

Professional Life Stress and Coping Strategies Used by House-Job Doctors*

Yousaf Jamal¹ and Yasmin Niloferfarooqi²

¹*Department of Applied Psychology, Government College Township Lahore, Pakistan*

²*Department of Applied Psychology, Punjab University, Lahore, Pakistan*

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ABSTRACT The current research investigates the relationship between coping strategies and professional life stress reported by house-job doctors. A purposive sample of 200 male and female house-job doctors was drawn from different hospitals in Lahore, Pakistan (Ganga Ram Hospital, Jinnah Hospital, Mayo Hospital, Fatima Memorial Hospital and General Hospital). Coping Orientation to Problem Experienced (COPE) and Professional Life Stress Scale (PLSS) were used to determine the coping strategies and professional life stress, respectively. The findings from the Pearson Product Moment Correlation indicated a significant relationship between; problem-focused coping and stress ($r = -.33, p < .01$), emotion-focused coping and stress ($r = .28, p < .01$), and avoidance coping and stress ($r = .21, p < .01$). The findings from this research have implications for promoting the understanding of the concept of coping strategies and their relationship with professional life stress so that a faculty development program can be introduced for house-job doctors in Pakistan

INTRODUCTION

Lazarus and Folkman (1984) argued that an individual undergoing stress uses external and internal resources to reduce stress. When the resources are inside a person they are called internal resources, and when outside they are called external resources. These personality resources have been found to buffer the impact of stress among health professionals. These resources are also called coping or coping strategies which buffer against stress. The present research investigated the relationship between professional life stress and coping strategies among house-job doctors in five teaching hospitals in Lahore, Pakistan.

The term “stress” became popular with academics during and after World War II. Healthcare professionals reported soldiers’ adaptation problems during combat conditions under which they would fail to fire their weapons, show serious impairment of vital perceptual and motor skills, give themselves up unnecessarily to the enemy or develop neurotic-psychotic symptoms associated with combat. Lazarus (1966) attributed these disorders to stress and to predisposing factors in the personality resulting from vulnerability to stress. The term “stress”

and/or its associated symptoms became more widespread during the intervening years when several renowned scholars studied stress in both humans and animals (Grinker and Spiegel 1945; Selye 1956; Janis 1958; Epstein 1962; Lazarus 1966; as cited in Judkins 2001).

Stress is a perceived discrepancy between the internal and external demands of the individual and his perceived ability to handle a situation. The individual’s subjective perception or appraisal of the situation and the possible threat is an absolutely essential component of this process. The individual tries to respond to the external threat by utilizing coping resources. This process is affected by the nature and the extent of the demands, the characteristics of the individual, the social support available to the person and the restraints under which the coping process takes place (Cox et al. 2000).

The stress experience may not essentially encompass any negative psychological or physiological impact when the individual has an ability to attain equilibrium by adjusting to the circumstances. Nevertheless, these experiences may still be strenuous and characterized by a weakening of the person’s wellbeing (Hoel et al. 2001 as cited in Monat et al. 2007). However, a growing interest in the negative influence of stress, especially its effect on job performance in the work environment, provides impetus to the present study. Overall, the various definitions of stress indicate that the perceived imbalance between a person and their environment/situation develops stress in human beings. Nei-

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ther the person, nor the situation alone can produce stress. Stress is a process in which there is an interaction between the environment, or one's appraisal of the environment, and the individual.

Stress at work is also termed work stress or 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 et al. 1998: 368). Palmer (1989), in his book "Occupational Stress", defined work stress as the psychological, physiological and behavioral response of individuals when they perceive a lack of equilibrium between the demands placed upon them and their ability to meet those demands which, over a period of time, lead to poor health (Blaug et al. 2007). Work place stress leads to a broad range of physical illnesses and psychological disorders such as chronic fatigue, insomnia, emotional upsets, migraines, anxiety, depression, stomach ulcers, allergies and other skin disorders. The most serious consequences may include heart attacks, accidents and even suicides (Di Martino 2003).

Researchers have discovered numerous job stressors that doctors and nurses usually come across: the emotional demands of patients and their families, death and dying, conflicts with administrators, inadequate staffing and work overload (Gray-Toft and Anderson 1981; Marshall 1980; McCranie et al. 1987). Likewise, prior research findings have linked professional life stress to absenteeism, negative outcomes of illness, decreased productivity and performance deterioration (Caverley 2005; Lease 1999; Nowack 1991).

Researchers state that coping with professional life stress refers to the cognitive and behavioral efforts to reduce the external or internal demands that are created by stressful situations (Monat et al. 2007). On the other hand, a few researchers argue that the effects of stress are directly linked to personality characteristics and coping strategies (Frankenhauser 1986; Monat et al. 2007; Wong and Wong 2006).

The cognitive transactional theory purports that the cognitive component of coping is based on a mental process of how an individual appraises a situation, and appraisal determines the level of stress and the unique coping strategies that the individual undertakes (Lazarus and Folk-

man 1984). Coping cannot be defined as effective or ineffective independent of the context in which it is used. Individuals and their environments reciprocally affect each other. In the face of a potentially stressful event, individuals appraise whether an event has personal relevance (Lazarus and Folkman 1984).

Within this framework, coping refers to "cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the persons" (Folkman and Lazarus 1988a: 310). Coping is the means by which we think, feel and act to advance our cause (Lazarus 1999). 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). Coping effectiveness depends on the match between coping efforts and other variables in the stress-coping process, including one's values, beliefs and commitments. (Folkman et al. 1986).

Osipow and Spokane (1983) argue that professionals' use of strategies to cope with stress depends largely on an individual's personality characteristics. Professional life can be relatively stressful, especially for health professionals. Many of them find it hard to cope with professional stress, while others see it as a challenge to work hard to overcome their stress. Effective use of coping strategies can decrease the negative consequences of work stress (Byrne 1964; Gleser and Ihilevich 1969).

Coping strategies have often been classified into two broad categories: problem and emotion-focused strategies (Folkman and Lazarus 1980). Problem-focused strategies involve behavioral activities such as action and planning, whereas emotion-focused strategies employ the expression of emotion and altering of expectations. Problem-focused strategies are associated with positive outcomes such as better health and reduced negative effect (Dunkley et al. 2006). On the other hand, emotion-focused strategies, particularly the use of avoidance strategies, are associated with negative outcomes such as poor health and increased negative affect (Pritchard et al. 2007). However, some emotion-focused strategies such as acceptance and positive reframing have been associated with

increased well-being (Scheier et al. 1994; Ramezanli et al. 2015).

Researchers argue that stress is directly linked to coping strategies (Frankenhauser 1986; Monat et al. 2007; Ghiyasvandian and Gebra 2014; Aslam 2015; Chai and Low 2015; Ramezanli et al. 2015; Shiferaw et al. 2015; Skaalvik and Skaalvik 2015).

Gadit and Mugford (2008) argue that in Pakistan, long working hours, night calls, treatment of critically ill patients, dealing with the relatives of patients, limited income and lack of accommodation, maintaining continuous medical education, striving to fulfill personal development plans and aiming to achieve higher goals are some of the reasons that make doctors' lives stressful and expose them to personal health problems. In Pakistan, some of the main causes of stress among doctors include bullying at work or professional jealousy, interference by influential people, absence of adequate access to justice, physical threats from patients' families, and political and sectarian victimization. Due to these reasons many doctors are unhappy at work and want to migrate abroad to look for better working conditions (Imran et al. 2011).

Only a few empirical studies have examined the prevalence of stress, the causes of stress, and their relationship with coping among house-job doctors. Thus, it is necessary that the relationship between stress and coping be studied among house-job doctors.

Objectives of the Study

The current research has the following objective.

To investigate the relationship between coping strategies and professional life stress among house-job doctors.

Rationale of the Study

The current research is important for several reasons. First, this study generates additional knowledge about the relationships between coping and professional life stress in a sample of house-job doctors working in different public teaching hospitals in Lahore, Pakistan. Second, the study of variables influencing workplace stress is also important because stress has various devastating effects on the workplace environment, and improving an individual may in-

crease his ability to deal with workplace stress (Lambert et al. 2003). Furthermore, relentless stress can have serious harmful effects on an individual's physical and psychological health (Gmelch et al. 1984; Sohail and Rehman 2015). Stress adversely affects the performance, productivity and job satisfaction of health professionals. Fourth, in Pakistan, doctors are working in unprivileged conditions and are therefore more prone to develop stress. An evaluation of professional life stress may enable employers to assist healthcare professionals in using effective stress reduction coping strategies.

Hypotheses

Based on the literature review pertaining to the relationship among the variables used in the current research the following hypotheses were formulated:

1. House-job doctors scoring high on the problem-focused coping scale (Carver et al. 1989) will score low on the professional life stress scale (Fontana 1989).
2. House-job doctors scoring high on the emotion-focused coping scale (Carver et al. 1989) will score high on the professional life stress scale (Fontana 1989).

MATERIAL AND METHODS

This chapter provides a description of the research design, the sample and sampling strategy, the instruments, and the procedure for the collection and analysis of the data.

Research Design

The main variables of the current study are coping strategies and professional life stress. The researcher did not use an experimental approach because true experiments require manipulation of the independent variables. As a reasonable alternative the researcher used a correlational research design.

Population

The population for this research included house-job doctors working at five public teaching hospitals in Lahore, Pakistan. The selection of this population was based on sufficient empirical research findings suggesting that house-job doctors are more at risk of professional life

stress due to their hectic schedule and pressure to obtain a professional license for medical practice.

Sample

A purposive sample of 200 house-job doctors (118 males and 82 females) was derived from the total number of house-job doctors working at five public teaching hospitals in Lahore. The sample was composed of 200 house-job doctors. The sample was drawn from five different teaching hospitals in Lahore, Pakistan (Ganga Ram Hospital, Jinnah Hospital, Mayo Hospital, Fatima Memorial Hospital and General Hospital). The purposive sampling technique involves the selection of cases that are likely to be information-rich with respect to the purpose of the research (Burns and Grove 1993).

In the current study the following inclusion criteria were used:

1. The minimum educational level of the participants was Bachelor of Medicine and Bachelor of Surgery (M.B.B.S). This level of general medical practitioner or physician is the same as a medical doctor MD degree in the USA.
2. Understanding of the English language.
3. Duration of the house-job was within the range of 3-12 months in public teaching hospitals located in Lahore, Pakistan.
4. Single or married without any past history of divorce or separation. Because the phenomena of divorce and separation might add to the professional life stress of house-job doctors.
5. Availability and willingness of the participants.

Instruments

The following instruments were used for data collection:

1. Informed Consent (protection of the participants' rights).
2. Professional Life Stress Scale (Fontana 1989).
3. Coping Orientation to Problem Experienced (Carver et al. 1989).

Informed Consent/ Protection of Human Subjects

Before the data collection, permission was obtained from the department of Psychology, University of the Punjab, Lahore, and from the

relevant hospital administration. Informed consent was also obtained from each of the participants before the information was collected to protect the human subjects. The risks and benefits related to this research were explained to every participant. It was also explained to all the participants that their identity and confidentiality would be maintained and only group data information would be reported.

Professional Life Stress Scale (PLSS)

The 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. The author of the PLSS has already granted permission for use of this scale in the current research project. The PLSS is a self-reported instrument consisting of 24 items. The items have diverse multiple optional responses. Consequently, different scoring patterns are advised by Fontana (1989), which are dependent on the number of optional responses given to each respondent in order to determine the respondent's professional life stress.

Fontana and Abouserie (1993) reported that the calculated reliability coefficient for the PLSS was found to be good, as shown by the Cronbach Alpha value $\alpha = 0.74$. For the current sample the calculated Cronbach Alpha value was found to be statistically significant ($\alpha = 0.69$).

Coping Orientation to Problem Experienced (COPE)

The Coping Orientation to Problems Experienced (COPE) was developed by Carver et al. (1989). The COPE is a copyrighted instrument to measure how people cope with stressful life events. Written permission was sought from the authors and was granted to the researcher for use of the COPE in the current research project.

The COPE consists of 60 items. Each item has four optional responses, which are scored with 1 = I usually don't do this at all, 2 = I usually do this a little bit, 3 = I usually do this a medium amount, 4 = I usually do this a lot. Craver et al. (1989) reported that the COPE has strong psychometric properties with the Cronbach Alpha value $\alpha = 0.92$, a test-retest reliability value of 0.86. For the current sample the Cronbach Alpha value was found to be statistically significant ($\alpha = 0.78$).

Procedure

Official permission was sought from the relevant hospital authorities for data collection from their house-job doctors. A total of five public hospitals in 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 the PLSS and COPE. A 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.

Statistics

The Statistical Package for the Social Sciences (SPSS) version 20.0 for Windows was used for the analysis of the data obtained from the questionnaires. The Coping Orientation to Problem Experience and Professional Life Stress Scale are Likert-format scales. For each measured item the scores were added up to reach a total score. These total scores were used for further analyses, which included descriptive and inferential techniques (Burns and Grove 1993).

A correlation matrix was prepared to show the relationships between coping and professional life stress.

RESULTS

The descriptive and inferential analyses of the data were collected from the house-job doctors serving in five public teaching hospitals in Lahore (Ganga Ram Hospital, Jinnah Hospital, Mayo Hospital, Fatima Memorial Hospital and General Hospital). The Statistical Package for Social Sciences (SPSS) version 20.0 for Windows was used for the overall data analyses.

Description of Participants

The demographic data for the gender, age, marital status, number of children, job duration, specialization, history of mental illness, history of physical illness and history of any other stress appear in Table 1. Males constituted 59 percent of the sample with an age range of 22 to 32 years for both genders. The participants in this study

were predominantly unmarried (91%, $n = 182$); only (9%, $n = 18$) were married with 38.89 percent having children. The job duration of the majority of the house-job doctors (69%) ranged from 3 to 7 months, the remaining 31 percent had been working for 8 to 12 months. None of the participants reported a history of any previous mental illness or having ever been treated previously for mental health conditions, either as an inpatient or an outpatient. Physical retardation or major physical illness was reported by 3 percent of the participants. A history of stress other than professional life stress was reported by 16 percent of the house-job doctors.

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

Characteristics	<i>n</i>	%
<i>Gender</i>		
Male	118	59
Female	82	41
<i>Age</i>		
22-26	183	92
27-32	17	08
<i>Marital Status</i>		
Married	18	09
Unmarried	182	91
<i>Children</i>		
Yes	07	39
No	11	61
<i>Duration of Job</i>		
3-7 months	137	69
8-12 months	63	31
<i>Specialization</i>		
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
<i>History of Physical Illness</i>	6	3
<i>History of Mental Illness</i>	0	0
<i>History of Any Other Stress</i>	32	16

The relationships between professional life stress and coping strategies were ascertained using the Pearson Product Moment Correlation Coefficient. Table 2 shows that the majority of the study variables are significantly correlated with each other, for example professional life stress and problem-focused coping $\{r(198) = -.33, p < .01\}$, professional life stress and emotion-focused coping $\{r(198) = -.28, p < .01\}$, and professional life stress and avoidance coping $\{r(198) = .21, p < .01\}$ among the house-job

doctors ($N=200$) from various public hospitals in Lahore.

DISCUSSION

The hypotheses 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.

1. Hypothesis: "House-job doctors scoring high on problem-focused coping scale will score low on professional life stress scale".

The results showed a significant negative relationship between problem-focused coping strategies and professional life stress. This finding supports the study hypothesis that states a significant inverse relationship between problem-focused coping strategies and professional life stress among house-job doctors. This means that the house-job doctors who used problem-focused coping strategies experienced less professional life stress. The present result is consistent with the findings of previous studies that used athletes (Polman Nicolls 2009), nurses (Liu et al. 2010; Laranjeira 2012; Ramezanli 2015), rescue employees (Aslam 2015), teachers (Skaalvik and Skaalvik 2015) and other respondents (Plan- te et al. 2000; Shimazu and Schaufeli 2007; Monat et al. 2007; Prati and Pietrantonio 2009; Saeed 2010; Asghari et al. 2013; Ghiyasvandian and Gebra 2014; Pariat et al. 2014; Bamuhair et al. 2015; Chai and Low 2015; Shiferaw et al. 2015).

The negative relationship between problem-focused coping strategies and professional life stress can be explained by focusing on the dimensions of problem-focused coping strategies, which involve reinterpretation and growth, the use of instrumental social support, active coping, turning to religion, restraint, suppression of competing activities and planning. The use of these strategies leads to a practical approach to

life that ultimately helps in coping with stress. Thus, the house-job doctors scoring high on measures of problem-focused coping strategies reported a lower level of professional life stress.

2. Hypothesis: "House-job doctors scoring high on the emotion-focused coping scale will score high on the professional life stress scale".

One objective of the current research is to examine the relationship between emotion-focused strategies and professional life stress among house-job doctors. The current result indicates a significant positive relationship between emotion-focused coping strategies and professional life stress, which supports the study hypothesis that states a significant positive relationship between the two study variables. The house-job doctors who used emotion-focused coping strategies reported experiencing more professional life stress. This finding is consistent with past research results. For example, the use of emotion-focused coping strategies positively correlated with burnout and stress in a sample of 103 critical care nurses (Boyle et al. 1991). Similar results were reported in a study of nurses working in the emergency department of the Armed Force Hospital (Liu et al. 2010) and nurses working in intensive care units of hospitals (Ramezanli 2015). According to Lazarus and Folkman (1984), individuals who use emotion-focused strategies may find brief respite from stressful situations. They further reported that continued use of emotion-focused strategies was associated with depression, anxiety and distress. Thus, it can be inferred that unresolved stress among house-job doctors may become a serious concern because past findings revealed anxiety, burnout and job dissatisfaction as outcomes of unresolved stress (Collins 1996). Emotion-focused coping strategies involve venting of emotions, behavior disengagement and emotional social support. The use of emotion-foc-

Table 2: Relationship between professional life stress and coping strategies used by the house-job doctors ($N=200$)

Variables	M	SD	1	2	3	4
1. Professional life stress	21.05	7.03	-			
2. Problem focused coping	77.04	10.85	-.33**	-		
3. Emotion focused coping	25.97	5.38	.28**	.14*	-	
4. Avoidant coping	22.09	4.44	.21**	-.02	-.17*	-

Note. ** $p < .01$, * $p < 0.05$

cused coping strategies might be encouraged more by a collectivist culture as compared to an individualistic culture. Since Pakistani culture represents a collectivist culture, house-job doctors in Pakistan might be more prone to use emotion-focused coping strategies when faced with professional life stress. This is because the use of emotion-focused coping strategies enables individuals to share their emotions with their families and friends, thereby seeking social support to cope with their stress.

CONCLUSION

The basic conclusion is that the results of the Pearson Product Moment Correlation performed in this study indicate that coping strategies and professional life stress are negatively correlated ($p < .01$) with each other.

RECOMMENDATIONS

Like many other studies the present research also has some limitations. This study used self-reporting measures of all the study variables. As such, the present findings have the usual problems of using self-reporting measures. Second, this study used a cross-sectional survey research design that 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. A representative probability sample of house-job doctors from all over Pakistan is recommended for this study so that the findings may have maximum external validity.

IMPLICATIONS

The current research provide a further look into the relationship between professional life stress and coping. On the whole, the current research has several implications. First, it contributes to the literature on coping and professional life stress pertaining to house-job doctors. The present study adds insights into coping and professional life stress. Second, the findings of this study further highlight the importance of the concepts of coping and professional life stress in the work environment of house-job doctors because their workplace is full of stressors. Third, the findings of this study also provide academics in medical education with

clues regarding the management of the workplace of house-job doctors. The findings of this study have theoretical implications because they provide a scientific body of knowledge pertaining to house-job doctors in Pakistan.

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