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Marketers' human capital resources and job performance

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Abstract

Purpose – Positing that human capital resources of marketers comprise both psychological capital (PsyCap) and marketing capital (MarCap), and that PsyCap in combination with MarCap will have a synergistic effect on marketers' job performance, the purpose of this paper is to investigate the configurational roles of PsyCap and MarCap in marketers' job performance.

Design/methodology/approach – Using a survey data set collected from 472 marketers in Ho Chi Minh City, Vietnam, the study tested the net effects of PsyCap and MarCap on job performance using structural equation modeling (SEM). Then, the study investigated the configurational roles of PsyCap and MarCap in job performance employing the fuzzy-set qualitative comparative analysis (fsQCA).

Findings – SEM results show that two components of PsyCap (efficacy and optimism) and one component of MarCap (organizational MarCap) have positive effects on job performance. fsQCA findings reveal that, except hope, combinations of PsyCap and MarCap components form several sufficient conditions for job performance.

Research limitations/implications – The focus of this study is on marketers, that is, at the individual level. Future research should examine both PsyCap and MarCap at a higher level, such as the team, unit, or firm level.

Practical implications – The study's findings suggest that firms should pay attention not only to the net effect but also to the configuration of PsyCap and MarCap when designing and implementing their human resource strategies and policies.

Originality/value – This study contributes to the literature on human capital resources by confirming the configurational roles of PsyCap and MarCap in marketers' job performance.

Keywords Vietnam, Job performance, Psychological capital, fsQCA, Marketing capital

Paper type Research paper

Introduction

The reality of our “flat world” today has given workers all over the globe the opportunity to freely cooperate and compete with each other (Friedman, 2007), challenging firms to design and implement innovative approaches to human resource management in order to survive and achieve sustainable growth and development (Aryee *et al.*, 2016; Chatterjee, 2017; Barney and Clark, 2007; Luthans *et al.*, 2008). In such a global competitive environment, workers in both developing economies and the developed world must equip themselves with the proper resources and capabilities to maintain a relevant place in their respective organization.

Although scholars mostly agree that human capital resources are key firm resources, not all types of human capital resources result in a competitive advantage (e.g. Campbell *et al.*, 2012; Ferguson and Reio, 2010). Human capital resources that can create a competitive advantage for firms can be classified into two main categories: psychological resources and functional resources. Among psychological resources, psychological capital (hereinafter PsyCap) is perhaps a key resource. PsyCap refers to an individual's psychological state of development, comprising efficacy, optimism, hope, and resiliency (Luthans *et al.*, 2008, 2015).

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Functional resources reflect a pool of knowledge, skills, and abilities that an individual has accumulated during his or her education, work and lives needed to perform functional tasks in an organization. These include human capital, relational capital, organizational capital and informational capital (Hunt, 2000). Empirical research has shown that both psychological and functional resources have positive effects on the job performance of employees (e.g. Stajkovic and Luthans, 1998). Whereas human capital resources include both psychological and functional resources (Luthans *et al.*, 2004), prior research examines the role of these two types of human capital resources in job performance separately. The question of how these two types of resources in combination contribute to the performance of workers is still largely ignored. Furthermore, basing the results on net effects produced by linear regression frameworks, such as structural equation modeling (SEM), one may not be able to discover the complexity of human behavior in general and human capital resources in particular (Ragin, 2008; Woodside, 2013).

The focus of this current study is on marketers. At the marketing professional level in the workplace, human capital resources of marketers can also be classified into psychological resources (i.e. PsyCap), and functional resources, termed marketing capital (hereinafter, MarCap). MarCap is defined as a pool of marketing knowledge, skills and abilities that marketers have accumulated during their education, work and lives. This form of resources include human MarCap, relational MarCap, organizational MarCap and informational MarCap which are needed to perform marketing tasks in their firms (Griffith and Lusch, 2007; Tho *et al.*, 2017). Compared to other business professionals, like those working in the field of accounting or finance, marketing professionals are unique. In everyday work, marketers often cope with a greater degree of adversity, uncertainty and challenges because their activities mainly deal with external environments such as customers and competitors (Griffith and Lusch, 2007; Tho *et al.*, 2017). Marketers should therefore equip themselves not only with marketing knowledge, skills and abilities (i.e. MarCap) but also with PysCap, in order to deal with their occupational pressure in intensely competitive markets.

Although a number of studies have investigated the impacts of PsyCap (e.g. Nguyen and Nguyen, 2012) and MarCap (e.g. Griffith and Lusch, 2007) on marketers' job performance, their synergistic effects is still unclear. For that reason, drawing upon the resource-based theory in human resources (Wright *et al.*, 2001) and key psychological resources theory (Hobfoll, 2002), this present study investigates the effects of PsyCap and MarCap in combination on marketers' job performance utilizing two approaches to data analysis: SEM and fuzzy-set qualitative comparative analysis (fsQCA). SEM was employed to investigate the net effects of the components of both PsyCap and MarCap on job performance. fsQCA was utilized to discover the configurations of PsyCap and MarCap components, which serve as sufficient conditions for the occurrence of job performance. The findings of this study contribute to the literature on human capital resources by confirming the configurational roles of these two types of marketing resources (i.e. the synergistic effect of PsyCap and MarCap) in the job performance of marketers. Also, the findings assist firms in designing and implementing appropriate human resource strategies and policies that enable their marketers to invest in these two types of resources to work for firms. The remainder of this paper presents a theoretical background and hypotheses, methods, data analysis and results, discussion, implications and conclusions.

Theoretical background and hypotheses

PsyCap

Scholars in the field of organizational behavior usually distinguish two psychological aspects of employees: one is the trait-like personality which is not specific to any task or situation and tends to be stable over time, and the other is the state-like psychological

resources which are more specific to certain situations or tasks (Chen *et al.*, 2000; Luthans *et al.*, 2015). Compared to the trait-like personality, state-like psychological resources are more malleable over time (Chen *et al.*, 2000). Among psychological resources, PsyCap has received attention by researchers in recent years (e.g. Luthans *et al.*, 2008, 2015; Nguyen and Nguyen, 2012). PsyCap, originated from positive psychology, is distinguished from other types of capital such as human capital (an individual's knowledge, skills and abilities) and social capital (an individual's durable network of relationships) (Luthans *et al.*, 2004; Newman *et al.*, 2014). Based on key psychological resource theories, which posit that individual-level resources are key resources serving as a foundation for managing, adapting and implementing other resources to achieve favorable outcomes (Hobfoll, 2002), Luthans *et al.* (2015) propose the concept of PsyCap. They define PsyCap as "an individual's positive psychological state of development that is characterized by: (1) having confidence (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" (p. 2).

At the marketing professional level, efficacy relates to the confidence of marketers in their knowledge and skills when performing their assigned marketing tasks (Luthans *et al.*, 2008; Nguyen and Nguyen, 2012). Optimism refers to marketers' positive expectations of outcomes in a changing work environment (Luthans *et al.*, 2008; Nguyen and Nguyen, 2012). Hope comprises pathways and agency. Pathways refer to marketers' capability for generating workable routes to the desired goal, and agency relates to marketers' perceived capacity to use the pathways to reach the desired goal (Nguyen and Nguyen, 2012; Rand and Cheavens, 2009). Finally, resiliency reflects marketers' capability for coping with both adverse and extremely positive events (Luthans *et al.*, 2008; Nguyen and Nguyen, 2012). A number of empirical studies show that the four components of PsyCap (efficacy, optimism, hope, and resiliency) have a positive impact on performance and other job outcomes (Luthans *et al.*, 2008; Madrid *et al.*, 2017; Nguyen and Nguyen, 2012; Stajkovic and Luthans, 1998). Luthans and Youssef (2009) note that PsyCap (i.e. the overall PsyCap instead of its individual components) may have synergistic effects on performance.

MarCap

A firm's human resources, referred to as functional resources in this study, can be defined as "all of the knowledge, experience, skill, and commitment of a firm's employees, their relationships with each other, and with those outside the firm" (Barney and Clark, 2007, p. 122). Hunt (2000) identifies four key categories of a firm's human resources: human capital (the business knowledge and skills of the firm's employees), relational capital (the firm's internal and external relationships), organizational capital (the firm's norms, culture, policy, practices, and procedures) and informational capital (information and knowledge about the firm's products and markets). The resource-based theory in human resources posits that these human capital pools, whether general or specific, will direct employees' relationships and behaviors including performance leading to a firm's competitive advantage (Wright *et al.*, 2001; Ployhart *et al.*, 2014).

At the marketing professional level, functional resources are termed MarCap. MarCap is a pool of marketing knowledge, skills and abilities that marketers accumulate during their education, training and professional practice (Griffith and Lusch, 2007). Based on Hunt's (2000) conceptualization, Griffith and Lusch (2007) suggest four pools of MarCap: human MarCap, relational MarCap, organizational MarCap, and informational MarCap. Human MarCap refers to a pool of marketing knowledge, skills and abilities of marketers. Relational MarCap includes the pool of marketers' relationships, internal and external to the firm. Organizational

MarCap comprises the pool of knowledge marketers possess about the firm's policy, practices, and procedures. Finally, informational MarCap includes the pool of marketers' knowledge about the firm's products and services, customers, competitors, and industry (Griffith and Lusch, 2007). Prior research has shown that MarCap has a positive effect on marketers' job outcomes (Griffith and Lusch, 2007; Tho *et al.*, 2017).

Like other human capital resources, MarCap is owned by its marketers, not by the firm (Wright *et al.*, 2001). Compared to organizational MarCap and informational MarCap, which are specific to the firm, human MarCap and relational MarCap are more general because the firm can recruit marketers who have been trained and worked elsewhere (Capron and Hulland, 1999). However, these two types of MarCap serve as knowledge grounds for further enhancement. Thus, human MarCap and relational MarCap are foundations for the development of organizational MarCap and informational MarCap, and a combination of these four components of MarCap will be a key pool of human capital resources, capable of leading to a firm's competitive advantage (Perez-Cabanero *et al.*, 2012; Tho *et al.*, 2017).

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Conceptual model

As previously discussed, human capital resources of marketers include both PsyCap and MarCap. Drawing upon the key psychological resources theory (Hobfoll, 2002), this study posits that PsyCap is fundamental for managing, adapting and implementing other resources, including MarCap, to achieve favorable outcomes, such as job performance. The study therefore proposes that the configurations of PsyCap components and MarCap components will serve as sufficient conditions for the occurrence of marketers' job performance. Figure 1 depicts a conceptual model presenting sufficient conditions for marketers' job performance.

Method

Research context, design and sample

As a transitioning economy with a population of more than 90 million, Vietnam provides a good case for the study of human capital resources of marketers. The transformation from a centrally planned economy to a market-oriented economy has moved the Vietnamese market from being closed to open. A more open market together with accession to the World Trade Organization, however, has led to more severe competition because Vietnamese firms now have to compete against international firms in their own market. One of the most pressing issues for firms in Vietnam is the shortage of in-country marketing professionals, who play a crucial role in the success of firms (Tho *et al.*, 2017).

The research comprised two phases, a qualitative pilot study and a main survey, and was undertaken in Ho Chi Minh City, the principal business center of Vietnam. Respondents were marketers working for firms in various industries in Ho Chi Minh City. The pilot study consisted of a series of in-depth interviews with a sample of 16 marketers selected by means of

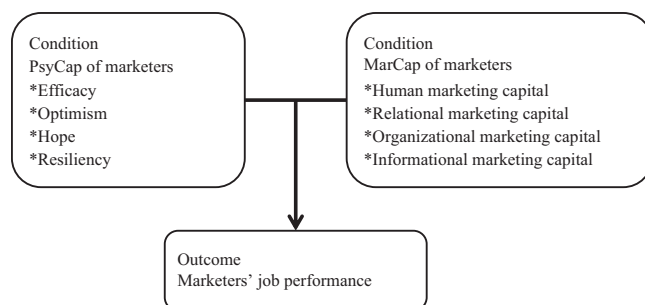


Figure 1.
Conceptual model:
sufficient conditions
for marketers' job
performance

theoretical sampling (i.e. the saturated point was 16). The purpose of this study was to modify the measures of constructs by examining how marketers described their PsyCap and MCap. Although the measures of constructs used in the model were available in the literature, this step was necessary in order to make them appropriate for the context of this study, that is, the Vietnamese market.

The main survey was undertaken by means of face-to-face interviews with a sample of 472 marketers. The sample, in terms of firm ownership, included 286 (60.59 percent) marketers working for local firms and 186 (39.41 percent) marketers working for foreign invested firms. In terms of firm size, there were 324 (68.64 percent) marketers working for firms which had more than 100 employees, and 148 (31.36 percent) marketers working for firms which had equal to or less than 100 employees. The sample comprised 281 (59.53 percent) female marketers and 191 (40.47 percent) male marketers. Finally, in terms of age, there were 359 (76.06 percent) marketers who were 30 years of age or younger, and 113 (23.94 percent) marketers who were older than 30 years.

Measurement

Three constructs examined were PsyCap, MarCap and job performance. PsyCap and MarCap were second-order constructs, and job performance was a first-order construct. PsyCap comprised four components: efficacy, optimism, hope and resiliency. Efficacy was measured by four items borrowed from Parker (1998). Optimism was measured by three items based on Carver *et al.* (2009). Hope in this study was state hope, and was measured by four items borrowed from Rand and Cheavens (2009). Finally, resiliency was measured by four items, adapted from Block and Kremen (1996).

MarCap was also composed of four components: human MarCap, relational MarCap, organizational MarCap, and informational MarCap. Each component of MarCap was measured by four items borrowed from Griffith and Lusch (2007). Finally, job performance was measured by four items adopted from Rego and Cunha (2008). Note that job performance was measured based on marketers' self-assessment. Although self-assessment 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/or social acceptance purposes (Rego and Cunha, 2008) as in the case of this study.

All items were measured by a seven-point Likert scale, anchored by 1 (strongly disagree) and 7 (strongly agree). 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. Note also that the items were randomly assigned to the questionnaire with an aim of mitigating the agreement tendency bias (e.g. Podsakoff *et al.*, 2003).

Data analysis and results

Using a data set collected from 472 marketers in the main survey, the study first validated the measures of constructs by confirmatory factor analysis (CFA). Then, the study used SEM to test the impacts (i.e. the net effects) of the components of both PsyCap and MarCap on job performance. Finally, fsQCA was employed to discover the configurations of the components of both PsyCap and MarCap, serving as sufficient conditions for job performance.

Measurement validation

The aim of this study was to examine the role of the individual components of PsyCap and MarCap on job performance; therefore, the measurement model (saturated model) was

formed by incorporating these components into job performance. Note that the screening process shows that the data exhibited slight deviations from normality; however, all of the univariate kurtoses and skewnesses of items were within the range $[-1, 1]$. The maximum likelihood estimation method was therefore used (Muthen and Kaplan, 1985).

The saturated model received an acceptable fit to the data: $\chi^2_{[459]} = 1117.74$ ($p = 0.000$), TLI = 0.93, CFI = 0.94, and RMSEA = 0.05. The factor loadings of all items measuring the constructs in the model were high (≥ 0.60) and significant ($p < 0.001$). Further, the average variance extracted of each construct in the model was equal or greater than 0.50 (Table II), supporting the unidimensionality of job performance and the components of PsyCap and MarCap (Steenkamp and van Trijp, 1991). Further, the correlation between any pair of two constructs was always less than the square roots of the average variance extracted of each construct in the pair (Table II), supporting discriminant validity of the components of PsyCap, MarCap and job performance (Fornell and Larcker, 1981). The CFA loadings of items, composite reliability, and average variances extracted of all scales are shown in Table I.

Common method bias

Due to the fact that the data were collected from a single respondent (i.e. the marketer), this study raised the possibility of a common method bias (Podsakoff *et al.*, 2003). Note that, in the design phase, randomly assignment of the items to the questionnaire was used to lessen such a bias. In this analysis phase, the study tested the bias using two statistical control procedures: a CFA Harman's single factor model test (Podsakoff *et al.*, 2003), and an unmeasured latent variable test (Markel and Frone, 1998). The CFA Harman's single factor model test reveals that the one-factor model received a very poor fit to the data ($\chi^2_{[495]} = 5670.63$ ($p = 0.000$), TLI = 0.48, CFI = 0.51, and RMSEA = 0.15) compared to the trait factor model ($\chi^2_{[459]} = 1117.74$ ($p = 0.000$), TLI = 0.93, CFI = 0.94, and RMSEA = 0.05). The unmeasured latent variable test was conducted by allowing the unmeasured latent variable to load on each item in the trait model. The results of this test reveal that all loadings of items on their measured constructs in this CFA model were almost identical to those reported in the CFA final measurement model, and that all loadings of the items on the unmeasured latent variable were not significant. Those results indicate that the common method bias, if present, was not a pervasive problem in this study.

SEM findings

The structural model received an acceptable fit to the data: $\chi^2_{[459]} = 1117.74$ ($p = 0.000$), TLI = 0.93, CFI = 0.94, and RMSEA = 0.05. Note that the structural model and the saturated model had the same degrees of freedom. Note also that no improper solution was found in the CFA and SEM models: Heywood cases were absent; all error-term variances were significant; and all standardized residuals were less than $|2.58|$. SEM results (Table III) indicate that only two out of four components of PsyCap (efficacy and optimism) and one out of four components of MarCap (organizational MarCap) had positive effects on job performance. A closer examination of Pearson correlations between the components of both PsyCap and MarCap and job performance (Table II) reveals that these correlations were all significant, that is, each component of PsCap and MarCap had a positive relationship with job performance. These results indicate that multicollinearity did exist which requires the use of multiplicative interaction terms, making the interpretation difficult (Ragin, 2008). For that reason, fsQCA was employed to reanalyze the data (Table III).

Predictive validity testing

Following Armstrong's (2012, p. 691) recommendation that "the fit is not a good way of assessing predictive validity," this study conducted a test for predictive validity of the

Items	<i>M</i>	<i>SD</i>	λ
<i>Job performance: composite reliability (CR) = 0.87; average variance extracted (AVE) = 0.63</i>			
I believe I am an effective employee	5.44	1.08	0.77
I am happy with the quality of my work output	5.27	1.14	0.72
My manager believes I am an efficient worker	5.14	1.07	0.84
My colleagues believe I am a very productive employee	5.23	1.05	0.83
<i>PsyCap: efficacy: CR = 0.88; AVE = 0.64</i>			
I feel confident of analyzing a long-term problem to find a solution	5.23	1.07	0.74
I feel confident in presenting my work area in meetings with senior management	5.29	1.07	0.83
I feel confident in contacting people outside the company	5.51	1.06	0.83
I feel confident in presenting information to a group of colleagues	5.74	1.00	0.80
<i>PsyCap: optimism: CR = 0.76; AVE = 0.52</i>			
In uncertain times, I usually expect the best	5.18	1.27	0.71
I always expect things go to my way	5.46	1.16	0.64
I expect more good things to happen to me than bad	5.31	1.21	0.80
<i>PsyCap: hope: CR = 0.85; AVE = 0.65</i>			
At the present time, I am energetically pursuing my goals	5.59	1.22	0.83
There are a lot of ways around any problem that I am facing now	5.44	1.16	0.84
I can think of many ways to reach my current goals	5.35	1.14	0.75
<i>PsyCap: resiliency: CR = 0.75; AVE = 0.50</i>			
I quickly get over and recover from being startled	5.23	1.18	0.76
I am interested in solving new and difficult tasks	5.43	1.18	0.75
I get over my anger at someone reasonably quickly	5.04	1.28	0.60
<i>MarCap: human marketing capital: CR = 0.89; AVE = 0.68</i>			
I have a great deal of marketing education and training	4.03	1.57	0.64
I have many marketing capabilities	4.45	1.33	0.89
I have many marketing skills	4.42	1.31	0.91
I have a great deal of marketing expertise	4.16	1.42	0.84
<i>MarCap: relational marketing capital: CR = 0.94; AVE = 0.79</i>			
I have a large network of business contacts	5.12	1.37	0.81
I have many business connections	4.88	1.39	0.89
I have developed many business relationships	4.94	1.36	0.94
I have developed many business acquaintances	4.87	1.39	0.91
<i>MarCap: organizational marketing capital: CR = 0.92; AVE = 0.75</i>			
I know a great deal about the way my employer does things	5.46	1.20	0.83
I have a great understanding of my employer's policies	5.39	1.25	0.90
I know a great deal about the practices and procedures of my employer	5.28	1.28	0.89
I have a great understanding about the way my employer operates	5.38	1.29	0.85
<i>MarCap: informational marketing capital: CR = 0.85; AVE = 0.58</i>			
I know a great deal about my employers products/services	5.88	1.05	0.75
I have a great understanding about my employer's competitors	5.21	1.22	0.77
I know a great deal about my employer's customers and clients	5.37	1.17	0.79
I have a great deal of knowledge of the industry	5.68	1.13	0.75

Table I.

Means (*M*), standard deviation (*SD*) and standardized CFA loadings (λ) of items

model by dividing the sample of 472 marketers into two subsamples. Each sample contained 236 marketers. The first sample (N1) was used to estimate the parameters in the model. These estimated parameters (regression coefficients) were used to predict the scores of job performance in the second sample (N2) which served as a holdout sample. The correlation between the predicted scores and the actual scores of job performance was calculated. Then, the reverse was undertaken: N2 was used to estimate the regression coefficients in the

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Table II.
Correlations between
components of
MarCap, PsyCap and
job performance

	1	2	3	4	5	6	7	8	9
1. Human marketing capital	0.82								
2. Relational marketing capital	0.65	0.89							
3. Organizational marketing capital	0.41	0.59	0.87						
4. Informational marketing capital	0.45	0.62	0.71	0.76					
5. Efficacy	0.35	0.44	0.43	0.63	0.80				
6. Optimism	0.24	0.21	0.24	0.38	0.42	0.72			
7. Hope	0.47	0.42	0.43	0.61	0.67	0.52	0.81		
8. Resiliency	0.34	0.32	0.34	0.50	0.68	0.67	0.73	0.71	
9. Job performance	0.37	0.42	0.48	0.57	0.66	0.45	0.57	0.56	0.79

Note: Numbers on the diagonal are square roots of average variance extracted; all correlations are significant at $p < 0.001$

Path	Unstandardized estimate	SE	Standardized estimate	<i>t</i> -value	<i>p</i> -value
Efficacy → Job performance	0.44	0.09	0.40	5.18	0.00
Optimism → Job performance	0.15	0.07	0.15	2.19	0.03
Hope → Job performance	0.05	0.07	0.06	0.75	0.45
Resiliency → Job performance	0.03	0.10	0.04	0.34	0.74
Human marketing capital → Job performance	0.04	0.04	0.06	1.07	0.29
Relational marketing capital → Job performance	0.00	0.04	0.00	0.07	0.95
Organizational marketing capital → Job performance	0.13	0.05	0.16	2.59	0.01
Informational marketing capital → Job performance	0.06	0.09	0.06	0.70	0.48

Table III.
SEM results

model and N1 served as a holdout sample (Woodside, 2013). The results show that the correlation between the predicted and actual scores of job performance was 0.63 ($p < 0.001$) when using N2 as a holdout sample and 0.61 ($p < 0.001$) when using N1 as a holdout sample. These results indicate that the model received an acceptable level of predictive validity.

fsQCA procedures

The results produced by SEM presented previously only reveal the net effects of the components of both PsyCap and MarCap on marketers' job performance. To discover their causal complexity, fsQCA, which can be used for a regression-based framework (Fiss *et al.*, 2013), was employed to analyze the data.

Calibration. Following the calibration method introduced by Ragin (2008), this study transformed the original values collected from the main survey into values ranging from 0 to 1. As previously presented, three constructs examined were job performance, PsyCap, and MarCap. Job performance was a first-order construct measured by four items. PsyCap was a second-order construct (efficacy, optimism, hope and resiliency). Efficacy was measured by four items, and optimism, hope and resiliency were measured by three items each. MarCap was also a second-order construct comprising four components (human MarCap, relational MarCap, organizational MarCap, and informational MarCap) and each component was measured by four items. All were measured by a seven-point Likert scale. The aim of this study was to investigate the configurational roles of the individual components, not the overall, of MarCap and PsyCap in marketers' job performance. The fsQCA calibration, therefore, was undertaken at the component level of these two second-order constructs. Before calibrating the measures of constructs (job performance and the components of PsyCap and MarCap) in the model, composite measures were formed by

taking an average of items measuring each construct. This procedure was used because all the constructs were unidimensional (Gerbing and Anderson, 1988).

Realizing that, in fsQCA, researchers should base their calibration approach on both external standards and the context of the study (Ragin, 2008), this study combined two methods of calibration: based on the survey scale and on the sample data values. First, based on the survey scale (seven-point Likert), the study assigned the three qualitative anchors for the calibration, that is, full membership threshold, full non-membership threshold, and the crossover point threshold as follows. The full membership threshold was fixed at the rating of 6; the full non-membership threshold was fixed at the rating of 3; and the crossover point was fixed at 4.5. Note that, following Tho and Trang (2015), the full non-membership threshold was set at three instead of two because Vietnamese employees tend to have a bias toward the right side (strongly agree) of the Likert scale when answering a survey questionnaire. Based on the sample data values, the full membership threshold was the point covering 95 percent of the data values; the full non-membership threshold was the point covering 5 percent of the data values; and the crossover was the point covering 50 percent of the data values. An average was used when a difference between the thresholds produced by the two methods existed.

Assessment criteria. Following Ragin (2008), this study used two criteria to assess fuzzy-set relations. They are fuzzy-set theoretic consistency and coverage. Note that the focus of this study is on sufficient conditions, and the consistency and coverage of (sufficient) condition X are calculated as follows (Ragin, 2008), where X_i (analogous to the independent variable in multiple regression analysis) is the membership score in the X configuration for marketer i and Y_i (analogous to the dependent variable in multiple regression analysis) is his or her membership score in the outcome set:

$$\text{Consistency } (X_i \leq Y_i) = \sum \left[\min(X_i, Y_i) / \sum (X_i) \right]$$

$$\text{Coverage } (X_i \leq Y_i) = \sum \left[\min(X_i, Y_i) / \sum (Y_i) \right]$$

fsQCA findings

Based on Ragin's (2008) recommendation that researchers should employ a high level of consistency (i.e. ≥ 0.85), the present study set the consistency threshold at 0.90. The results, produced by the fsQCA 2.5 package, are shown in Table IV.

At the consistency threshold of 0.90, the solution yielded a total coverage of 0.97, that is, these configurations explained about 97 percent of the job performance of marketers in the sample. Only one component of PsyCap (i.e. hope) was a sufficient condition for job performance. Other components formed an INUS condition (insufficient but necessary part of a condition which is itself unnecessary but sufficient for the result; Mackie, 1965, p. 245) as follows (Table IV):

[...] hope + human marketing capital*relational marketing capital + relational marketing capital*organizational marketing capital + human marketing capital*informational marketing capital + organizational marketing capital*optimism + human marketing capital*resiliency + organizational marketing capital*efficacy + resiliency*efficacy + relational marketing capital*optimism + relational marketing capital*resiliency + organizational marketing capital*resiliency + informational marketing capital*resiliency \rightarrow job performance.

A closer examination of these configurations reveals that resiliency was present in 5 out of 11 configurations; organizational MarCap and relational MarCap occurred in 4 configurations; human MarCap appeared in 3 configurations; and informational MarCap, optimism, and

Table IV.
fsQCA results
(consistency
threshold: 0.90)

Configurations	Raw coverage (%)	Unique coverage (%)	Consistency (%)
Hope	85.32	2.26	81.90
Human marketing capital*relational marketing capital	58.10	0.23	89.55
Relational marketing capital*organizational marketing capital	69.13	0.22	87.52
Human marketing capital*informational marketing capital	60.49	0.13	88.60
Organizational marketing capital*optimism	70.73	0.45	88.41
Human marketing capital*resiliency	56.76	0.02	89.39
Organizational marketing capital*efficacy	74.44	0.30	88.13
Resiliency*efficacy	75.46	0.54	87.25
Relational marketing capital*optimism	65.78	0.16	89.07
Relational marketing capital*resiliency	64.70	0.01	89.14
Organizational marketing capital*resiliency	70.67	0.03	88.44
Informational marketing capital*resiliency	74.01	0.09	86.98

Notes: Model: job performance = f (human marketing capital, relational marketing capital, organizational marketing capital, informational marketing capital, hope, optimism, resiliency, efficacy). Parsimonious solution: frequency cutoff: 1.00; consistency cutoff: 0.91; solution coverage = 0.97; solution consistency = 0.76

efficacy were present in two configurations. Thus, no component PsyCap or MarCap played as a necessary condition for the outcome (job performance). The results further show that there were three configurations of within MarCap components (relational MarCap combined with human MarCap and organizational MarCap, and human MarCap combined with informational MarCap). Other configurations were combinations between PsyCap components and MarCap components. For example, resiliency was combined with all other components of MarCap to form sufficient conditions for job performance, that is, resiliency served as an essential component of PsyCap for adapting and managing MarCap to achieve job performance. Thus, the findings confirm the synergistic effects of PsyCap components and MarCap components on job performance.

Discussion, implications and conclusions

Positing that human capital resources of marketers comprise both PsyCap and MarCap, and that PsyCap and MarCap have synergistic effects on the job performance of marketers, this study investigates the configurational roles of the components of PsyCap and MarCap in marketers' job performance. The study findings offer a number of implications for theory, research and practice.

Implications for theory and research

Theoretically, this study argues that human capital resources at the marketing professional level comprise both PsyCap and MarCap, and that combinations of these two types of human capital resources will serve as sufficient conditions for marketers' job performance. Prior studies have largely examined these two types of resources separately using traditional quantitative methods with an aim of discovering their net effects on job performance or other job outcomes. This study contributes to the literature by investigating both of them simultaneously employing both traditional and configurational approaches to data analysis (i.e. SEM and fsQCA). The study findings generally confirm the synergistic role of these two types of resources in marketers' job performance. The findings also verify that psychological resources (e.g. PsyCap) serve as a fundamental resource helping marketers to adapt and manage other resources (e.g. MarCap study) to attain their job outcomes (e.g. performance).

Specifically, correlation analysis shows that all components of PsyCap and MarCap have positive relationships with the job performance of marketers. However, SEM results reveal that

only one component of MarCap (organizational MarCap) and two components of PsyCap (efficacy and optimism) have positive effects on job performance. These findings are due to the intercorrelation among components of these two types of resources when estimating the net effects of a number of independent variables on a dependent variable. The fsQCA findings show that only one component of PsyCap (hope) serves as a sufficient condition for the occurrence of job performance. Other components of PsyCap and all components of MarCap, individually, are not sufficient conditions for marketers' job performance but their combinations do. These findings indicate that the effect of human capital resources on performance is more complex and synergistic, that is, the whole is greater than the sum of its parts, as posited by the human capital resources theory (Luthans and Youssef, 2009). However, the synergistic relationship between them is not easy to discover by traditional methods. The findings of this study therefore affirm that fsQCA is essentially complementary to traditional statistical methods for discovering the complexity of causal relationships in business.

Managerial implications

In practice, the findings of this study, in general, indicate that firms should strive to recruit, develop, and manage marketers who have generally high levels of both PsyCap and MarCap. Firms should also work toward establishing appropriate human resource policies and practices to further develop the PsyCap and MarCap of their current marketing employees. Policies that motivate marketers to enhance their PsyCap and accumulate their MarCap will assist marketers in improving their job performance, leading to a firm's competitive advantage in terms of human capital resources (Aime *et al.*, 2010).

More importantly, the results of this study suggest that firms should pay attention not only to the net effects but also to the configurations of the components of these two types of marketers' human capital resources. Theoretically, PsyCap and MarCap have synergistic effects on job performance; however, the question of how to achieve such a synergy is not easy to answer in practice. The findings from fsQCA in this study indicate that to achieve a higher level of consistency (i.e. at a consistency level of 0.90) for the occurrence of job performance, except for hope (a component of PsyCap), no other components of PsyCap or MarCap can serve as sufficient conditions for the job performance of marketers. Other sufficient conditions come from different combinations of PsyCap and MarCap components.

For example, the second sufficient condition for job performance is a combination of human MarCap and relational MarCap. This indicates that, to achieve a high level of job performance, marketers should have a high level in both human MarCap and relational MarCap. With regard to these two components of MarCap, if a marketer has only a high level of human MarCap but she or he does not reach a high level of relational MarCap, this marketer is unable to achieve a high level of performance. Similarly, the third sufficient condition for job performance is a combination of relational MarCap and organizational MarCap, indicating that marketers should be high in both relational capital and organizational capital in order to gain a high level of job performance. The last sufficient condition for job performance is a combination of informational MarCap and resiliency, demonstrating that to achieve a high level of job performance, marketers should have a high level in both informational MarCap (a MarCap component) and resiliency (a PsyCap component).

However, on closer inspection, one can see that resiliency combines with all other components of MarCap to form sufficient conditions for job performance. This implies that no components of MarCap can serve as a sufficient condition for job performance but their combinations with other types of capital (resiliency in this study) will do. Thus, resiliency (a PsyCap component) serves as an essential capital assisting marketers in adapting and managing their MarCap to achieve their job performance. For that reason, if marketers of a firm have a high level of resiliency but a low level of MarCap, the firm should design training programs that can enhance the level of MarCap of their marketers. On the contrary,

if marketers have high a level of MarCap but a low level of resilience, PsyCap training programs are required. Note that, PsyCap is a state-like characteristic, which is open to change and development (Luthans *et al.*, 2015), giving opportunities for PsyCap assessment and training programs.

Conclusions

In conclusion, this study sheds more light on human capital resources by investigating the configurational roles of PsyCap and MarCap in marketers' job performance, encouraging researchers to utilize an appropriate method – in this case, fsQCA – to investigate the complexity of causal relationships between human capital resources and job outcomes. The study findings also suggest that firms should pay attention to the configurations of PsyCap and MarCap, that is, the recipe is more important than the ingredients in designing and implementing human resources policies and practice. In so doing, firms will enjoy a higher level of job performance accomplished by their marketers.

It is worth noting that the present study only examines the role of PsyCap and MarCap in job performance. Future research should investigate the relationship between human capital resources and other job outcomes such as job satisfaction and job tension. In addition, the study investigates the configurational roles of PsyCap and MarCap in marketers' job performance, that is, at the individual level. Such an investigation at a higher level (e.g. the team, unit, or firm level; Newman *et al.*, 2014; Ployhart *et al.*, 2014) deserves attention in future research. Finally, the focus of this study is on marketers. As previously discussed, marketers and other business professionals such as accountants may exhibit some differences. Future research should make a comparison of the role of human capital resources in job performance between marketers and other business professionals in order to discover their similarities and differences.

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