

High Performance Management Practices in Owner-Managed SMEs

Retha Wiesner, Associate Professor in HRM
Faculty of Business, University of Southern Queensland,
Toowoomba QLD 4350, Australia.
Telephone: +61 07 46312590; Email: wiesner@usq.edu.au

Nicci Poole, School of Management and Marketing, Faculty of Business,
University of Southern Queensland

Heather C. Banham, Business Administration Department,
Okanagan University College, Kelowna, Canada

Abstract

While there is extensive management and academic literature on the topic area of high performance management practices (HPPs) internationally, research on HPPs in the Australian context is limited. Furthermore, research on HPPs has focused predominantly on large organisations and is largely a new direction for research in SMEs. This study attempts to fill some of the gaps in existing studies by considering a wide range of HPPs in Australian SMEs, with particular focus on owner managed SMEs. The objective of this paper is to examine the extent and nature of HPPs in owner managed Australian SMEs and the impact of certain organisational characteristics on these practices.

The research questions under examination include: What is the prevalence of HPPs in owner managed Australian SMEs?; and what is the impact of firm size, the presence of a HR manager, and the existence of a strategic plan on HPPs in SMEs?

Undertaking this research is justified on the basis of: there is a gap in the theory relating to HPPs in SMEs and in particular owner managed SMEs, owing to the fact that most studies on HPPs are based in large organisations; globalisation and the pace of economic change are forces that are driving the need for greater understanding of HPPs (Burke 1995); and there are high expectations for growth and performance of SMEs in the economic growth and development plans for the Asia Pacific and Australian region (Asia Pacific Economic Cooperation 2002).

A survey questionnaire was sent out to 4000 Australian small and medium-sized enterprises (35% response rate). A Dunn and Bradstreet database was used and a stratified sample employed. A chi-square analysis was employed to determine whether there were significant differences in relation to high performance practices in small vs. medium organisations, SMEs with and without a HR manager; and organisations with and without a strategic plan.

The results of this study indicate that the overall picture regarding the incidence of high performance practices in Australian owner managed SMEs looks quite bleak. Significant positive relationships were found between demographic variables and HPPs in SMEs. The paper concludes that large firm solutions may not be appropriate. A more balanced approach to prescribing and researching management solutions in SMEs is needed; an approach with a greater emphasis on the SME sector. This paper will provide an improved understanding of HPPs in Australian SMEs which will help the sector to better meet performance expectations.

Acknowledgement: The authors wish to acknowledge the contribution of Jim McDonald to this project.

Introduction

The literature on high performance management practices (HPPs) has focused mainly on larger organisations and research in the small and medium context is extremely limited (Galang, 1998; Gollan 2005). While there is general consensus in the literature that HPPs are critical to the profitability and long-term success of small and medium sized organisations (SMEs), the literature remains unclear as to what extent HPPs are employed by owner managed SMEs and in which way HPPs are impacted upon by the size of the organisation, the presence of a human resource manager and the existence of a strategic plan. This study reports the results of an investigation of owner managed Small and Medium Sized Enterprises (SMEs) in an Australian study in relation to these research issues. The HPPs reported on in this paper are all HRM practices, however the practices focused on here are high performance in nature and therefore according to the literature they are having an impact on performance. The challenge for owner managed SMEs is to develop organisations which can achieve a competitive advantage through recognition that HPPs contribute to firm performance and the important role which a HR manager and a strategic plan could play in creating organisational systems that facilitate flexibility, innovation and speed. Therefore, this study is an attempt to fill some of the gaps in existing studies on High Performance Practices (HPPs) in SMEs. The *objective* of this paper is to examine the extent and nature of HPPs in owner-managed Australian SMEs and the impact of certain organisational characteristics on these practices.

A variety of definitions of SMEs are utilised in the literature for various purposes and there is no single accepted definition. The authors of this paper, following Baron (1995), and consistent with the Australian Bureau of Statistics (2002), have adopted employee numbers with the size range of 20-200 employees as the definition of SMEs on the basis that firms smaller than 20 employees in size would be unlikely to have organisational change issues to the same degree that firms in the range would be experiencing. A small business is therefore defined as an organisation employing between 20 and 100 employees and a medium sized business as ranging from 100 to 199 employees.

In order for SMEs to survive and prosper, they must be able to adapt to the ever-changing environment (Want 1998; Burke 2002). With the scope and pace of political, social and economic change in today's business world, this is not an easy task. Within this environment, the future of SMEs will often depend on the strategic choices of one or just a few individual managers. The manager of an SME is most often the entrepreneur owner-manager (Lattimore, Martyn, McCann and Pearson 1997). The ABS defines an owner-manager as the proprietor of sole proprietorship; the partners of a partnership or the working director(s) of an incorporated company. This definition is limited in that a working director may or may not be an owner. Therefore for the purposes of this paper we define an owner-manager as any one of the proprietors of a sole proprietorship or a partner in a partnership or the working director(s) of an incorporated company who is a significant shareholder. We furthermore define an entrepreneur as an SME owner-manager who is actively engaged in the day-to-day running of his or her business (Blackman 2003). Therefore, for the purposes of this paper, the owner-manager is seen as an entrepreneur.

Whether the SME fails or succeeds is very often the result of external factors such as economic, politic, social-economic and technological factors. These factors are mostly beyond the control of a single owner-manager, however the strategic choices of the owner-manager and the choice of employing particular management practices in the organisation are within the control of the owner-manager. Furthermore, in contrast with the situation in large organisations, the SME owner-manager has much greater control over the employment of management strategies. According to Howard (1997), in nine out of ten times the owner-manager will be working in the business, compared to just 35% of larger organisations. Furthermore, SMEs are less likely to be unionised as evident from the results of the 1995 Australian workplace industrial relations survey. Only 17% of workers in small businesses were unionised compared to 74% in large organisations (Morehead, Steel, Alexander, Stephen and Duffin 1997). This allows SME owner-managers a greater degree of managerial prerogative than in larger organisations.

Leadership in SMEs is frequently dominant and centralised (Khan & Manopichetwattana 1989 and McAdam 2002). In the SME, the personal identity of the owner-manager and the firm's

reputation are closely intertwined, as is business success and personal success. Three factors, personal reputation in the community, investment of personal assets and hands-on involvement in the business, increase the likelihood that the enterprising, innovative and independent leader of the SME is highly committed to adapting to the changing environment (Cecora 2000). Visibility of the leader and day-to-day involvement in the operations of SMEs are potential advantages in implementation of change and management practices (McAdam 2000). The relationship between the personality of the business leader and organisational strategy and structure is found to be stronger in small firms than in larger firms (Miller & Toulouse 1986). Starting a small business involves making a commitment of resources to an idea by the owner for their future and this means there is a very strong connection between the individual and the small business (Fuller 2003). However, while this level of personal commitment aids survival in times of crises, it can actually inhibit growth when that growth requires a shift in the self-identity of the owner such as the hiring of professional management (Fuller 2003). For the SME to grow, the personal agenda and the organisational goals have to be aligned. The intention and ability of owner-managers need to be consistent with opportunity in order to fulfil the growth expectations for small business (Morrison, Breen & Ali, 2003). Of the three factors (intention, ability and opportunity), two (intention and ability) relate directly to leadership characteristics.

Still there is an additional complexity to be considered in relation to leadership of owner-managers. A relatively high proportion of SMEs (up to 40% in the United Kingdom) have two or more owner-managers/partners/directors (Curran & Blackburn, 2001). As a consequence, interpersonal conflicts, in the absence of strong conflict resolution skills, can affect the business.

Lifestyle and independence are frequently key motivators of small business formation (Wilson 2002) and it may be that these same two factors serve to inhibit SMEs from taking on outside capital and expertise. This, in turn, may inhibit growth and growth potential.

According to various studies (Gollan 2005; Huselid 1005), the implementation of certain management practices which impact on organisational profitability and the competitive advantage could have a significant impact on the sustainability and viability of organisations. These management practices are referred to as high performance management practices (HPPs) which describe a set of management practices that enhances employee relations through employee involvement and participation; and which increase organisational performance and profitability through quality communication and consultation between management and employees (Gollan 2005).

There is also a strong suggestion in the literature that HPPs are transferable and can purposively be established in businesses. For example, Sung and Ashton (2005, p. 3), define HPPs as "work practices that are deliberately introduced with the purpose of improving business performance". The same assumptions are made by policy makers (Drummand and Stone 2006). This is in line with Sung and Ashton's (2005) view of HPPs as sets of complementary work practices covering three broad areas or "bundles" of practices. They identified 35 practices in three areas. Firstly, high employee involvement practices, including self-directed teams, quality circles and sharing of company information; secondly, human resource practices, covering sophisticated recruitment processes, performance appraisals and mentoring, etc.; and thirdly reward and commitment practices, embracing financial rewards, family friendly" policies, job rotation and flexible working. They argue that the major strength lies in employing these practices in combination rather than as individual elements. These "bundles" are variously described in the literature as necessarily being "internally consistent", "congruent" "cohesive" and "coherent" (Whitfield and Poole, 1997; Appelbaum, Bailey, Berg & Kallerberg 2000).

The impact of HPPs on business performance is often argued in the literature through a two stage process (Harley 2002). Firstly, HPPs positively impact on employee orientations to work, and secondly, this in turn has a number of effects including a reduction in staff turnover and greater flexibility in work practices (Appelbaum et al. 2000). These outcomes in turn result in higher productivity and better overall organisational performance (Harley 2002).

Very often these practices are introduced in response to an opportunity or threat in the economic environment or to build on an identified strength or overcome an internal weakness.

As Small and Medium Enterprises (SMEs) work to achieve the economic expectations being placed upon them, they need to be able to successfully adapt and implement HPPs to survive and grow. This ability to successfully implement HPPs is vital to all organisations of all sizes and with the growing international emphasis on SMEs it is important that they too are able to successfully implement these practices.

Undertaking this research is justified on the basis of the three aspects. *Firstly*, there is a gap in the theory relating to HPPs in Australian SMEs and in particular owner managed SMEs. Even though there has been a growing emphasis upon the role of HPPs as a source of competitive advantage (Dessler, Griffiths, Lloyd-Walker and Williams 1999) and evidence of numerous studies that certain HRM practices improve organisational performance (Bartram 2005; Arthur 1994; Ichniowski, Shaw and Prensushi 1994; Delery and Doty 1996), there is still very little systematic research available concerning the adoption and character of these practices in Australian SMEs and more specifically owner-managed SMEs (Curran and Blackburn 2001; Wilson 2002; Wiesner and McDonald 2001; Hammond 2001). Furthermore, existing studies on HPPs mainly target large organisations. Wiesner, Banham and McDonald (2007) conducted the only national study on HPPs within the SME sector in Australia. However, their study did not distinguish between owner-managed and non-owner managed SMEs. Approximately 55% of Australian SMEs employ managers other than the owners and another 45% employ the owners only (ABS 1999). Therefore, what makes this paper unique is the exclusive focus on owner-managed SMEs.

Secondly, globalisation and the pace of economic change are forces that are driving the need for greater understanding of management practices that enhance the sustainability of SMEs (Burke 2002). Whilst, SMEs are expected to not only survive, but to grow and contribute to the economies of the Asia Pacific as a whole and Australia in particular, very little attention has been given to their ability to meet these expectations, including their ability to implement HPPs. This lack of research is quite surprising given the role that HPPs can play in creating a more highly efficient labour force upon which SMEs can draw to increase their competitiveness, and the significance of the SME sector to the economy of Australia. This fact and the key role that SMEs inevitably play in the Australian economy, suggests the importance of an understanding of factors which impact upon HPPs in Australian owner managed SMEs.

Thirdly, there are high expectations for growth and performance of owner-managed SMEs in the economic growth and development plans for the Asia Pacific and Australian region (Asia Pacific Economic Cooperation 2002). In order to survive and grow, owner-managed SMEs need to be able to change and adapt as internal and external challenges arise. Improved understanding of HPPs in owner-managed SMEs could enhance their ability of meeting these performance expectations.

In view of the foregoing discussion, the *research questions* under examination include:

- RQ1: What is the prevalence of HPPs in owner-managed Australian SMEs?
- RQ2: What is the impact of organisational size upon the adoption of HPPs in owner managed SMEs?
- RQ3: What is the impact of the presence of a HR manager upon the adoption of HPPs in owner managed SMEs?
- RQ4: What is the impact of the existence of a strategic plan upon the adoption of HPPs in owner managed SMEs?

The rest of the paper addresses the research methodology followed in this study, the results and discussion and finally some practical implications for owner-managed SMEs.

Methodology

Exploratory survey methodology was employed in this study. A questionnaire measuring organisational change and employee management practices (including HPPs presented in this paper) was developed and the validity of the questionnaire was addressed by examining the content validity and reliability. The content validity was determined by asking a panel consisting

of SME managers, HR experts and academics in HR, to comment on the suitability of each item. The reliability analysis indicated Cronbach Alpha Coefficients of between .80 and .90 for each section.

The studies by Wood & Menezes (1998), Delaney, Lewin & Ichniowski (1989), Lawler et al (1995) and Osterman (1994) were used as a starting point in deciding what practices are representative of HPPs. Forty-seven practices that deem to be representative of HPPs were selected for the purpose of this paper. The following measures of high commitment/involvement and quality practices were included for analysis: selection (with the emphasis on the involvement by parties other than the line-manager); a range of training and development practices; performance appraisal (with the emphasis on formal appraisal and appraisals that include parties other than just the line-manager); a range of change practices in relation to numerical and functional flexibility and one item on flexi-place; a range of participative and individual compensation practices; a range of employment relations practices that focus on consultation with other parties; a range of team and quality practices; communication practices that focus on open organisational communication; certain employee management policies and procedures not compulsory by law; and two electronic practices relating to recruitment and Human Resource Information Systems (HRIS).

There is a debate in the literature concerning whether performance-based pay qualifies as a HPP. However, according to Wood (1999) performance-based and merit-based pay should be included in so far as the model of high commitment/performance management is based on observation of leading edge developments rather than a theory of commitment. This was also the basis on which the two electronic HR practices have been included. However, we recognise Lawler's view that skill-based pay, group-based incentives and profit-sharing are most compatible with the notion of high-involvement management. No internal recruitment methods are included, contrary to Wood's suggestion. This is owing to the fact that our original questionnaire focused on external recruitment only. Although we have included quality practices, another debate revolves around the inclusion of quality systems and practices (Applebaum and Batt 1994). Wood (1999) investigated the coherency of practices commonly associated with TQM and high commitment/performance systems. He found a positive coherence and argues that the lesson is not dissimilar to that which was drawn from the limited adoption of high commitment personnel practices in the 1960's and 1970's, namely that: "we ought not to expect innovations in management on humanistic grounds alone".

The questionnaire was sent out to 4000 Australian small and medium-sized enterprises. A Dunn and Bradstreet database was used and a stratified sample according to the following criteria were employed: all ABS industry categories excluding agriculture; employee size between 20-200 employees; a personalized address label targeting the CEO or MD; and representation of each state and territory in Australia. After allowing for incorrect mail addresses and closed businesses, a response rate of 36 percent was achieved (N=1435).

Seven-hundred and forty-two (742) questionnaires were received from owner managed SMEs which comprised the sample focused on in this paper. The highest proportion of these questionnaires was received from owner-managers in the various states in Australia - Victoria (31 percent), followed by NSW (28 percent), Queensland (20 percent) and South Australia (10 percent). The ACT, Northern Territory, Western Australia and Tasmania comprised the other 11% of the sample. Action to encourage organisations to respond to the survey included a covering letter explaining the purpose of the survey, provision of a reply paid envelope, follow-up letters, an assurance of confidentiality, and participation in a draw for a one-day, tailor-made workshop for recipients who provided contact details.

Sixty-three percent of the owner managed SMEs were family organisations of which family members managed seventy nine percent of these organisations. Fifty-seven percent exported their products or services of which 85 percent had been exporting for more than three years. Only five percent of SMEs were franchise operations.

More than one-third of organisations (41 percent) operated from a single location, 55 percent of SMEs operated in 2-10 locations and the remainder in more than 10 locations. Nine out of ten SMEs could be said to generally be 'surviving' businesses with almost all of them having been established for more than 10 years (90 percent). Seven percent of the organisations that had

been in operation for 5-10 years and younger organisations (<5 years) represented 3 percent of the sample.

As expected, most SMEs did not have a designated manager whose principle responsibility covered human resource management (77 percent). A HR department was found in only 12 percent of SMEs. Forty-eight percent of respondents said their organisation has at least one union member with more than two-thirds of the sample (72 percent) estimating that there was either less than 10 percent union membership or no union membership at all among employees. Sixty-one percent of respondents reported the existence of a formalised strategic plan and 77 percent a business plan (a business plan builds on a strategic plan and is more tactical and operational in nature).

As far as the personal demographics of respondents are concerned, 70 percent had a post-secondary school qualification, 72 percent were older than 45 years and only 5 percent were female.

The prevalence of the HPPs was measured by asking respondents to which extent these practices occurred in the previous three years - 'never, for some jobs, for all jobs'. In analysing the data, the existing scales were collapsed into two-point scales reflecting the presence or absence of a practice. SPSS was used to analyse the data. Descriptive statistics were used to describe the demographics and summarise the data. These are presented in the form of percentage distributions in order to identify trends in the data. A chi-square analysis was used to determine whether there were significant differences in relation to HPPs between small and medium organisations, SMEs with and without a HR manager and organisations with and without a strategic plan. The wording presented to respondents to determine the presence of a HR manager were the following: 'is there a manager in this organisation whose principle responsibility cover human resource management and who has one of the following terms in their title: (1) There is no specialist manager (2) Industrial Relations (3) Employee Relations (4) Human Resource Management (5) Personnel (6) Other (please specify)?' This question was re-coded into two categories to reflect the presence or absence of a HR manager.

Results and Discussion

To determine whether the management practices in SMEs could be described as high or low performance, we have tailored our discussion around the four research questions, the first of which relates to the level of adoption of HPPs in owner managed Australian SMEs.

RQ1: What is the prevalence of HPPs in owner-managed Australian SMEs?

Overall, the results in table 1 suggest a moderate level of adoption of HPPs. We defined a high level of adoption of an individual high performance management practice as occurring where 70 percent or more of SMEs employing that practice and a low adoption level is defined as an uptake of less than 30 percent. For the purposes of this paper, this criterion was decided upon after giving a panel of 10 SME managers a choice between various cut-off points in relation to what could constitute a high level of adoption.

TABLE 1: The Prevalence of HPPs in Australian Owner Managed SMEs and the Impact of Organisational Size, the Presence of a HR Manager and the Existence of a Strategic Plan on the adoption of HPPs (n=742)

HPPs	%	Size		HR manager		Strategic plan	
		Small %	Med %	No %	Yes %	No %	Yes %
<i>Recruitment</i>							
1. Internet recruitment	7	5	14*	5	12*	4	8*
<i>HRIS</i>							
	12	11	21*	7	27*	7	16*
<i>Selection</i>							
2. Formal selection procedures #	82	79	96*	79	91*	71	89*
3. Other managers / employees have an input in the selection design	86	85	95*	85	90	83	89*
4. Other employees have an input in the selection decision	62	61	72*	62	63	56	67*
<i>Training and Development</i>							
5. Formal training budget #	52	48	72*	45	73*	28	66*
6. Technical or vocational training ¹ #	76	75	80	75	83*	71	79*
7. Management and development training ² #	69	67	84*	67	80*	60	75*
8. Increase in training where previous program existed	69	66	86*	66	83*	56	76*
9. New career paths introduced	68	65	83*	65	79*	57	75*
10. Formal mentoring #	37	36	45	32	54*	23	47*
11. Computer-aided instruction #	62	61	69	56	83*	52	69*
<i>Performance appraisal practices</i>							
12. Formal performance appraisal system #	69	67	81*	64	82*	52	79*
13. Employee self-performance appraisals	39	38	45	37	45	30	43*
14. Peer performance appraisals	42	41	45	39	50*	31	48*
<i>Compensation practices</i>							
15. Performance based pay (PBP)	94	93	98*	93	94	91	95*
16. Competitive wages	89	88	92	87	89	90	89
17. Pay based on acquired skills	95	95	96	93	99*	91	97*
18. Group/team incentive programs	48	46	62*	46	55*	34	57*
19. Profit sharing/gain sharing schemes	50	48	58*	47	61*	40	56*
20. Employee share scheme	19.3	19	24	18	26*	12	24*
21. Individual incentive programs	59	56	66	58	61	52	63*
<i>Employment relations practices</i>							
22. Formal agreements with employees #	71	68	86*	69	75*	60	80*
23. Formal agreements with unions #	21	17	51*	21	22	19	23
24. Joint consultative committees	30	27	47*	30	35	21	36*
25. Establishing work teams with direct responsibility for setting and achieving targets	46	45	52	43	60*	21	57*
26. Establishing other forms of self-management	16	14	25	14	25*	14	18
<i>HR Policies</i>							
27. Employee assistance program	12	12	16	12	13	11	13
28. A policy of sharing business information with employees	57	57	60	56	67*	41	69*
<i>Communication Practices</i>							
30. Explaining proposed org changes to employees	99	100	98	99	100	99	100
31. Use of open channels of communication	99	100	98	99	100	99	100

32. Engage in systematic search for opportunities and problems	99	96	98	95	97*	94	97
33. Conducting employee attitude surveys	33	33	36	31	44*	17	45*
Flexible practices							
34. Job sharing	38	38	40	35	54*	35	41
35. Flexible hours of work	58	57	61	53	72*	46	65*
36. Telecommuting/work from home	23	23	23	20	32*	15	28*
37. Job rotation	45	45	46	44	47	40	48*
38. Job enrichment	43	41	56*	40	58*	29	52*
Team Practices							
39. Quality problem solving teams	49	48	55	48	52	32	59*
40. Self managing work teams	48	47	59*	43	66*	35	56*
41. Cross functional project teams	21	19	38*	16	37*	12	27*
Quality Practices							
42. Total quality management	53	51	64*	48	65*	40	61*
43. Quality programmes (ie ISO9000)	57	55	68*	55	62	49	62*
44. Productivity improvement schemes	60	58	71*	59	45	43	70*
45. Bench marking	36	31	66*	32	52*	18	47*
46. Best practice (comparison with other Australian organisations)	36	39	60*	36	46*	21	54*
47. Best practice (comparison with similar organisations overseas)	42	20	41*	18	43*	6	34*

* $p < 0.05$.

practices characterised by formality

1 'Unionisation' refers to the estimated presence of at least one union member in the workforce (Callus et al. 1991)

It is clear from table 1 that a high level of adoption was found in relation to only ten of the forty-seven HPPs (adopted by seventy percent or more SME respondents) and a low adoption rate was found in relation to eight practices (adopted by less than thirty percent of respondent SMEs).

In this study there was a high level of adoption in 2 out of the 3 high performance selection practices, 1 out of 7 training and development practices, none of the performance appraisal practices, 3 out of 7 compensation practices and only 1 out of 5 employment relations practices. Moderate to low levels of adoption of high performance practices were found in relation to flexibility, teams and HR policies. Communication scored 3 out of 4.

The significance of the first research question relates to the contribution HPPs make to organisational performance. Several research studies have shown that HPPs and policies have a positive effect on organisational performance profitability, shareholder return and organisational survival (Banker, Field, Schroeder and Sinha, 1996; Huselid 1995). The results of this study indicate that the overall picture regarding the incidence of HPPs in Australian SMEs looks relatively bleak. According to these results, SMEs have at best only a moderate affinity for the adoption of HPPs.

It is true that large organisations are more likely to have the resources, technical knowledge and skills to implement large scale high performance management programs and it is also true that the term 'low performance' could be used to label the management practices in some SMEs, but the results presented here indicate that it would be inaccurate to assume they were the norm in the SME sector.

As mentioned earlier, our approach in selecting practices for inclusion in our analysis focused on an integration of high commitment/involvement management and quality practices which are likely to impact on organisational performance and are responsive to the environmental challenges faced by organisations (Galang, 1998). Therefore the low adoption of HPPs is significant for the effectiveness of both the management of employees and the performance of the SME, given the links between participation and the performance of firms.

The claims made for the link between employee participation and SME performance include the hypotheses that participation leads to increased employee satisfaction; that improved productivity follows; and, that it promotes improved rationality and legitimacy leading to

greater effectiveness of management decision-making (Vaughan 1991). Participation can provide a means for management to improve efficiency within the organisation; create industrial harmony between management and employees, and provide a forum for grievance resolution as well as constitute a means towards industrial democracy within the organisation (Salamon 1987).

Any 'high performance' flavour is therefore spoiled by the poor performance with respect to participative practices and collective practices.

However, the adoption rate may be ameliorated by SME characteristics accorded small business by previous research (Chapman, 1999; Granovetta 1984; Welsh and White 1981; Heneman and Berkley 1999; Callus Kitay & Sutcliffe 1991; Olsen and Terpstra; 1992; Bacon Ackers Storey & Coates 1996; Wiesner, 2001). Characteristics of SMEs that make them different from their larger counterparts include: informality of organisational structures, reporting relationships and processes, availability of capital, role in the marketplace, degree of management skills and time and business planning, environmental scanning and strategic planning affect the ability and capability of SMEs to respond to the demands of the competitive environment (Jennings and Beaver, 1997; Joyce, Woods, McNulty and Corrigan, 1990; Johns, Dunlop and Sheehan, 1989; Marlow and Patton, 1993). These differences between large and small to medium sized organisations emphasise the importance of further research on HPPs in SMEs in order to ascertain how Australian small and medium sized organisations respond to changing environmental demands.

Do owner-managed SMEs have an easier time than larger organisations employing HPPs? The answer is both 'yes' and 'no', and some arguments could certainly be made in favour of SMEs. The number of business success stories of organisations of this size suggests that small companies can undertake fundamental changes successfully in their management practices (Dessler, Griffiths, Lloyd-Walker and Williams, 1999). They have the advantages of greater control over internal resources and less complexity in their structures. Bacon et al (1996) suggest that large organisations in the UK may have much to learn from the informal nature of change in small businesses. We suggest that the same applies to the Australian scenario. Where SMEs implement HPPs they may have some advantages over large organisations. For example, the informality of organisational structures and relationships may mean that forces that traditionally restrain change or maintain stability have less influence. However, the descriptive data and other studies do not point to any firm conclusion on this basis. If firms do have a high degree of flexibility, their relatively small size means that changes in practices may be adopted more quickly (Marlow and Patton 1993). This is in contrast to large organisations where mechanistic and bureaucratic structures can impede the implementation of HR processes (Robbins, Waters-Marsh, Cacioppe R & Millett 1994). On the other hand, as pointed out earlier, small companies have fewer resources to help them with radical change. In view of these findings, it is therefore debatable whether the management models as applied in large organisations can also be applied to SMEs.

RQ2: What is the impact of organisational size on the adoption of HPPs in owner managed SMEs?

The results in this study clearly demonstrate that size does have a significant impact on the adoption of high HPPs. It is clear from table 1 that HPPs are significantly more prevalent in medium sized organisations than in small organisations in relation to more than half of these practices (25 of the 47 practices). The chi-square analysis showed that there is a significant positive relationship between the following HPPs and organisational size ($p < 0.05$): internet recruitment; HRIS; all selection practices; 4 of the 7 training and development practices; one performance appraisal practice; 3 out of the 7 compensation practices; 3 out of 5 employment relations practices; one flexible practice (job enrichment); 2 out of 3 team practices; and all 6 quality practices. These results support the findings of Wiesner and McDonald's (2001) Australian study and Wager's (1998) Canadian study.

These differences in implementation of HPPs between the smallest and largest categories also confirm the findings in other studies that as the organisation increases in size so does the level of change. AWIRS 1990 indicated that as size increases so does the proportion of changes in

management practices and that the proportion of workplaces affected by organisational changes also increased (Callus, Kitay and Sutcliffe, 1992). The business longitudinal study also reported a progressive increase in the implementation of major changes and business improvement activities in all firm sizes (Productivity Commission/Department of Industry Science and Tourism 1997).

RQ3: What is the impact of the presence of a HR manager on the adoption of HPPs in owner managed SMEs?

Wiesner and McDonald (2001) argue that the impact of the presence of a HR manager on the prevalence of employee management practices is inherently linked to small and medium sized businesses rather than larger organisations because large organisations tend to employ a specialised HR manager and most often also have a HR department. This positive relationship between the presence of a HR manager and the introduction of employee management practices is consistent with the work of Cummings and Worley (2001) because human resource practices are identified as one of the main categories of tools for introduction of organisational change. However, there is still a paucity of research which examines the role of the HR manager in the adoption of HPP and organisational change (Newton 1998; Sanchez, Kraus, White and Williams 1999). Terpstra, Mohamed and Rozel (1996) argue that the beliefs, assumptions and education of HR managers have an impact upon the information they seek out and the employment practices they adopt. Owing to this selective focus of their attention, HR managers are best placed to have a positive impact on decision making relating to employee practices. This argument is supported by Murphy and Southey (2003). They argue that characteristics such as networking skills, political influence, knowledge and experience, professionalism and personality traits of HR practitioners influence their ability to conduct a needs analysis and identify appropriate HPPs for adoption, as well as obtain the requisite support, resources and opportunity.

The results in table 1 indicate that the presence of a HR manager plays a significant role in the prevalence of HPPs. High performance practices occurred significantly more in organisations with a HR manager (32 of the 47 practices). The chi-square analysis showed that there is a significant positive relationship between the following HPPs and the presence of a HR manager ($p < 0.05$): internet recruitment; HRIS; one out of the three selection practices; all training and development practices; 2 out of 3 performance appraisal practices; 4 out of the 7 compensation practices; 3 out of 5 employment relations practices; 1 out of 2 HR policies; 2 out of 4 communication practices; 4 out of 5 flexible practices; 2 out of 3 team practices; and 4 out of 6 quality practices.

The significance of this for Australian SMEs lies in the fact that unlike their larger counterparts SMEs generally lack formal managers responsible for HR or HR departments. The importance of the link between the presence of a HR manager and HPPs is therefore mainly a research question for SMEs (and not large organisations) because managers responsible for managing people issues, such as the human resource or industrial relations manager, are seen in larger organisations as being in a partnership with other managers and employees through playing a proactive, strategic role to foster the achievement of organisational success (Kramar 2000). The strategic importance of HPPs is as important for SMEs as it is for larger organisations. Unlike larger organisations, however, a full-scale, fully functioning HR department is frequently not much of a possibility; and much of what is needed in the way of skills and knowledge will have to be learned on the job. Employee management practices are often limited to the essentials and those areas with the most immediate payoff (Frazee, 1997). Thus, SME managers in most cases look to handle their limited resources to gain short-term, day-to-day maximum advantage (Jennings and Beaver, 1997). If managers in SMEs tend to expect an immediate reward for any resources utilised, they may find it difficult to provide strategic human resource management due to their focus on moving as quickly as possible to meet the needs and demands of a competitive external environments. Often SME managers lack an understanding of the importance of a linkage between strategic planning and resource utilisation (Sironopolis, 1994).

Only 33 percent of owner managed SMEs in this study employed a dedicated manager responsible for human resources. One can argue that those SMEs without HR managers use

consultants to advise them on HR issues, however our research shows that it is mainly medium-sized organisations that take advantage of this option (Wiesner and McDonald 2001).

An even more important research question for future research in SMEs relates to the relationship between the presence of a HR manager and firm performance. This aspect falls outside the scope of this study, however, thus far research results on the link between the presence of a HR manager and performance of SMEs are mixed. Welbourne and Cyr (1999) found that in 'mid-size' firms, the presence of a senior HRM executive had a negative effect on the performance of the firm. However other empirical studies suggest that a strong association exist (Savery and Mazzarol, 2001).

RQ4: What is the impact of the existence of a strategic plan on the adoption of HPPs in owner managed SMEs?

There is debate on the benefits of engaging in strategic planning, especially in smaller organisations (Richardson 1995). Within this debate, Mintzberg (1979) is one of the leading members in the 'anti-planners' camp who argue that the world has become so complex and fast moving time spent on formulating plans is wasted (Joyce and Woods 2003). He characterizes strategic planning as bureaucratic when what is needed is fast, flexible and incisive action. However, there is much literature arguing the counterpoint that strategic planning is essential in all businesses, including smaller ones. While much published research tends to reflect the experiences of large-scale businesses, it is at least possible that the same conclusions may be warranted for SMEs. Pettigrew and Whipp (1993) reported that part of the pattern of successful strategic change was the ability to take abstract strategic ideas and plan for the implementation of these ideas in a methodical manner. Their study on strategic change argues that planning of change is important. This entailed breaking down strategic intentions into actionable components and allocating responsibility for each of these. Joyce and Woods (2003) also point to the positive role that formal planning processes play in bringing about change and innovation in the growth of SMEs.

The results in table 1 show that the presence of a strategic plan had a significant positive relationship with the great majority of the HPPs (39 of the 47 practices). The chi-square analysis showed that there is a significant positive relationship between the following HPPs and the prevalence of a strategic plan ($p < 0.05$): internet recruitment; HRIS; all three selection practices; all training and development practices; all performance appraisal practices; six out of the seven compensation practices; three out of five employment relations practices; one of the two HR policies; one of the four communication practices; four out of five flexible practices; all three team practices; and all six quality practices.

The significance of this finding relates to the fact that only 61 percent of SMEs in this study had a strategic plan even though 77 percent had a business plan. Although 91 percent said they had identified specific goals and objectives as part of the strategic/business plan, only 46 percent said they had altered its practices in order to achieve the goals and objectives identified in the strategic/business plan. This supports the research by Wiesner and McDonald (2001) that SME managers do not tend to take a strategic approach to HRM.

A strategic approach in organisations would require at least the presence of a corporate strategy. Written and unwritten mission statements, corporate strategies and human resource strategies are characteristics of 90 percent of large Australian organisations (Kramar 2000). McDonald and Wiesner (1998) found in an interview program with 40 SME managers that these managers had difficulty in distinguishing between a strategic and business plan. Therefore two questions relating the presence or absence of a strategic plan and a business plan were included in the questionnaire.

Business and strategic planning may have peculiarities specific to small and medium sized organisations. The changeability of the market makes it difficult for small firms to plan for growth and change especially as they may be reliant on the sales of the larger organisation they supply or the state of the industry in which they operate (Johns, Dunlop and Sheehan 1983; Joyce et al. 1990; Marlow and Patton 1993; Jennings and Beaver 1997). The impact of a turbulent environment on the viability of SMEs is demonstrated by the high exit rates reported by *Portrait of Australian Business* (Productivity Commission 1997) which revealed that one-

quarter of firms with 10 employees or fewer planned to close or sell within 3 years. This rate progressively decreased as size increased. In this present survey 55 firms were reported as no longer operating, representing 8.7 percent of the initial sample.

Practical Implications for Owner Managed SMEs

Recent studies show that there is a definite link between HPPs and the financial performance of organisations (Huselid, 1995; Patterson et al. 1997), however the results of this study indicate that there is only a moderate adoption of HPPs in Australian owner-managed SMEs. This doesn't present a very optimistic picture for Australian owner-managed SMEs.

Why are HPPs lacking in so many SMEs? By their nature, SMEs have more limited human, material and financial resources (Mc Adam 2002; Vossen as cited in Huang et al. 2002) than larger businesses. With these more limited resources, it is more difficult to direct efforts to organisational change initiatives (McAdam 2002). SMEs focus on allocation of resources to achieve their maximum short-term advantage, which frequently leaves them to respond to external influences as they occur rather than taking a proactive approach. Consequently this issue of limited resources means that SMEs face a major challenge in regard to innovation, which normally requires the directing of resources to research and development. Innovation is important to growth and viability and is cited as a practical instrument for achieving change (Wind & Main 1998).

SMEs also have less market power than large organisations and consequently they are more subject to market changes (Todtling and Kaufman 2001; Raymond, Julien, Carriere and Lachance 1998 as cited in McAdam 2002). However, sometimes a smaller organisation can be more responsive than larger organisations and adapt to market changes as they occur (McAdam 2002; Wiesner and McDonald 2001). This is possible because SMEs normally have closer relationships with their market than large organisations. Both loyalty and geographic proximity can work in favor of the SME and they may have an advantage in being able to read the signs of change early (McAdam 2000). Early recognition and response to environmental change at the stage when it can be considered a challenge and not a crisis, is a key to long-run survival (De Geus 1999).

What can SMEs do to enhance the HPPs in their firms? SMEs can seek help from industry and professional associations that provide education on high performance work systems and bring together companies to network and learn from one another. Other sources of help include Chambers of Commerce, a number of electronic forums available on the internet and university courses on the management of SMEs. Small companies may also pool resources to obtain the help of change management consultants with experience in high performance work systems. To ensure business excellence, objectives and goals must be feasible and attainable. The real issue for both the development and understanding of employee performance is to get employees involved in the creation of plans as well as in their execution. What is needed in Australian SMEs is to capture the potential of the workforce to become involved in building sound relationships and, for this, it is necessary to have deeply held core values within the organisation. Hence, individuals must be inspired rather than simply respond to any initiative. Within the business arena, it is the inter-linking of the three elements of productivity, quality and high commitment/involvement that can form a triadic gain in both economic and organisational commitment terms.

The forces propelling organisations toward HPPs such as global competition, technology and rapid change, are not likely to fade soon. Success stories will prompt more and more companies to create HPPs. As the HPPs of today's SMEs mature and evolve, they will face the challenge of renewal. A critical step in the implementation is one of the most difficult and least understood. It requires SMEs to be vigilant and forward-thinking learning organisations in order to be tomorrow's performance leaders. In Gillooly's (1998 p.15) words:

SMEs used to be referred to condescendingly by large companies as "ankle biters." Small businesses, until the recent advent of advanced electronic-business technologies, occasionally nipped at the heels of much bigger companies - but many often became little more than speed bumps to the behemoths of commerce as they steamrolled their way to greater and greater market share".

A high level of leadership commitment to the change process is a key for implementation of effective organisational change (Bruce & Wyman 1998; Kotter 1996; Want 1998). Strong leadership is an absolute necessity for change to occur (Burke, 2001) and in its absence, there can be very little change (Shinn 2001). Astute leaders will be monitoring their environment including consideration of customers, capital markets, key supplies and suppliers, competitors, human resource practices, changing government regulations and technology (Burke 2002). The multi-tasking requirements of the leaders in operating SMEs, may overcome their capacity to maintain this watching brief.

The significance of the findings of our research for SMEs is that they underscore the need to acknowledge that contemporary change models may on the one hand not apply to organisations in the size ranges considered in this study (Banham 2006). On the other hand, while the imperatives for HPPs are no less significant for small and medium sized firms than they are for larger organisations, the specific needs of SMEs should drive the forms of HPPs. Large firm solutions may not be appropriate. What the HR profession needs, is a more balanced approach to prescribing and researching management solutions; an approach with a greater emphasis on the SME sector.

SME owner-managers may not be unaware of the links between these practices and organisational performance, which Huselid (1995) and others have proposed. In a study on the managerial assumptions of SME managers, McDonald (2006) found that three-quarters rely on their own experience as the primary source of their ideas managing their organisations. Even if they are aware of the advantages of these practices, they may still disregard them (Johnson, 2000). A second reason may be that SME managers don't always view these practices as practical within the context of managing a small organisation. Third, the cost of implementing new practices is always an issue for SMEs.

A greater understanding of HPPs may lessen the frustration that small business owners experience as the result of employee management problems. Furthermore, this added understanding of current HPPs may also be useful in solving the problem that many small business owners may not even recognise their own failure to deal with people management issues. In other words, regardless of their size, the reliance upon traditional work practices for SMEs may cause an intensification of problems as firms expand.

When we look at Australian owner managed SMEs, do we see a portrait represented by high or low performing management practices? While there are clearly examples of both extremes, the portrait we see is somewhere in between. The adoption by Australian owner managed SMEs of HPPs may only be described as moderate, and in this regard the low application of participative practices and a low incidence of collective relations, indicates that many SMEs need a make-over if they are to meet the demands of the market. It is evident from the findings in this study that HPPs in owner managed SMEs stand to benefit from modernisation and improvement.

References

- ABS (1999) Small business in Australia, Australian Bureau of Statistics, Canberra.
- ABS (2000). *Labor Force, Australia*, Australian Bureau of Statistics, Cat. No. 6203. Canberra: Australian Government Publishing Service.
- Appelbaum E Bailey T Berg P and Kallerberg A (2000) *Manufacturing Advantage: Why High Performance Work Systems Pay Off*, CUP, New York, NY.
- Appelbaum E and Batt R (1994) *The new American workplace: transforming work systems in the United States*, Ithaca, Cornell University Press NY.
- Arthur JB (1994) Effects of human resource systems on manufacturing performance and turnover, *Academy of Management Journal* 37: 670-87.
- Asia Pacific Economic Cooperation 2002, The APEC Working Committee [Online] Available: <http://www.apecsec.org.sg> and <http://www.guide to economy.org> [Accessed 08 October 2002]
- Bacon N Ackers P Storey J and Coates D (1996). It's a small world: managing human resources in small business, *International Journal of Human Resource Management* 7 (1) February: 82-100.
- Banker RD Field J M Schroeder R G and Sinha K K (1996) Impact of work teams on manufacturing performance: A longitudinal field study, *Academy of Management Journal* 39 (4): 867-91.
- Baron A (1995) Managers of small firms challenge stereotypes, *Personnel Management* 1 (3) 9 February: 59.
- Banham HC (2006) *Organisational Change in Small and Medium Enterprises – A Regional Study*. Unpublished doctoral dissertation, University of Southern Queensland, Australia
- Bartram T 2005 Small firms, big ideas: The adoption of human resource management in Australian small firms, *Asia pacific Journal of Human Resources* 43 (1): 137-154.
- Blackman AJ 2003 Entrepreneurs: Interrelationships between their characteristics, values, expectations, management practices and SME performance, Doctoral thesis, Griffith University, Gold Coast.
- Bruce R and Wyman S (1998) *Changing Organisations, Practicing Action training and Research*, Sage Publications, Thousand Oaks, California.
- Burke WW (1995) Organization change: What we know, what we need to know', *Journal of Management Inquiry* 4 : 158-171
- Burke WW (2002) *Organization Change Theory and Practice*, Sage Publications Thousand Oaks, California
- Burke WW (2001) Organization Development and Change in *Best Practices in Organization Development and Change*, eds. Carter L, Giber D, Goldsmith M, Linkage Incorporated Jossey-Bass/Pfeiffer, San Francisco
- Callus R Kitay J and Sutcliffe P (1992) Industrial Relations at small business workplaces, *Small Business Review* AGPS, Canberra: 106-45.
- Capelli P and Rogovsky N (1994) New work systems and skill requirements, *International Labour Review* 133 (2): 205-20.
- Cecora J (2000) Entrepreneurs and SMEs in Regional economies: Policy Issues for Sustainable Development in a Globalizing Economy, *International Review of Sociology* 10 (1): 83-100
- Chapman P (1999) Managerial Control Strategies in Small Firms, *International Small Business Journal* Jan (17 i2): 75-80.
- Cummings TG and Worley CG (2001) *Organization Development and Change*, South-Western College Publishing Thomson Learning, U.S.A.
- Curran J and Blackburn RA (2001) *Researching the Small Enterprise*, Sage Publications London.
- De Geus A (1999) Planning as Learning, *Harvard Business Review on Managing Uncertainty*, Harvard Business School Publishing, Boston MA
- Delaney JT Lewin D and Inchniowski C (1989) *Human resource policies and practices in American firms*, US Department of Labor, Washington, D.C.
- Delery JH and Doty, HD 1996 Modes of theorizing in strategic HRM: Tests of universalistic, contingency and configurational Predictions, *Academy of Management Journal* 39 (4): 802–35.

- Dessler G Griffiths J Lloyd-Walker B and Williams A (1999) *Human Resource Management*, Prentice Hall, Australia.
- Fuller T (2003) *If you wanted to know the future of small business what questions would you ask?* Futures 35, IPC Science and Technology Press in Co-operation with the Institute for the Future, 35 (4) : 305-321.
- Galang MC (1998) High performance work practices in small and medium sized manufacturing firms; a comparative study. 11th IIRA World Congress: *Developing Competitiveness and Social Justice: the interplay between institutions and social partners*, Bologna, 22-26 September.
- Gillooly B (1998) Emerging Enterprise, *Information Week* 69 (7): 97.
- Gollan P J (2005) High involvement management and human resource sustainability: The challenges and opportunities, *Asia Pacific Journal of Human Resource Management* 43 (1): 18-33.
- Granovetta M (1984) Small is bountiful: Labor markets and establishment size, *American Sociological Review* 49 (2): 323-34.
- Harley B (2002) Employee responses to high performance work system practices: an analysis of the AWIRS95 data, *Journal of Industrial Relations* 44 (3): 418-34.
- Heneman HG and Berkley RA (1999) Applicant attraction practices and outcomes among small business, *Journal of Small Business Management* 37 (1): 53-63.
- Howard J (1997) *More time for business* – Statement by the Prime Minister, the Hon. John Howard MP, Canberra, AJPS.
- Huang X Soutar GN and Brown A (2002) New product development processes in small and medium-sized enterprises: Some Australian evidence, *Journal of Small Business Management*, Milwaukee, January 2002.
- Huselid M A (1995) The impact of HRM on turnover, productivity, and corporate financial performance, *Academy of Management Journal* 38(3): 635–72.
- Ichniowski C Shaw K and Prensushi G (1995). The effects of HRM practices on productivity, Working Paper no. 5333. National Bureau of Economic Research, Cambridge, MA.
- Jennings P and Beaver G (1997) The Performance and Competitive Advantage of Small Firms: A Management Perspective, *International Small Business Journal* 15 (2), January-March: 63-75.
- Johns BL Dunlop WJ and Sheehan WJ (1989) *Small Business in Australia: Problems and Prospects*, 3rd edn. Allen and Unwin, Sydney.
- Joyce P Woods A McNulty T and Corrigan P (1990) Barriers to change in small businesses: Some cases from an inner city area, *International Small Business Journal* 8 (4): 49-58.
- Khan AM and Manopichetwattana V (1989) Innovative and Non-innovative Small Firms: Types and Characteristics, *Management Science* 35 (5).
- Lawler E Mohrman S A and Ledford G E (1995) *Creating high performance organisations*, Jossey-Bass, San Francisco.
- Jennings P and Beaver G (1997) The Performance and Competitive Advantage of Small Firms: A Management Perspective, *International Small Business Journal* 15 (2), January-March: 63-75.
- Jones JT (2005) The determinants of training in Australian manufacturing SMEs, *Education and Training* 47 (8/9).
- Johns BL Dunlop WJ and Sheehan WJ (1989) *Small Business in Australia: Problems and Prospects*, 3rd edn. Allen and Unwin, Sydney.
- Johnson, E.K. (2000) The practice of human resource management in New Zealand: Strategic and best practice? *Asia Pacific Journal of Human Resources*, 38 (2): 69-82.
- Joyce P Woods A McNulty T and Corrigan P (1990) Barriers to change in small businesses: Some cases from an inner city area, *International Small Business Journal* 8 (4): 49-58.
- Khan AM and Manopichetwattana V (1989) Innovative and Non-innovative Small Firms: Types and Characteristics, *Management Science* 35 (5).
- Kotter JP (1996) *Leading Change*, Harvard Business School Press, Boston, Massachusetts.
- Kramar R (2001) HRM in the 1990's: Managements dream come true? In Wiesner R and Millett B (Eds.) *Management and Organisational Behaviour: Contemporary Challenges and Future Directions*. Wiley, Sydney.
- Lattimore R Martyn B McCann B and Pearson K (1997) *Portrait of Australian Business: Results of the 1995 Business Longitudinal Survey, Small Business Research Program*. Productivity Commission/Department of Industry, Science and Tourism, AGPS Canberra.
- Marlow S and Patton D (1993) Managing the employment relationship in the smaller firm:

- possibilities for human resource management, *International Small Business Journal*, 11 (4) July-September: 57-64.
- McAdam R (2000) The implementation of reengineering in SMEs: A grounded study, *International Small Business Journal* London, Jul-Sep.
- McAdam R (2002) Large-scale innovation - reengineering methodology in SMEs: Positivistic and phenomenological approaches, *International Small Business Journal* London, Feb. 2002.
- McDonald, J. (200) *The ideology of managers in small and medium sized enterprises*. Unpublished PhD dissertation., University of Southern Queensland.
- Marlow, S. and Patton, D. (1993). Managing the employment relationship in the smaller firm: possibilities for human resource management', *International Small Business Journal*, 11 (4), July-September: 57-64.
- McDonald J and Wiesner R (1998) Organisational change and HRM strategies in Australian SMEs, 11th IIRA World Congress: *Developing competitiveness and social justice: the interplay between institutions and social partners*, Bologna, 22-26 September.
- Miller D and Toulouse JM (1986) *Chief Executive Personality and Corporate Strategy and Structure in Small Firms*, *Management Science* 32 (11): 1389-1409
- Mintzberg H (1979) *The Structuring of Organization*, Prentice-Hall, Englewood Cliffs, NJ.
- Morehead A Steele M Alexander M Stephen K and Duffin L (1997) *Changes at Work: The 1995 Australian Workplace Industrial Relations Survey*, Addison Wesley Longman, Canberra.
- Morrison A Breen J and Shameem A (2003) Small Business Growth: Intention, Ability and Opportunity, *Journal of Small Business Management* 41 (4): 417-425.
- Murphey GD and Southy G (2003) High performance work practices: Perceived determinants of adoption and the role of the HR practitioner, *Personnel Review* 32 (1).
- Newton K (1998) The high performance workplace: HR based management innovations in Canada, *International Journal of Technology Management* 6 (1-3): 177-9.
- Olson PD and Terpstra DE (1992) Organisational structural changes: life-cycle stage influences and managers' and interventionists' challenges, *Journal of Organisational Change Management*, 5 (4): 27-40.
- Osterman P (1994) How common is workplace transformation and who adopts it?, *Industrial and Labor Relations Review* 47(2): 173-88.
- Osterman, P. (1995), Skill, training, and work organization in American establishments. *Industrial Relations*, 34 (2): 125-46.
- Patterson M West M Lawthom R and S Nickell (1997) *Impact of people management practices on business performance*, Issues in People Management. London: Institute of Personnel and Development.
- Pettigrew A and Whipp R (1991) *Managing Change for Competitive Success*, Blackwell, Oxford.
- Robbins SP Waters-Marsh T Cacioppe R and Millett B (1994) *Organisational Behaviour Concepts, Controversies and Applications* Prentice Hall, New York.
- Raymond L Julien PA Carriere JB and Lachance R (1996) Managing Technological Change in Manufacturing Smes: A Multiple Case Analysis, *International Journal Technology Management* 11 (¾).
- Richardson B (1995) In defence of business planning: why and how it works for small firms and 'corporations of small business units, *Small Business and Enterprise Development* 2: 41-57.
- Salamon, M. (1987) *Industrial Relations Theory and Practice*. London: Prentice Hall.
- Sanchez J Kraus E White S and Williams M (1999) Adopting high involvement human resources practices: the mediating role of benchmarking, *Group and Organisation Management* 24 (4): 461-78.
- Savary L and Mazarol T (2001) The characteristics of small business human resources – A comparison of small and large firms, *Small Enterprise Research- The Journal of SEAAZ* 9 (2).
- Shinn GS (2001) Intentional Change by Design, *Quality Progress Milwaukee* 34 (5): 46-51.
- Sironopolis N (1994) *Small business management: A guide to entrepreneurship*, Houghton-Mifflin, Boston.
- Sung J and Ashton D (2005) *Achieving Best Practice in your Business*. High Performance Work Practices: Linking Strategy and Skills to Performance Outcomes, DTI in association with CIPD London.
- Terpstra D Mohamed A Rozell E (1996) A model of human resource information, practice choice, and organizational outcomes, *Human Resource Management Review* 6 (1):25-46.

- Todtling F and Kaufmann A (2001) *The Role of the Region for Innovation Activities of SMEs*, Sage Publications European Urban and Regional Studies 8 (3): 203-215.
- Vaughan E (1991) Structure and strategy in the case for worker participation, in L. Savery and N. Dufty, eds. *Readings in Australian industrial relations* Harcourt, Brace Jovanovich, Sydney, pp. 418-28.
- Wagar T (1998) Determinants of Human Resource Management Practices in Small Firms: Some Evidence from Atlantic Canada, *Journal of Small Business Management* 36 (2): 13-23.
- Want J (1995) *Managing Radical Change, Beyond Survival in the New Business Age*, Oliver Wight Publications Inc., Essex Junction, Vermont, U.S.A.
- Welbourne TM and Cyr LA (1999) The human resource executive effect in initial public offering firms, *Academy of Management Journal* 42 (6): 6-16.
- Welsh JA and White JF (1981) A small business is not a little big business, *Harvard Business Review* 59 (4): 18-32.
- Whitfield K and Poole M (1997) Organizing employment and high performance: theories, evidence and policy, *Organization Studies* 18 (5): 745-64.
- Wiesner R and McDonald J (2001) Bleak house or bright prospect? Human resource management in Australian SMEs, *Asia Pacific Journal of Human Resources* 39 (2).
- Wiesner R Banham H and McDonald J (2007) Australian Small and Medium Sized Enterprises: A study of high performance management practices, *Journal of Management and Organisation*.
- Wilson N (2002) Agenda for Growth *International Small Business Journal*, London, 20 (1): 117-120.
- Wood S (1999) Getting the measure of the transformed high performance organisation, *British Journal of Industrial Relations* September 37:3.
- Wood S and de Menezes L (1998) High commitment management in the UK: Evidence from the Workplace Industrial Relations Survey, and Employers' Manpower and Skills Practices Survey', *Human Relations* 51: 485-515.
- Wilson N (2002) Agenda for Growth, *International Small Business Journal* London 20 (1): 117-120.
- Wind JY and Main J 1998 *Driving Change*, The Free Press New York NY.