Page 1 of 19 ANZAM 2011

Marketers' psychological capital and performance

Tho D Nguyen

UEH-UWS DBA Program, University of Economics, HCM City, Vietnam

Email: ndtho@ueh.edu.vn

Phong D Nguyen

Quan HM Tran

University of Economics, HCM City, Vietnam

Trang TM Nguyen

Vietnam National University, HCM City, Vietnam

Marketers' psychological capital and performance

Abstract

This study examines the role of psychological capital in job performance of marketers in Vietnam. Based on positive organizational behavior theory, the study proposes a model, in which psychological capital has direct and indirect (mediated by job effort, job attractiveness, and quality of work life) impacts on job performance. The model was tested with a sample of 696 marketers working for firms in Ho Chi Minh City by means of structural equation modeling. The results show that the proposed model fits the data well and all hypotheses were supported. Thus, psychological capital is important for enhancing marketer performance and firms should pay attention to this type of capital in their recruiting, training and development programs.

Key words: Psychological capital, quality of work life, job performance, Vietnam

Regarding people in the workplace, a research area that receives much attention by researchers in the last few years is the positive organizational behavior and its derivative 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 and job performance of employees (e.g., Luthans et al. 2005; Luthans et al. 2008). However, to the best of our knowledge, little attention has been paid to the role of psychological capital in the job performance of marketers, especially, in transition markets like Vietnam. For that reason, the purpose of this study is to investigate the direct and indirect roles of psychological capital in job performance in a transition market. Vietnam.

Vietnam provides a good case for the study of psychological capital and job performance of marketers. In 1986 the Vietnamese government initiated a new economic reform program, aiming to transform the economy from a centrally planned economy to a market-oriented economy under socialist guidance. In the past several years, under the centrally planned system, business activities of Vietnamese firms focused primarily on production. The movement toward a market economy, together with the entry to the WTO, has caused Vietnamese firms to change their traditional ways of doing business. Instead of focusing on production and relying primarily on the government planning system, Vietnamese firms are now required, not only to find their own markets for their brands, but also to produce higher quality and more competitive brands as well as to effectively market them in

Page 3 of 19 ANZAM 2011

order to successfully compete with international brands in their home markets. In so doing, they are confronted with several difficulties, one of which is a shortage of qualified marketers (Nguyen and Nguyen 2011). Thus, research in the area will assist firms in understanding the role of psychological capital in job performance of marketers in order to stimulate them to effectively and efficiently work for firms. The rest of the paper includes: literature review and hypotheses; methods; data analysis and results; discussion and implications; and, limitations and directions for future research.

LITERATURE REVIEW AND HYPOTHESES

Conceptual Model

Figure 1 depicts a conceptual model explaining the direct and indirect roles of psychological capital in job performance of marketers. Specifically, the model proposes that psychological capital of marketers will have positive impacts on job effort, job attractiveness, quality of work life, and job performance. Further, quality of work life and job effort of marketers underlie their job performance. Finally, job attractiveness enhances quality of work life of marketers.

[Insert Figure 1 here]

Psychological Capital

In organizational behavior, the concern about trait-like personality and state-like psychological capacities of employees has received little attention by researchers (Luthans, Avolio, Walumbwa, and Li 2005). Trait-like personality is not specific to any task or situation and tends to be stable over time whereas state-like psychological capacities are more specific to certain situations or tasks and tend to be more malleable over time (Chen, Gully, Whiteman, and Kilcullen 2000). Several related concepts that describe state-like psychological capacities of employees can be found in the literature on positive organizational behavior such as psychological ownership (Avey, Avolio, Crossley and Luthans 2009), psychological capital (Luthans et al. 2005; Luthans, Norman, Avolio, and Avey 2008). This study focuses on psychological capital of marketers.

Luthans, Youssef, and Avolio (2007) propose four components of psychological capital: self-efficacy; optimism; hope; and, resiliency. They define psychological capital 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) in order 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, 3). Luthans et al. (2008) note that psychological capital has both conceptual and empirical support.

Self-efficacy refers to "people judgments about their capability to perform particular tasks" (Parker 1998, 835). Applied to the marketing professional level, self-efficacy helps marketers to be confident about their knowledge and skills in performing their assigned marketing tasks. Optimism is broadly defined as "the tendency to maintain a positive outlook" (Schneider 2001, 253). Positive organizational behavior focuses on realistic optimism which "involves enhancing and focusing on the favorable aspects of our experiences" (Schneider 2001, 253). Applied to the marketing professional, optimistic marketers are characterized by having positive expectations of outcomes in a changing work environment (Luthans et al. 2008). Hope reflects "the belief that one can find pathways to desired goals and become motivated to use those pathways" (Snyder, Rand and Sigmon 2002, 257). Hope comprises two dimensions: pathways (way-power) and agency (will-power). Pathways refer to one's capability of generating workable routes to the desired goal and agency relates to one's perceived capacity to use the pathways to reach the desired goal (Snyder, Sympson, Ybasco, Borders, Babyak, and Higgins 1996; Snyder, Rand and Sigmon 2002). Applying hope to the marketing professional level in a firm, pathways facilitate marketers to recognize the goals set by the firm and to translate those goals into their own actions to achieve the goals. Agency assists marketers in controlling their actions to achieve the desired goals and especially, in applying the requisite motivation to the best alternative pathway (Luthans et al. 2008; Snyder et al. 2002). Finally, resiliency refers to "positive adaptation in the context of significant adversity or risk" (Masten and Reed 2002, 75). Applying resiliency to the marketing professional, resiliency can be characterized by coping responses to both adverse and extreme positive events (Luthans et al. 2008).

Quality of Work Life and Job Performance

Quality of work life is about the well being of employees (Sirgy, Efraty, Siegel, and Lee 2001) and there are several different definitions of quality of work life (Martel and Dupuis 2006). In the context of this study, following Sirgy et al. (2001), we define quality of work life as marketers' satisfaction with a set of human needs when participating in the workplace. The set of human needs includes health and safety needs, economic and family needs, social needs, esteem needs, actualization needs, knowledge needs and aesthetics needs. quality of work life is important for firms because it relates to employee performance productivity and loyalty (Korunka, Hoonakker, and Carayon 2008; Rego and Cunha 2008). To reiterate, marketers' quality of work life is expected to have a positive impact on their performance. Therefore, we propose the following hypothesis:

H1: *Quality of work life has a positive impact on job performance.*

Research shows that the four components (self-efficacy, optimism, hope, and resiliency) of psychological capital have positive relationships with performance, happiness, well-being and satisfaction of workers. For example, self-efficacy has been found to have a positive impact on performance (Stajkovic and Luthans 1998; Legal and Meyer 2009). Employees' optimism is related to their performance, satisfaction and happiness (Yousef and Luthans 2007). Hope is related to employees' performance, satisfaction, happiness and retention (Yousef and Luthans 2007). Resiliency has a positive relationship with employee performance (Luthans et al. 2005) and happiness and satisfaction (Yousef and Luthans 2007). In sum, self-efficacy, optimism, hope and resiliency are related to the performance and quality of work life of employees.

Luthans et al (2007) found that overall psychological capital is a better predictor of employee performance than its individual components. For that reason, in this study, we focus on the predictive power of overall psychological capital rather than its individual components. And, we propose that overall psychological capital will have positive impacts on both quality of work life and performance of marketers. Thus,

H2: Psychological capital has a positive impact on quality of work life.

H3: *Psychological capital has a positive impact on job performance.*

Job Effort and Job Attractiveness

This study also examines two other job factors, i.e., job effort and job attractiveness. Job effort is also an important concept in organizational behavior. Some researchers believe that job effort is a component of job performance (e.g., Lusch and Serpkenci 1990). However, on the employee side, job effort and job performance are two different concepts (Christen, Iyer, and Soberman 2006). Job effort is the input of job performance and job performance is the output of job effort. Applied to the marketing professional level, the effort of marketers in their job will enhance there performance. Psychological capital of marketers also contributes to their effort in performing their duties. Marketers with a higher level of psychological capital tend to put more effort on their work and are not afraid of difficulties, and they always adapt to difficult tasks. Thus,

H4: *Job effort has a positive impact on job performance.*

H5: *Psychological capital has a positive impact on job effort.*

Job attractiveness plays an important role in quality of work life of marketers. Job attractiveness reflects "the degree to which a job is exciting, challenging, and provides a sense of accomplishment (Christen et al. 2006, 141). When marketers perceive that the work they are performing is attractive, they are more willing to fulfill the work. Thus, job attractiveness will stimulate marketers' ability to work and generate interest to complete the assigned task, thus, increasing marketers satisfaction with the job. Job attractiveness also is enhanced for the marketers with high levels of psychological capital because these marketers do not hesitate to perform any job. They always persevere and adapt to each task to complete. They are less prone to yield up difficult tasks or become bored with simple tasks. Therefore,

H6: *Job attractiveness has a positive impact on quality of work life.*

H7: *Psychological capital has a positive impact on job attractiveness.*

METHODS

Design and Sample

The research comprised two phases, a pilot and a main survey, and was undertaken in Ho Chi Minh City, the principal business centre of Vietnam. Respondents were marketers working for firms in HCM City. The pilot study consisted of two steps: qualitative and quantitative. First, we conducted a

Page 7 of 19 ANZAM 2011

series of in-depth interviews with 11 marketers in HCM City to modify the measures. Although most of the measures of constructs are available in the literature, this step is important to make them appropriate for the context of this study (a transition market).

The quantitative pilot study was undertaken by face-to-face interviews with 125 marketers 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. A convenience sample of 696 marketers working for various types of firms in HCM City was interviewed in this survey. The purpose of this main survey was to validate the measures and to test the structural model. Confirmatory factor analysis (CFA) was utilized to assess the measures and structural equation modeling (SEM) was employed to test the theoretical model and hypotheses.

Measurement

There were five constructs examined in this study: psychological capital; quality of work life; job effort; job attractiveness; and, job performance. Psychological capital and quality of work life were second-order constructs. Job effort, job attractiveness and job performance were first-order constructs. Psychological capital comprised four components: hope; optimism; resiliency; and, self-efficacy. Hope was measured by four items borrowed from Snyder, Rand and Sigmon (2002). Note that hope used in this study is state hope (Snyder et al. 2002). Optimism was measured by three items adopted from Carver and Scheier (2002). Resiliency was measured by four items, adopted from Block and Kremen (1996). Self-efficacy was measured by four items, borrowed from Parker (1998). Quality of work life was measured by nine items addressing need satisfaction of marketers (Sirgy et al. 2001). Job effort and job attractiveness were measured by three items each, borrowed from Christen et al. (2006). Finally, job performance was measured based on marketers' self-assessment. Although selfassessment has been criticized for being less accurate compared to objective criterion measures, it is valuable when anonymity is guaranteed and/or individuals perceive no need to present themselves favorably for career, performance appraisal and/social acceptance purposes (van der Heidjen and Nijhof 2004; Rego and Cunha 2008) as in the case of this study. The scale included four items, adopted from Staples, Hulland and Higgins (1999) and Rego and Cunha (2008).

Seven-point Likert scaling, anchored by 1 (strongly disagree) and 7 (strongly agree) was used for all items in this study. The questionnaire was initially prepared in English and then translated into Vietnamese by an academic fluent in both languages. This procedure was undertaken because English is not well understood by all marketers in this market. Back translation was undertaken to ensure the equivalence of meanings.

Measurement Refinement

The measures were refined via Cronbach's alpha reliability and EFA, using the data collected from 125 marketers in the pilot study. Specifically, EFA (principal components with varimax rotation) extracted four factors from the items measuring psychological capital with 66.38 percent of variance extracted at an eigen-value of 1.18. The Cronbach's alphas of these scales were .66 (hope), .72 (optimism), .68 (resiliency), and .87 (self-efficacy). Note that one item measuring optimism (I'm always optimistic about my future) and one item measuring hope (At this time, I am meeting the goals that I have set for myself) were deleted due to their low item-total correlations (<.30) in the reliability analysis.

EFA extracted three factors from nine items measuring quality of work life with 70.44 percent of variance extracted at an eigen-value of 1.03. The first factor covered items measuring marketer's satisfaction with health and pay, termed survival needs. The second factor included items measuring marketer's satisfaction with social and esteem needs, termed belonging needs, and the third factor comprised items measuring marketer's satisfaction with actualization, knowledge and aesthetics needs, termed knowledge needs. The Cronbach's alphas of these scales were .75 (survival needs), .70 (belonging needs), and .84 (knowledge needs). Finally, for the items measuring the three first-order constructs (job performance, job effort and job attractiveness), EFA attracted three factors with 74.33 percent variance extracted at an eigen-value of 1.07. In addition, all factor loadings were high (≥ .50). In sum, the results of the preliminary assessment indicated that all scales satisfied the requirement for reliability. Accordingly, these measures were used in the main survey.

Sample Characteristics

The sample included 330 (47.4%) male and 366 (52.6%) female marketers. There were 334 (48%) marketers working in the service industry, 194 (27.9%) marketers working in the manufacturing

Page 9 of 19 ANZAM 2011

industry, and 168 (24.1%) marketers working in both industries. In terms of firm ownership, there were 87 (12.5%) marketers working for state-owned companies, 334 (44.4%) working for joint-stock companies, 29 (4.2%) working for joint-venture companies, 208 (29.9%) working for limited proprietary companies, and 63 (9%) working for private firms. In terms of firm size, there were 263 (37.8%) marketers working for firms which had less than or equal to 100 employees, 148 (21.3%) marketers working for firms which had from 100 to 300 employees and 285 (40.9%) marketers working for firms which had more than 300 employees.

DATA ANALYSIS AND RESULTS

CFA was used to validate the scales and, then, SEM followed to test the theoretical model and hypotheses. The screening process shows that the data exhibited slight deviations from normality. Nonetheless, most of the univariate kurtoses and skewnesses were within the range of [-1, 1]. Therefore, maximum likelihood estimation was used (Muthen and Kaplan 1985).

Measurement Validation

There were five constructs under investigation: psychological capital; quality of work life; job effort; job attractiveness; and, job performance. The scales measuring these constructs were refined via Cronbach's alpha and EFA using the data set (n = 125) collected in the pilot study. These scales were then assessed via CFA using the data set (n = 696) collected in the main survey. We used two steps in validating measures. First, we used two CFA models to assess the two second-order constructs: psychological capital and quality of work life. We, then, incorporated the three first-order constructs (job effort, job attractiveness, and job performance) into the first two CFA models to form a saturated model (final measurement model).

Psychological capital. Psychological capital comprised four components: hope; optimism; resiliency; and, self-efficacy. The CFA results indicate that the measurement model of psychological capital received an acceptable fit to the data: $\chi^2_{[62]} = 253.76$ (p = .000); GFI = .946; CFI = .935; and RMSEA = .067. In addition, all factor loadings were high ($\lambda \ge .53$) and significant (p <.001). These findings indicate that the scales measuring the components of psychological capital were

unidimensional and the within-method convergent validity was achieved (Steenkamp and van Trijp 1991).

Quality of work life. Quality of work life consisted of three components: satisfaction with survival needs; satisfaction with belonging needs; and, satisfaction with knowledge needs. The CFA results indicate that the measurement model of quality of work life received an acceptable fit to the data: $\chi^2_{[24]} = 147.05$ (p = .000); GFI = .955; CFI = .947; and, RMSEA = .086. In addition, all factor loadings were high ($\lambda \ge .50$) and significant (p <.001). These findings indicate that the scales measuring the components of quality of work life were unidimensional and the within-method convergent validity was achieved (Steenkamp and van Trijp 1991).

Saturated model. The saturated model (final measurement model) was formed by incorporating the CFA model of the three first-order constructs (job effort, job attractiveness and job performance) into the two CFA models of the two second-order constructs (psychological capital and quality of work life). Because the measures of the components of psychological capital and quality of work life were unidimensional, summates were used to test the structural models. The use of summates helps decrease the number of free parameters considerably, which makes the estimation more reliable without increasing the sample size (Bagozzi and Edwards 1998). Consequently, four summates (indicators) were formed for psychological capital (hope, optimism, resiliency and self-efficacy), and three summates were formed for quality of work life (survival needs, belonging needs, and knowledge needs). Table 1 presents the means, standard deviations, CFA factor loadings of items, composite reliability and average variance extracted of the scales.

[Insert Table 1 here]

The final CFA model received an acceptable fit to the data: $\chi^2_{[109]} = 385.13$ (p = .000); GFI = .939; CFI = .952; and RMSEA = .060. The factor loadings of all items measuring the two first-order constructs (job effort, job attractiveness and job performance) were high (\geq .68) and significant (p < .001). These findings indicate that the scales measuring these two first-order constructs used in this study were unidimensional and the within-method convergent validity was achieved. The correlations

between constructs, together with their standard errors, indicate that they were significantly different from unity, thus, supporting the construct discriminant validity (Steenkamp and van Trijp 1991).

Structural Results

SEM was used to test the theoretical model and hypotheses. The proposed model received an acceptable fit to the data: $\chi^2_{[112]} = 388.12$ (p = .000); GFI = .939; CFI = .952; and RMSEA = .060. Note that no improper solution was found in any model: Heywood cases were absent; all error-term variances were significant; and, all standardized residuals were less than |2.58|. Table 2 shows the unstandardized estimates of the structural paths and Figure 2 presents the standardized ones.

[Insert Table 2 here]

Hypothesis Testing

Consistent with H1, a positive relationship between quality of work life and job performance was found (β =.28, p <.001). H2 proposes a positive relationship between psychological capital and quality of work life. The estimated structural path between psychological capital and quality of work life was significant (γ =.35, p <.001), thus H2 was supported. H3 proposes that psychological capital has a positive impact on job performance. The results reveal that this hypothesis also received support from the data (γ =.47, p <.001). H4 proposes a positive relationship between job effort and job performance. This hypothesis also received support from the data (β =.14, p <.05). The relationship between psychological capital and job effort proposed in H5 was found significant (γ =.70, p <.001). The relationship between job attractiveness and quality of work life suggested in H6 was also significant (β = .65, p <.001). Finally, consistent with H7, the relationships between psychological capital with job attractiveness was also supported (γ =.53, p <.001)

The results also indicate that psychological capital was a key factor predicting job performance (γ_{total} =.756) of marketers. Psychological capital, quality of work life, job effort and job attractiveness explained 62 percent of the variance of marketers' job performance (Figure 2).

DISCUSSION AND IMPLICATIONS

Recognizing the importance of psychological capital of marketers for their work, this study examines the role of psychological capital in job performance of marketers in Vietnam. The study also examines two job factors that play as mediators, i.e., job effort and job attractiveness. The results of this study provide some implications for theory and practice.

Theoretically, this study documents the role of psychological capital of marketers in a transition market, Vietnam. In terms of practice, this study confirms that psychological capital is a factor that enhances, directly and indirectly, the performance of marketers. Therefore, firms should pay attention to this psychological aspect of marketers. Firms should recruit qualified marketers based on not only their knowledge and skills in marketing but also their psychological capital. Firms should also design training programs which include training in psychological capital. Personnel policies that nurture, develop and evaluate the psychological capital of marketers are also necessary for firms. In other words, firms need to recruit marketers who have a high level of psychological capital, and foster, develop and evaluate their psychological capital to help them develop this type of capital together with other functional capacities (such as knowledge and skills in marketing). Note that psychological capital is in the form of state, which can be developed and managed (Luthans et al. 2008). Therefore, a firm is able to develop and nurture this type of capital if the firm has appropriate strategies and personnel policies. In doing so, the firm will have qualified marketers.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study has a number of limitations. First, the model was tested with a convenience sample of marketers working for companies in Ho Chi Minh City, Vietnam. The model should be tested with marketers in other cities and provinces in Vietnam such as in Can Tho, Da Nang, and Hanoi with a probability sample to enhance the generalizability of the results. In addition, the model needs further replication, extension, and critical evaluation in other transitional markets such as China to provide useful insights. Second, the model only examined the roles of human resources at the marketing professional level. Testing the model with other business functions within firms, such as accounting, finance, etc. will enhance our understanding of the relationships between psychological capital and job performance. This is another direction for future research. Finally, we focus on the state-like

components of psychological factors of people, that is, psychological capital of marketers. Incorporating trait-like components such as psychological hardiness, personality of marketers will provide further insights into the role of psychological aspects of people in their work and lives. This is also an appropriate area for future research.

REFERENCES

- Avey JB, Avolio JB, Crossley CD & Luthans F (2009) Psychological ownership: Theoretical extensions, measurement and relation to work outcomes, *Journal of Organizational Behavior* 30: 173-91.
- Bagozzi RP & Edwards JR (1998) A general approach for representing constructs in organizational research, *Organizational Research Methods* 1(1): 45-87.
- Block J & Kremen AM (1996) IQ and ego-resiliency: Conceptual and empirical connections and separateness, *Journal of Personality and Social Psychology* 70(2): 349-61.
- Carver CS & Scheier MF (2002) Optimism, in Snyder CR & Lopez SJ (Eds), *Handbook of Positive**Psychology, pp 231-43, Oxford University Press, Oxford.
- Chen G, Gully SM, Whiteman J-A, & Kilcullen RN (2000) Examination of relationships among traitlike individual differences, state-like individual differences, and learning performance," *Journal of Applied Psychology* 85(6): 835-47.
- Christen M, Iyer G & Soberman D (2006) Job satisfaction, job performance, and effort: A re-examine using agency theory, *Journal of Marketing* 70 January: 137-50.
- Korunka C, Hoonakker P & Carayon P (2008) Quality of working life and turnover intention in information technology work, *Human Factors and Ergonomics in Manufacturing* 18(4): 409-23.
- Legal J-B & Meyer T (2009) Goal priming and self-efficacy: Independent contributions to motor performance, *Perceptual and Motor Skills* 108: 383-91.
- Lusch RF & Serpkenci RR (1990) Personal differences, job tension, job outcomes, and store performance: A study of retail store managers, *Journal of Marketing* 54 January: 85-101.
- Luthans F, Youssef CM & Avolio BJ (2007) Psychological Capital: Developing the Human Competitive Edge, Oxford University Press, Oxford.
- Luthans F, Avolio BM, Walumbwa FO & Li W (2005) The psychological capital of Chinese workers:

 Exploring the relationship with performance, *Management and Organization Review* 1(2):
 249-71.

Page 15 of 19 ANZAM 2011

- Luthans F, Norman SM, Avolio BJ & Avey JB (2008) The mediating role of psychological capital in the supportive organizational climate: Employee performance relationship, *Journal of Organizational Behavior* 29: 219-38.
- Martel J-P & Dupuis G (2006) Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument, *Social Indicators Research* 77(2): 333-68.
- Masten AS & Reed M-GJ (2002) Resilience in development, in Snyder CR & Lopez SJ (Eds), Handbook of Positive Psychology pp 74-88, Oxford University Press, Oxford.
- Muthen B & Kaplan D (1985) A Comparison of some methodologies for the factor analysis of nonnormal Likert variables, *British Journal of Mathematical and Statistical Psychology* 38(2): 171-89.
- Nguyen TD & Nguyen TTM (2011) The WTO, marketing and innovativeness capabilities of Vietnamese firms, *Management Research Review* 34(6): 712-26.
- Parker SK (1998) Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions, *Journal of Applied Psychology* 83: 835-52.
- Rego A & Cunha MP (2008) Authentizotic climates and employee happiness: pathways to individual performance?, *Journal of Business Research* 61: 739-52.
- Schneider SL (2001) In search of realistic optimism meaning, knowledge, and warm fuzziness, American Psychologist 56(3): 250-63.
- Sirgy MJ, Efraty D, Siegel P & Lee D-L (2001) A new measure of quality of work life (QWL) based on need satisfaction and spillover theories, *Social Indicators Research*, 55: 241-302.
- Snyder CR, Rand KL & Sigmon DR (2002) Hope theory: A member of the positive psychology family, in Snyder CR & Lopez SJ (Eds) *Handbook of Positive Psychology* pp 257-76, Oxford University Press, Oxford.
- Snyder CR, Sympson SC, Ybasco FC, Borders TF, Babyak MA & Higgins RL (1996) Development and validation of the state hope scale, *Journal of Personality and Social Psychology* 70(2): 321-35.

- Stajkovic AD & Luthans F (1998) Self-efficacy and work-related performance: A meta analysis, *Psychological Bulletin* 124(2): 240-69.
- Staples DS, Hulland JS & Higgins CA (1999) A self-efficacy theory explanation for the management of remote workers in virtual organizations, *Organization Science* 10(6): 758-76.
- Steenkamp J-BEM & van Trijp HCM (1991) The use of LISREL in validating marketing constructs, International Journal of Research in Marketing 8(4): 283-99.
- Van der Heijden BIJM & Nijhof AHJ (2004) The value of subjectivity: Problems and prospects for 360-degree appraisal systems, *International Journal of Human Resource Management* 15(3): 493-511.

Page 17 of 19 ANZAM 2011

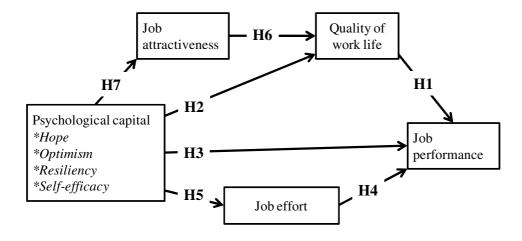
Table 1: Standardized CFA loadings of items

Psychological capital: <i>Hope:</i> Composite reliability $\rho_c = .68$; Average variance extracted ρ_v	adings .57 .68 .67	- 11.36					
At the present time, I am energetically pursuing my goals 5.54 1.336	.57 .68	- 11.36					
There are a lot of ways around any problem that I am facing now 5.22 1.308		11.36					
	.67						
I can think many ways to reach my current goals 5.20 1.382		11.31					
Psychological capital: <i>Optimism</i> : ρc=.68; ρvc=.41							
In uncertain times, I usually expect the best 5.04 1.420	.67	13.17					
I always expect things go to my way 5.29 1.370	.58	12.15					
Overall, I expect more good things to happen to me than bad 5.25 1.382	.76						
Psychological capital: Resiliency: ρc=.59; ρvc=.33							
I quickly get over and recover from being startled 5.09 1.266	.61	10.68					
I am generous with my colleagues 5.88 1.165	.58	10.35					
I get over my anger at someone reasonably quickly 4.80 1.400	.53						
Psychological capital: Self-efficacy: ρc=.86; ρvc=.60							
I feel confident of analyzing a long-term problem to find a solution 5.17 1.190	.75	19.04					
I feel confident of presenting my work area in meetings with senior							
management 5.21 1.263	.82	20.63					
I feel confident of contacting people outside the company 5.47 1.217	.79	19.89					
I feel confident of presenting information to a group of colleagues 5.67 1.128	.75						
Job performance: ρc=.86; ρvc=.61							
I believe I am an effective employee 5.28 1.170	.79						
I am happy with the quality of my work output 5.15 1.197	.77	20.86					
My manager believes I am an efficient worker 5.08 1.184	.78	21.16					
My colleagues believe I am a very productive employee 5.20 1.170	0.80	21.79					
Job effort: ρ_c =.81; ρ_{vc} =.59							
I always make an effort to perform my work well 6.00 1.064	.75						
I always take responsibility in my work 6.05 1.030	.86	19.60					
I always work long hours when necessary to complete my work 5.98 1.176	.68	16.67					
Job attractiveness: ρ_c = .89; ρ_{vc} = .63							
My job is very exciting 4.86 1.374	.87						
I rarely get bored with my job 4.69 1.386	.82	26.23					
My job is very attractive 4.59 1.387	.88	29.33					
Quality of work life: Survival needs: $\rho_c = .78$; $\rho_{vc} = .55$							
My job provides good health benefits 5.11 1.517	.50						
I am satisfied with what I'm getting paid for my work 4.34 1.542	.86	12.36					
My job does well for my family 4.47 1.431	.82	12.40					
Quality of work life: Belonging needs: ρc=.70; ρvc=.45							
I have good friends at work 5.47 1.342	.67						
I have enough time away from work to enjoy other things in life 4.96 1.475	.56	11.64					
I feel appreciated at work 5.35 1.191	.76	13.62					
Quality of work life: Knowledge needs: ρc=.86; ρvc=.66							
I feel that my job allows me to realize my full potential 4.90 1.324	.79						
My job allows me to sharpen my professional skills 4.96 1.397	.85	22.03					
My job helps me develop my creativity 4.79 1.394	.81	21.44					

Table 2: Unstandardized structural paths in the model

Hypothesis	Structural path	Estimate	Std error	t-stat	p-value
H1	Quality of work life → Job performance	.127	.026	4.829	.000
H2	Psychological capital → Quality of work life	.222	.031	7.267	.000
Н3	Psychological capital → Job performance	.136	.022	6.068	.000
H4	Job effort → Job performance	.161	.063	2.566	.010
H5	Psychological capital → Job effort	.175	.013	12.961	.000
Н6	Job attractiveness → Quality of work life	1.062	.094	11.341	.000
H7	Psychological capital → Job attractiveness	.206	.017	12.039	.000

Figure 1: Conceptual Model



Page 19 of 19 ANZAM 2011

Figure 2: Standardized SEM Results

