also provide academics of medical education with clues regarding management of workplace of the house job doctors. The constructs of hardiness and coping strategies are important because they predict professional life stress. The findings of this study have theoretical implications because they provided scientific body of knowledge pertaining to the house-job doctors in Pakistan. The present results have practical implications also in the sense that the effects of hardiness and coping strategies on professional life stress imply the training needs of house-job doctors which can help enhance their hardiness and promote employment of problem-focused coping strategies to overcome their professional life stress. This study also highlights the need of counseling program for the house-job doctors in order to familiarize them with the advantages of being adequately hardy and use of problem-focused coping when faced with professional life stress. Another practical utility of the present finding is that the house-job doctors may be counseled to refrain from using emotion-focused and avoidance coping strategies in the face of workplace stress. A major implication of this study is that medical education provider must be familiar with the usefulness of the study variables which have pragmatic utilities for the management of working conditions of house-job doctors. Issues relating to professional life stress of house-job doctors need to be addressed promptly. Lingering, unaddressed issues of professional life stress are likely to increase physical and psycho-social problem of house-job doctors.

References

- Bartone, P. T. (2012). Social and organizational influences on psychological hardiness: How leaders can increase stress resilience. *Security Informatics*, 1(1), 1.

- Carver, C. S. (2007). COPE (Complete version). Department of Psychology, University of Miami, Coral Gables, FL. Retrieved from <http://www.psy.miami.edu/faculty/ccarver/scICOPEF.html>
- Carver, C. S., Scheier, M. F., & Weintraubs, J. K. (1989). *Coping orientation to problem experienced*. Miami: University of Miami, Department of Psychology.
- Chai, M. S., & Low, C. S. (2015). Personality, coping and stress among university students. *American Journal of Applied Psychology*, 4(3-1), 33-38.
- Delahaij, R., Gaillard, A. W. K., & Van, D. K. (2010). Hardiness and the response to stressful situations: Investigating mediating processes. *Personality and Individual Differences*, 49(5), 386-390.
- Fontana, D. (1989). *Professional life stress scale*. Routledge Ltd: The British Psychological Society.
- Fontana, D., & Abouserie, R. (1993). Stress levels, gender and personality factors in teachers. *The British Journal of Educational Psychology*, 63, 261-70.
- Ghiyasvandian, S., & Gebra, A. A. (2014). Coping work strategies and job satisfaction among Iranian nurses. *Iran Red Crescent med J*, 16(6), 7779.
- Islam, A. (2002). Health sector reform in Pakistan: Why is it needed? *The Journal of the Pakistan Medical Association*, 52 (3), 95-100.
- Hurrell, J. J., Nelson, D. L., & Simmons, B. L. (1998). Measuring job stressors and strains: Where we have been, where we are, and where we need to go. *Journal of Occupational & Environmental Medicine*, 3(4), 294-305.
- Jalali, S., & Amarqan, H. A. (2015). Study of the relationship between psychological hardiness and creativity with job stress in personnel of Emergency Social Services of Golestan Province. *Indian Journal of Fundamental and Applied Life Sciences*, 5 (2), 1671-1679.
- Kobasa, S. C. (1979a). Personality and resistance to illness. *American Journal of Community Psychology*, 7, 413-423.
- Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*, 42, 168-177.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer
- Maddi, S. R. (2001). *Personal Views Survey* (3rd ed., revised). Newport Beach, CA: The Hardiness Institute.
- Maddi, S. R., Harvey, R. H., Khoshaba, D. M., Lu, J. L., Persico, M., & Brow, M. (2006). The personality construct of hardiness, III: Relationships with repression, innovativeness, authoritarianism, and performance. *Journal of Personality*, 74, 575-598.
- Malik, N. I., & Rehman, G. (2003). Occupational role stress, psychological well-being and work motivation of medical professionals. *Pakistan Journal of Social and Clinical Psychology*, 1, 45-57.
- McCranie, E. W., Lambert, V. A., & Lambert, C. E. Jr. (1987). Work stress, hardiness, and burnout among hospital staff nurses. *Nursing Research*, 36(6), 374-378.
- Monat, A., Lazarus, S. R., & Reevy, G. (Eds.) (2007). *The Praeger handbook on stress and coping* (Vol 1 & 2, p. 601). Westport, Connecticut: Praeger.
- Polman, R., Nicholls, A., Morley, D., & Taylor, N. J. (2009). Coping and coping effectiveness in relation to a competitive sport event: Pubertal status, chronological age, and gender among adolescent athletes. *Journal of Sport & Exercise Psychology*, 31, 3, 299-317.
- Rasouli, A., Hossenian, S & Dokanee, F. (2012). *Relationship between hardiness and job satisfaction & stress among staff and faculty members of Islamic Azad University*. Unpublished manuscript. Islamic Azad University.
- Seyle, H. (Ed.). (1983). *Seyle's guide to stress research* (Vol. 2). New York: Scientific & Academic Editions.
- Shiferaw, H., Anand, S., & Nemera, G. (2015). Stress and coping strategies among generic B.Sc. nursing students of Jimma University, south west Ethiopia. *International journal of recent advances in multidisciplinary research*, 2(7), 0511-0517.
- Skaalvik, E. M., & Skaalvik, S. (2015). Job Satisfaction, stress and coping strategies in the teaching profession—What do teachers say? *International education studies*, 8(3), 1913-9039.
- Tabachnik, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd edition). New York: Lawrence Erlbaum.
- Yew, S., Lim, K. M., Haw, Y., & Gan, S. K. (2015). The association between perceived stress, life satisfaction, optimism, and physical health in the Singapore Asian context. *Asian Journal of Humanities and Social Sciences*, 3(1), 2320-9720.

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