

High Performance Human Resource and Corporate Entrepreneurship: the Mediating Role of Organizations Citizenship Behavior and Procedure Justice

M.R. Dizgah, Sh Gilaninia, H.R. Alipour, A. Asgari

Islamic Azad University, Rasht Branch, Iran

Abstract: The purpose of this paper aims to clarify the relationship between high performance human resource practices and corporate entrepreneurship, and tries to demonstrate the mediator role of citizenship behavior and procedural justice in this relationship. In this study sample included 93 small-to-medium-sized enterprises in Guilan province. It is argued here that previous studies have emphasized the positive impact of human resource management practices. In contrast to prior research, this paper shows that high performance human resources practices is positively related to corporate entrepreneurship and this relationship is mediated by the organizational behavior and procedure justice. One limitation of findings is that, training and reward are not positive related to corporate entrepreneurship, but with mediating role of organizational citizenship behavior and procedure justice the relationship was significant.

Key words: High performance human resource, corporate entrepreneurship, procedure justice, organizations citizenship behavior, SMEs.

INTRODUCTION

In a rapidly changing world, organizations need to continually identify new opportunities beyond existing competencies if they are to survive (Hamel *et al.*, 1989; Minzberg, 1994). Entrepreneurship can be viewed in the context of a range of factor, as it is not an all-or-nothing phenomenon that some individuals, teams, organizations, or communities have and other do not (Stevenson & Gumpert, 1985).

Granovetter (1995) argued that an environment that affords profits is not a sufficient condition for organizational survival, but it is more important to consider the social structure within which individuals and groups try to construct it. From the management perspective, entrepreneurship is an organizational process that encourages and practices innovation, risk taking, and proactiveness toward customers, competition, and opportunities (Miller & Friesen, 1982). The process enables the organization to create value by identifying market opportunities and creating unique combinations of resources to pursue those opportunities (Jacobson, 1997). Yaundt (2000) found that HR practices do not directly influence organizational performance; rather, these practices help build intellectual capital, which in turn leads to increased organizational value creation. Human capital must be organized and led, trained and developed in ways that lead to the development of the right core competencies and organizational capabilities. An organizations capabilities and competencies are its mead of creating value. Organizations need to be designed to make human capital a source of competitive advantage (Lawler, 2009). High-performance human resource practices consist of a set of coherent practices that enhance OCB, employee skills, participation in decision making and motivation to forth discretionary effort (Applebaum *et al.*, 2000). High performance work system (HPWS) may also form an important organizational level influence on innovativeness. To enhance innovation, HRM practices need to ensure that creativity and new knowledge and skills can be created in the firms.

Firms also need to maintain an environment that supports the implementation of these new ideas in the workplace (De kok & Hartog, 2006). For example, Shipton *et al* (2004) suggest that innovation will be promoted and sustained where HRM practices are in place to manage the creation, transfer and implementation of knowledge.

Practice of HRM in small firms characterized by informality. However, science of HRM, which views employees as a source of value and, combined with the systems used to manage them, as a source of competitive advantage, can help to explain the growth and sustainability of the firm (Mayson & Barret, 2006). The strategic relevance of HRM practices is highlighted by the fact that they intervene on entrepreneurial capabilities that, in addition to their effect on performance, lead to the extension of organizational competences,

as a consequence of the corporate entrepreneurship process (Zahra *et al.*, 1999). HRM practices can influence different kinds of entrepreneurial activities that, in turn, lead to different aspects of corporate performance (Macchitella, 2008). Hayton (2005) report evidence that HRM practice can play in promoting CE. High-performance human resource practices are positively related to CE, and that this relationship is mediated by the OCB of employees (Zhang *et al.*, 2008). Given the knowledge intensity of the CE process (Kanter, 1985); it is unsurprising to find that higher levels of human capital are positively associated with CE (Soutris, 2007) and that entrepreneurial firms tend to make systematic investments in employee skills, particularly group skills and socialization (Jones *et al.*, 1995). Pare (2007) states that procedural justice and citizenship behaviors partially mediate the effect of high-involvement HR practices on the turnover intentions of highly skilled professionals.

Zhang *et al.* (2008) found that high performance human resource practices are positively related to CE and that this relationship is mediated by the OCB of employees. At the same time, corporate entrepreneurship relies on the activities carried out by some key player within the organization (Sharma and Chrisman, 1999). Therefore, if the entrepreneurial effort is based on the behaviors of individuals, these should be affected by appropriate HRM practices.

2. Review of literature:

2.1. Definition of High – Performance Human Resource Practices:

High performance work system (HPWS) has gained great interest in recent years as the source of competitive advantage in complex environment of today's word (e.g. Pfeffer, 1998). The aim of high performance human resource is to increase corporate performance by the help of its employees (Armstrong, 2001).

According Bamberger and Meshoulam (2000) high performance human resource practices consist of three main parts: (1) people flow, including selective staffing, training (such as more extensive, general skills training), employee mobility (for example, broad career paths, promotion within the firm) and guarantee of job security; (2) appraisal and rewards, including performance appraisal (specifically long– term, results- orientated appraisal), compensation and other benefits, such as extensive, open- ended rewards; (3) employment relations, including job design (such as broad job descriptions, flexible job assignments) and encouragement of participation. Specific contents are shown in fig.1 as below.

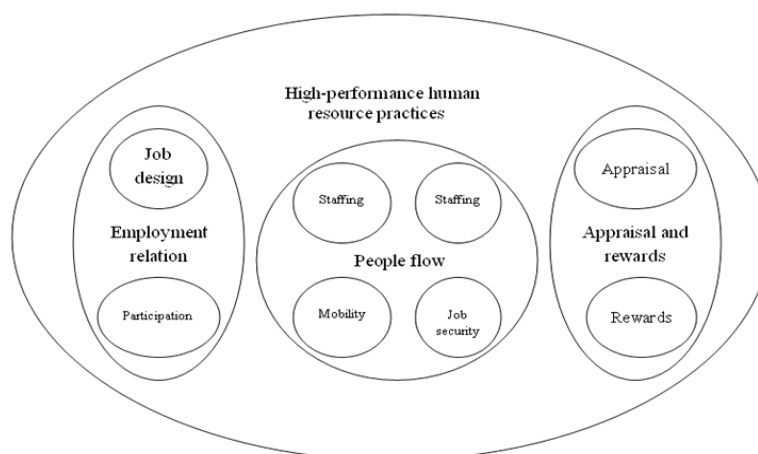


Fig. 1: Configuration of high- performance human resource practices (adapted from Bamberger and Meshoulam, 2000)

2.2. Definition of Corporate Entrepreneurship:

Zahra (1991) observed that “corporate entrepreneurship may be formal or informal activities aimed as creating new business in established companies through product and process innovations and market developments. These activities may take place at the corporate, division (business), functional, or project levels, with the unifying objective of improving a company’s competitive position and financial performance.”

According to definitions, CE has three dimensions: innovation, venturing and strategic renewal activities (Guth & Ginsberg, 1990; Zahra & Covin, 1995). Covin and Miles (1999) have stated that CE is a Strategic orientation involving the regeneration of products, processes, services, strategies or even the entire organization.

2.3. The Mediating Role of OCB and Procedural Justice:

Organizational justice describes the individuals (or groups) perception of the fairness of treatment received from an organization and their behavioral reaction to such perception (James, 1993). Procedural justice generally functions as a process theory that involves work motivation which focuses on workers' perceptions: of fairness regarding the procedures used to make decisions about the distribution of outcomes (Folger & Cropanzo, 1998). Liao & Rupp (2005) found that procedural justice climate contributes to individual satisfaction with supervisor (when procedural justice climate is supervisor-focused) and OCB (when procedural justice is organization-focused) above and beyond the individual procedural justice perceptions.

Procedural justice predicted to affect attitudes about organizations (e.g., organizational commitment) (Ambrose *et al.*, 2007; Deconinck, Stilwell, 2001) Findings from several studies suggest that HR practices are related to employee commitment, some scholars have found that these relationships are not necessary direct or unconditional (Pare & Tremblay, 2007). Meyer and Smith (2000) found the links between some HR practices and both effective and normative commitments were fully or partially mediated by employees' perceptions of procedural justice and organizational support.

Procedural justice is also associated with voice; this is related to employees feeling that their point of view is being heard (Thibaut & Walker, 1975). Employees who perceive that they have a voice may feel a sense of employee input, employees who perceive that they have a voice may feel a sense of empowerment and motivation, which could enhance creativity (Amabile, 1996; Cobb *et al.*, 1995; Kurtzberg & Amabile, 2001). Creativity is the base of innovation which can enhance CE.

Sapienza & Korsgaard (1996) found strong evidence for the usefulness of procedural justice theory as a framework for understanding the management of inter organizational relations involving new ventures. Organizational citizenship behaviors of a discretionary nature that are not part of employees' formal role requirements, nevertheless these behaviors contribute to the effective functioning of an organization (Organ, 1988; Athanasou and King, 2002; Robbins, 2001). Organizational systems that define the role of each employee are an important element of organizational design; they are in and by themselves not sufficient to guarantee the success of an organization.

Dependable role of behavior needs to be complemented by innovative and spontaneous behaviors (Katz & Kahn, 1966). The (OCB) focuses on this particular type of employee contributions to the organization (Raub & Steffen, 2008). Shore *et al.* (1995) and Chen *et al.* (1998) argue that a high level of OCBs reflects employees' true willingness to be involved in the organization.

3. Theoretical Framework and Hypothesis:

In a previous research on high performance human resource and CE done by Zhang *et al.* (2008) OCB was considered as moderator. The present study is conducted to explore the relationship between high performance human resources and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior. Figure 2 shows the conceptual structure of the study.

In this study, High-performance human resources and organizational entrepreneurship are considered as the independent variable and dependent variable respectively. Procedural justice and organizational citizenship behavior are two moderator variables.

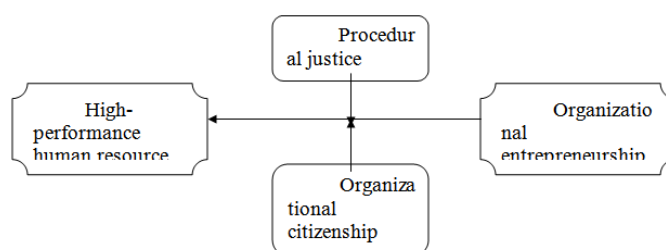


Fig. 2: Conceptual framework

Therefore, our hypothesis is follows:

H1. There is a significant relationship between high performance human resource practices and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.
H1. There is a significant relationship between staffing and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H2. There is a significant relationship between human resource training and entrepreneurial organization

with regard to the role of procedural justice and organizational citizenship behavior.

H3. There is a significant relationship between mobility and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H4. There is a significant relationship between job security and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H5. There is a significant relationship between job design and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H6. There is a significant relationship between appraisal and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H7. There is a significant relationship between rewards and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

H8. There is a significant relationship between participation and entrepreneurial organization with regard to the role of procedural justice and organizational citizenship behavior.

4. Methodology:

4.1 Sample:

In this study, sample included 93 small and medium sized enterprises (SMEs) that have been selected from among 600 active SMEs in the Guilan province.

4.2. Measures:

Apart from human resource managers rating of high-performance human resource practices (the independent variable), and CE (the dependent variable), other variables such as procedural justice and organizational citizenship behavior as mediator variable are controlled. We adopt the five-point Likert scale (very small, low, medium, high, and very high).

4.2.1. High-performance Human Resource Practices:

Following Bamberger and Meshoulam (2000), we developed a 26-item scale to measure integrated high-performance human resource practices that was originally produced by Snell and Dean (1992). Other researchers such as Delery and Doty's (1996), Bea and Lawler's (2000), Zhang *et al.* (2008) also used it. The Cronbach's α of this scale was 0.93.

4.2.2. Corporate Entrepreneurship:

For measuring CE dimensions (Riskiness, proactiveness, competitive aggressiveness, innovativeness), we used Aktan and Bulut (2008), 15 item adapted from Barringer and Bluedorn (1993), Honsby *et al.* (2002), Miller (1983), Calantone *et al.* (2002), Antonic and Hisrich (2001), Dess *et al.* (1997), and Naman and Slevin (1993). In this study for reliability of CE questionnaire we did factorial validity and then two items were eliminated and then we measured CE dimensions with 13 items.

4.2.3. Procedural Justice:

Procedural justice questionnaire consists of 5 questions developed by Tremblay *et al.* (2001). The Cronbach's α of this scale was 0.76.

4.2.4. Organizational Citizenship Behavior:

OCBs also were measured using a five-item scale adopted from Podsakoff *et al.* (1997), Williams and Anderson (1991) and Guy and Trmblay (2007). The Cronbach's α of this scale was 0.90.

RESULTS AND DISCUSSION

Table 1 presents the regression results. This table shows that except training and rewards there are positive relationship between dimensions of high performance human practices and CE.

Then with mediator role of procedure justice and OCB in the high performance human resource practices and CE, table 2 shows increase in relations intensity as well as relation between training and rewards.

Table 1: Correlations of high-performance human resource practices and CE.

High-performance human resource practices									
	Staffing	Training	Mobility	Job security	Job design	Appraisal	rewards	participation	
Sig.(2-tailed)	.000	.006	.136	.002	.031	.000	.010	.0271	.000
corporate	0.42	0.28	0.15	0.31	0.22	0.40	0.26	0.11	0.37
entrepreneurship									

Table 2: Correlations of high-performance human resource practices and CE due attention to procedural justice and organizational citizenship behavior.

High-performance human resource practices									
	Staffing	Training	Mobility	Job security	Job design	Appraisal	rewards	participation	
Sig.(2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000
corporate	0.51	0.46	0.46	0.48	0.22	0.47	0.50	0.46	0.46
entrepreneurship									

Hence, the hypotheses H, H1, H2, H3, H4, H5, H6, H7, and H8 are supported.

6. Discussion and Implication:

The result of this empirical study demonstrates the relationship between multidimensional, theoretically grounded configuration of high performance human resource practices and CE. Measurement model shows breakdown of HR practices into eight dimensions and the reliability and validity of all eight scales. Prior research on HR practices, CE, OCB, procedural justice has contributed to a deeper understanding of these constructs. Similar to Zhang *et al.* (2008), we found that HR practices are significantly and positively related to CE and this relation was intensified with moderator variables such as OCB and procedural justice. Each of six dimensions of HR (job design, participation, staffing, mobility, job security, and appraisal) is significantly and positively related to CE and also relationship is intensified by OCB and procedural justice. Contrary to our expectations, our study did not show relationship between training, rewards and CE. Previous results indicated that appropriate use of rewards enhance entrepreneurial activity within organizations (Barringer and Milkovich, 1998; Block and Ornati, 1997; Kanter, 1989). But, with moderator role of OCB and procedural justice, relations between training, rewards and CE was significant. Our findings shows that HR practices are only positively related to social exchanges between the organization and employees when a high level of OCB and procedural justice exists. Findings provide guidelines to help managers and entrepreneurs to better understand the important of HR practices and procedural justice and its outcomes and OCB within the firms and its effects on their entrepreneurial activities, which are very important for survival of firms in present dynamic environment. This in overall can make the economic position of the country better.

7. Limitation and Future Research:

Result may be influenced by bias such as different methods of training, rewards and informality of HR practices in some SMEs. Pare and Tremblay (2007) find that HR practices play a determining role in the development of affective commitment among highly skilled professionals. Future research can test relationship between HR practices and CE with other moderators such as commitment and trust. It can also use larger sample sizes and other types of industries.

REFERENCE

- Aktan, B., C. Bulut, 2008. "Financial Performance Impacts of Corporate Entrepreneurship in Emerging Markets: A case of Turkey", *European Journal of Economics, Finance and Administrative Sciences*, available at: www.eurojournalsn.com
- Amabile, T.M., 1996. "Creativity in context", Boulder, CO: Westview press, Inc.

- Amborse, M., R.L. Hess, S. Gonesan, 2007. "The relationship between justice and attitudes: An examination of justice effects on event and system-related attitudes", *organizational behavior and human decision process.*, 103: 21-36.
- Antonic, B., R.D. Hisrich, 2001. "Intrapreneurship: construct refinement and cross-cultural validation", *Journal of Business Venturing*, 16: 495-527.
- Appelbaum, E., T. Bailey, P. Berg, A. Kallegert, 2000. "Manufacturing advantage: high-performance work systems pay off, Ithaca, NY: ILR Press.
- Armstrong, M., 2001. "Strategic Human Resource Management: A Guide To Action".
- Athanasou, M.J.C. & J.N. King, 2002. "Job satisfaction and organizational citizenship behavior: A study of Australian human-service professionals", *Journal of Managerial psychology*, 17(4): 287-297.
- Bae, J., J.J. Lawler, 2000. "Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy", *Academy of Management Journal*, 43: 502-517.
- Barringer, B.R., A.C. Bluedorn, 1999. "The relationship between corporate entrepreneurship and strategic management", *Strategic Management Journal*, 20: 421-444.
- Barringer, M.S., G.T. Milkovich, 1998. "A theoretical exploration of the adaption and design of flexible benefit plans: A case of human resource innovation", *Academy of Management Review*, 23: 305-324.
- Block, Z., O. Ornati, 1987. "Compensating corporate venture managers", *Journal of Business Venturing*, 2(1): 41-52.
- Calantone, R.J., S.T. Cavusgil, Y. Zhao, 2002. "Learning orientation, Firm innovation capability, and firm performance", *Industrial Marketing Management*, 31(6): 515-515.
- Chen, X.P., C. Hui, D.J. Sego, 1998. "The role of organizational citizenship behavior in turnover: Conceptualization and Preliminary tests of Key Hypotheses", *Journal of Applied psychology*, 83: 922-931.
- Cobb, A.T., K.C. Wooten, R. Folger, 1995. "Justice in the making: Towards understanding the theory and practice of justice in organizational change and development", In W. A. Prasmore & R. A. Woodman (Eds), *Research in organizational change and development* (Vol. 8, pp. 243-295), Greenwich, CT: JAL press.
- Colvin, A., R. Batt, H. Katz, 2000. "How High-Performance Human Resource Practices and workforce unionization Affect Managerial pay", center for advanced Human Resource Studies, available at: www.ilr.cornell.edu/CAHRS.
- Covin, J.G. & M.P. Miles, 1999. "Corporate entrepreneurship and the pursuit of competitive advantage", *Entrepreneurship Theory and Practice*, 23(3): 47-63.
- Deconinck, J.B. & S.C. Deam, 2004. "Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intentions", *Journal of Business Research*, 57: 225-231.
- De Kodak, J., H.D. Den, 2006. "High Performance Work Systems, Performance and innovativeness in small Firms", Available at www.eim.nl/smesandentrepreneurship.
- Delery, J.E., H.D. Doty, 1996. "Modes of theorizing in strategic human resource management: test of universalistic, contingency, and configurationally performance predictions", *Academy of Management Journal*, 38: 802-836.
- Dess, G.G., G.T. Lumpkin, J.G. Covin, 1997. "Entrepreneurial strategy making and firm performance: tests of contingency and configurationally models", *Strategic Management Journal*, 18(9): 677-695.
- Folger, R. & R. Cronpanzano, 1998. "Organizational Justice and Human Resource Management", Thousand oaks, CA: Sage publications.
- Granovetter, M., 1995. "Getting a job: A study of contacts and careers", Chicago: University of Chicago press.
- Guth, W.D. & A. Ginsberg, 1990. "Guest editors introduction: corporate entrepreneurship", *Strategic Management Journal*, 11: 5-15.
- Hamel, G., Y. Doz, C.K. Prahalad, 1989. "Collaborate with your competitors and win", *Harvard Business Review*, 67(1): 133-139.
- Hayton, J.C., 2005. "Promoting corporate entrepreneurship through Human Resource Management Practices: A review of empirical research", *Human Resource Management Review*, 15: 21-41.
- Hornsby, J.S., D.F. kuratko, S.A. Zahra, 2002. "Middle managers perception of the internal environment for corporate entrepreneurship: assessing a measurement scale", *Journal of Business Venturing*, 17: 253-273.
- Jacobson, R.L., 1992. "Jackson personality inventory manual", Goshen, NY, Research Psychologists Press.
- James, K., 1993. "The social context of organizational justice: Cultural, intergroup and structural effects on justice behaviors and perceptions", in: Cropazo. R. (Ed), *Justice in the workplace: Approaching Fairness in Human Resource Management*, Erlbaum, Hillsdale, NJ, pp: 21-50.

- Jones, F.F., M.H. Morris, W. Rockmore, 1995. "HR practices that promote entrepreneurship", *HR Magazine*, pp: 86-91.
- Kanter, R.M., 1983. "The change masters: Innovation and entrepreneurship in the American corporation", New York: Simon & Schuster.
- Kanter, R.M., 1998. "When giants learn to dance", New York: Simon & Schuster.
- Katz, D., R.L. Kahn, 1966. "The social psychology of organizations", Wiley, New York.
- Kurtzberg, T.R., T.M. Amabile, 2001. "From Guilford to Creative synergy: opening the black box of team level creativity", *Creativity Research Journal*, 13: 285-294.
- Lawler, E., 2009. "Make Human Capital a source of competitive advantage", USC Marshall School of Business, available at: <http://Ssrn.com/abstract=1311431>.
- Liao, H., D.E. Rupp, 2005. "The impact of justice orientation on work outcomes: A cross- Level Multi foci framework", *Journal of Applied psychology*, 90: 242-256.
- Maccitella, U., 2008. "The Effect of Human resource Management Practices on organizational performance through corporate entrepreneurship", University Bacconi, Track Economic & Management.
- Mayer, J.P., C.A. Smith, 2000. "HRM practices and organizational commitment: Test of mediation model", *Canadian Journal of Administrative Sciences*, 17: 319-331.
- Mayson, S., R. Barrett, 2006. "The science and practice of HRM in small firms", *Human Resource Management Review*, 16: 447-455, www.socscient.com/bam/humrs.
- Miller, D., 1983. "The correlates of entrepreneurship in three types of firms". *Management Science*, 29(7): 770-791.
- Miller, D., P.H. Friesen, 1982. "Innovation in conservative and entrepreneurial firms: two models of strategic momentum", *Strategic Management Journal*, 3(1): 1-25.
- Minzberg, H., 1994. "The fall and rise of strategic planning", *Harvard Business Review*, 72(1): 107-114.
- Naman, J.L., D.P. Slevin, 1993. " entrepreneurship and the concept of fit: a model and empirical tests", *Strategic Management Journal*, 14: 137-154.
- Organ, D.W., 1988. "Organizational Citizenship Behavior: The good soldier syndrome", D. C. Heath and company, Lexington, MA/Toronto.
- Padsakoff, P., M. Ahearne, S. Mackenzie, 1997. "Organizational citizenship behaviors and sale unit effectiveness", *Journal of Applied Psychology*, 82: 262-270.
- Pare, G., M. Tremblay, 2007. "The influence of High- Involvement Human Resource Practices, procedural justice, organizational commitment and Citizenship Behaviors on Information Technology professional's Turnover Intentions", available at: <http://gom.sagepub.com> hosted at <http://online.sagepub.com>.
- Raub, S., 2008. "Does bureaucracy kill individual initiative? The impact of Structure on organizational citizenship behavior in hospitality industry", *International Journal of Hospitality Management*, 27: 179-186.
- Robbins, S.P., 2001. "Organizational Behavior", prentice-Hall, Upper saddle River, NJ.
- Sapienza, H., M.A. Korsgaard, 1996. "Procedural justice in Entrepreneurship Investor relations", *Academy of Management Journal*, 39(3): 544-574.
- Sharma, P., J.J. Chrisman, 1999. "Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship", *Entrepreneurship Theory and Practices*, 23(3): 11-27.
- Shipton, H., D. Fay, M.A. West, M. Patterson, K. Birdi, 2004. "Managing people to promote innovation", Aston Business school Research Paper RPO430.
- Shore, L.F., S.T. BarkdaleK, 1995. "Managerial perceptions of employee commitment to the organization", *Academy of Management Journal*, 38: 1593-1625.
- Snell, S.A., J.W. Dean, 1992. "Integrated manufacturing and human resource management: A human capital perspective", *Academy of Management Journal*, 35: 467-504.
- Soutaris, V., 2002. "Firm-specific competencies determining technological innovation: A survey in Greece", *R & D Management*, 32(1): 61-77.
- Stevenson, H.H., D. Gumpert, 1985. "The heart of entrepreneurship", *Harvard Business Review*, 63(2): 85-94.
- Thibout, J., L. Walkerl, 1975. "Procedural Justice: A psychological analysis", Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Tremblay, M., P. Guay, G. Simard, 2001. "organizational commitment and OCB: the role of HR practices", Paris: L. Cadin.
- Way, S.A., 2002. "High-performance work systems and intermediate indicators of firm performance within the US Small Business Sector", *Journal of Management*, 28(6): 756-785.

Williams, L., S.E. Anderson, 1991. "Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behavior", *Journal of Management*, 17: 601-617.

Zahng, Z., D. Wan, M. Jia, 2008. "Do High-Performance Human Resource Practices help corporate entrepreneurship? The mediating of organizational citizenship behavior", *Journal of High Technology Management Research*, 19: 128-138.

Zahra, S.A., 1991. "Predictors and financial outcomes of corporate entrepreneurship: An exploratory study", *Journal of Business Venturing*, 6: 259-286.

Zahra, S.A., 1996. "Governance, ownership and corporate entrepreneurship: the moderating impact of industry technological opportunities", *Academy of Management Journal*, 39(6): 1713- 1735.

Zahra, S.A., G. Coving, 1995. "Contextual influence on the corporate entrepreneurship- performance relationship: A Longitudinal analysis", *Journal of Business Venturing*, 10(1): 43-58.

Zahra, S.A., A.P. Nielsen, W. Bogner, 1999. "Corporate Entrepreneurship Knowledge, and competence development Entrepreneurship Theory and Practices", 23(3): 169-189.