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Relationships between academic performance, perceived group psychological capital, and positive psychological capital of Thai undergraduate students

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Abstract

Positive psychological capital or simply PsyCap, comprised of self-efficacy, optimism, hope and resilience, has an impact on student-related outcomes. The purpose of this study was to provide empirical evidence on the relationships between academic performance, perceived group PsyCap, and individual PsyCap of Thai undergraduate students. The study was conducted at individual level of analysis. The participants were four hundred and eighteen Thai undergraduate students. They completed measures of individual PsyCap and the perception of PsyCap of the group and reported their grade point average (GPA). Structural equation modeling (SEM) was employed to test the proposed relationships. The fit indices showed that the hypothesized model had a reasonably adequate fit to the data ($\chi^2 = 23.37$, $df = 17$, $p = .138$, $CFI = .996$, $RMSEA = .030$, $GFI = .988$, $AGFI = .967$). The results showed that academic performance has positive direct effect on students' PsyCap and positive indirect effect on students' perceived group PsyCap through their own PsyCap. Moreover, students' PsyCap has positive impact on their perception of PsyCap of the group, but there is no reciprocal effect.

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Keywords: Positive psychological capital, PsyCap, academic performance, Thai undergraduate students;

1. Introduction

Positive psychological capital or simply PsyCap, comprised of self-efficacy, optimism, hope and resilience, was proposed by Luthans and his colleagues based on the concept of positive organizational behavior or POB (Luthans, Youssef, & Avolio, 2007). The empirical studies have demonstrated that PsyCap affects students on several desirable outcomes including academic performance (Luthans, Luthans, & Jensen, 2012; Malone, 2010; Tjakraatmadja & Febriansyah, 2007), creativity (Tsai, Lee, & Hsu, 2012), positive coping style or coping mechanism (Khan, Siraj, & Li, 2011; Qingquan & Zongkui, 2009), physical and psychological well-being (Qingquan & Zongkui, 2009; Zhong & Ren, 2009). Although several studies have shown the positive impact of PsyCap on students' academic performance (Luthans et al., 2012; Malone, 2010; Tjakraatmadja & Febriansyah, 2007), there is no evidence on the impact of academic performance on PsyCap. This study aimed to examine the impact of students' academic performance on their own PsyCap.

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Recently, some researchers have been interested in studying collective PsyCap (Sweetman, 2010; Walumbwa, Luthans, Avey, & Oke, 2011), based on Bandura's notion of collective efficacy (Sweetman, 2010). The results of the study showed the positive impact of collective PsyCap on group-level performance and citizenship behavior (Walumbwa et al., 2011). Although collective PsyCap was studied at the group-level of analysis, data were collected at individual-level. That is, each group member assessed PsyCap of their group as a whole and aggregated these individual-level data to represent the group-level PsyCap. This study aimed to determine whether individuals' perception of PsyCap of the group are correlated with their own PsyCap. Moreover, this study also aimed to examine the impact of students' academic performance on their perception of PsyCap of the group as well. In sum, the purpose of this study was to provide empirical evidence on the relationships between academic performance, perceived group PsyCap and individual PsyCap of Thai undergraduate students. The study was conducted at individual level of analysis.

2. Methodology

2.1 Participants

Four hundred and eighteen undergraduate students voluntarily participated in this study. They were enrolled in three Psychology courses at three universities. Data were collected in March 2012. Those who were willing to participate in the study completed the questionnaire in class. The sample contained 294 (70.3%) females. Majority of the samples were freshman students (45%).

2.2 Measures

2.2.1 Academic performance

Academic performance was measured by overall grade point average (GPA). The participants were asked to report their GPA in the questionnaire.

2.2.2 Positive psychological capital

This study assessed individual PsyCap and individual perception of PsyCap of the group. Individual PsyCap was assessed using the PsyCap scale developed based on Luthans and his colleagues' concept of PsyCap (Luthans et al., 2007), comprised of self-efficacy, hope, optimism, and resilience. The scale consisted of 20 items, five items for each of the components, and each item was developed to specific to the educational context to make the item fit our subjects. After a tryout on the scale was conducted, one item in the component of optimism was eliminated because of the low corrected item-total correlations. Therefore, the PsyCap scale consisted of 19 items, each item was answered via a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). An example is "When the teacher assigns a class project, I've always expected the best outcomes". After that, the target of each item on the PsyCap scale was shifted from the individual to the group to measure individual perception of PsyCap of the group. That is, the target of each item on perceived group PsyCap scale was the group rather than the individual. An example is "When the teacher assigns a class project, my group have always expected the best outcomes." The perceived group PsyCap scale consisted of 19 items, each item was answered via a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). In the present study, reliabilities were .83 for the PsyCap Scale and .85 for the perceived group PsyCap scale. Subscale reliabilities of both scales are reported in Table 1.

3. Results

Means, standard deviations, Cronbach's alpha and correlations of the study variables are displayed in Table 1. The results showed that the sample students reported the highest scores in the component of hope on both the PsyCap scale ($M = 4.27$, $SD = .49$) and perceived group PsyCap scale ($M = 4.17$, $SD = .54$). All the components of individual PsyCap had significantly positive correlations with all the components of perceived group PsyCap at the

.01 level. Individual efficacy, individual optimism, individual hope, and perceived group hope had significantly positive correlations with GPA at the .01 level ($r = .202$, $r = .202$, $r = .250$, and $r = .143$, respectively).

Table 1. Means, standard deviations, Cronbach's alpha and correlations of observed variables

	M	SD	Scale	1	2	3	4	5	6	7	8	9
1. Efficacy (In)	3.78	.50	1-5	(.58)								
2. Optimism (In)	4.18	.55	1-5	.414**	(.65)							
3. Hope (In)	4.27	.49	1-5	.498**	.600**	(.69)						
4. Resilience (In)	3.77	.55	1-5	.461**	.394**	.559**	(.54)					
5. Efficacy (G)	3.85	.54	1-5	.392**	.141**	.315**	.226**	(.65)				
6. Optimism (G)	4.11	.55	1-5	.130**	.548**	.368**	.222**	.400**	(.69)			
7. Hope (G)	4.17	.54	1-5	.227**	.283**	.571**	.315**	.502**	.560**	(.73)		
8. Resilience (G)	3.58	.56	1-5	.213**	.210**	.336**	.517**	.391**	.382**	.538**	(.60)	
9. GPA	3.32	.39	0-4	.202**	.202**	.250**	.084	.058	.053	.143**	.054	-

NOTE: $n = 418$; reliability coefficients (Cronbach's alpha) on diagonal; In = Individual, G = Group
 ** $p < .01$

Structural equation modeling (SEM) was used to test the hypothesized model. The fit indices showed that the hypothesized model had a reasonably adequate fit to the data ($\chi^2 = 23.37$, $df = 17$, $p = .138$, CFI = .996, RMSEA = .030, GFI = .988, AGFI = .967). The links between academic performance, individual PsyCap, and perceived group PsyCap showed that academic performance has direct effect on students' PsyCap ($\beta = .249$, $p < .001$) and indirect effect on students' perceived group PsyCap through their own PsyCap ($\beta = .137$, $p < .05$). Moreover, students' PsyCap has positive impact on their perception of PsyCap of the group ($\beta = .530$, $p < .001$), but there is no reciprocal effect as showed in Table 2. The findings are presented in Figure 1, where standardized path coefficients are depicted.

Table 2. Total, direct, and indirect effects of Academic performance, Individual PsyCap, and Perceived group PsyCap

Independent variable	Dependent variable	
	Individual PsyCap	Perceived group PsyCap
Academic Performance	-	-
Direct effect	.249***	-
Indirect effect	.010	.137*
Total effect	.259***	.137*
Individual PsyCap	-	-
Direct effect	-	.530**
Indirect effect	-	.022
Total effect	-	.552***
Perceived Group PsyCap	-	-
Direct effect	.074	-
Indirect effect	.003	-
Total effect	.077	-

* $p < .05$ ** $p < .01$ *** $p < .001$

4. Discussion and conclusion

The purpose of this study was to provide empirical evidence on the relationships between academic performance, perceived group PsyCap and individual PsyCap of Thai undergraduate students. The fit indices showed that the hypothesized model had a reasonably adequate fit to the data. Moreover, the findings suggest that academic performance has direct effect on students' PsyCap and indirect effect on students' perceived group PsyCap through their own PsyCap. One reason may be that academic performance may have acted as a positive feedback on

students’ mastery experiences or performance attainments. Luthans, Luthans, and Luthan (2004) emphasized that mastery experiences or performance attainments “is potentially the most powerful approach for developing confidence because it entails direct information about success” (p.48). In Addition, Stajkovic (2006) proposed that self-efficacy, optimism, hope, and resilience share a common confidence core. Thus, mastery experiences or performance attainments should lead to stronger confidence or self-efficacy and other components of PsyCap, which in turn should lead to greater PsyCap. When students’ PsyCap was developed, their perception of PsyCap of the group trended to be increased.

The results in present study found that students’ PsyCap has positive impact on their perception of PsyCap of the group. Although there is no empirical evidence on the relationship between individual PsyCap and the perception of PsyCap of the group, the several studies have showed that self-efficacy, a key component of PsyCap, was positively correlated with individuals’ perception of their group’s efficacy (Earley, 1993; Lent, Schmidt, & Schmidt, 2006; Son, Jackson, Grove, & Feltz, 2011). These results may be used to explain the finding of the present study.

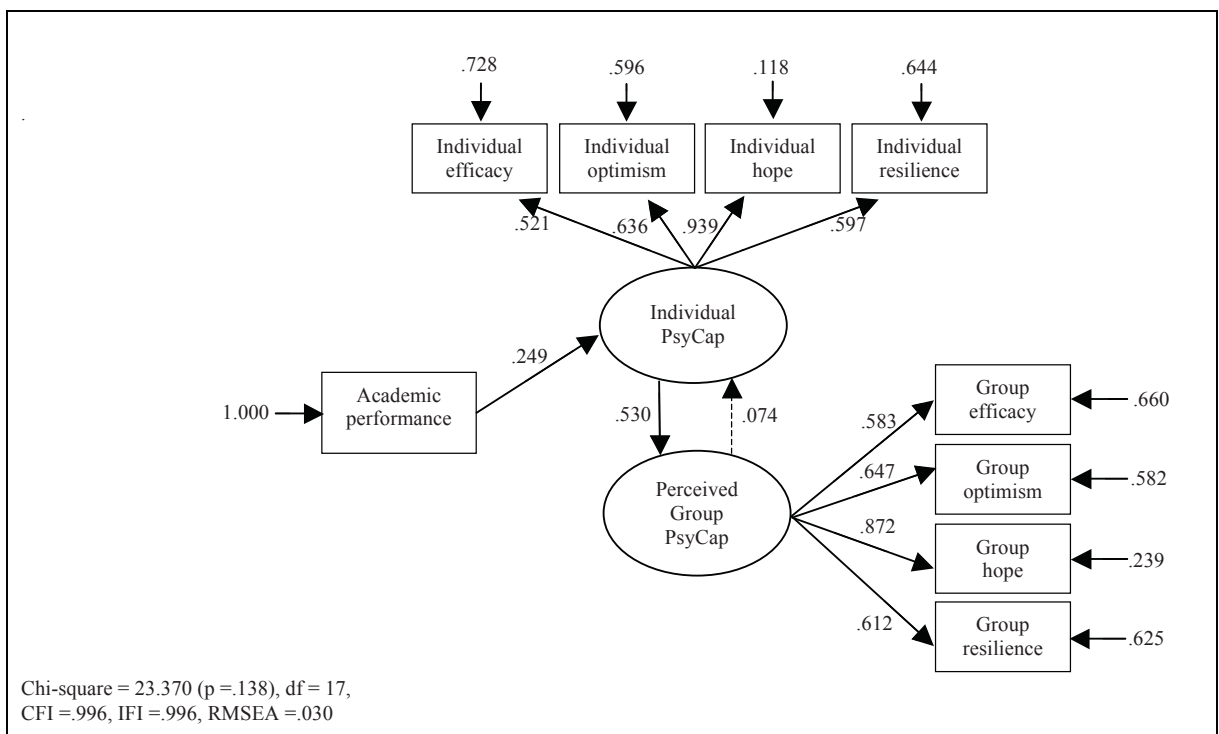


Figure 1. Final study model

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