Correlation between Psychological Capital and Occupational Burnout in Nurses

A B S T R A C T

Aims The environment surrounding human includes physical, social, and psychological factors, each of which plays an important role in health status of human. The studies have shown that several psychological factors may play role in occupational burnout among the nurses. The aim of this study was to investigate the correlation between psychological capital and occupational burnout in nurses.

Instruments & Methods The statistical population of the present descriptive correlational study comprised of employed nurses in hospitals affiliated to Isfahan University of Medical Sciences, who were totally 4,000 participants selected based on the Cochran's formula for sample size as 351 respondents, using stratified random sampling method in 2015-2016. The research tools included Luthans et al.'s psychological capital questionnaire and Maslach burnout inventory. The data analysis was performed, using statistical SPSS 19 software by stepwise regression, Pearson's correlation coefficients, and ANOVA test.

Findings There was an inverse significant correlation among psychological capital \( r=0.179; p<0.05 \) and resiliency \( r=0.318; p<0.05 \) with occupational burnout, while self-efficacy, hope, positive attitude- optimism were not significantly related to occupational burnout. Accordingly, at the first step, resiliency interprets 10.1% of variance of occupational burnout \( (p<0.01) \). Therefore, regression can be extended to statistical population. Beta coefficient reduced occupational burnout up to 0.318 units against 1 unit increase in resiliency \( (p=0.001) \).

Conclusion There is an inverse correlation between psychological capital and occupational burnout in nurses. However, there is no correlation between self-efficacy, hope, positive attitude- optimism of psychological capital with occupational burnout.

Keywords Psychological capital; Occupational Burnout; Nurses

C I T A T I O N   L I N K S

[1] A comprehensive dictionary of psychology and psychiatry: English-Persian
[2] Stress and psychiatric disorder in healthcare professionals and hospital staff
[3] Stress, anxiety, and cognitive interference: Reactions to tests
[4] Psychology of productivity
[5] Job burnout
[6] Maslach burnout inventory manual
[7] Psychology: Models of the healthy personality
[8] Positive organizational behavior: Engaged employee in flourishing organizations
[9] Positive psychological capital: Measurement and relationship with performance and satisfaction
[10] Cultivate self-efficacy for personal and organization management: Strategy and action links
[11] Hope theory: Rainbows in the mind
[12] Learned Optimism
[13] Human resource management: Strategy and action links
[14] Relationship between job stress and resiliency with occupational burnout among nurses
[15] Relationship between psychological capital, personality characteristics with burnout of administrative staff of the education district 3 of Shiraz
[16] The impact of psychological capital on job burnout of Chinese nurses: The mediator role of organizational commitment
[17] The impact of psychological capital on mental health among Iranian nurses
[18] Considering the mediating role of job burnout
[19] Psychological capital: Developing the human competitive edge
[20] The development and resulting performance impact of positive psychological capital.
Correlation between Psychological Capital and Occupational Burnout in Nurses

60

Introduction

The occupational burnout is the symptom of emotional exhaustion after several years of involvement in and commitment to business and people [1]. Burnout is a physical and mental syndrome along with tiredness, leading to negative behavior and attitude toward oneself, work, care-seekers, non-productive work and absenteeism, ill-morality, and job dissatisfaction [2]. The nurses are some of personnel, who are closely related to other people, responsible for health and life of humans, and exposed to incurable patients and diseases. Thus, they always experience serious stresses.

There are numerous factors of occupational burnout in nursing, out of which one can refer to stressful factors in nursing [3]. Occupational burnout causes destruction in quality of services provided by the personnel. The subject of reducing potential of personnel and occupational burnout is presently assumed as a prevalent problem in all healthcare systems so that according to the available statistics, of each 7 employees, 1 is subject to burnout at the end of the working day [4].

Based on Maslach’s viewpoint, occupational burnout is a syndrome, which emerges in response to chronic stress and it is mainly observed among types of jobs of instructors and assistants e.g. advisors, teachers, social workers, physicians, polices, nurses, etc; this is probably due to the type of tasks and responsibilities of such kinds of occupations [5].

Maslach and Jackson assume 3 elements for occupational burnout as follow:

1) Depersonalization: It denotes emotional isolation from direct care for the referents that may typically lead to the type of attitude, ignorance, and lack of emotion toward others. In other words, the subject may feel sense of ignorance to others.

2) Emotional exhaustion: It is tiredness and burnout.

3) Reduced performance: It means that an employee may feel s/he does not do useful activity [6].

Several psychological factors may affect occupational burnout. A fundamental change emerges in the way of attitude of some psychologists. The focal point and new direction of this approach is called perfection psychology or health psychology, which deals with the healthy dimension of human nature not unhealthy one [7]. This new approach, which is also called positivistic psychology, created a new movement called positive organizational behavior. The positive organizational behavior does not claim to reach to a new achievement relating to positivism, but it refers to the requirement for further concentration on theorization and effective research, application of positive modes, attributes, and behaviors of personnel in workplace [8]. In developing a framework for positive organizational behavior in organization, Luthans et al. have proposed positivistic psychological capital as a combinatory factor and source of competitive advantages in organizations. They maintain that psychological capital may lead to enhancing value of human capital (knowledge and skills of individuals) and social capital (network of relations between them) with reliance on positivistic psychological variables e.g. hope, self-efficacy, optimism, and resiliency etc. in organization. Therefore, psychological capital is composed of positivistic psychological variables, which can be measured, developed, and trained, and it is possible for the management to implement them [9]. These variables are as follow:

Self-efficacy: Bandura has defined self-efficacy as individual resolute belief in one’s own capabilities to mobilize motivational and cognitive sources and the strategies needed for successful doing of certain tasks under specific situations [10].

Hope: Snyder supports the idea that hope is a cognitive or intellectual status, which enables the individuals to formulate actual but challenging and predictable objectives and, then, to achieve those goals by self-centered will, energy, and internalized perception [11].

Optimism: Seligman defines optimism as interpretive (descriptive) style, which attributes positive events to permanent, personal, and pervasive causes and the negative events to external, temporary, and specific conditions. On the other hand, pessimism is an interpretive style that ascribes positive events to permanent, personal, stable, and pervasive factors [12].

Flexibility or resiliency: Resiliency has been defined as a psychological capacity; thereby,
the individuals can successfully use it for tackling with change, crisis, risk, and problems [13]. In a study carried out by Shakerinia and Mohammadpoor, the relationship between occupational stress and resiliency with occupational burnout in female employed nurses was explored in public hospitals in Rasht. The findings suggested that resiliency and occupational burnout had inverse significant relationship with each other [14].

In a study carried out by Badiyee and Barzegar on 123 employees, the relationship between psychological capital and personality traits with occupational burnout was examined. The data were analyzed by correlation coefficient and multivariate regressive analysis. The findings suggested that there is an inverse and significant relationship between some of the variables of psychological capital and occupational burnout [15].

In a study, Peng et al. found that psychological capital and organizational commitment had an inverse and negative relationship with occupational burnout [16]. Estiri et al. stated that there is a significant relationship between psychological capital, job burnout, and mental health; also, there is a significant negative relationship between psychological capital and job burnout [17].

Given that occupational burnout serves as a response to the resultant stresses in nurses, the aim of this study was to investigate the correlation between psychological capital and occupational burnout in nurses.

**Instruments and Methods**

The statistical population of the present descriptive correlational study comprised of employed nurses in hospitals affiliated to Isfahan University of Medical Sciences, who were totally 4,000 participants. Samples were selected based on the Cochran’s formula for sample size as 351 respondents, using stratified random sampling method in 2015-2016.

Two questionnaires were used for data collection:

1- A 24-item questionnaire to determine psychological capital [17, 18],
2- A 25-item questionnaire to specify occupational burnout [6],

The questionnaires were distributed according to the specified quantity after permission was issued for their administration by attendance in the hospitals affiliated to Isfahan University of Medical Sciences since August, 6th, 2015 for six months. The questionnaires were examined on site and in the case of high defect (about 1%), the colleagues were asked to complete questionnaires perfectly. Thus, the rate of return of questionnaires was 100%.

With respect to the frequent use of questionnaires in various domestic and foreign studies and verification of their validity, content validity of them was verified. As one of the methods of determining internal consistency, the Cronbach alpha coefficient was used to specify the reliability of the questionnaires. The total reliability coefficients were derived for psychological capital questionnaire and occupational burnout inventory as 0.80 and 0.74, respectively.

The data were analyzed, using SPSS 19 software at descriptive and inferential levels. In descriptive statistics, statistical variables such as frequency, percentage, mean, and standard deviation were used and in inferential statistics, Pearson’s correlation coefficient (to investigate the correlation between the variables), multivariate regression (to determine the amount of effect of predictor variable on the dependent variable), and multi-way ANOVA (to investigate the relationship between the demographic variables and the research variables) tests were employed.

**Findings**

Demographic data in questionnaires were as follow: 64.1% of participants were female and 33.0% of them were male, 2.9% was unspecified. 36.8% of participants were 31 to 40 years and 83.9% of participants had B.A. degree and in 47.7% of participants, work background was less than 10 years.

The mean score of the occupational burnout was 2.93±0.69.

The correlation coefficient was significant between psychological capital and resiliency with occupational burnout. Namely, there was an inverse and significant correlation between psychological capital and occupational
Correlation between Psychological Capital and Occupational Burnout in Nurses

There is no significant correlation between variables of self-efficacy, hope, positive attitude-optimism of psychological capital with occupational burnout (Table 1).

| Variables                        | Mean±SD         | Correlation coefficient | Significance level |
|----------------------------------|-----------------|-------------------------|--------------------|
| Psychological capital            | 3.08±0.18       | -0.179*                 | 0.006              |
| Self-efficacy                    | 3.08±0.39       | -0.051                  | 0.438              |
| Hope                             | 2.98±0.25       | -0.014                  | 0.833              |
| Resiliency                       | 3.35±0.46       | -0.318*                 | 0.001              |
| Positive attitude-optimism       | 2.93±0.35       | -0.080                  | 0.222              |

*p<0.01

Among the studied variables in regression, predictor variable of occupational burnout was placed at the first step in resiliency out of psychological capital. Based on the results of stepwise regressive analysis, there was a significant relationship between resiliency of psychological capital with occupational burnout. Accordingly, at the first step, resiliency interprets 10.1% of variance of occupational burnout (p<0.01). Therefore, regression can be extended to statistical population. Beta coefficient reduced occupational burnout up to 0.318 units against 1 unit increase in resiliency (p=0.001). There was no significant difference between scores of psychological capital based on age, gender, educational degree, and work background (p>0.05).

There was no significant difference between scores of occupational burnout based on age, educational degree, and work background, but based on variable of gender scores of occupational burnout are significantly different (F=6.346; p=0.013).

Discussion
There was an inverse and significant correlation between psychological capital and occupational burnout. There was a negative and inverse correlation between resiliency with occupational burnout, while the correlation was not significant between self-efficacy, hope, positive attitude-optimism of psychological capital with occupational burnout.

Luthans et al. claimed what mentioned under title of psychological capital might be proposed as a competitive advantage by investment in individuals [19]. Although financial sources and capital are necessary for development performance in an organization, they are addressed alone; so, they are not suitable predictors for excellent performance and development of the organization and psychological capitals, which can be guaranteed by an organization along with financial capitals, should be accounted for. Psychological capital may positively affect spirit of individuals and stimulate interesting in work and entrepreneurship. Similarly, the role of psychological capital has been approved in improving motivation and it has been identified that psychological capital improves hope and self-reliance and add to the rate of efforts made by individuals. Using psychological capital, one can remove mental resistance and strengthen defensive potential against stress. Therefore, since stress is the main factor for creating occupational burnout, the rate of occupational burnout may be reduced by increasing the level of psychological capital.

Likewise, as Luthans et al. maintained, excellent performance will be achieved only when we notice investment in non-traditional and intangible organizational sources (especially psychological capital) [19]. Peng et al. also confirmed the inverse and significant effect of psychological capital on occupational burnout among nurses in China [16]. Estiri et al. showed that there is a significant negative relationship between psychological capital and job burnout [17].

Among the studied variables in regression at first step, resiliency is the best predictor for occupational burnout. In all wards, nurses encounter persons, whose daily life is full of adverse conditions; therefore, resiliency is assumed an important lifestyle for them. Some attributes have been attached to resilient nurses, such as flexibility, indefatigability, self-conception, and philanthropy. Researchers have also introduced efficient dominance and coping skills as major consequences for resiliency. By
resiliency, nurses will be able to resist against many psychological stresses. Warelow and Edward indicated that the nurses, who have employed resilient behaviors and are potential when exposing to occupational problems to preserve their health, might be less subject to occupational burnout \cite{20}; this finding was consistent with the results of a study conducted by Shakerinia and Mohammadpoor, in which there was a negative and significant relationship between occupational burnout in nurses with rate of resiliency in them \cite{14}.

There was no significant difference between scores of psychological capital based on gender, age, educational degree, and work background. Also, there was no significant difference between scores of occupational burnout according to age, educational degree, and work background, but the difference is significant in scores of occupational burnout based on gender and occupational burnout is more frequent in females. To interpret this hypothesis, it can be mentioned that based on the reports of nurses and personnel of hospitals, due to repeated and direct exposure to mortality, pains and injuries, long working hours, physical activities, few holidays, short time for social communications with friends and close people, shortage and sometimes lack of social supporting network, and rising public expectations, they are exposed to more mental and physical stresses. Constant continuity of these stresses for a long time will be followed by occupational burnout. Given that the females possess more sensitive emotions and feelings than the males and also emotional exhaustion is seen more in female nurses than males, occupational burnout is observed more in female nurses than their male peers.

This research has been conducted in Isfahan University of Medical Sciences, therefore its results can not be generalized to other organizations and hospitals. The method of this research was quantitative. Advising other researchers, use of qualitative methods as being essential is to explain the findings from the quantitative research. Due to the importance of psychological capital and its effect on some variables like occupational burnout, the officials in organizations should be more aware of trend of importance and role of psychological capital and they should hold some training courses e.g. Luthans intervention program in workplaces. Likewise, with respect to the findings, it is suggested to hold training courses for resiliency improvement skills in nurses by some courses about communication skills and social relations as well as establishment of workshops for recognition and training of resiliency to the target groups.

**Conclusion**

There is an inverse correlation between psychological capital and occupational burnout in nurses. However, there is no correlation between self-efficacy, hope, positive attitude-optimism of psychological capital with occupational burnout.

**Acknowledgements:** This paper was excerpted from an M A. thesis written by Mr. Amin Asgari, a student in master's course of Educational Administration in Islamic Azad University, Isfahan branch (Khoorasegan) under the supervision of Fariba Karimi, Ph.D; the deputy of Isfahan University of Medical Sciences (Project Code: 294-81) approved it on April, 25\textsuperscript{th}, 2015. The authors would like to express their great appreciation to the research deputy of Isfahan University of Medical Sciences and the employed nurses in the hospitals affiliated to Isfahan University of Medical Sciences as well as the research deputy of Islamic Azad University Isfahan branch (Khoorasegan) for their kind cooperation in this research.

**Ethical permissions:** There is no ethical code.

**Conflict of Interests:** There are no conflicts of interest.

**Authors’ Contribution:** Asgari Mobarekeh A. (First author), Introduction author/ Original researcher/ Statistical analyst (50%); Karimi F. (Second author), Methodologist/ Assistant/ Discussion author (50%).

**Funding:** This research has been conducted without financial support.

**References**

1. Pourafkary N. A comprehensive dictionary of psychology and psychiatry: English-Persian. 1\textsuperscript{st} Volume. Tehran: Farhang Moaser Publishers; 1994. [English-Persian]
2. Weinberg A, Creed F. Stress and psychiatric disorder in healthcare professionals and hospital staff. Lancet. 2000;355(9203):533-7.
3. Sarason IG. Stress, anxiety, and cognitive interference: Reactions to tests. Pers Soc Psychol. 1984;46(4):929-38.
4. Saatchi M. Psychology of productivity. Tehran: Virayesh Publication Institute; 1997. [Persian]
5. Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annu Rev Psychol. 2001;52:397-422.
6. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory manual. Palo Alto Calif: Consulting Psychologists Press; 1981.
7. Schultz P. Psychology: Models of the healthy personality. Khoshdel G, translator. Tehran: Peykan; 2001. [Persian]
8. Bakker AB, Schaufeli WB. Positive organizational behavior: Engaged employee in flourishing organizations. J Organ Behav. 2008;20(2):147-54.
9. Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: Measurement and relationship with performance and satisfaction. Pers Psychol. 2007;60(3):541-72.
10. Bandura A. Cultivate self-efficacy for personal and organization. In: Locke AL, editor. The Blackwell handbook of principles in organization behavior. London: Wiley; 2003.
11. Snyder CR. Hope theory: Rainbows in the mind. Psychol Inq. 2002;13(4):249-75.
12. Seligman MEP. Learned Optimism. New York: Pocket Books. 1998.
13. Stewart GL, Brown KJ. Human resource management: Strategy and action links. Earabi M, Fayyazi M, translators. Tehran: Maahkameh; 2006. [Persian]
14. Shakerinia I. Mohammadpour M. Relationship between job stress and resiliency with occupational burnout among nurses. J Kermanshah Univ Med Sci. 2009;14(2):161-9. [Persian]
15. Badiei M, Barzegar M. Relationship between psychological capital, personality characteristics with burnout of administrative staff of the education district 3 of Shiraz. 1st International Conference on Psychology, Counselling (challenges and process); 2015 May; Marvdasht: Islamic Azad University, Marvdasht Branch; 2015. [Persian]
16. Peng J, Jiang X, Zhang J, Xiao R, Song Y, Feng X, et al. The impact of psychological capital on job burnout of Chinese nurses: The mediating role of organizational commitment. PLoS One. 2013;8(12):e84193.
17. Estiri M, Nargesian A, Dastpish F, Sharifi M. The impact of psychological capital on mental health among Iranian nurses: Considering the mediating role of job burnout. SpringerPlus. 2016;5(1):1377.
18. Luthans F, Youssef CM, Avolio BJ. Psychological capital: Developing the human competitive edge. New York: Oxford University Press, USA; 2006.
19. Luthans F, Avey JB, Avolio BJ, Peterson SJ. The development and resulting performance impact of positive psychological capital. Hum Resour Dev Q. 2010;21(1):41-67.
20. Warelow P, Edward KL. Caring as a resilient practice in mental health nursing. Int J Ment Health Nurs. 2007;16(2):132-5.