

Human Capital, Organizational Demography and Organizational Performance: The Analysis of CPA Firms in Taiwan

Ming-Jiuan Wu¹, Shin-Tien Chen²

¹Assistant Professor, Department of Business Management, Ming Chi University of Technology, Taiwan

²Professor, Department of Business Management, Ming Chi University of Technology, Taiwan

Correspondence: Shin-Tien Chen, Professor, Department of Business Management, Ming Chi University of Technology, Taiwan. E-mail: cst@mail.mcut.edu.tw

Received: August 30, 2016

Accepted: September 8, 2016

Online Published: October 9, 2016

doi:10.5539/ibr.v9n11p126

URL: <http://dx.doi.org/10.5539/ibr.v9n11p126>

Abstract

Many studies indicate a positive correlation between human capital and operating performances for professional service providers. This paper takes a step further and explores the impact of demographic profiles on financial performances, given the lack of research on this front in Taiwan. To clarify the relationship between these factors, this paper takes a resources-based view in the examination of the influence of human capital and demographic profile on operating performances. Sample is sourced from "Survey of CPA Firms in Taiwan" issued by the Financial Supervisory Commission in 1999-2012. The empirical results suggest that (1) the greater the human capital, the better the organizational performances; (2) the higher the heterogeneity of educational backgrounds in the demographic mix, the better the organizational performances; (3) the heterogeneity in age in terms of the interaction between human capital and demographic profiles has a positive effect on organizational performances.

Keywords: human capital, organizational demography, organizational performance, CPA firms

1. Introduction

To response to the intensifying competition in the marketplace due to globalization, companies resort to reorganizations, downsizing, reengineering, outsourcing or relocating facilities to other countries. All these measures are increasing the diversity of the demographic profile of organizational members (Richard and Jeffrey, 2000). The labor force is becoming increasingly diversified over time and across geographies, as a result of market changes, government legislations, workforce quality improvements (Triandis, Kurowski, and Gelfand, 1993). It is hence important to effectively manage the issues associated with the heterogeneity of demographic profiles, in particular when it comes to the effects of human behavior within an organization. This is because such issues are critical to the continued growth of an organization. The more heterogeneous the demographic mix in an organization, the more difficult it is the international communication between organizational members, all else being equal (O'Reilly, Snyder, and Boothe, 1993; Smith et al., 1994). The impact on organizational members is used to explain various phenomena such as resignations, interpersonal relationships, innovations and performances (Jackson, 1995; Baek, 2004). In sum, demographic mix is an important factor to an organizational, as it affects the organizational performances. It goes without saying that demographic diversity is a major issue in organizational management.

Most studies indicate that demographics affect the communication and integration between organizational members and hence organizational performances. However, existing literature deals with work groups, divisions or sub-groups within an organization (Murray, 1989; Michel and Hambrick, 1992; Ancona and Caldwell, 1992). Few studies examine large organizations as a whole. This paper hence seeks to explore the relationship between demographic mix and organizational performances in organizations that are human-centric, labor-intensive and intelligence-focused.

In general, people are considered the most important asset to CPA firms as a professional service provider. Human capital is the most essential resource for the rendering of services by CPA firms. The quality and quantity of human capital affects the service quality and operating costs of CPA firms as a labour-intensive industry.

In fact, human capital is the most critical factor to operating performances of CPA firms. Resource-based views

argue that if human resources are valuable, scarce, imperfectly imitable, and not replaceable, such resources are the main source of competitive advantage for a company. Organizational performances are the outcome of the interaction between human resources and other resources (Hoskisson et al., 1999). In fact, the knowledge and the capability to produce proprietary knowledge are the most essential asset of any firms, as well as the core of the resource base (Grant, 1996; Spender, 1996; Chen and Lin, 2003). Understandably, human capital is the source of competitive advantage for CPA firms as professional service providers. However, it is yet to be clarified the impact of human capital on the financial performances of CPA firms given the importance of human capital to CPA firms. Hence, this paper sets out to explore (1) the effects of human capital and demographic mix on organizational performances; (2) whether demographic profile alters the relationship between human capital and organizational performances.

2. Literature Review and Hypotheses Establishment

2.1 Human Capital and Organizational Performances

Pepper (2002) points out that human capital has long been considered a critical resource to most companies. Literature suggests that the attributes of human capital affects operating outcomes (Huselid, 1995; Pennings et al., 1998; Wright, Smart and McMahon 1995). It is only logical that human capital is the most important production factor to labor-intensive CPA firms that provide professional services on the basis of domain knowledge. Generally speaking, human capital is the most critical factor to operating performances of CPA firms (Kor and Leblebici, 2005). The empirical studies up to date in Taiwan on the relationship between human capital and operating performances of CPA firms focus on the influence of different human capital attributes on the operating performances. Literature suggest that human capital variables such as professional experience accumulation and professional certificate acquisitions (e.g. average years of professional training, average years of education, average working years of employees) enhance the professional expertise of CPA firms, and hence have a positive impact of revenues of CPA firms.

As mentioned in literature, human capital has a positive effect on the improvement of corporate performances. To explore the relationship between human capital and financial performances of CPA firms, this paper hence develops the following hypothesis:

H1: The greater the human capital, the better the financial performances of CPA firms.

2.2 Organizational Demography and Organizational Performances

Tsui, Egan and Xin (1995) argue for increasing heterogeneity in age, gender and ethnicity in organizations of the future. The more heterogeneous in the tenure of organizational members, the more positive effect it has on innovations (Bantel and Jackson, 1989). Some studies posit that demographic diversity helps to inspire the creativity of organizational members and hence improve the performances of organizations (Murray, 1989; Ancona and Caldwell, 1992; Watson, Kumar and Michaelsen, 1993). The majority of past studies focus on the influence of the homogeneity/heterogeneity of demographic profiles on organizations. In general, the greater the heterogeneity in demographic mix, the better it is for organizational creativity and performances.

Educational backgrounds are often a classification for organizational members. Fried and Ferris (1986) contend that well-educated employees usually have greater knowledge and skillsets and can handle more complex tasks. They are far more aware of task characteristics than the less-educated. In general, the more senior the job positions, the greater the requirement for communication, coordination and integration, and the more often such positions are held by the well-educated. In a nut shell, the greater the education levels, the higher the productivity and competitiveness. Literature suggests that the higher the education levels of employees, the better the organizational performances (compared to the organizations with employees of lower education levels) (Cotton, 1993). The greater the heterogeneity in educational backgrounds of organizational members, the more likely a diversity of ideas and opinions emerge. This inspires organizational innovations and boosts performances. In sum, there is a positive correlation between the degree of heterogeneity in service tenures and the level of organizational performances (Ancona and Caldwell, 1992). Some studies indicate a positive correlation between the degrees of heterogeneity in age and service tenures and the level of organizational performances (Murray, 1989; Watson, Kumar, and Michaelsen, 1993). Demographic mix in an organization can be largely described with age, gender and education. As the research subject in this paper is CPA firms in Taiwan and demographic structure is one of the key factors to the financial performances of these CPA firms, this paper hence develops the following hypotheses on the basis of the above literature:

H2a: The greater the demographic heterogeneity in gender, the stronger the financial performances of CPA firms.

H2b: The greater the demographic heterogeneity in age, the stronger the financial performances of CPA firms.

H2c: The greater the demographic heterogeneity in education, the stronger the financial performances of CPA firms.

2.3 Organizational Demography, Human Capital and Organizational Performances

Demographic profiles of any given organization can be largely described by age, gender and education. Some studies argue that female-dominated organizations are as competitive as male-dominated ones. Wharton and Baron (1987) indicate that male employees report a higher level of job satisfaction in either male-dominated or female-dominated organizations, but not in organizations with an even split between males and females. The greater the demographic heterogeneity in gender, the more internal competition and encouragement and the better the organizational performances become. The higher the demographic heterogeneity in age, the greater the diversity in values and judgement criteria and the more likely innovations come about. This has a positive effect on organizational developments. Meanwhile, the more different the educational backgrounds, the more diversity there is in ideas and thoughts. This provides more opportunities in mutual learning and experience sharing.

Human capital is an aggregation of knowledge, competences, experience, attitude and unique capabilities collectively owned by organizational members. The level of knowledge, expertise, unique skillsets and experience owned by employees and managers is indicative of the human capital owned by a given organization (Dess and Picken, 1999; Lepak and Snell, 1999; Hurwitz et al., 2002). In essence, human capital is the competitive capability of an organization as it represents the collective knowledge, skillsets, expertise and contact networks owned by organizational members and supervisors (Molyneux, 1998). It creates performances and maintains revenues for organizations. As CPA firms are human-centric, knowledge-intensive and organizational members stay in contact and communication over a long period of time, they require high-caliber human resources. On the basis of the previous literature review and H1 and H2, this paper develops the following hypothesis:

H3a: The greater the demographic heterogeneity in gender and the higher calibre of human capital, the better the financial performances of CPA firms.

H3b: The greater the demographic heterogeneity in age and the higher calibre of human capital, the better the financial performances of CPA firms.

H3c: The greater the demographic heterogeneity in education and the higher calibre of human capital, the better the financial performances of CPA firms.

3. Methodology

3.1 Conceptual Framework

This paper intends to explore the influence of human capital and demographic profile on the organizational performances of CPA firms. Figure 1 illustrates the relationship among human capital, demographic mix and organizational performances on the basis of the literature review in the previous section.

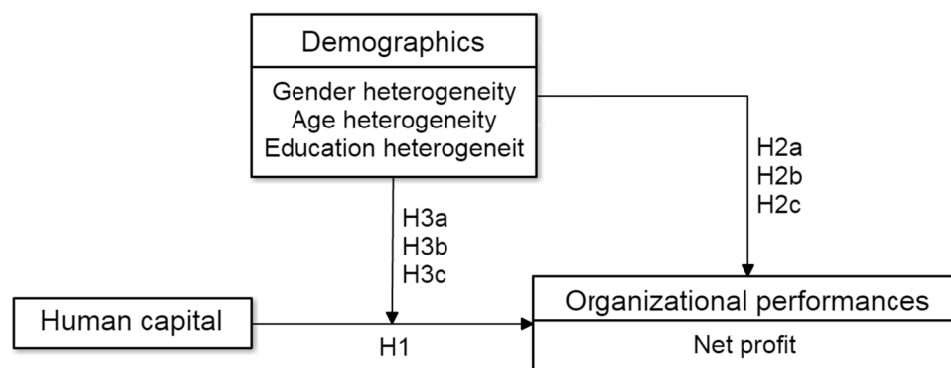


Figure 1. Conceptual Framework

3.2 Variable Measurements

3.2.1 Dependent Variable: Net Profit

The research subject in this paper is CPA firms, a professional service provider similar to law firms. This paper refers to Hitt et al (2001) by measuring the profitability of CPA firms with net profit, the net profits divided by revenue. Net profit is used to indicate the financial performances of CPA firms (Capar and Kotabe, 2003).

3.2.2 Independent Variables Human Capital

This paper measures the implicit and explicit human capital with a principal components analysis to linearly combine all the components into a single indicator of human capital. As financial performances are outcome of the collective contribution of all the personnel, this paper measures human capital of all the members in CPA firms, including partners and assistants.

The measurement of explicit human capital is based on the aggregation of the years spent on general education. A PhD degree is estimated to be 23 years in total (comprised of 6 years in elementary school, 6 years in junior and senior high school, 4 years in university, 2 years on master degree and 5 years on PhD degree). Other education background is calculated in the same manner.

The equation is as follows:

(PhD degree × 23 + master's degree × 18 + university degree × 16 + vocational college graduation × 14 + senior high or vocational school graduation × 12 + others × 9) / No. of employees at year end

Implicit human capital is measured with professional experience (or work years). As the surveys where the research sample is sourced does not provide the number of professional work years of the employees in CPA firms, this paper refers to the six age groups shown in the database as the proxy. These age groups are below 25, 25-34, 35-44, 45-54, 55-64 and 65+. Generally speaking, there is a high correlation between professional experience and biological age. Senior professionals tend to have a wider range of professional experience and contact networks. This paper assigns weightings from 1 to 6 by combining these six age groups with job titles ranging from assistants to partners, in order to convert the age profile to professional experience.

As the database used by this paper only provides six age groups, this paper deflects the age columns in the original data to reduce measurement errors. In other words, this paper refers 30, 40, 50 and 60, i.e. the medium of the four age groups (25-34, 35-44, 45-54 and 55-64) and deducts these numbers by 22 as the average age of the workforce entering the job market. The age 22 is estimated by using the average of the age of a typical university graduate at 23 years old (if school age starts at 8) and the age of a typical vocational college graduate at 21 years old (assuming that school age starts at 7).

3.2.3 Organizational Demography

Due to the limitation of data structure available, this paper uses different measurements for respective variables. Below is a detailed explanation of the measurements of independent variables.

(1) Gender heterogeneity

This variable is measured with the percentage of female employees, i.e. the number of female employees divided by the total number of employees in a firm. This is ratio measurement.

(2) Age heterogeneity

The original data contains six age groups, i.e. below 25, 25-34, 35-44, 45-54, 55-64 and 65+. Whilst this breakdown indicates the age profile, it does not accurately the average age of the workforce by company. Operationally, this paper converts the group breakdown into a ratio measurement.

Age heterogeneity is measured with Herfindahl-Hirschman index (HHI) as follows (Greenwood, Prakash and Deephouse, 2005):

$$HHI = \sum_{i=1}^I P_i^2$$

Where

i : Indicative the age group, from 1 to 6

I : Total number of age groups, i.e. 6 in this study

P : Percentage of members in a particular age group in the total workforce

(3) Education heterogeneity

This variable is measured by the average educational level of the total workforce in a company. The original data classifies education backgrounds into five buckets, i.e. senior high or vocational school, vocational college, university, postgraduate degrees or others. This nominal scale contains ordinal characteristics. To facilitate the empirical research process, this paper treats it as an interval scale and assumes the interval is evenly spaced from one education level to the next.

3.2.4 Control Variables

This empirical study controls the variables such as the number of years since inception, the level of industry professionalization, the size of CPA firms and the leverage of human resources, in order to identify the influence of human capital and organizational demographics on net profit.

3.3 Sample Descriptions

This paper sources sample from “Survey of CPA Firms in Taiwan” issued by the Financial Supervisory Commission in 1999-2012.

4. Analysis and Discussion

4.1 Descriptive Statistics of Variables

Table 2 shows the descriptive statistics of variables such as maximum values, minimum values, means and standard deviations. Table 3 summarizes the correlation coefficients between variables. The absolute values of all the coefficients are below 0.60, indicative of the dependence of variables from each other (i.e. the low likelihood of collinearity between variables and the resultant bias in statistical results).

Table 2. Descriptive Statistics of Variables

Variable	Maximum	Minimum	Mean	Standard deviation
Net profit	0.00	0.83	0.21	0.12
Gender heterogeneity	0.02	0.97	0.63	0.10
Age heterogeneity	0.00	0.92	0.46	0.13
Education heterogeneity	0.00	1.00	0.49	0.15
Human capital	4.06	8.19	6.22	0.62
Industry professionalization	0.13	7.13	0.45	0.19
No. of years since inception	4.00	17.00	9.52	3.73
Firm size	0.69	7.41	2.42	0.95
Human resource leverage	0.00	67.00	5.90	4.50

Table 3. Matrix Correlation Coefficients

Variable	1	2	3	4	5	6	7	8	9
1. Net profit	1.000								
2. Gender heterogeneity	-0.145**	1.000							
3. Age heterogeneity	-0.005	0.126***	1.000						
4. Education heterogeneity	0.008	0.095***	0.218***	1.000					
5. Human capital	0.105***	-0.344***	-0.301***	-0.098***	1.000				
6. Industry professionalization	-0.022*	-0.023*	0.012	0.035***	0.132***	1.000			
7. No. of years since inception	0.116***	-0.038***	0.087***	-0.008	-0.105***	0.013	1.000		
8. Firm size	-0.239***	0.187***	-0.019	-0.017	-0.332***	-0.223***	0.059***	1.000	
9. Human resource leverage	-0.244***	0.327***	0.059***	0.056***	-0.326***	-0.086***	0.167***	0.593***	1.000

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (2-tailed)

4.2 Human Capital, Organizational Demography and Organizational Performances

Table 4 shows the results of the hierarchical regression analysis regarding the influence of human capital and demographic profile on organizational performances of CPA firms. According to the numbers in Model 2, human capital has a significant and positive influence on organizational performances ($\beta = 0.004$; $p < 0.1$), and hence H1 is supported. The numbers in Model 3 suggests a significant and negative correlation between gender heterogeneity (as a demographic factor) and organizational performances ($\beta = -0.069$; $p < 0.01$). Hence, H2a is not supported. There is no significantly negative correlation between age heterogeneity and organizational performances ($\beta = -0.001$) and therefore, H2b is not supported. Education heterogeneity is significantly and positively correlated to organizational performances ($\beta = 0.019$; $p < 0.05$) and hence H2c is supported. The numbers in Model 5 indicates that the combined effects of human capital and gender heterogeneity are significantly and negatively correlated with organizational performances ($\beta = -0.116$; $p < 0.01$) and hence H3a is not supported. There is a significant and positive correlation between the combined effects of human capital and age heterogeneity and organizational performances ($\beta = 0.077$; $p < 0.01$) and hence H3b is supported. There is a significant and negative correlation between the combined effects of human capital and education heterogeneity and organizational performances ($\beta = -0.024$; $p < 0.1$) and hence H3c is not supported.

This paper finds a positive and direct impact of human capital and demographic profile on organizational performances. The positive and direct impact of human capital on organizational performances can be interpreted as follows:

1. CPA firms are knowledge-centric and labour-intensive organizations. The knowledge owned by the firms is

the most important and competitive asset (Grant, 1996; Wu, Wei and Liang, 2015). In other words, human capital is the source of organizational knowledge. Lepak and Snell (1999) indicate that an organization able to leverage its human capital is more likely to create value and improve performances. The research results of this paper suggest that the CPA firms with higher-caliber human resources post better financial performances. This is consistent with relevant literature.

2. The resource-based view posits that organizational performances depend on resources and competences owned by the organization. Resources are tangible assets and competences (e.g. human capital) are intangible assets. Many scholars indicate that human capital of an organization includes the average education levels, experiences and relevant skillsets. The higher the average levels of education, experience and relevant skills, the greater the organizational performances (Wright, Smart, and McMahon, 1995; Pennings et al., 1998). Similar statements can be made about the influence of intangible assets on organizational performances.

Table 4. Influence of Human Capital and Demographic Profile on Organizational Performances

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	0.255***	0.228***	0.289***	0.276***	-0.011***
No. of years since inception	0.006***	0.005***	0.005***	0.005***	0.005***
Firm size	-0.019***	-0.018***	-0.019***	-0.019***	-0.017***
Industry professionalization	-0.046**	-0.047**	-0.046***	-0.046***	-0.046***
Human resource leverage	-0.005***	-0.005***	-0.004***	-0.004***	-0.004***
Gender heterogeneity			-0.069***	-0.067***	0.638***
Age heterogeneity			-0.001	0.001	-0.479***
Education heterogeneity			0.019**	0.019**	0.164*
Human capital		0.004*		0.002	0.049***
Human capital× gender heterogeneity					-0.116***
Human capital×age heterogeneity					0.077***
Human capital× education heterogeneity					-0.024*
Adjusted R ²	0.102	0.103	0.106	0.106	0.111

Note: a: * p<0.1; ** p<0.05; *** p<0.01

b: This is the results of the analysis with control variables including the number of years since inception, firm size, industry professionalization, human resource leverage and the dummy variable on the removal of the floor price for auditing fees.

The positive and direct impact of demographic profile on organizational performances can be elaborated as follows:

In general, the more senior job positions, the more demanding for the capabilities to communicate, coordinate and integrate. Such positions are typically held by the well-educated. Hence, the higher-educated tend to have greater productivity and competitiveness. Literature mentions that the organizations with a well-educated workforce tend to have better performances than the organizations staffed with the less-educated (Cotton, 1993). Meanwhile, the greater the education heterogeneity, the more likely a diversity of ideas and opinions can emerge. This improves the innovation capability and hence performances of organizations. Therefore, education heterogeneity (as a demographic factor) has significant and positive influence on organizational performances.

As far as the combined effects of human capital and demographic profile, only the hypothesis regarding the influence of age heterogeneity on the organizational performance is supported. This paper interprets the research results as follows:

1. A workforce with high heterogeneity in age can produce a diversity of opinions and judgement criteria. This inspires innovations and encourages positive developments of the organizations.
2. A high-caliber human capital is comprised of a well-educated workforce. Fried and Ferris (1986) suggest that the well-educated people tend to be equipped with good knowledge base and skillsets. They are able to handle highly complex tasks which require the abilities to communicate, coordinate and integrate. Hence, organizations with well-educated members demonstrate higher productivity and competitiveness. The greater the age heterogeneity and the higher caliber of human capital, the stronger financial performances of the organizations.

Table 4 also indicates that the higher calibre of human capital but the lower the gender heterogeneity, the worst the financial performances of the organizations. The greater the human capital and the education heterogeneity

also lead to the worst the financial performances. It does seem that demographic profile affects the relationship between human capital and organizational performances. This is probably because of the following reasons: (1) the lower the gender heterogeneity, the more consistent the opinions among members. This means a lack of innovative actions to enhance organizational performances; (2) the higher the education heterogeneity, the more diverge the opinions among members. However, this may result in conflicts and hurt organizational performances.

5. Conclusions and Management Implications

CPA firms are a knowledge-based and labour-intensive service provider typically seen in the knowledge economy. Understandably, human capital (highly related to demographic profiles) is critical to operating performances. However, there is no definite conclusion regarding whether the demographic mix of the workforce in professional service providers affect their financial performances. To make up the theoretic gap, this paper refers to the resource-based view in the exploration of the influence of human capital and demographic profile on the organizational performances of CPA firms in Taiwan. The purpose is to clarify the relationship among these factors. Data regarding demographic attributes is sourced from "Survey of CPA Firms in Taiwan" issued by the Financial Supervisory Commission in 1999-2012, in order to examine the direct effects of human capital and demographic profile as well as the combined effects of these two factors on organizational performances. The empirical results indicate that both the direct effects and the combined effects of human capital and demographic profiles affect the organizational performances of CPA firms in Taiwan.

The research findings convey two important management implications: (1) the calibre of human capital is critical to the financial performances of CPA firms, as human resources are their major assets; (2) it is necessary to attract various opinions to inspire innovations and improve operating efficiency. This can be achieved with a heterogeneous workforce. CPA firms should actively build a rich and high-calibre human capital, as well as recruit a diversity of talents to establish competitive advantages.

References

- Ancona, D. G., & Caldwell, D. F. (1992). Demography and Design: Predictors of New Product Team Performance. *Organizational Science*, 3(3), 321-341. <http://dx.doi.org/10.1287/orsc.3.3.321>
- Baek, H. Y. (2004). Corporate Diversification and Performance: Evidence on Production Efficiency. *Journal of Multinational Financial Management*, 14(2), 135-152. <http://dx.doi.org/10.1016/j.mulfin.2003.07.006>
- Bantel, K. A., & Jackson, S. (1989). Top Management and Innovations in Banking: Does the Composition of the Top Team Make A Difference. *Strategic Management Journal*, 10(2), 107-124. <http://dx.doi.org/10.1002/smj.4250100709>
- Capar, N., & Kotabe, M. (2003). The Relationship between International Diversification and Performance in Service Firms. *Journal of International Business Studies*, 34(4), 345-355. <http://dx.doi.org/10.1057/palgrave.jibs.8400036>
- Chen, H. M., & Lin, K. J. (2003). The Measurement of Human Capital and Its Effects on the Analysis of Financial Statements. *International Journal of Management*, 20(4), 470-480.
- Cotton, J. L. (1993). *Employee Involvement: Methods for Improving Performance and Work Attitudes*, London: Sage Publications.
- Dess, G. G., & Picken, J. C. (1999). *Beyond Productivity: How Leading Companies Achieve Superior Performance by Leveraging Their Human Capital*. New York: John Wiley & Sons, Inc.
- Fried, Y., & Ferris, G. R. (1986). The Dimensionality of Job Characteristics: Some Neglected Issues. *Journal of Applied Psychology*, 71(3), 420-432. <http://dx.doi.org/10.1037/0021-9010.71.3.419>
- Grant, R. M. (1996). Toward A Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17(Winter Special Issue), 109-122. <http://dx.doi.org/10.1002/smj.4250171110>
- Greenwood, R., Li, S. X., Prakash, R., & Deephouse, D. L. (2005). Reputation, Diversification, and Organizational Explanations of Performance in Professional Service Firms. *Organization Science*, 16(6), 661-671. <http://dx.doi.org/10.1287/orsc.1050.0159>
- Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service firms: A Resource-Based Perspective. *Academy of Management Journal*, 44(1), 13-28. <http://dx.doi.org/10.2307/3069334>
- Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and Research in Strategic Management:

- Swings of a Pendulum. *Journal of Management*, 25(3), 417-456. <http://dx.doi.org/10.1177/014920639902500307>
- Hurwitz, J., Lines, S. B. M., & Schmidt, J. (2002). The Linkage between Management Practices, Intangibles Performance and Stock Returns. *Journal of Intellectual Capital*, 3(1), 51-61. <http://dx.doi.org/10.1108/14691930210412845>
- Huselid, M. A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *Academy of Management Journal*, 38(3), 635-672. <http://dx.doi.org/10.2307/256741>
- Jackson, S. E., & Ruderman, M. N. (1995). *Diversity in Work Teams: Research Paradigms for Changing Workplace*, Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10189-000>
- Kor, Y. Y., & Leblebici, H. (2005). How Do Interdependencies among Human-Capital Deployment, Development, and Diversification Strategies Affect Firms' Financial Performance? *Strategic Management Journal*, 26(10), 967-985. <http://dx.doi.org/10.1002/smj.485>
- Lepak, D. P., & Snell, S. A. (1999). The Human Resource Architecture: Toward A Theory of Human Capital Allocation and Development. *Academy of Management Review*, 24(1), 31-49.
- Michel, J. G., & Hambrick, D. C. (1992). Diversification Posture and Top Management Team Characteristics. *Academy of Management Journal*, 35(1), 9-37. <http://dx.doi.org/10.2307/256471>
- Molyneux, A. (1998). IC and the ASCPA: Seeking Competitive Advantage, *Australian CAP*, 68(5), 27-28.
- Murray, A. I. (1989). Top Management Group Heterogeneity and Firm Performance, *Strategic Management Journal*, 10(Issue S1), 125-142. <http://dx.doi.org/10.1002/smj.4250100710>
- O'Reilly, C. A., Snyder, R., & Boothe, J. (1993). Effects of Executive Team Demography on Organizational Change. In Humber G. and Glick W. (eds.) *Organizational Change and Redesign: Ideas and Insights for Improving Performance*, 147-175. Oxford, New York.
- Pennings, J. M., Lee, K. K., & Witteloostuijn, A. (1998). Human Capital, Social Capital and firm dissolution. *Academy of Management Journal*, 41(4), 425-440. <http://dx.doi.org/10.2307/257082>
- Pepper, A. (2002). Leading Professionals: A Science, A Philosophy and A Way of Working. *Journal of Change Management*, 3(4), 349-360. <http://dx.doi.org/10.1080/714023848>
- Richard, L., & Jeffrey A. (2000). Perceived Promotional Opportunities in Veterans Affairs Hospitals: A Examination of Relational Demography Theory. *The Journal of Applied Behavioral Science*, 36(3), 269-296. <http://dx.doi.org/10.1177/0021886300363001>
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P., & Scully, J. A. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39(3), 421-438. <http://dx.doi.org/10.2307/2393297>
- Spender, J. C. (1996). Making Knowledge the Basis of A Dynamic Theory of The Firm. *Strategic Management Journal*, 17(Issue S2), 45-62. <http://dx.doi.org/10.1002/smj.4250171106>
- Sveiby, K. E. (1998). Intellectual Capital: Thinking ahead. *Australian CPA*, 68(5), 18-22.
- Triandis, H. C., Kurowski, L. L., & Gelfand, M. J. (1993). Workplace Diversity. In M. D. Dunnette, and L. M. Hough. *Handbook of Industrial and Organizational Psychology*, 4, 769-827.
- Tsui, A. S., Egan, T. D., & Xin, K. R. (1995). Diversity in Organizations Lessons from Demography Research, In Chemers, Martin M., Stuart Oskamp, and Mark A. Costanzo. *Diversity in Organizations: New Perspectives for a Changing Workplace*, Sage Publications, Thousand Oaks, CA: 191-219. <http://dx.doi.org/10.4135/9781452243405.n8>
- Watson, W. E., Kumar, K., & Michaelsen, L. K. (1993). Cultural Diversity's Impact on Interaction Process and Performance: Comparing Homogeneous and Diverse Task Groups, *Academy of Management Journal*, 36(3), 590-602. <http://dx.doi.org/10.2307/256593>
- Wharton, A. S., & Baron, J. N. (1987). So Happy Together ? The Impact of Gender Segregation on Men at Work. *American Sociological Review*, 52(5), 574-587. <http://dx.doi.org/10.2307/2095595>
- William, K., & O'Reilly, C. A. (1998). The Complexity of Diversity: A Review of 40 Years of Research. *Research in Organizational Behavior*, 20(January), 77-140

- Wright, P. M., Smart, D., & McMahan, G. C. (1995). Matches Between Human Resources and Strategy among NCAA Basketball Teams. *Academy of Management Journal*, 38(4), 1052-1074. <http://dx.doi.org/10.2307/256620>
- Wu, Y., Wei, Z., & Liang, Q. (2015). Top management team diversity and strategic change: The moderating effects of pay disparity and organization slack. *Journal of Organizational Change Management*, 24(3), 267-281. <http://dx.doi.org/10.1108/09534811111132686>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).