

## POSITIVE PSYCHOLOGICAL CAPITAL: A NEW APPROACH TO SOCIAL SUPPORT AND SUBJECTIVE WELL-BEING

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A growing body of empirical evidence has shown that although social support (SS) can predict subjective well-being (SWB), the relationship between SS and SWB is still unclear. In this study we investigated the role that positive psychological capital (PPC) plays in the relationship between SS and SWB. The results showed that PPC, SS, and SWB were positively related. The more important result, however, was that PPC mediated the relationship between SS and SWB. The findings are discussed in the context of the importance of PPC for SWB. Limitations in this study and implications for future research are identified.

*Keywords:* positive psychological capital, social support, subjective well-being.

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Investigations of determinants of psychological well-being have been a major focus of not only positive psychology but also health sociology. Many researchers have examined internal, demographic, and other external correlates of subjective well-being (SWB; Dolan, Peasgood, & White, 2008). Among the external factors – that is, those factors that cannot be controlled by the individual him or herself because they are reliant on other people – social support (SS) has been shown to be a very important variable that can improve SWB (Diener, 2009), and this is regardless of demographic factors, such as health, income, educational background, and marital status, which account for only a small amount of the variance in well-being measures. To improve SWB more effectively, factors are necessary that can not only strongly predict SWB but that also allow effective intervention to be performed. Positive psychological capital (PPC, also referred to as PsyCap; Luthans, Youssef, & Avolio, 2007) may be one such factor that is amenable to intervention and that is related to SWB.

### **Literature Review and Development of Hypotheses**

*Positive psychological capital* is defined as “an individual’s positive psychological state of development and is characterized by: (a) having confidence to take on, and put in the necessary effort to succeed at, challenging tasks (self-efficacy); (b) making a positive attribution about succeeding now and in the future (optimism); (c) persevering toward goals and, when necessary, redirecting paths to goals in order to succeed (hope); and (d) when beset by problems and adversity, sustaining and bouncing back up and even beyond to attain success (resiliency)” (Luthans et al., 2007, p. 3). There is a growing body of empirical evidence that PPC has a positive impact on the individual’s work attitudes and behaviors (Luthans, Norman, Avolio, & Avey, 2008). This has been shown in the results of longitudinal research (Avey, Luthans, Smith, & Palmer, 2010; Luthans, Avey, Avolio, Norman, & Combs, 2006) and in a field study conducted by Culbertson, Fullagar, and Mills (2010).

#### **Positive Psychological Capital and Subjective Well-Being**

Although little direct evidence has been produced to indicate that there is a relationship between PPC and SWB, researchers have suggested that PPC may have a positive impact on SWB. For example, Cole, Daly, and Mak (2009) suggested that an individual’s psychological capital influences the impact of unemployment on his or her well-being and PPC facilitates reemployment. In addition, Culbertson et al. (2010) reported that employee PPC showed a positive relationship with well-being and Avey et al. (2010) found a reliability impact on the employee’s well-being over time. Therefore, we proposed the following hypothesis:

**Hypothesis 1:** Positive psychological capital will significantly predict an individual's subjective well-being.

### **Positive Psychological Capital and Social Support**

It has been proposed that PPC has a state-like nature and is, thus, open to development (Luthans et al., 2006). There is accumulating evidence to support the existence of a positive impact of SS on the components of PPC (i.e., self-efficacy, optimism, hope, and resiliency). For example, Foote, Piazza, Holcombe, Paul, and Daffin (1990) reported the presence of a significant relationship between SS and hope, and SS and self-esteem. In addition, in their study Holahan and Holahan (1987) found that initial self-efficacy was related to SS after a period of one year and Dougall, Hyman, Hayward, McFeeley, and Baum (2001) reported that SS had a positive influence on optimism. Luthans et al. (2008) provided more direct evidence that a supportive climate had a positive impact on PPC. Therefore, we proposed the following hypothesis:

**Hypothesis 2:** Social support will significantly predict an individual's positive psychological capital.

### **Social Support and Subjective Well-Being**

SS can affect human health and well-being in several ways, and may correlate robustly with SWB. For example, Parasuraman, Greenhaus, and Granrose (1992) found that work support was associated with increased job satisfaction, and spousal support was associated with greater family satisfaction. In addition, Diener and Fujita (1995) found that family support was significantly associated with SWB, and, in a longitudinal study, Turner (1981) reported that SS was related to SWB. Therefore, we proposed the following hypothesis:

**Hypothesis 3:** Social support will significantly predict an individual's subjective well-being.

### **Psychological Capital as a Mediator**

SS is thought to be an important component necessary for SWB (Diener, 2009). However, how SS affects SWB is still not clear, although researchers have suggested that SS promotes well-being by influencing emotion, cognition, and behavior in a way that promotes positive affect, and may not always be necessary for SWB (Gallagher & Vella-Brodrick, 2008). Researchers have, thus, been attempting to establish the psychological connection between SS and SWB. For example, Gallagher and Vella-Brodrick found that emotional intelligence (EI) played a moderating role between SS and SWB, and SS, EI, and their interaction effects significantly predicted SWB. Karademas (2006) found that optimism partially mediated the perceived relationship between SS and well-being, and this was predicted by daily emotional support. On the basis of Hypotheses 1 to 3, we

predicted that PPC would be the key factor amenable to intervention, and would be related to SWB. Therefore, we proposed the following hypothesis:

**Hypothesis 4:** Positive psychological capital will mediate the relationship between social support and an individual's subjective well-being.

## Method

### Participants and Procedure

Participants were students taking undergraduate psychology courses at a university in Wuhan, China. All participants volunteered to take part, and were compensated with an extra-credit opportunity for their time. The completion of the questionnaire typically took about 12 minutes. After we had eliminated invalid responses, we obtained 381 usable survey forms. The sample consisted of 113 men and 268 women, and their ages ranged from 17 to 23 years ( $M = 19.81$ ,  $SD = 1.00$ ).

### Measures

We measured SS with the 10-item Chinese Social Support Rating Scale (SSRS; Xiao, 1999), which has been widely used in China (Cheng et al., 2008). The SSRS measures three types of SS: subjective social support (SSS, three items, Cronbach's  $\alpha = .75$ ); objective social support (OSS, three items, Cronbach's  $\alpha = .70$ ); and availability of social support (ASS, three items, Cronbach's  $\alpha = .69$ ), with a total social support score (TSS) for the three types summed (TSS, Cronbach's  $\alpha = .81$ ).

We assessed PPC with the Chinese Positive PsyCap Questionnaire (PPQ; Zhang, Zhang, & Dong, 2009), which is based on the theory of positive psychology and the PsyCap Questionnaire (PCQ-24; Luthans et al., 2007). The 26-item PPQ measures the four components of PPC; namely hope, resiliency, optimism, and self-efficacy, with six items in each subscale, using a 7-point scale with items rated from 1 (*strongly disagree*) to 7 (*strongly agree*). To reflect the state-like nature of PPC, participants were asked to respond to each question in terms of how they felt "right now." Further, questions were adapted to be more relevant to the students who were the participants in our study and so as to be framed not only for a target context specific to the workplace. To obtain a composite PPC score, we summed and averaged the seven responses for each of the four subscales to obtain a subscale composite average for each subscale. Then, we added and averaged the averages for each subscale to obtain a composite average for each participant's PPC score: (Cronbach's  $\alpha$  for resiliency = .68; for self-efficacy = .79; for hope = .80; for optimism = .70; for total PPC = .86).

We used the five-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) to measure life satisfaction, as one component of SWB (Cronbach's  $\alpha = .77$ ), with items rated from 1 (*strongly disagree*) to 7 (*strongly agree*). The 12-item Scale of Positive and Negative Experience (SPANE; Diener et al., 2010), which was designed to assess subjective feelings of well-being and ill-being, includes six items to assess positive feelings (Cronbach's  $\alpha = .81$ ) and six items to assess negative feelings (Cronbach's  $\alpha = .77$ ). In both the positive and negative groups of items, three of the items are general (e.g., positive, negative) and three per subscale are more specific (e.g., joyful, sad; Diener et al., 2010). We used a 5-point scale with items rated from 1 (*very rarely or never*) to 5 (*very often or always*). We standardized the SWLS and the SPANE scales and combined them to construct a composite measure of SWB as follows:  $SWB = SWLS + SPANE-P - SPANE-N$ .

## Results

### Description and Correlation Analysis

Means, standard deviations, and Pearson correlations of the variables are presented in Table 1. We found that, with the exception of OSS and resiliency, all the variables were significantly related. As shown in Table 1, Hypotheses 1 to 3 were all supported because PPC was significantly related to SWB ( $r = .35, p < .01$ ), PPC was positively related to SS ( $r = .37, p < .01$ ), and SS was positively related to SWB ( $r = .57, p < .01$ ).

### Mediation Effect Analysis

As researchers have suggested that both Baron and Kenny's (1986) method and the Sobel test (Sobel, 1982) suffer from low statistical power in most situations (Preacher & Hayes, 2004), we used the bootstrap method, which is considered to be a more powerful approach for estimating indirect effects in simple mediation models (Preacher & Hayes, 2004). In this study, we repeated the bootstrap process the recommended minimum of 5,000 times.

The results of multiple regression and bootstrap analysis are presented in Table 2. Without controlling for PPC, there were significant direct effects between SS and SWB ( $\beta = .35, p < .001$ ). When controlling for PPC, the direct effects between SS and SWB, although still significant, were greatly reduced ( $\beta = .16, p < .001$ ). There was a significant indirect effect on SWB (bootstrap  $M = .42, 95\% CI = .28-.56$ ) by using bootstrap analysis to detect mediated effects.

Table 1. Means, Standard Deviations, and Bivariate Correlations Among Variables

Values	1	2	3	4	5	6	7	8	9	10	11	12	13
1. OSS	-												
2. SSS	.37**	-											
3. ASS	.12**	.21**	-										
4. TSS	.71**	.86**	.69**	-									
5. Resiliency	.02	.16**	.16**	.14*	-								
6. Self-efficacy	.21**	.30**	.18**	.34**	.39**	-							
7. Hope	.17*	.29**	.10*	.30**	.32**	.57**	-						
8. Optimism	.22**	.27**	.22**	.35**	.41**	.56**	.53**	-					
9. PPC	.20**	.33**	.20**	.37**	.69**	.82**	.78**	.79**	-				
10. SWLS	.10*	.19**	.09**	.19**	.18**	.29**	.34**	.40**	.39**	-			
11. SPANE-N	-.09*	-.17**	-.16**	-.20**	-.31**	-.30**	-.32**	-.36**	-.41**	-.31**	-		
12. SPANE-P	.27**	.33**	.24**	.39**	.26**	.40**	.34**	.47**	.48**	.48**	-.22**	-	
13. SWB	.20**	.30**	.21**	.35**	.33**	.44**	.45**	.55**	.57**	.80**	-.68**	.76**	-
M	9.16	20.76	7.98	37.89	27.29	33.41	30.58	31.25	122.51	21.25	23.35	28.60	26.50
SD	2.21	3.35	1.56	5.18	5.52	5.65	5.44	4.89	16.62	5.20	5.37	5.42	5.25

Note. \*  $p < .05$ , \*\*  $p < .01$ .

Table 2. Regression and Bootstrap Results for Positive Psychological Capital as a Mediator

Regression model	Regression			Bootstrap		
	R <sup>2</sup>	ΔR <sup>2</sup>	β	Indirect effect	SE	95% CI
Step 1. TSS	.12					
Step 2. TSS	.34	.22	.35***	.42	.07	.28–.56
PPQ		.01	.16***			
			.51***			

Note. \*\*\*  $p < .001$ .

## Discussion

To our knowledge, the current research represents a first look at the associations among PPC, SS, and SWB. The results, which are in accordance with those gained in earlier studies (e.g., Diener & Fujita, 1995; Parasuraman et al., 1992; Turner, 1981), indicate that SS is significantly associated with SWB. However, in terms of importance, our major finding was the involvement of PPC as an important mediator between SS and SWB. Specifically, we have provided initial evidence that, in concert with SS, positivity in general, and PPC in particular, may have a desirable impact on an individual's SWB.

The bivariate correlations showed that, with the exception of OSS and resiliency, each variable and its components were significantly related. Our results are consistent with those gained in previous studies in that we found there was a significant positive relationship between PPC and SWB among the students who took part in our study (e.g., Avey et al., 2010; Culbertson et al., 2010), and also between SS and SWB (e.g., Diener & Fujita, 1995; Parasuraman et al., 1992; Turner, 1981). We have provided empirical evidence that people who have more positive psychological resources, such as high PPC, will have a higher level of SWB. We also extended the scope of research in this field to a less narrowly focused context than that used in recent previous studies by Avey et al. (2010) and Culbertson et al. (2010), which were conducted in the setting of the workplace and showed that PPC improved employees' SWB in that context. Although previous researchers have emphasized the influence on SWB of personality traits (Gomez, Krings, Bangerter, & Grob, 2009), PPC, which is state-like and made up of the positive psychological resource capacities of self-efficacy, hope, optimism, and resiliency, can also have a significant positive impact on SWB.

Our analysis of the mediation effect yielded results supporting PPC as a partial mediator of the link between SS and SWB. This result is consistent with the results of Gallagher and Vella-Brodrick (2008), who suggested that SS influences SWB through EI. Unlike EI, which is a trait, PPC has a state-like nature and is, thus, open to development (Luthans et al., 2006).

In some studies, researchers have found that it is possible to develop an individual's PPC through relatively brief workplace intervention (micro-intervention) and this intervention was shown to be a preliminary step toward not only increasing participants' PPC, but also financial impact and gaining a high return on investment (Luthans et al., 2006). Luthans, Avey, and Patera (2008) have even suggested that PPC could be developed through a highly focused, 2-hour web-based training intervention. They developed a PPC intervention (PCI) model, the aim of which is to improve individual PPC, and the results of their testing suggested that PCI could be used not only to develop participants'

PPC, but could also lead to an improvement in their on-the-job performance (Luthans, Avey, Avolio, & Peterson, 2010). Our results suggest that one way to improve individuals' PPC may be to provide them with better SS.

We have provided new insights into SS and PPC as predictors of SWB, and have also identified a possible conditional relationship between SS and SWB with regard to PPC. However, providing SS is not, on its own, a course of action sufficient to achieve SWB. We suggest that it may be important to recognize that the level of an individual's PPC may also play a role in leveraging the contribution of positive SS to SWB.

The methodology we used in this empirical study is a limitation. As we did not use an experimental research design, it is not possible to infer from our results that PPC causes PWB, that SS causes PPC, or that SS causes PWB through the mediating effect of PPC. The other potential limitation is our use of a single source of self-report data. Although there is empirical evidence (Spector, 2006) to suggest that common method variance does not significantly inflate correlations, a longitudinal approach should be used in future research.

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