Psychological Capital of Employees of the Tehran University of Medical Sciences During 2010-2011

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ABSTRACT

Background: Psychological capital with components of hope, self efficacy, optimism, and resiliency has been recently proposed to bring positive psychology to the workplace.

Objectives: We investigated Psychological Capital states of employees of the Tehran university of medical sciences (TUMS) headquarter offices in Tehran, Iran.

Materials and Methods: A cross-sectional, descriptive and analytical study was conducted among all (1260) employees of the Tehran university of medical sciences headquarter offices in Tehran, Iran during the 2010-2011 time period. They were asked to respond to the PsyCap questionnaire, consisting of four subscales include hope, optimism, self-efficacy and resilience, each comprising of six items. Data were recorded and analyzed by SPSS software, using Chi-square statistical methods.

Results: Descriptive statistics showed that the mean for positive psychological capital score was 4.05 (SD = 0.43), state of hope was 4.2 (SD = 0.64), optimism was 4.03 (SD = 0.85), self-efficacy was 3.9 (SD = 0.67), and resilience was 4.06. It seems that TUMS employees score higher in hope state subscale of positive psychological capital inventory.

Conclusions: The relatively upper scores on the positive psychological states may be explained by the fact that TUMS employees worked and lived under good job that more likely to be associated with higher organizational performance. This is similar to USA sample and incompatible with Chinese workers. This study finding is only a first step towards an empirical examination of PsyCap states of psychological capital in Iran. However, our findings show the potentially important role of PsyCap capacities in health care organizations in Iran.

Keywords: Psychological Capital; Workforce; Positive Psychology
1. Background

Positive organizational behavior (POB), suggested by Luthans 2002 and defined by Zong and Zhao Li (2007), is a new title in the field of organizational behavior which stresses managing and developing capabilities of human beings, and analyses the positive approaches and abilities of employees to enhance their organizational performance (1). Peterson (2006) defined POB as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace” (2).

Positive psychology is the study of situations and processes that contribute to the normal performance of people, groups, and organizations (3). Positive psychology is a constellation of characteristics and experiences of positive organizations and individuals that aim to expand the focus of clinical psychology beyond suffering and its consequences (4, 5).

Psychological Capital (PsyCap) research has been basically an application of positive psychology, which links the positive organizational behavior and positive psychology (6). PsyCap investigates human psychological capital and is one way to study this new field (7). PsyCap evaluates major feelings of individuals in several psychological dimensions that help them to perform according to the active organization standards and gain competitive advantages (8). PsyCap evaluates self-efficacy, hope, optimism, and resilience states which recently have been proposed to contribute to positive psychology in the workplace (9).

Synder et al. (1991) defined hope as a sense of goal attainment and planning to perform the goal (10). Self-efficacy means self-confidence about his or her abilities in motivating other people by cognitive resources to perform a specific task successfully (11). Optimism is defined as a state by which people expect good things to happen to them (12, 13). Resilience is a person's ability to rebound from a set back or failure (14, 15). Hope, self-efficacy, optimism, and resilience are referred to as core factors of psychological capital, and are important factors for work motivation of employees and authentic leadership (16, 17). Self-efficacy, hope, optimism, and resilience are referred to as positive organizational behavior criteria which generate positive thinking and motivation for organizational behavior (18).

Self-efficacy, hope, optimism, and resilience states of PsyCap are proposed to associate with organizational employees' attitudinal, behavioral, and performance outcomes and also employees’ well-being measures over time (19). Avey et al. (2011) confirmed the relationship between PsyCap with employee's well-being (20). However, Avey et al. (2006) expressed that psychological capital decreased the level of employees' absenteeism (21). Moreover, Fredrickson (2001) declared that field of psychological capital led to positive emotions that could cause employees’ flourishing (22). Avey et al. (2008) found that employees’ psychological capital was related to their emotions that in turn were related to their positive attitudes and behaviors (23). Currently, psychological capital is increasingly receiving attention because of its important role in managing organizational employees for competitive advantage and employees’ positive work attitudes (24-26).

Although human resource management in Iran is beginning to receive more attention, some of the new developments in organizational behavior has been largely neglected. At this critical time of the development of Iranian organizations, as they are preparing to increase their national production, better understanding and practical testing of the newly emerging concept of psychological capital would be particularly relevant. Since, Tehran university of medical sciences (TUMS) represents one of the best educational, research and managerial performances in Iran and Middle East in the last decade; we attempted to explore whether such a good performance is stemmed from positive organizational behavior.

2. Objectives

The purpose of this study was to investigate positive psychological capital states (self-efficacy, hope, optimism, and resiliency) of the headquarter employees of TUMS, Tehran, Iran.

3. Materials and Methods

This cross-sectional, descriptive and analytical study was conducted by a census method among 1260 employees as the total headquarters' employees of TUMS, Tehran, Iran during 2010-2011.

3.1. PsyCap Questionnaire

The research tool for data collection was the PsyCap questionnaire that was measured using the PCQ-24 (the validity analysis can be found in Luthans et al. 2007; Luthans & Youssef, 2004 contains the entire PCQ-24; and free permission for research purposes can be obtained from www.mindgarden.com) (23, 24). PsyCap questionnaire is a higher order construct, consisting of four subscales, each subscale comprised of six items, for a total of 24 items. The subscales include self-efficacy, hope, optimism, and resilience.

A major concern with cross-cultural research is accurate translation from the US-compiled psychological instruments to other languages and cultures. To avoid or minimize the cultural interference as much as possible, we followed Brislin (1980) guidelines on the re-translation method. A member of our team who received his Ph.D in English language education translated the English questionnaire into Persian and the Persian version of the questionnaire was then re-translated back to English by an Iranian graduate student majoring in English.
The re-translated PsyCap questionnaire was evaluated by a panel of experts who rated the relevance of each item, clarity, format, and ease of completion of the questionnaire. Rater responses ranged between one (strongly disagree) to five (strongly agree). The mean score for each item and also the total mean of psychological capital was calculated (maximum = 5). A score rating of 75-100% was defined as the highest agreement rate, a score of 50-75% as a medium agreement rate, and below 50% was defined as disagreement. A pilot study was performed which yielded a high internal consistency of the PsyCap questionnaire (Cronbach’s alpha = 0.73). A brief instruction for completion and the purposes of PsyCap were also included to ensure that respondents understood the measured concepts. Also, we collected the respondent’s demographic details consisting of age, sex, years of work experience, marriage status, salary, and ethnicity. Tehran University of Medical Sciences Ethics Committee on Research approved this study. All employees voluntarily consented to participate and contribute to the self-assessment.

3.2. Study Participant

The questionnaires were delivered to the respondents by five evaluators who explained the aim of this study and philosophy of PsyCap assessment to the participants at the end of administrative time. Overall 1100 respondents filled and returned the questionnaires (response rate of 80%).

3.3. Statistical Analysis

The collected data were analyzed for correlations by Chi-square statistical method using the SPSS software.

4. Results

The participant ages ranged from 20 to more than 50 years old and most of them (52.5%) were 30-40 years old. About thirty of the respondents had 5-10 years work experience. Sixty five percent of the employees were male and the rest were female. 83.8% of them were married. Four percent of the respondents reported associate diploma, whereas 52% of them reported BSc. degree, with 27.5% reporting a MSc. degree and 16.5% reporting Ph.D or M.D. 53% of the employees were Persian, others were Turkish (30%), Kurdish (5%), Gilaki (4%), Mazandarani (4%) and Arabs (4%).

The results of descriptive statistics (overall means and standard deviations) showed that the mean score for positive psychological capital was 4.05 (SD = 0.43), state of hope was 4.20 (SD = 0.64), optimism was 4.03 (SD = 0.85), self-efficacy was 3.90 (SD = 0.67), and resilience was 4.06 (SD = 0.63), which showed good levels of positive psychological capital for TUMS employees (Table 1).

| Table 1. Positive Psychological Capital Components Mean Rating for TUMS Headquarters’ Employees |
|---------------------------------------------|------------------|--------------------|
| Raw Components of PsyCap | Mean Rating (s.d) | SD |
| 1 | Self-efficacy | 3.90 | 0.67 |
| 2 | Hope | 4.20 | 0.64 |
| 3 | Optimism | 4.03 | 0.85 |
| 4 | Resilience | 4.06 | 0.63 |

Also, TUMS employees scored higher in the hope state of PsyCap. It was found that only self-efficacy was significantly related to the respondents’ gender (self-efficacy, P = 0.03; hope, P = 0.36; optimism, P = 0.25; and resilience, P = 0.49) (Table 2). More importantly, the positive psychological capital summing all four states did not have significant correlation with age, degrees, years of experience and Persian ethnicity.

| Table 2. Comparison of Different Study Variables According to the Participants’ Gender |
|---------------------------------------------|------------------|--------------------|
| PsyCap components | Gender | N | Mean (5.0) | SD | T | P-value |
| Self-efficacy | Male | 715 | 4.11 | 0.76 | 2.213 | 0.03 |
| | Female | 385 | 3.78 | 0.49 | |
| Hope | Male | 715 | 4.28 | 0.59 | 0.909 | 0.36 |
| | Female | 385 | 4.14 | 0.70 | |
| Optimism | Male | 715 | 4.12 | 0.86 | -0.68 | 0.49 |

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Table 3 presents the analysis of variables according to the merit-based salary measures of the employees. As shown, psychological capital of the employees was positively related to their merit-based salary ($P = 0.042$).

Table 3. Comparison of Different Study Variables According to the Merit-based Salary

<table>
<thead>
<tr>
<th>PsyCap components</th>
<th>Salary (million RIS)</th>
<th>No.</th>
<th>Mean (5.0)</th>
<th>SD</th>
<th>T</th>
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5. Discussion

Up to now, there has been only few studies on psychological capital, with positive consequences on both performance and work attitudes, but all of them has been performed in the USA and China. Our study is the first PsyCap study outside these two countries, which has explored not only the positive organizational effect of states of hope, optimism, resiliency, and self-efficacy, but also incorporated them into the core construct of psychological capital.

Results of our study showed that TUMS headquarters’ employees score relatively high in hope. Several studies show that hope has positive impact on academic performance (27, 28). Few studies have attempted to link hope to the workplace performance (29, 30). These studies suggest that those employees who are hopeful are likely to be motivated to be at a higher performance. Avey et al. believed that employees who have high scores in hope have ability to take multiple strategies to accomplish organizational goals and are motivated to be successful in their task (31). Searle and Barbuto (2010) declare that hope is associated with positive behaviors showed by savvy leaders (32). Considering this research results, we can argue that high level of hope in TUMS headquarters’ employees, would have a positive impact on their performance.

Coutu (2002) and Masten (2001) suggest that highly resilient employees are more effective in experiencing and development under threatening conditions (33, 34). Recently, there have been a few attempts to correlate resiliency to workplace performance and human resource development (33, 35-37). Resilient employees are those who get involved in challenging situations leading to organizational change and also have the ability to become compatible with organizational policies (17). Such rapid transformation is perhaps most characteristic of TUMS employees today, and therefore the resiliency of TUMS employees would be specially related to their PsyCap and
their performance.

Carver and Sheier (2002) note that optimism is one's character trait to understand the organizational change and maintain positive expectations about what will happen and remain motivated throughout the change process (28). Psychological capital suggests that employees who have optimism, are likely to be committed, leading to higher performance (24, 38). In TUMS work context included in our study, such optimism seems to be related to these employees' PsyCap, resulting in their higher performance.

Bandura (1997) demonstrates that employees who are highly efficacious are presented by pursuit and continuous efforts towards accomplishment and have beliefs in their own success (39). We think that TUMS headquarters employees have ability to move towards accomplishment because of their high efficacy.

Combined, these four states of hope, resiliency, efficacy, and optimism used in our study; represent the positive psychological capital of a sample of Tehran university of medical sciences employees who present the relatively upper scores of these states of the PsyCap core construct. Luthans et al. (2005) indicate the Chinese workers' positive states of hope, optimism, resiliency, efficacy and psychological capital, significantly correlated with their performance (16). Youssef and Luthans found that the positive psychological capital capacities of hope, optimism, resiliency, and efficacy have impact on the desired employees' work related outcomes (17, 19). Also, Luthans et al. (2008) show that employees' psychological capital is positively related to their performance, satisfaction, and commitment, leading to a supportive climate (40-42). Moreover, a study of manufacturing employees found a significant relationship between PsyCap state and their work attitudes, their behaviors, and high job performance leading to organizational progress (23, 25, 40).

Luthans et al. (2005) who examined the relationship of Chinese employees' positive psychological capital states of hope, resiliency, self-efficacy, and optimism separately and when four states were combined into a core construct of psychological capital, indicated that the mean for hope was 5.17 (SD = 1.14), optimism was 3.36 (SD = 0.44), resiliency was 2.81 (SD = 0.50), and self-efficacy was 3.50 (SD = 0.33), suggesting reasonable levels of PsyCap states for Chinese employees, with the possible exception of resiliency, where it seemed to be somewhat lower than norms for US employees (16), and all values were lower than mean values for the TUMS employees, with the exception of hope state.

Although Waldersee & Luthans (1994) believe that the study of impact of PsyCap states on employees' performance is difficult, because several complex mechanisms and processes which are involved (41). Similarly, TUMS headquarters employees' score for hope state was upper than the other PsyCap states, indicating that it can positively impact their performance. On the other hand, Bandura (1986) argues that no single variable can impact employees' performance, and it is the overall PsyCap states which correlates with employees' desired performance (42). Moreover, combination of PsyCap states may be more exactly predict employees' desired performance as opposed to any individual state (43).

In our research, we showed that psychological capital of TUMS employees positively correlates with their merit-based salary (P = 0.042). This is similar to results of Luthans et al. (2005) research that found the positive psychological capital of Chinese employees was positively related to their merit-based salary (P < 0.001) (16), indicating that PsyCap of Chinese employees have more significant correlation with their merit-based salary in comparison with TUMS employees.

5.1. Limitations and Implications

Limitations of any field study are magnified when concepts and techniques developed in one culture are applied to another culture. Also, one of the main limitations of the present study is that, it was conducted at one specific time point. Second, the employees were interviewed only through a questionnaire. It is possible that this information-collection process has been convenient for the present research, but it might have introduced some bias into the final results of the research.

The practical implications of this study includes manager attention to build and strengthen the psychological capital of their employees. There are specific guidelines and several successful applications in psychology capital literature for enhancing hope, optimism, resiliency, and self-efficacy which have been open to human resource management with organizationally related performance implications.

The results of current study showed that TUMS employees had obtained the desired score of positive psychological capital in each of PsyCap subscales. Our impression is that recent good performance and high development within the other medical universities in Iran, Middle East countries, and international arena in the last decade are stemmed from accomplishment of positive organizational behavior and positive PsyCap of the employees in those organizations.

We believe that a new approach to understand the full psychological capacities of TUMS human resources is now needed. We propose that TUMS employees' positive psychological capital states may help resolve human resource challenges, and the results of this study provide initial support for this notion. Although, this study only examined the attitudes of TUMS employees related to positive psychological capital, but these findings provide preliminary support that positive employees may indeed be a very important component of a positive organizational change.

Findings of current study are only the first step towards an empirical examination of PsyCap states of self-efficacy,
hope, optimism and resiliency and overall psychological capital in Iran’s workforce. However, our findings show the potentially important role of these PsyCap capacities. Investing in, developing and leveraging PsyCap may be an overlooked perspective and approach in meeting the challenges of improving workforce performance in Iran.

Further research is now needed to understand other predictors of performance on PsyCap, which might be the most appropriate technique for enhancing employees' performance and encouraging them to meet specific personal and organizational challenges in Iranian organizations.

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Authors’ Contribution

None declared.

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