The Linkage among Positive Psychological Capital, Autonomy and IP

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Abstract:  
In this study, the author has established and tested the theoretical model of the relationship between psychological capital and work performance in the creative context. Such a creative context, a representative component is self-determination, combined with the psychological capacity to form antecedents that together affect innovative performance. The survey sample of convenience was collected from university lecturers to test the theoretical model. The results show that all hypotheses are statistically significant.

Keywords: Psycap, IP, Autonomy, Vietnam

1. Introduction  
Nowadays, Organizations should transform to respond to economic changes and gain competitive advantages. So, the organizations need to innovate continuously and stimulate the creativity of employees to contribute to the process of innovation. Lack of innovation can seriously weaken an organization’s competitiveness (House, 2003). High levels of innovation are needed to make sure that organizations remain flexible and succeed in competitive markets (Amabile, 1996; Oldham, 2002). Regarding people at the workplace, there are two areas, among others, that have attracted much attention by researchers in the last few years. They are the positive organizational behavior and quality of work-life (Nguyen & Nguyen, 2011). The first is psychological capital, which is defined as an individual’s psychological state of development (Luthans et al. 2005; Luthans et al. 2008). Research shows that there is a relationship between psychological capital (PsyCap) and job performance (Luthans et al. 2005; Luthans et al. 2008). However, as far as I know, little attention has been paid to the role of PsyCap in innovative performance (IP) in a developing country such as Vietnam. Another question to be answered is ‘What factors do workers need to create efficiency in such a creative environment?’. In general, the degree of independence and freedom that employees experience in how they carry out their tasks and roles is most important. Some studies show that empowered people tend to be more creative and have a better awareness of how work is done (Kazlauskaite et al., 2011; Spreitzer, 1995). Vietnam provides a typical example of the study of PsyCap and autonomy of people in a creative workplace. Thus, we propose that psychological capital and its cooperation factor can help explain and predict creative performance.

2. Literature review

2.1. Psychological Capital  
At the end of the 1990s, positive psychology was conducted and introduced by Prof. M. Seligman and his colleagues in the area of organizational behavior. From then, The term ‘positive psychology’ led to the ‘Positive Organizational Behavior’ approach, which searched to measure, develop, and manage people's psychological strengths rather than focusing on their weaknesses (Luthans & Yousef, 2014). Psychological Capital or positive psychology can be defined as examining the processes by which positive attitudes, feedback, criticism contribute to the functioning and development of an individual, group or corporation. At that time, the Psychological capital of employees has not received much attention by organizational behavior researchers (Luthans et al. 2005).

According to (Luthans et al, 2007), there are two fundamental features in the construct of PsyCap such as ‘trait-like’ and ‘state-like’. The first- relatively isn’t specific to any task or situation, stable and difficult to change; represents personality, in the meanwhile, the other is relatively flexible and open to development.

Four components of PsyCap are proposed by Luthans, Youssef, and Avolio (2007): self-efficacy, optimism, hope, and resiliency. They define Psy Cap as: an individual’s positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) to succeed; and (4) when beset by problems and adversity, sustaining and...
bouncing back and even beyond (resiliency) to attain success. (Luthans et al, 2007). According to (Luthans et al., 2008), PsyCap has both conceptual and empirical evidence as following:

2.1.1. Self-efficacy
Self-efficacy refers to the general belief of people as they exhibit their performances (Hmieleski KM, Carr JC., 2007). (Özkalp, 2009) said that self-efficacy is not mentioned the competences on individuals’ capabilities, on the contrary, it is related to the belief on personal abilities. Self-efficacy can be regarded as an intrinsic motivation to direct people and effectively perform their assigned different tasks.

2.1.2. Hope
Hope reflects “the belief that one can find pathways to desired goals and become motivated to use those pathways” (Snyder, et al, 2002). Hope consists of two dimensions: pathways (way power) and agency (will power). Pathways refer to one's capability of creating paths to the desired goal and agency relates to one's perceived capacity on how to use those paths to reach the desired goal (Snyder, et al, 2002). Hope supports the desires of positive outcomes and gives the feeling of being good to make the dreams come true in human life. It can be determined as a feature which awakes people to get a motivation (Akman & Korkut, 1993).

2.1.3. Optimism
Optimism is broadly defined as “the tendency to maintain a positive outlook” (Schneider 2001), as ‘a psychological intention and expectation to hope the best possible and positive outcome which can positively influence peoples’ mental and physical health’ (Çavuş, M.F. & Göçek, A., 2014). This will make the optimistic life happier and more comfortable than the pessimist. Optimists expect good things to come out while pessimists always think that bad things will come to them, (Carver CS, Scheier M, 2003).

2.1.4. Resiliency
(Çavuş, M.F. & Göçek, A., 2014) said that ‘Resiliency which is defined as a tendency to recover from adversity or depressing process, allows people to optimistically look at the overwhelming situations’ while another point of view refers to ‘positive adaptation in the context of significant adversity or risk’ (Masten and Reed 2002, 75). People with their inherent resilience can be easy to adapt to the changes in life. It can also be said that resiliency can be developed and managed by other three core components of psychological capital, self-efficacy, hope, and optimism (Luthans et al, 2007).

2.1.5. Autonomy
In the various papers, they all describe ‘autonomy’ or ‘self-determination’ in a very similar way. Self-determination reflects autonomy in the initiation and continuation of work behavior and processes. Most of the studies describe autonomy as the degree of independence and freedom in deciding on work methods, pace, and discretionary efforts that employees experience in how they carry out their tasks and roles (Janssen, 2005; Ramamoorthy et al, 2005; Spector, 1986).

2.2. Innovative Performance
The definition of innovation is plentiful because this concept appears in many different fields and in many theories of sociology (Goldsmith and Foxall, 2003). The innovation performance in an organization is to manifest the behavior of creativity, that is, to bring out ideas, processes or products that satisfy two properties that are novel and useful (Amabile, 1988; Oldham and Cummings, 1996). In organizations, creativity has been simply described as the process of ‘coming up with fresh ideas for changing products, services, and processes to better achieve the organization’s goals’ (Amabile, et al, 2005), meanwhile, IWB is defined as the intentional behaviors of individuals to produce and implement novel and useful ideas explicitly intended to benefit the individual, group or organization. The definition suggests that IWB is broader and more than creativity (creativity has been found to be: a source of innovation) although creativity is a necessary part of IWB, especially in the beginning, to generate original and useful ideas (Scott and Bruce, 1994).

2.3. The Linkage among Positive Psychological Capital, Autonomy, and IP

2.3.1. Psycap and IP
As mentioned above, self-efficacy doesn’t talk about a person’s actual skills, but rather the beliefs one possesses regarding what he or she can do with those skills (Bandura, 1997). Self-Efficacy is a generative capability that impacts performance through the use of inventiveness and resourcefulness (Bandura, 1988). In other words, higher levels of efficacy are associated with increased creative performance (Amabile, 1996). In the studies of (Stajkovic and Luthans, 1998a; Legal and Meyer, 2009), there is a close connection between confidence and job performance. (Bandura, 1997) argue that when a person was highly confident they are almost always trying to achieve success (when they believe in it). If they don’t believe that they can succeed, they will give up and to get good results in difficult conditions wouldn’t work.

The second of the four components of psychological capacity is ‘hope’ that also has an impact on innovative performance (IP). To be different from self-efficacy in terms of what they refer to as the way power or pathway generation mechanisms. More specifically, while self-efficacy relates to people’s belief about what they can do with their skills, hope relates to the willpower to use those skills along with the ability to generate multiple paths to achieving the same goal.
Individuals with a high level of hope not only have goodwill and motivation but also have the ability to decide how to reach their goals. For those who have 'hope', they continue to reach their goals even in the face of difficulties. For those who are full of hope, there will be independent thinking (Luthans, Youssef and Avolio, 2007a), this will lead them to creative activities for the goal (Sweetman et al., 2010).

Optimism is depicted as an explanatory style whereby positive events are attributed to personal and permanent characteristics by the individual, and negative events are attributed to external, temporary factors of the situation (Seligman, 1998). Many people still confuse between the two concepts of hope and optimism. In fact, the two are considered conceptually distinct (Snyder, 1994). For optimists who face challenges, the problem-solving style of optimism will give individuals a sense of self-determination about their own problems and directly impact their creativity (Seligman, 2014 cited in Sweetman et al., 2010).

The last one is resilience, the definition of resilience is being able to positively adapt to, and to 'bounce back' from adversity. Resilience enables an individual to not only survive but to potentially thrive on positive adjustment to change (Masten & Reed, 2002). Creative performance requires a resilient internal force to move beyond the challenges and setbacks inherent in creative work, as well as to adapt to a changing environment in general (Amabile, 1983). Resilience may provide an essential quality by which one can persevere in the face of change and the need for creative problem solving (Luthans, Youssef, & Avolio, 2007).

In the study of (Luthans, Youssef, and Avolio, 2007), it is found that PsyCap as a second-order construct would better predict its employee performance than are its components. For that reason, in this study, the authors focus on the predictive power of overall PsyCap rather than its individual components. And, the authors propose that overall PsyCap will have positive impacts on IP. Thus,

- Hypothesis 1: PsyCap has a positive impact on IP.

2.3.2. Autonomy and IP

Based on ideas from the self-determination theory, intrinsic motivation has been seen as an explanation for the linkage between autonomy and IWB (Ohly et al., 2006; Sanders et al, 2010). (Ohly et al., 2006), for example, argue that empowered employees are more intrinsically motivated and this, in turn, triggers proactive behaviors such as IWB. (Li et al., 2015) suggest that when workers are empowered, they have a self-determination mentality to solve organizational problems. In the study of (Spreitzer, 1995), it is also found that workers with a high degree of psychosocial capital boost their creative performance. Thus,

- Hypothesis 2. Autonomy has a positive impact on IP

2.3.3. Autonomy and PsyCap

Also, this study also considers the relationship between PsyCap and autonomy, as follows. By honest thinking, when an individual has a firm belief in himself, a positive attitude to that belief, a spirit of resiliency in any adversity, he will have a more self-determined mentality and be independent on others. Therefore, the author also proposes to establish this relationship as follows:

Hypothesis 3: Autonomy is affected by PsyCap.

2.4. Conceptual Model

Figure 1 depicts a conceptual model explaining the role of PsyCap and autonomy in IP. Specifically, the model proposes that PsyCap and autonomy will have positive impacts on. Innovative performance:

![Figure 1: Conceptual Model](image)

3. Research Methodology

3.1. Research Context

Vietnam provides a suitable case for the study of IP. As a transitioning economy, the Vietnamese economy has been moving from a centrally planned economy to a market-oriented economy. In the past two decades, Vietnam's continuing economic transformation has sharply increased the needs with qualified staff by Vietnamese enterprises and also foreign firms because they have to compete with other local and international business organizations in the market (Nguyen et al, 2012). Vietnamese universities have also responded to this requirement by enhancing the quality of their
education programs. Therefore, the university needs to have a policy to promote innovation in the teaching staff to ensure the quality of training.

3.2. Research Process

Two phases comprised the research: a pilot study and a main survey:

- The pilot study included a qualitative study and a quantitative survey. The pilot qualitative study was undertaken using a focus group with ten lecturers at Tien Giang University. The purpose of this study was to modify the measures of the constructs in the model.
- The quantitative pilot study was conducted by using face-to-face interviews with one hundred lectures at Long An University of Economics and Industry (LAU), university of Ho Chi Minh City University of Food Industry (FIU), and Tien Giang University (TGU) to refine the scales. Cronbach’s alpha reliability and exploratory factor analysis (EFA) were used to preliminarily assess the scales.
- The main survey was also undertaken by using face-to-face interviews as well. A convenience sample four hundred 400 lectures at the university, such as the University of Finance- Marketing (UMF), Ho Chi Minh City Open University (HOU), Ho Chi Minh City University of Food Industry (FIU), Tien Giang University (TGU), and Long A University of Economics and Industry (LAI) was interviewed in this survey. The purpose of this main survey was to validate the measures and to test the structural model. First, confirmatory factor analysis (CFA) was used to assess the measures. Then, analyses were conducted using the AMOS program for structural equation modeling (SEM) to test the theoretical model and hypotheses.

3.3. Measurement

All constructs used established and validated scales with minor modifications to reflect the research context, examined included autonomy, was first-order constructs and PsyCap and IP were second-order constructs. Autonomy was measured by three items, adopted from (Spreitzer, 1995) and one item created in the focus group (qualitative study). PsyCap was comprised of four components: hope, optimism, resiliency, and self-efficacy was all measured by fifteen items, borrowed from (Nguyen & Nguyen, 2011). Finally, IP was comprised of two components: willing to try and creative original. Willing to try was measured by four items borrowed from (Hurt et al., 1977). Creative original was measured by four items that also borrowed from (Hurt et al., 1977). Although self-assessment has been criticized for being less accurate compared to objective criterion measures, it is valuable when anonymity is guaranteed. All items were measured by a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree or agree, 4 = agree, 5 = strongly agree) All the measures were initially prepared in English and then translated into Vietnamese by an academic fluent in both languages. This procedure was performed because all lecturers is not well-understood English. Then, Back-translation ensured the equivalence of meaning.

3.4. Measure Refinement

As previously mentioned, the measures were refined via Cronbach’s alpha reliability and Exploratory Factor Analysis (EFA), using the data set collected from 100 university lecturer in the pilot study. The results showed that all scales were used in the study satisfied the requirement for Cronbach’s alpha reliability. Specifically, Cronbach’s alphas of the scales measuring PsyCap, autonomy, willing to try and creative original were 0.83, 0.85, 0.88 and 0.88, respectively and item-total correlations were favorable (>0.3). EFA (principal components with varimax rotation) attracted one factor with 61.277% percent variance extracted: Autonomy (eigenvalue=2.734). EFA extracted two factors from 8 items measuring IP with 65.307% percent of variance extracted. The first factor (eigenvalue=3.270) included items measuring willing to try and The second factor (eigenvalue=1.831) covered items measuring creative original. EFA (principal components with varimax rotation) extracted four factors from the items measuring Psy-Cap with 67.28 percent of variance extracted: self-efficacy (Eigenvalue=3.38); optimism (Eigenvalue=1.82); resiliency (Eigenvalue=1.24); and hope (Eigenvalue=1.04).

The results of the preliminary assessment indicated that all the used scales in this study satisfied the requirements for reliability and validity. Accordingly, these measures were used in the main survey.

3.5. Sample Characteristic

Among 400 respondents, university lecturers included 212 (53.0%) male lectures and 188 (47.0%) female lectures. In terms of academic title or degree, there were 331 (82.8%) masters, 69 (17.2%) doctors and above.

4. Research Results

4.1. Measurement Validation

In this step, CFA was used to validate the measures and, then, SEM followed to test the theoretical model and hypotheses. As presented previously, the model comprised three constructs: PsyCap, autonomy, and IP. The scales measure that these constructs were refined via Cronbach’s alpha reliability and EFA, using the data set collected from 100 university lecturers in the pilot study. These scales were then validated by CFA using the data set collected from 400 university lecturers in the main survey.

The saturated model (final measurement model) received an acceptable fit to the data: $\chi^2 (266) = 368.725$ (p = 0.000), GFI = 0.931, CFI = 0.978, TFI = 0.975, and RMSEA = 0.031 (depicted in Fig.2). The factor loadings of all items measuring all the constructs in the model were high (≥0.557) and significant (p<0.001). These findings indicate that the
scales measuring these constructs were unidimensional and the within-method convergent validity was achieved. The correlations between constructs, together with their standard errors (see Appendix 1) indicate that they were significantly different from unity. thus, supporting the construct discriminant validity. Table 1 presents the CFA factor loadings of items, composite reliability, and average variance extracted (AVE) of the scales.

![Image](image-url)

**Figure 2: Saturated Model**

| ITEM | CFA Loading | p  |
|------|-------------|----|
| Psychological capital: Self-efficacy; \( p=0.863 \); AVE=0.611 | 0.829 | *** |
| I feel confident of analyzing a long-term problem to find a solution | | |
| I feel confident of presenting my work to a small management | 0.748 | *** |
| I feel confident of contacting people outside the company | 0.729 | *** |
| I feel confident of presenting information to a group of colleagues | 0.824 | *** |
| Psychological capital: Optimism; \( p=0.711 \); AVE=0.483 | 0.758 | *** |
| In uncertain times, I usually expect the best | 0.638 | *** |
| I always expect things to go my way | 0.618 | *** |
| Overall, I expect more good things to happen to me than bad things to happen to me | | |
| Psychological capital: Hope; \( p=0.846 \); AVE=0.769 | 0.988 | *** |
| At the present time, I am energetically pursuing my goals | 0.557 | *** |
| There are a lot of ways around any problem that I am facing now | 0.981 | *** |
| I can think of many ways to reach my current goals | | |
| Psychological capital: Resilience; \( p=0.799 \); AVE=0.591 | 0.708 | *** |
| I quickly get over and recover from being started | 0.828 | *** |
| I am generous with my colleagues | 0.727 | *** |
| I get over my anger at someone reasonably quickly | | |
| Autonomy; \( p=0.788 \); AVE=0.489 | | |
| In the work | | |
| 1 I have significant autonomy in determining how I do my job | 0.741 | *** |
| 2 I have decided on my own how to go about doing my work | 0.678 | *** |
| 3 I have considerable opportunity for taking decisions about my job | 0.740 | *** |
| 4 At work, I am not under pressure to do what others want | 0.602 | *** |
| Willing to try; \( p=0.824 \); AVE=0.638 | | |
| In the work | | |
| 1 I am reluctant about adopting new ways of doing things until I see them working for people around me | 0.941 | *** |
| 2 I rarely trust new ideas until I see whether the vast majority of people around me accept them | 0.978 | *** |
| 3 I am generally cautious about accepting new ideas | 0.740 | *** |
| 4 I expect other people to agree if I do not agree with them | 0.741 | *** |
| Carusino original; \( p=0.860 \); AVE=0.658 | | |
| In the work | | |
| 1 I see out new out new ways to do things | 0.829 | *** |
| 2 I enjoy trying out new ideas | 0.773 | *** |
| 3 I am receptive to new ideas | 0.721 | *** |
| 4 I frequently improve methods for solving a problem when an answer is not apparent | 0.716 | *** |

**Table 1: Standardized CFA Loading**

4.2. Structural Results

Basing on the accepted saturated model, SEM was used to test the theoretical model and three hypotheses.

| Hypotheses | Structural path | Standardized Estimate | Unstandardized Estimate | S.E. | C.R. | p  |
|------------|----------------|-----------------------|-------------------------|------|-----|----|
| H3         | AU =< CAP     | .492                  | .711                    | .128 | 5.565 | *** |
| H1         | IP =< CAP     | .870                  | .745                    | .132 | 5.647 | *** |
| H2         | IP =< AU      | .290                  | .172                    | .059 | 2.886 | .004 |

**Table 2: Structural Path**
The SEM results indicated that all three proposed hypotheses were supported (Table 2). To be consistent with hypothesis H1, a positive relationship between psycap and IP was found (p<0.001). Hypothesis H2 proposed a positive linkage between autonomy and IP, the estimated structural path between these two constructs was also significant (p<0.001), supporting this hypothesis. A positive relationship between psycap and autonomy was also proposed in hypothesis H3, the estimated structural path between these two constructs was significant (p<0.005). (See Table 3 for details). Thus, it is possible to conclude that the research model is suitable for the data collected from respondents.

Table 3: Direct, Indirect and Total Effect on IP

| Construct | Effect | PSYCAP | AUT |
|-----------|--------|--------|------|
| AUT       | Direct | 0.492  | -    |
|           | Indirect | -     | -    |
|           | Total   | 0.490  | -    |
| IP        | Direct  | 0.870  | 0.290|
|           | Indirect | 0.142 | -    |
|           | Total   | 1.012  | 0.290|

5. Conclusion and Recommendation

The arm of this study was to examine the relationship between the overall level of positive psychological resources (i.e., efficacy, hope, optimism, and resilience) and their performance in a creative context. Besides, another important component in an innovative working environment is self-determination, which is also considered along with psychological capacity concerning efficiency. The findings supported all of the study hypotheses. Specifically, PsyCap and autonomy related positively to innovative performance. The findings suggest that innovative performance may be enriched through developing individuals’ PsyCap.

This study also has important practical implications because PsyCap is statelike and thus receptive to development and performance management. Specifically, the findings suggest that creative performance may be enhanced through developing employees’ PsyCap. Research has suggested that psycap can all be developed through an additional autonomy to enhance performance.

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### Appendix

| AU <-> CAP | r | 0.492 | 0.041598648 | 11.827308 | 3.35334E-28 | p |
|------------|---|-------|-------------|-----------|-------------|---|
| CAP <-> IP | r | 0.805 | 0.028347767 | 28.397299 | 2.2946E-101 | p |
| AU <-> IP  | r | 0.718 | 0.033258226 | 21.588644 | 6.28832E-71 | p |

Table 4