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The Mediating Effect of Job Satisfaction between Psychological Capital and Job Burnout of Pakistani Nurses

Nazim Ali (Corresponding author)
Department of Management Studies University of Malakand, Dir Lower,Pakistan
Email: nazimali100@yahoo.com

Arshad Ali
Department of Management Studies University of Malakand, Dir Lower,Pakistan
Email: arshad.ali@uom.edu.pk

Abstract

Low-level of job satisfaction, psychological capital and high level of job burnout is very detrimental both for the organization and individual employee. A few studies have identified the factors influencing job burnout of nurses. The model developed in this study is unique and yet to be used. This study investigates the mediating effect of job satisfaction between psychological capital and job burnout of nurses in Pakistan. Data were collected from 219 female nurses working in government hospitals of Khyber Pakhtunkhwa (KPK), Pakistan through Psychological Capital Questionnaire. Questionnaire is based on a Maslach Burnout Inventory-General Survey and Job Satisfaction Survey. Correlation analysis explored a significant positive relationship between psychological capital and job satisfaction and a negative relationship between psychological capital and job burnout. A significant negative relationship between job satisfaction and job burnout was also confirmed. Confirmatory factor analysis revealed a significant positive path from psychological capital to job satisfaction, and a negative path to job burnout. A significant negative path from job satisfaction to job burnout was also investigated. Furthermore, job satisfaction mediated the relationship between psychological capital and job burnout. The path from psychological capital to job burnout through job satisfaction was found significant. This study contributes to the previous reservoir of literature and explains the importance of the impact of psychological capital on job burnout.

Key words: psychological capital, job satisfaction, job burnout, nurses, Pakistan

1. Introduction

Burnout, coined by Freudenberger (1974), is a state of decreased sense of achievement, reduced work commitment, and fatigue etc. experienced and found among professionals such as nurses and doctors due to prolonged working hours, and overload (Freudenberger, 1974). Job burnout is a debilitating process that amputates the psychological and physiological ability of employees' devotion to organization, lower the employees' motivation level and reduce their enthusiasm (Stevenson, 1994). Burnout is

very detrimental both for the organization and health care professionals including nurses and doctors (Xianyu & Lambert, 2006). Burnout has been proved to make doctors perpetrate mistakes (Montgomery et al., 2011).

High burnout makes the doctors and nurses to be depersonalized towards the patients that ultimately culminate in incorrect medical prescriptions of doctors and poor quality take after of nurses. This study is conducted not only to investigate the impact of psychological capital on job burnout of nurses working in Pakistan, but also to test the mediating effect of job satisfaction. Prior to this research, no research has tested the mediating role of job satisfaction between psychological capital and job burnout.

2. Literature Review

Job burnout has mainly considered in three dimensions; emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach, 1981). Emotional exhaustion is achieved when employees feel severe emotional fatigue and diminished or no enthusiasm towards the job. Depersonalization is achieved when employees keep distance from work and demonstrate an indifferent and callous attitude at work place. Reduced personal accomplishment is achieved when employees feel lack of proficiency and successful work achievement.

Human capital (Fitz-Enz, 2000) comprises psychological capital, intellectual capital, emotional capital and social capital (also known as PIES). Psychological capital is one of the most important human capital subsets, addressing human related issues in any type of organization. Psychological capital is "a positive state of mind exhibited during the growth and development of an individual" (Luthans & Youssef, 2004). It has four dimensions, namely; optimism, self-efficacy, resiliency, and hope. Optimism refers to "explanatory style that attributes positive events to internal, permanent and pervasive causes and negative events to external, temporary and situation specific one's" (Luthans & Youssef, 2004). An optimistic worker is always confident about the present and future and tries best to help the organization achieve individual and organization goals. Optimism dimension of psychological capital has a great association with the enhancement of employees' as well as organization's performance (Martin-Krumm, et al., 2003). Self-efficacy refers to the "individual's conviction… about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998). Self-efficacy or self-confidence workers accept responsibility and challenging assignments and work hard to achieve what they have been assigned. Stajkovic and Luthans (1998) found that self-efficacy dimension of psychological capital was significantly associated with employees' outcomes. Hope refers to "a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-oriented energy) and (b) pathways (planning to meet goals)" (Snyder et al., 1991).

The relationship of psychological capital with different employees' outcomes such as turnover intentions (Avey et al., 2006; Luo & Hao, 2010), absenteeism (Avey, et al., 2006), job satisfaction (Larson & Luthans, 2006) and performance (Luthans et al., 2005) etc., has been studied in different studies conducted in developed countries of the world. But the mediating effect of job satisfaction between psychological capital and job burnout has not been explored in previous studies. Furthermore, only a few studies have explored the relationship between psychological capital and job burnout (Luo & Hao, 2010;

Luthans, Luthans, & Luthans, 2004 ; Peng, et al., 2013). The present study will explore the mediating effect of job satisfaction between psychological capital and job burnout of nurses working in 3 big government hospitals of the KPK, Pakistan.

3. Methods

3.1 Sample and Data Collection

Data were collected from 219 female nurses working in three big government hospitals of KPK, Pakistan through Psychological Capital Questionnaire (Luthans, Youssef, & Avolio, 2006), a questionnaire based on a Maslach Burnout Inventory-General Survey (Schaufeli & Leiter, 1996) and three facets of Job Satisfaction Survey (Spector, 1997). Three hundred (300) questionnaires were distributed physically to female nurses within a period of two months. The nurses were duly informed of the purpose of the questionnaire. Two hundred and thirty four (234) questionnaires that indicate a response rate of 78 % were returned after two reminders. Fifteen (15) questionnaires were eliminated because they contained incomplete information. The remaining 219 questionnaires were used for the purpose of this study.

3.2 Measures

3.2.1 Psychological Capital Questionnaires

The overall psychological capital and its four dimensions, namely, self-efficacy, optimism, resiliency and hope were measured by 24 items (each dimension has 6 items) adapted from (Luthans et al., 2006). Seven point likert scale ranging from 1 “strongly disagree” to 7 “strongly agree” was used to rate the responses. In this study, the Cronbach Alfa for self-efficacy, optimism, resiliency and hope was 0.91, 0.93, 0.94 and 0.95 respectively.

3.2.2 Job Satisfaction Survey (JSS)

Job satisfaction survey (Spector, 1985) contains nine dimensions of job satisfaction including, pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work and communication. Each dimension has 4 items which are measured through 6 a point likert scale ranging from 1 (Disagree Very Much) to 6 (Agree Very Much). In this study, only three dimensions which are pay, promotion and working condition were included because they were considered important in this study. The cronbach Alfa for pay, promotion and working condition was .88, 82 and 84 respectively.

3.2.3 Job Burnout

Job burnout contains three dimensions which are depersonalization, personal accomplishment and emotional exhaustion. Each dimension was measured by five items developed for this study and mainly based on Maslach Burnout Inventory-General Survey. 7 point likert scale ranging from 0 (never) to 6 (every day) was used to collect the responses. The cronbach Alfa for depersonalization, personal accomplishment and emotional exhaustion was 0.84, 0.95 and 0.93 respectively.

Table 1: Latent and Manifest Variables

Latent Variables	**Abbreviations**
Depersonalization	Dep
Personal Accomplishment	PA
Emotional Exhaustion	EE
Job Burnout	JB
Pay	P
Promotion	Pro
Working Condition	WC
Job Satisfaction	JS
Psychological Capital	PC
Hope	H
Optimism	OP
Resiliency	R
Self-Efficacy	SE
All items of the Psychological Capital Questionnaire, Job Satisfaction Survey and Job Burnout are manifest variables	

4. Results

Psychological capital indicated a low level of self-efficacy, optimism, resilience and hope showing that nurses working in government hospitals of Pakistan were not self-confident, not optimistic and almost don't accept responsibility for a given task. They indicated a low level of satisfaction with working condition, promotion and salary. Table 2 also revealed that the level of personal accomplishment was almost good. The level of depersonalization was not satisfactory showing that nurses were callous and indifferent in taking care of patients. They also showed almost a high level of emotional exhaustion indicating that nurses felt emotional fatigue and diminished enthusiasm towards the job.

Table 2: Descriptive Statistics

Questions Related To	N	Min	Max	Mean	Std. Deviation
Self-Efficacy	219	1.00	7.00	3.9954	1.28326
Self-Efficacy	219	1.00	7.00	4.1461	1.33980
Self-Efficacy	219	1.00	7.00	4.1918	1.48686
Self-Efficacy	219	1.00	7.00	4.1507	1.45266
Self-Efficacy	219	1.00	7.00	3.9817	1.52341
Self-Efficacy	219	1.00	6.00	4.0502	1.30709
Optimism	219	1.00	6.00	3.9269	1.23932
Optimism	219	1.00	7.00	4.0776	1.30925
Optimism	219	1.00	7.00	3.9315	1.44941
Optimism	219	1.00	7.00	3.8447	1.32845
Optimism	219	1.00	7.00	3.7260	1.33678
Optimism	219	1.00	7.00	3.8767	1.19569
Resiliency	219	1.00	6.00	3.7260	1.28784
Resiliency	219	1.00	7.00	3.9132	1.42609
Resiliency	219	1.00	7.00	3.9087	1.44339
Resiliency	219	1.00	7.00	3.6941	1.34523
Resiliency	219	1.00	7.00	3.7671	1.34288
Resiliency	219	1.00	7.00	3.7397	1.40798
Hope	219	1.00	7.00	4.0685	1.39128
Hope	219	1.00	7.00	4.0183	1.44934
Hope	219	1.00	7.00	4.0046	1.44469
Hope	219	1.00	7.00	4.0137	1.43508
Hope	219	1.00	7.00	4.0548	1.49209
Hope	219	1.00	7.00	3.9406	1.43710
Depersonalization	219	1.00	5.00	3.5936	1.17472
Depersonalization	219	1.00	5.00	3.5525	1.21562
Depersonalization	219	1.00	5.00	3.6119	1.21536
Depersonalization	219	1.00	5.00	3.5845	1.22135
Depersonalization	219	1.00	5.00	3.6530	1.22592
Personal Accomplishment	219	1.00	5.00	2.8128	1.52250
Personal Accomplishment	219	1.00	5.00	2.7808	1.44546
Personal Accomplishment	219	1.00	5.00	2.7854	1.34593
Personal Accomplishment	219	1.00	5.00	2.7717	1.35894
Personal Accomplishment	219	1.00	5.00	2.9178	1.52129
Emotional exhaustion	219	1.00	5.00	3.4475	1.53274
Emotional	219	1.00	5.00	3.2648	1.41849

exhaustion					
Emotional exhaustion	219	1.00	5.00	3.1689	1.37265
Emotional exhaustion	219	1.00	5.00	3.3425	1.43565
Emotional exhaustion	219	1.00	5.00	3.5114	1.52159
Pay	219	1.00	5.00	3.6484	1.08773
Pay	219	1.00	5.00	3.7397	1.08400
Pay	219	1.00	5.00	3.8402	1.02135
Pay	219	1.00	5.00	3.8767	1.08296
Working Condition	219	1.00	7.00	3.9178	1.29664
Working Condition	219	1.00	7.00	4.1781	1.26718
Working Condition	219	1.00	6.00	4.3653	1.25028
Working Condition	219	1.00	7.00	4.0046	1.29039
Promotion	219	1.00	6.00	3.8311	1.15883
Promotion	219	1.00	6.00	3.7534	1.25743
Promotion	219	1.00	6.00	4.0731	1.09383
Promotion	219	1.00	6.00	3.9772	1.14316

The results of correlation revealed that psychological capital had a significant positive relationship with job satisfaction and negative relationship with job burnout. Job satisfaction was also found to have a significant negative relationship with job burnout.

Table 3: Correlation between Psychological Capital, Job Satisfaction, and Job Burnout

	PC	JS	JB
PC	1		
JS	.459**	1	
JB	-.579**	-.456**	1

**. Correlation is significant at the 0.01 level (2-tailed).

In this study we used Chi Square, Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR) and the Root Mean Square Error of Approximation (RMSEA) to know the quality of the fit of the model. Following are the acceptable values of Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR) and the Root Mean Square Error of Approximation (RMSEA):

Table 4: Fit of Index and Acceptable Limit

Name of Fit Index	**Acceptable limit**	**Reference**
GFI	0.90 or higher	Kline (2011) and Hu (1999)
CFI	0.90 or higher	Kline (2011) and Hu (1999)
SRMR	0.08 or lower	Kline (2011) and Hu (1999)
RMSEA	0.08 or lower	Kline (2011) and Hu (1999)

The results of confirmatory factor analysis revealed that the measurement model of psychological capital fit the sample data very well. Chi square (N = 219) = 363.04, df = 248 p< 0.000; GFI = 0.882; CFI = 0.974; SRMR = 0.088 and RMSEA = 0.04 for psychological capital. The standardized loadings are given in figure 1.

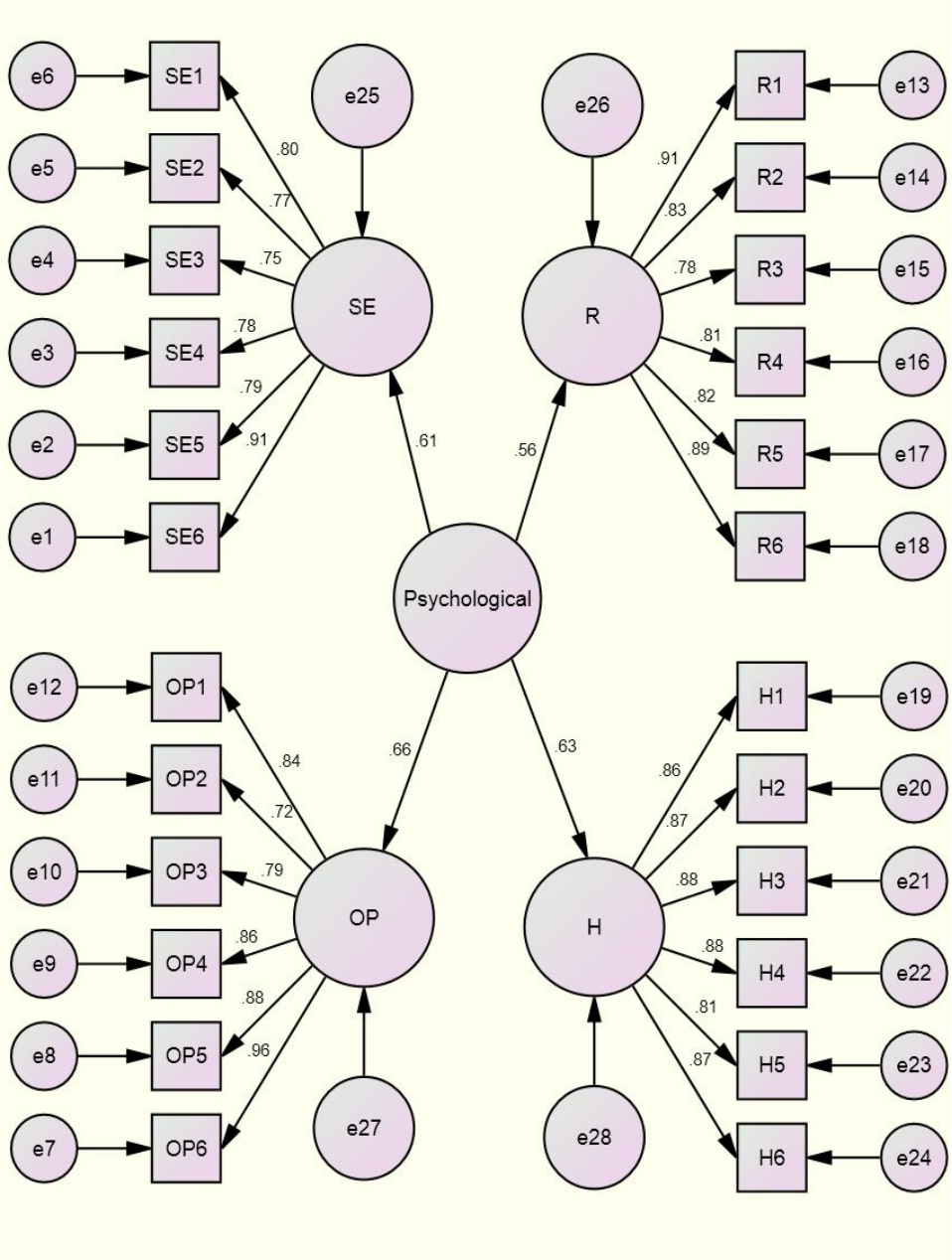

Figure 1: Dimensions of Psychological Capital

Note: OP=Optimism, SE= Self-Efficacy, R=Resiliency; H=Hope; PC=Psychological Capital

The results of confirmatory factor analysis revealed that the measurement model of job satisfaction fit the sample data very well. Chi square (N = 219) = 72.671, df = 51, p< 0.025; GFI = 0.95; CFI = 0.983; SRMR = 0.060 and RMSEA = 0.044 for job satisfaction. Standardized loadings are given in figure 2.

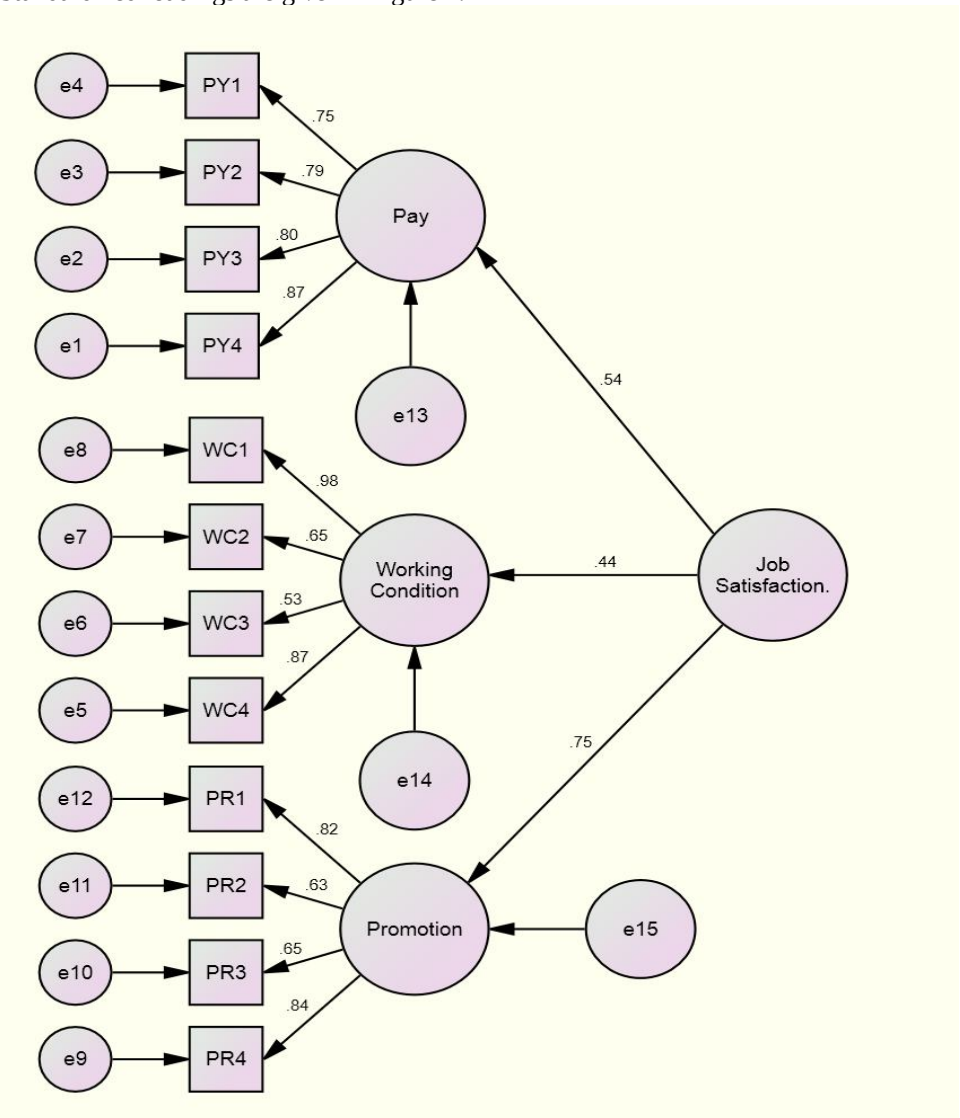

Figure 2: Dimensions of Job Satisfaction

The results of confirmatory factor analysis revealed that the measurement model of job burnout fit the sample data very well. Chi square (N = 219) = 125, df = 87, p< 0.004; GFI = 0.929; CFI = 0.985; SRMR = 0.063; and RMSEA = 0.045 for job burnout. Standardized loadings are given in figure 3.

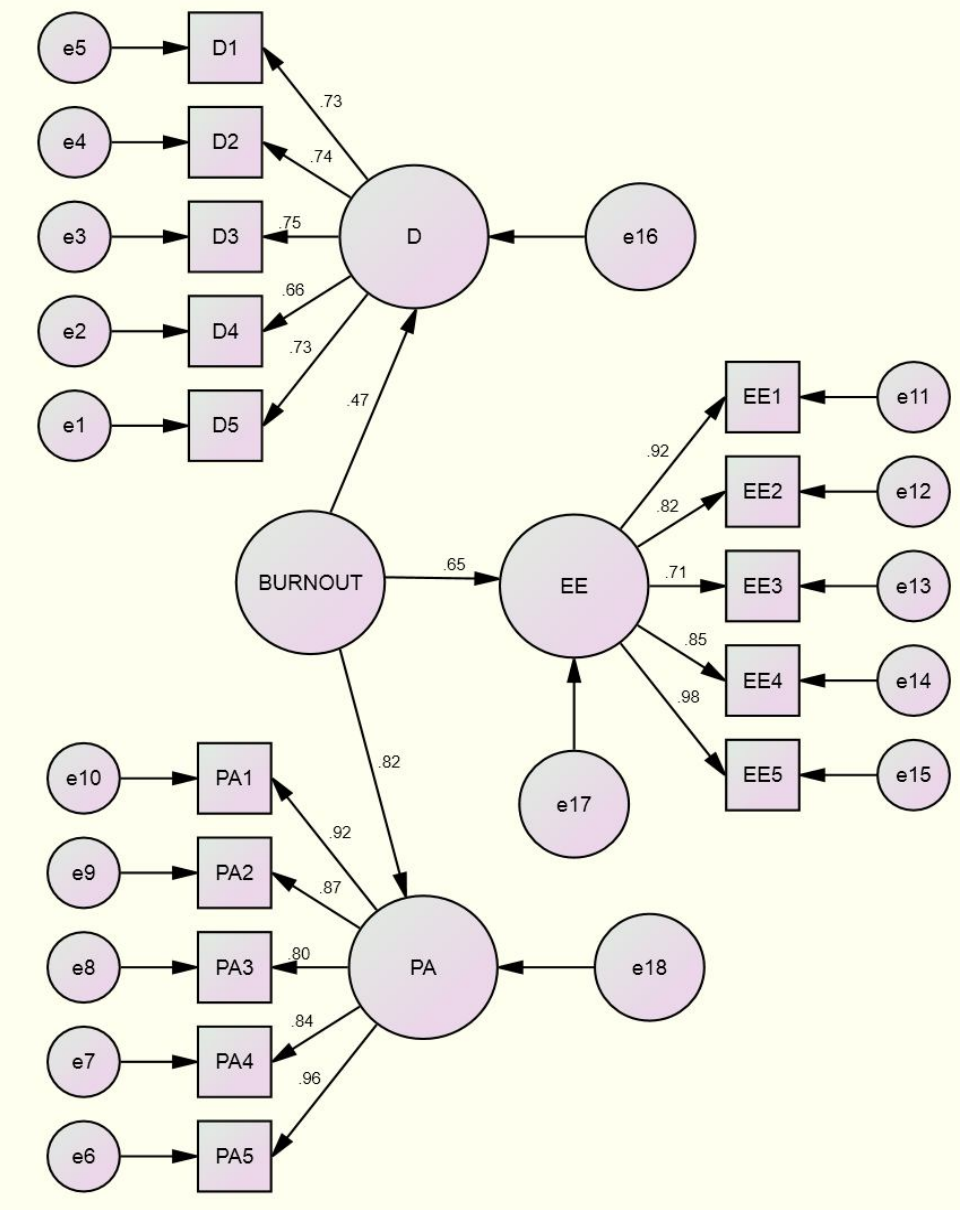

Figure 3: Dimensions of Job Burnout

Note: D=Depersonalization; PA=Personal Accomplishment; EE=Emotional Exhaustion

The measurement model of psychological capital and job burnout fit the sample very well. For psychological capital and job burnout, chi square was (N = 219) 894, df, 694, p< 0.000; GFI, 0.934; SRMR, 0.086; CFI, 0.972 and RMSEA, 0.036. Psychological capital showed - 83 percent impact on job burnout.

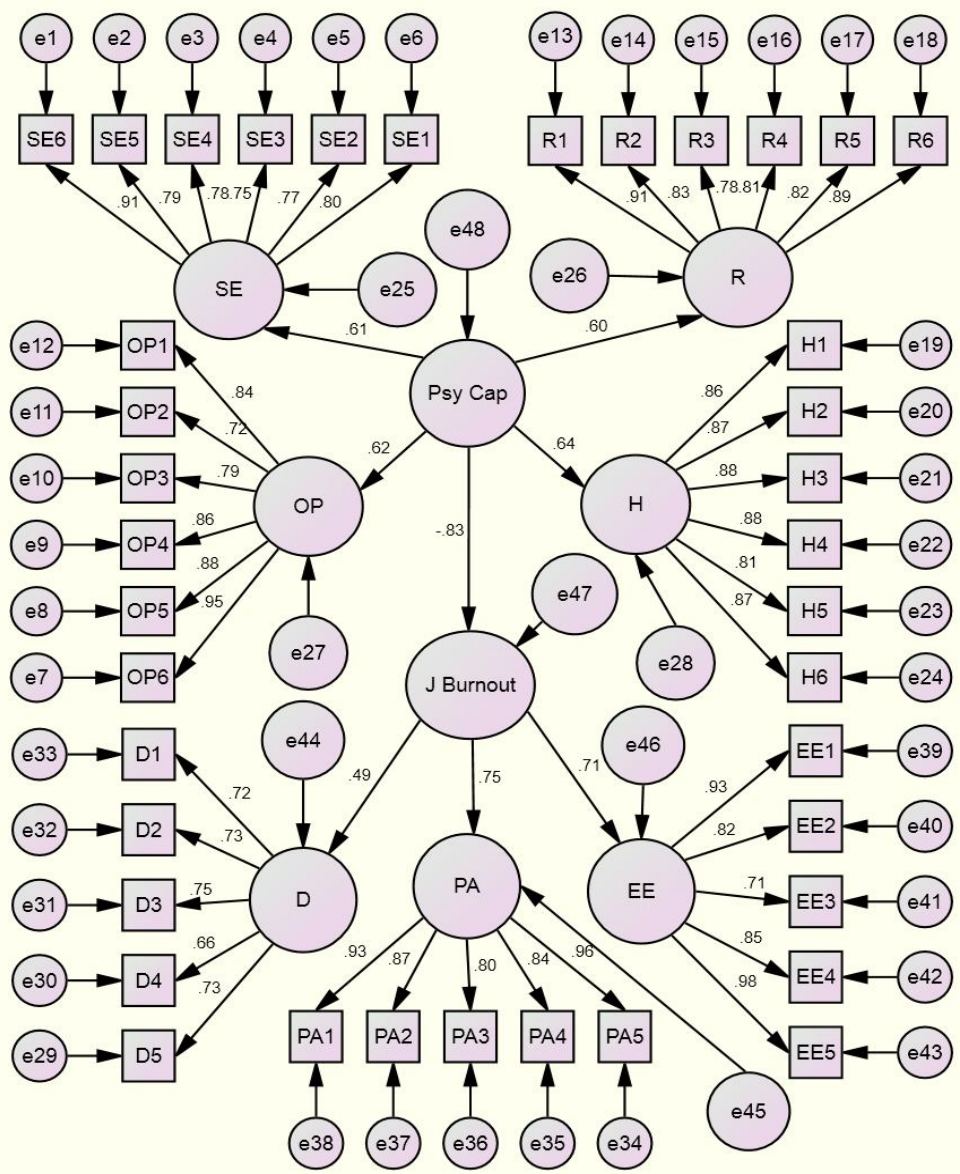

Figure 4: Path from Psychological Capital to Job Burnout

Note: OP=Optimism, SE= Self-Efficacy, R=Resiliency; H=Hope; PC=Psychological Capital; D=Depersonalization; PA=Personal Accomplishment; EE=Emotional Exhaustion; J Burnout = Job Burnout

The results of confirmatory factor analysis revealed that the measurement model of psychological capital, job satisfaction and job burnout fit the sample data very well. Chi square (N = 219) = 1472, df = 1211, p< 0.000; GFI = 0.922; SRMR = 0.081; CFI = 0.969; and RMSEA = 0.031. Standardized loadings are given in figure 5. All values are in the range of cut off values. Therefore, the model is accepted. The results revealed that psychological capital had - 83 percent impact on job burnout but when job satisfaction

was included as mediating variable, then the impact of psychological capital on job burnout reduced to -58 percent. Job satisfaction showed 30 percent negative impact on job burnout. So job satisfaction mediated the impact of psychological capital on job burnout.

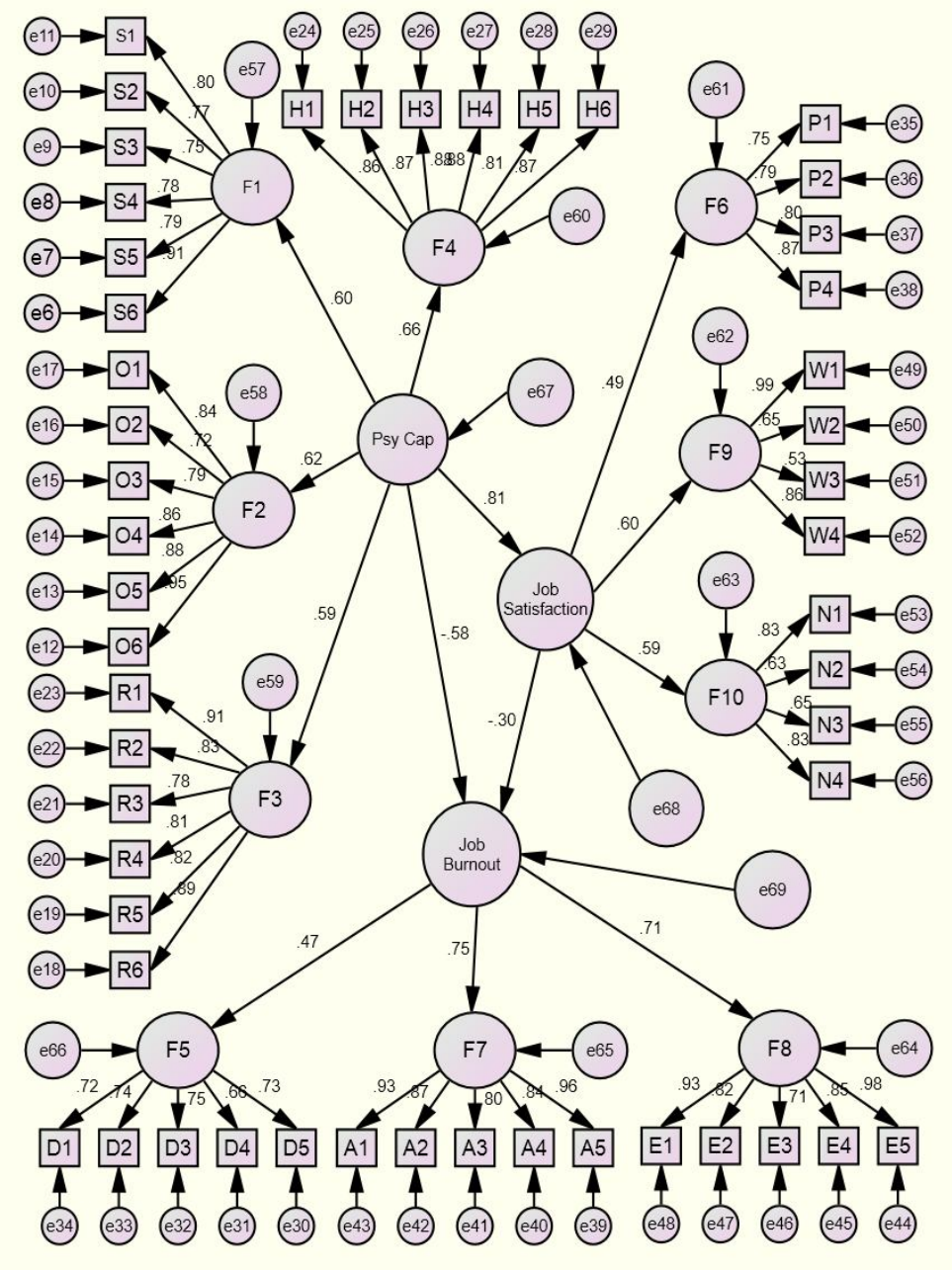

Figure 5: Path from Psychological Capital to Job Burnout through Job Satisfaction

Note: F2 = Optimism, F1= Self-Efficacy, F3 = Resiliency; F4 = Hope; Psy Cap = Psychological Capital; F5 = Depersonalization; F7 = Personal Accomplishment; F8 = Emotional Exhaustion; F6 = Pay; F9 = Working Condition; F10 =Promotion;

5. Conclusion and Recommendations for Present and Future Research

This research was conducted to investigate the mediating effect of job satisfaction between psychological capital and job burnout of nurses in Pakistan. Data were collected from 219 female nurses working in government hospitals of the KPK, Pakistan through Psychological Capital Questionnaire, Questionnaire based on a Maslach Burnout Inventory-General Survey and Job Satisfaction Survey.

The path from psychological capital to job burnout showed -83 percent impact. But when job satisfaction as mediating variable was included, the path from psychological capital to job burnout reduced from -83 to -58.

Job satisfaction played a pivotal role in mediating the relationship between psychological capital and job burnout of nurses. The results revealed that psychological capital had a significant negative impact on job burnout. So job burnout of nurses can be reduced by paying heed to increasing the level of the 4 dimensions of psychological capital. Nurses having strong psychological capital will more likely to be satisfied with their job and will experience low levels of job burnout and will contribute to the attainment of the organization's goals and objectives.

It is recommended for future research to test the model developed in this study by collecting data from nurses of other government hospitals of Pakistan. In this study, job satisfaction was used as a mediator. Other factors such as organizational commitment, and organizational citizenship behavior, etc. can be used as a mediator and then the model can be tested by taking samples from other service industry.

6. Limitation of the study

One of the limitations of this study was that the results of this study can be generalized to the nurses of government hospitals of the KPK, Pakistan, not to the nurses of government hospitals of other provinces of Pakistan. Another limitation of this study was the respondents. Data gathered from participants may be different from the data to be collected from non-participants. The last limitation of this study was the questionnaire used. There are many other questionnaires which can be used for measuring job satisfaction, psychological capital and job burnout. So data collected through the questionnaires mentioned in this study may be different from the data to be collected through other questionnaires.

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