

Validation of Psychological Capital Questionnaire in Thai Employees

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Abstract

Although the construct of psychological capital was first introduced by Luthan, its concept has been developed in attaining competitive advantage and supporting unity between employee and organization within a western context. Study in this topic is much less attention in Asia, especially in Thailand. This current study therefore aimed to develop and initial validate a Psychological Capital Questionnaire (PCQ) in Thai employees. The original PCQ consisted of 4 components (i.e., self-efficacy, optimism, hope, and resilience) with 24 items in total. The new version of PCQ developed for this current study contained 60 items. Participants were 120 Thai employees from various private organizations in Bangkok Metropolis. They were recruited by convenience sampling method. Corrected item-total correlation (CITC), Internal consistency reliability (Alpha coefficient), and Confirmatory Factor Analysis (CFA) were used to examine psychometric properties. Initially, the Principle Component Analysis (PCA) was conducted with 60 items of the new version of PCQ. PCA yielded four factors of the new version of PCQ with 24 items in total. CFA confirmed that the four factors of the new version of PCQ were significantly fitted the data ($\chi^2 = 2.46$, $df = 2$, $p = .292$, GFI = .990, AGFI = .949, RMSEA = .044). Alpha coefficient of the new PCQ scale was 0.95. Alpha coefficients of the four subscales of PCQ ranged from 0.80 to 0.87. This study demonstrated that the 24-item PCQ in Thai version has good psychometric properties and thus is useful instrument to assess Thai employee's psychological capital.

Keywords: Psychological Capital, Thai employees, Validation

Introduction

Competitive advantages such as cost leadership or high value-added of goods and services help today's organization adapt, survive, and grow up under business world changes. Beyond its impact on organization economies, competitive advantages lead to workplace stress and other undesirable organizational outcomes such as job dissatisfaction, burnout, and organizational withdrawal. Recently, Luthans and colleague (2004) proposed one of the human capitals called "Psychological capital or Psycap" that has positive effects on competitive advantage of an organization. Psycap is defined as a positive state-like capacity or an individual's positive psychological state of development and is characterized by four components: (1) having confidence (Work Self-Efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (Optimism) about recent and future success; (3) persevering toward goals and, when necessary, redirecting paths to goals (Hope) in order to succeed; and (4) when beset with problems and adversity, sustaining and bouncing back and even beyond (Resiliency) to attain success (Luthans, et al., 2007). Promoting employee's Psycap has been developed in attaining competitive advantages and supporting unity between employees and organizations. Although the construct of psychological capital was first introduced by Luthan, its concept has been developed in attaining competitive advantages and supporting unity between employees and organizations within a western context. Study on this topic is much less attention in Asia, especially in Thailand. The current study, therefore, aimed to develop and initially validate a Psychological Capital Questionnaire (PCQ) in Thai employees.

Methodology

Participants. This study consists of 120 Thai employees (36 males, 84 females) with mean age 29.6 years old ($SD = 7.17$). Their average work experience was 4.33 years ($SD = 6.78$). Participants were recruited conveniently from various private companies in Bangkok Metropolis, Thailand during November, 2012 to January, 2013.

Procedure. The original 24-item PCQ (Luthans, Youssef, & Avolio, 2007) was translated into Thai language using forward translation process. Based on existing literature and original 24 items; sixty items of Thai version of PCQ were generated. The developed PCQ was reviewed by the three experts to secure the scale's content validity. Example questions of the Thai version of PCQ were "*I am confident in my performance that I can work under pressure and challenging circumstances (Work Self-efficacy)*", "*I believe that all the problems occurring at work always have a bright side (Optimism)*", "*I have several ways to accomplish the work goal (Hope)*", and "*Although too much responsibility at work make me awkward, I can go through to work successfully (Resilience)*". A simple 5-point Likert scoring system was used for each item of PCQ. Responses were scored as follows: "strongly disagree" (score of 1) to "strongly agree" (score of 5).

After receiving approval from the committee for Human Research, Chulalongkorn University, the first author contacted a coordinator of each organization to recruit participants by convenience sampling method.

Data Analysis. Corrected item-total correlation (CITIC), Internal consistency reliability (Alpha coefficient), and Confirmatory Factor Analysis (CFA) were used for psychometric property analyses.

Results

The findings suggested that all 60 items of PCQ meet the selection criteria CITC value is greater than critical r value [$r(118) = .151, \alpha = 0.5$]. To make the scale parsimony, an appropriate number of items were determined by the CITC scores. For each subscale, the first six items with highest CITC value were selected. The final version of PCQ contained twenty four items (6 item per subscale). The final version of the scales yielded satisfied CITC (as of 0.46 to 0.77) and internal consistency (Cronbach's alpha of .95). The Cronbach's alpha coefficients of the four subscales were as follows: Work Self-efficacy (.87); Optimism (.80); Hope (.84); and Resilience (.86) as shown in Table 1.

Table 1

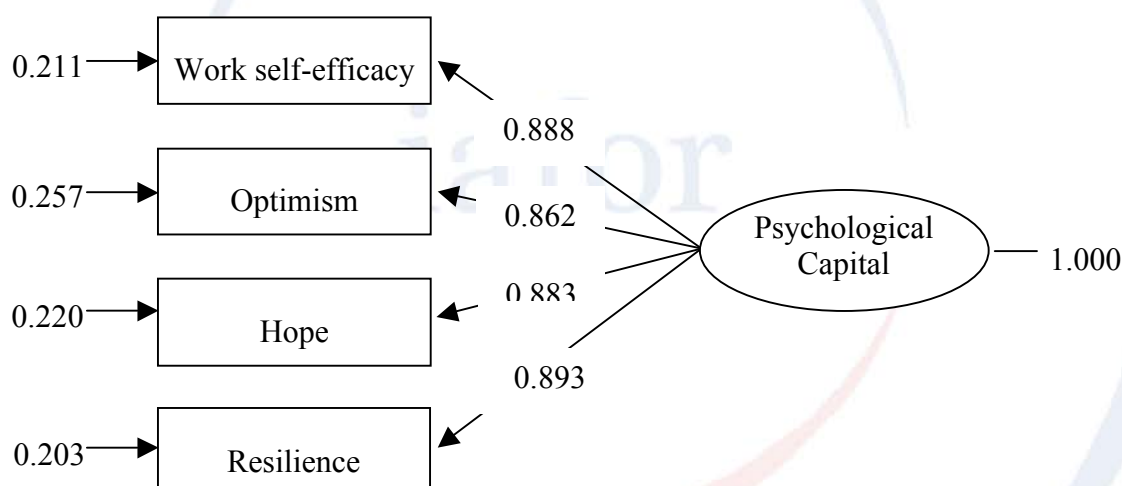
Items, Corrected Item-Total Correlations for Each Item of the 24-item PCQ Thai version

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No	Item	Original-item	Developed-item	CIT C
Sub scale 1: Work Self Efficacy ($\alpha = .87$)				
1	<i>I feel confident in analyzing a long-term problem to find a solution. (+)</i>	✓		0.59
2	<i>I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems. (+)</i>	✓		0.59
3	<i>Although supervisor assigns me an extra job which I never had done it, I still believe in my ability that I can do it. (+)</i>		✓	0.66
4	<i>I am confident in my performance that I can work under pressure and challenging circumstances. (+)</i>		✓	0.75
5	<i>I feel confident that I can accomplish my work goals. (+)</i>		✓	0.77
6	<i>If organizations transform new working system which is difficult to understand, I am still confident that I can learn new things from this system. (+)</i>		✓	0.65
Sub scale 2: Optimism ($\alpha = .80$)				
7	<i>I'm optimistic about what will happen to me in the future as it pertains to work. (+)</i>	✓		0.46
8	<i>At work, I always find that every problem has a solution. (+)</i>		✓	0.66
9	<i>I believe that all the problems occurring at work always have a bright side. (+)</i>		✓	0.65
10	<i>If I have to face with bad situation, I believe that everything will change to be better. (+)</i>		✓	0.56
11	<i>I believe that success in the current work will occur in the future. (+)</i>		✓	0.52
12	<i>I always stuck with the problem and found that the problem cannot do anything. (-)</i>		✓	0.49
Sub scale 3: Hope ($\alpha = .84$)				
13	<i>At the present time, I am energetically pursuing my work goals. (+)</i>	✓		0.62
14	<i>I have several ways to accomplish the work goal. (+)</i>		✓	0.51
15	<i>When I found that my performance appraisal was less than the expected goal, I am trying to find the ways to improve, and then start to do better. (+)</i>		✓	0.54
16	<i>Now, I feel that I am energetic to accomplish the work goal. (+)</i>		✓	0.65
17	<i>When I set goals and plan to work, I will be concentrated to achieve the goal. (+)</i>		✓	0.68
18	<i>I work as the goals set by the belief that "Where there is a will, there is a way". (+)</i>		✓	0.71
Sub scale 4: Resilience ($\alpha = .87$)				
19	<i>I usually manage difficulties one way or another at work. (+)</i>	✓		0.65

No	Item	Original-item	Developed-item	CITC
20	<i>I usually take stressful things at work in stride. (+)</i>	✓		0.64
21	<i>Although my work is failed, I will try to make it success again. (+)</i>		✓	0.62
22	<i>Although too much responsibility at work makes me feel awkward, I can go through to work successfully. (+)</i>		✓	0.67
23	<i>I am undiscouraged and ready to face with difficulties at work. (+)</i>		✓	0.77
24	<i>When I faced with disappointment at work, "I fell but I could quickly get through". (+)</i>		✓	0.60
The 24-item PCQ ($\alpha = .95$)				

A confirmatory factor analysis (CFA) was further conducted, and the result suggested that the measurement model of three scales fit the data very well ($\chi^2 = 2.465$, $df = 2$, $p = .292$, GFI = .990, AGFI = .949, RMSEA = .044) (Figure 1).



$\chi^2 = 2.465$, $df = 2$, $p = .292$, RMSEA = .044, GFI = .990, AGFI = .949

Figure 1
Confirmatory factor analysis model of the developed 24-PCQ Thai version.

Discussions & Conclusion

The objective of this research project was to develop and validate a measure of Psychological Capital in Thai employees. Corrected item-total correlation (CITC) and Internal consistency reliability (Alpha coefficient) were conducted. The Alpha coefficient of new 24-item PCQ was high (0.95) and the Alpha coefficient of its subscales were ranged from .80 to .87; Work Self-efficacy (.87); Optimism (.80); Hope (.84); and Resilience (.86). The findings indicated that the new 24-item PCQ was a reliable scale. This result was consistent with Luthan and colleagues's research which showed high reliability values of Psychological Capital Questionnaire. (Luthan et al., 2007). Moreover, the construct validity of the 24-PCQ testing by CFA

confirmed that the 4-factor of PCQ model fitted in the data. The current study's finding suggests that the new 24-item PCQ in Thai version contains four factors and has good psychometric properties to assess employees' psychological capital. This finding was consistent with a previous study (e.g. Luthans, Avey, & Norman, 2007). As the current study focused on participants who were private employees only, future study should extend the development of PCQ into other contexts such as public company, non-profit organization, or school. In summation, a Thai version of 24-item PCQ demonstrates satisfied reliability and valid to use in Thai employees.

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