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Human resources and SME performance in services: empirical evidence from the UK

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We investigate the relationship between human resources (HR) and superior firm performance, as well as the role of business strategy as a key mediating factor, for small- and medium-sized enterprises (SMEs) in the UK Tourism Hospitality and Leisure (THL) sector. Our results suggest that high-performing SMEs in the THL sector are managed by more experienced entrepreneurs. We also find that more profitable SMEs combine a highly skilled workforce with technological and know-how-based firm differentiation strategies, and/or product differentiation strategies, which are based on quality of service and personal attention to customers, alongside generous compensation and attention to employee development.

Keywords: business strategy; human capital; organisation commitment to employees; profitability; service SMEs

Introduction

The central theme in the field of strategic human resource management (SHRM) has been the investigation of the mechanisms that describe the link between human resource (HR) architecture and organisational performance. The theoretical literature in the field has mainly been based on the resource-based view (RBV) of the firm, which aims to provide a justification of how HR is linked to firm-level sustainable competitive advantage (SCA) (Lado and Wilson 1994; Wright, McMahan and McWilliams 1994). On the empirical side, the focus has been mainly on testing the validity of universalistic ('best practice') versus contingency ('external fit') approaches of the relationship between HR and financial performance (Huselid 1995; Wright and Boswell 2002), with most of the evidence providing support to the 'best practice' framework (Becker and Huselid 2006).

However, several scholars in the field suggest that despite the lack of empirical support, the 'contingency perspective' should not be dismissed, as it may still provide a satisfactory framework for analysis in the SHRM theory (Becker and Huselid 2006). The case for caution is supported by the fact that the vast majority of empirical evidence is produced by studies from the US, focusing on samples of large firms in the manufacturing sector (Arthur 1994; Youndt, Snell, Dean and Lepak 1996; Appelbaum, Bailey, Berg and Kalleberg 2000). This raises doubts on the applicability of their results in different settings.

By way of an example, it has long been acknowledged by SHRM scholars that the nature of HRM and its link with organisational performance depend critically on firm size and the industry context (Storey 2002; Way 2002). In general, it is expected that HRM

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can be more important for the service sector than the manufacturing sector, given the much larger share of production costs accounted for by employment (Bartel 2004). In addition, there is evidence that smaller firms are not just 'scale-down' version of large firms and that they engage in different HRM practices than larger firms (Huselid 1995; Storey 2002).

Although recent studies have produced evidence on the HRM-performance link from services and medium-sized enterprises (SMEs) (Way 2002; Guest, Michie, Conway and Sheenan 2003), this area is still viewed by many as surprisingly under-researched (Delery and Dotty 1996; Heneman and Tanksy 2003). This is especially true when one considers the importance of services and the small business sector for OECD economies (OECD 2002; Small Business Service 2003).

Importantly, the samples analysed by empirical HRM studies of SMEs exclude very small/micro-firms (firms with less than 10 employees) (Hoque 1999; Way 2002; Bacon and Hoque 2005). As a result, empirical findings may not be representative of the population of SMEs, as in most service industries very small firms account for a significant share of all firms (Hoque 1999; Forth, Bewley and Bryson 2006). It is also arguable that we know little about the key areas of the HR-performance link of very small firms and whether small businesses deploy strategies that are properly aligned to HR to appropriate value (European Commission 2002)

The purpose of this paper is to shed some light in this little investigated area. In particular we aim to identify the key HR features that are associated with superior financial performance and to explore the role of business strategy as a mediator of the HR-performance link in micro-SMEs in the UK Tourism Hospitality and Leisure (THL) sector.

A review of extant SHRM literature and of the survey-based evidence from UK SMEs in services so far seems to suggest that the human capital of employees and of the entrepreneur/business owner, as well as the organisation's commitment to employees' well-being, fair compensation and development are potentially key HR factors for SME success (see the Hypotheses development subsection on Human resources and SMEs profitability).

Our own results provide evidence that the entrepreneur's experience is the only HR factor of THL SMEs which is directly and positively associated with profitability. More importantly we find that synergies of strategy and HR matter for SMEs performance, but the evidence points towards a 'good' and 'bad' fit of strategy and HR, i.e. that only certain interactions of strategy and HR are associated with higher profitability, whereas others have a negative or no association.

The structure of the paper is as follows. In 'Hypotheses Development' we build on extant theory to develop the hypotheses for empirical investigation. Section three describes our method and survey design, the sample and the operational measures of the dependent and independent variables employed in our analysis. The fourth section discusses the main results and findings. Finally section five discusses implications for managerial practice and provides concluding remarks.

Hypotheses development

Human resources and SMEs profitability

Based on the RBV, HR factors can lead to SCA when they are valuable, rare, inimitable and non-substitutable (VRIN) (Barney 1991). Wright et al. (1994) distinguished between the firm's human capital pool (i.e. the stock of employees' education and skills that exist within a firm at any given point in time) and HR practices (those HR tools intended to manage the human capital pool). By employing the concept of VRIN, they argued that the human capital pool had greater potential to constitute a source of SCA.

The above argument may hold more strongly within the small business sector where gaining access to a workforce that produces superior employee output is both valuable and rare (Way 2002). In the 2001 Employee Skill Survey, for example, 'significant numbers" of SMEs in the UK reported skill shortages or skill gaps (Small Business Service 2001, p. 69), and in another survey almost one third of SMEs identified training among the top five challenges facing the business in the coming year (Small Business Service 2001, p. 69). This evidence supports the idea that a lack of skilled labour can be leading cause of firm failures within the UK small business sector.

Way (2002) also suggests that superior human capital too is inimitable and non-substitutable because micro-SMEs are typically more labour-intensive compared to their larger counterparts, and other sources of competitive advantage are in limited supply to them.

Recent research distinguishes between human capital attributes (including education, experience and skills) of employees and of top managers, as important determinants of firm outcomes (Huselid 1995; Pennings, Lee and Van Witteloostuijn 1998). This distinction is expected to be even more important in SMEs, in which the high concentration of decision-making power suggests that the owner/entrepreneur's creative talent can be fundamental for business success (Lefebvre and Lefebvre 1993). This view is supported by the UK Department of Trade and Industry (DTI), which argues that 'Improving the growth capability of UK businesses will only be achieved by raising performance across a range of areas such as management skills, workforce development and the use of innovation and adoption of best practice across different business functions (Small Business Service 2002).'

The above arguments serve as the basis of our first hypothesis:

H1: The human capital of SMEs, such as the entrepreneur's education and experience and the education and training of the workforce, will tend to be positively related to the profitability of SMEs.

In contrast to Wright et al. (1994), Lado and Wilson (1994) proposed that firm's HR practices could provide a source of SCA. They suggested that HR systems (a combination of individual HR practices) can be unique, causally ambiguous and synergistic in the way they enhance firm competencies and thus could be inimitable. This point of view seems well accepted within the current SHRM paradigm (Snell, Youndt and Wright 1996).

Based on Huselid (1995), HRM practices or high-performance work practices (HPWPs) include comprehensive employee recruitment and selection procedures, incentive compensation, performance management systems, as well as employee involvement and training practices (see Huselid (1995) and Combs, Liu, Hall and Ketchen (2006) for analysis articulating how HPWPs may lead to SCA). On the other hand, Gerhart, Wright, McMahan and Snell (2000) have suggested that among empirical studies that have examined the link between HRM practices and firm performance, there is little consistency with regards to the individual HRM practices. In addition, Becker and Huselid (1998) and other scholars suggest that the choice of HRM practices should be guided by what previous research has indicated as theoretically and empirically appropriate.

Previous research seems to support that SMEs are less likely than larger organisations to adopt sophisticated HRM practices. Bacon and Hoque (2005) provide evidence that although informality in employment practices in SMEs is widespread, it is not universal. In particular, SMEs with a high share of skilled and unionised workforce are more likely to adopt formal HRM procedures. Based on this evidence and given that UK SMEs are less likely to be unionised and/or have a high-share of skilled employees, one would expect that they are also less likely to engage in HPWPs (Forth, Bewley and Bryson 2006). Based on Hoque (1999) the same is expected to be the case for the THL industry in the UK.

In SMEs in the service sector, where it is much more common for employment relations to be dealt with by the owner/manager, it is expected that the nature of HRM hinges heavily on the personal relationship between the management and the employees (Forth et al. 2006).

In the SHRM literature, the HR practice closer to the informal and relational model identified as relevant for service SMEs, is the organisation's commitment to its employees (OCE), which is expected to be fundamental in achieving SCA (Lee and Miller 1999, 2001; Wright and Boswell 2002). An OCE may be reflected in its care for employee well-being and satisfaction, in the fairness and compassion of its rewards and its investment in competence development of employees (Eisenberger, Cotterell and Marvel 1987; Eisenberger, Fasolo and Davis-LaMastro 1990).

OCE is expected to create useful emotional bonds between an organisation and its employees. If employees believe that their organisation cares about them and their happiness, treats them with consideration and distributes its rewards accordingly, those employees are far more likely to develop positive affective attachments to their employer (Eisenberger et al. 1987, 1990). Strong affective bonds can induce greater efforts from employees – efforts to work harder, to cooperate more willingly, to work more innovatively and thus to do a better job (Eisenberger et al. 1990). This can lead to greater productivity, more creativity, higher quality work and better team decisions (Peters 1994). In fact employees' affective attachments to their organisations have been shown to reduce costly absenteeism, to cut turnover and to improve job performance (Steers and Porter 1987). OCE can also create a climate of trust that allows firms to dispense with costly and demotivating bureaucratic controls (Barney and Hansen 1994). Thus, OCE and the effort, initiative and collaboration it fosters, can help firms to build SCA.

Based on these arguments we propose our second hypothesis:

H2: The SME's OCE will tend to be positively related to SMEs profitability.

The HR-strategy nexus and SMEs profitability

Becker and Huselid (2006) recognise that the HR-performance link is not as direct as suggested by prior SHRM literature and that indirect links are central to a more complete understanding of how the HR architecture drives firm performance. The 'contingency' perspective in SHRM postulates the importance of 'external fit', namely the alignment of HRM with business strategy for superior performance (Wright et al. 1994).

The logic behind the 'external fit' hypothesis is that HR can lead to SCA by facilitating the achievement of strategic goals as these goals require relevant knowledge, skills and expertise as well as certain behaviours and attitudes by employees (Wright, Dunford and Snell 2001). A given business strategy may be worth little without the appropriate stock of human capital needed for successful strategy execution (Barney 1991; Lado and Wilson 1994). In turn, the pursuit of a dedicated strategy for value appropriation may lead to superior performance via the efficient deployment of the organisation's human capital (Lee and Miller 1999).

HRM practices such as OCE are expected to contribute towards a committed and motivated workforce, which in turn is more willing to work in harmony towards the achievement of strategic objectives and to take decisions with care and 'generosity of spirit' (Hart 1992; Lado and Wilson 1994). Conversely, dedicated business strategies may intelligently help focus employee effort and thus leverage the benefits of OCE. A dedicated and coherent strategy can provide employees with useful goals to work towards, as well as important work to do. Firms without a strategy for attaining competitive advantage may end up wasting their employees' best efforts (Lee and Miller 1999).

Based on these arguments we propose our third hypothesis:

H3: SMEs human capital and their OCE will tend to be related positively to SME profitability, more strongly when the SME pursues a dedicated strategy to improve its performance.

Methodology

Research design and sample

The data used in our analysis were collected through a large-scale survey of THL SMEs implemented between September and December 2005 by the Centre for International Business and Management (CIBAM), at the Judge Business School, University of Cambridge, and in close collaboration with trade associations of the THL sector. The data were collected as part of a project aiming to evaluate the effect of business support programmes for SMEs in the THL offered by a strategic alliance of trade associations in the sector. The THL sector consists mainly of micro-, small- and medium-sized firms (defined by the European Commission as firms with 10 or less employees, 50 or less employees and 250 or less employees, respectively, European Commission 2002) and is very heterogeneous. In our sample, businesses receiving support included hotels, attractions, other service accommodation and self-catering accommodation providers, restaurants, caravan/home sales, pubs/bars, businesses in catering service, health clubs and leisure centres, businesses organising conferences and events, recruitment, cottage letting and travel agencies.

We adopted the methodology of contacting the firms, mailing the questionnaire and following up, as proposed in the literature (Dillman 1999). We contacted in total 1350 businesses that participated in business support programmes offered by the DTI and a strategic alliance of the main industry associations in THL. Questionnaire items were identified by a review of the literature on the organisational structure of service SMEs (Lefebvre and Lefebvre 1993; Hoque 1999; Rangone 1999; Bacon and Hoque 2005) and by interviews with CEOs of the main trade associations in the sector and several business owners/entrepreneurs that had as a main objective to identify the key business areas in general and of HR in particular for THL SMEs.

The questionnaire was kept relatively short (three pages) and simple, partly because of concerns of a low response rate and partly because extant literature (Hoque 1999; Bacon and Hoque 2005) and discussions with CEOs of the main trade associations in the THL and with business owners revealed that in contrast to large firms the organisational structure and HR architecture of THL SMEs is quite simple, allowing more focused questions.

The questionnaire included questions on key financial and other performance indicators such as sales revenue, total expenditure, advertising expenditures and expenditure on R&D (e.g. expenditure on the development and commercialisation of new products/services, expenditure on the development of new ways of doing business and expenditure on new technology). Information was also requested on business objectives and strategies to achieve these, competencies for the business strategy and management and personnel policy, as well as on the number of employees and workforce skill decomposition and training provision. Business managers/owners were also asked to provide information on their education and experience as well as on business characteristics, such as ownership status, age of business and on whether the business is a part of larger organisation, as well as the number and type of collaborations and partnerships and reasons that led to the establishment of these partnerships.

The survey achieved a relatively high response rate (35%), as compared to the average response rate for SMEs in this sector (Dillman 1999), with 460 businesses returning the survey questionnaire. The information collected was of very good quality as the vast majority of managers provided detailed answers to all questions. Table 1 presents some important statistics such as number of employees, turnover and profit margin for SMEs responding in the survey (excluding businesses that are part of a large organisation, i.e. a mother company with 500 or more employees), for all contacted businesses and for all UK SMEs (obtained by FAME database in 2005).

The average firm in our sample is quite small with around 50 employees (30% of the sample consisted of medium businesses, 40% of small businesses and 30% of micro-businesses). A simple comparison of the main statistics between respondents and all firms included in the survey as presented in Table 1 does not seem to suggest a problem with non-response bias. However, comparing SMEs responding in the survey with all UK SMEs in THL seems to suggest that responding firms are on average smaller in size, which may further explain why they are also less profitable than the population of THL SMEs (Manning 2003). This discrepancy may be due to the fact that our survey included only THL SMEs that were offered business support by the DTI, that may be very different than non-supported SMEs. The non-random nature of our sample suggests the possibility of sample selection bias (Becker and Huselid 2006), which we try to address in our analysis that follows.

Measures

Dependent variable

We use the price–cost margin (PCM) as a measure of firm profitability. This is specified as sales revenue minus total expenditure, divided by sales revenue. The PCM represents the proportional difference between unit price and the marginal cost of output. A high PCM reflects a firm's ability to increase price over costs and/or to reduce average costs. The former situation might reflect a firm's market power, whereas the latter might reflect the firm's cost efficiency (Cubbin and Geroski 1987). The PCM is the most common index of profitability in strategic management and it is extensively employed in the industrial organisation (IO) literature (Draca, Machin and Van Reenen 2008).

Independent variables

HR. Our research hypotheses focus to two aspects of HR: the human capital pool of the organisation (distinguishing between entrepreneurial and employees' human capital) and the organisation's commitment to employees.

Table 1. Main descriptive statistics of the DTI-supported sample of SMEs and population of SMEs and the UK THL SMEs population.

	DTI sample	*DTI population*	*THL SMEs population*
Number of employees	52	54	63
Turnover/sales revenue	2172	2033	3180
Profit margin	0.3	0.23	0.54
Number of firms	430	1328	7771

Notes: DTI sample means calculations exclude businesses that are part of a larger organisation with more than 500 employees. Turnover/sales revenue is measured in £000.

We use factor analysis to identify structure within the HR-related subsets of the data. In particular, we used the information provided on the level and the number of educational/professional degrees/qualifications of the entrepreneur to construct a composite measure of manager's education. A confirmatory factor analysis (orthogonal, Varimax) was run to determine whether these items loaded on the factor labelled as entrepreneur's education (Table 2). Similarly, we used information on the years of general managerial experience of the owner/entrepreneur of the SME and on the years of experience in the THL sector to produce factor scores that measure the underlying latent construct of entrepreneur's experience. As indicated by Table 2, the items related to entrepreneur's education are negatively and strongly correlated with the items linked to entrepreneur's experience, suggesting that higher managerial experience is associated with fewer and lower educational qualifications. The factor loadings for these items further suggest that entrepreneur's education and experience are linked to two separate latent constructs, represented by factor 1 and factor 2, respectively.

The employees' human capital was measured by a single indicator, namely the share of qualified/trained employees in the business, calculated as the weighted sum of managerial employees with a degree/professional qualification and the number of non-managerial employees who received formal training, by the total number of employees.[1]

Following Lee and Miller (1999, 2001), the OCE is defined as the organisation's care about employees' competence development, fair and ample pay, and job satisfaction and

Table 2. Varimax rotated factor matrix of human resources items.

Item	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 4*	*Factor 5*
Factor 1: Manager's experience					
Years of general managerial experience	0.9	−0.56	−0.01	0.009	−0.016
Years of managerial experience in the THL	0.9	−0.48	0.06	−0.048	0.089
Factor 2: Manager's Education					
Level of degree/professional qualifications	−0.6	0.91	0.02	0.004	0.022
Number of degrees/professional qualifications	−0.57	0.89	−0.01	−0.01	0.02
Factor 3: Organisation's commitment to employees 1 (OCE 1-staff development)					
Human resources key for business strategy	0.17	−0.027	0.64	0.07	0.1
Importance of clear communication of HR policy	0.16	−0.19	0.63	0.24	0.15
Importance of human resources for business success	0.03	−0.11	0.77	0.23	0.14
Importance of education/training of employees for HR	0.21	−0.08	0.88	0.11	−0.01
Cooperation with other stakeholders for staff development	0.08	−0.06	0.91	−0.07	0.16
Factor 4: Organisation's commitment to employees 2 (OCE 2-employees' well-being)					
Importance of workers' satisfaction for HR	−0.02	−0.22	0.18	0.78	0.001
Importance of a good work environment for HR	0.13	−0.26	0.37	0.77	−0.27
Factor 5: Organisation's commitment to employees 3 (OCE 3-fair Pay)					
Average wage	0.09	−0.081	0.11	−0.021	−0.76
Impact of minimum wage	−0.079	−0.037	−0.06	−0.012	0.88
Staff turnover	−0.002	−0.022	0.03	−0.15	0.76
Eigen value	5.866	4.06	1.4	1.19	0.966
% of variance	41.9	29	10	8.5	6.9

physical and emotional well-being. Based on this definition our (confirmatory) factor analysis includes all attitudinal five-point Likert scale items, as well as metric variables that may reflect the aspects of OCE suggested by our definition.

Factor analysis seems to confirm the conceptual structure of OCE suggested by the adopted definition. Our analysis identifies three separate latent constructs that are consistent with the three key aspects of OCE, namely staff development (factor 3-OCE1), employees' satisfaction and well-being (factor 5-OCE2), and fair and ample pay (factor 6-OCE3).[2]

Results in Table 2 also suggest that the three OCE factors are not strongly correlated, suggesting that OCE does not necessarily involve a single construct. This is consistent with the analysis conducted by Lee and Miller (1999, 2001), who find that the three key aspects of the definition of OCE may not be congruent and thus OCE may be operationalised by more than one composite measure in the empirical analysis.

Business strategy. The two main strategy typologies used in the SHRM literature to explore the 'external fit' hypothesis are that of Porter (1985) and of Miles and Snow (1978) (Becker and Huselid 2006). The two typologies partly overlap. Porter (1985) postulates three strategies, namely product differentiation, cost leadership and focus, whereas Miles and Snow (1994) classify organisations based on the strategy they adopt to: prospectors (emphasising new products and markets), defenders (placing emphasis on cost advantage), analysers (a combination of prospector and defender) and reactors (with no permanently focused strategy, i.e. choosing between being a prospector, defender and analyser according to the circumstances).

Another strand of the strategy literature, often ignored by SHRM studies of the 'HR-strategy' fit, includes a strategy typology that shares some strategy types with the other two typologies, but it is not completely nested into them. This strategy typology is based on early IO economics, transaction costs and the RBV (Bain 1956; Penrose 1959; Williamson 1975). This strand of the literature postulates that the firm's profitability is determined by its ability to gain market power via raising structural and/or strategic barriers to entry for potential competitors. These strategic barriers to entry include product differentiation (based on price, quality, etc.) and cost advantage as in Porter (1985) but also 'relatively impregnable bases' (RIB, a form of firm differentiation as a whole, as described in Penrose (1959) and the RBV), namely technological and know-how-based bundles of (tacit) knowledge which are hard for rivals to imitate (Pitelis 2004). In addition, firms could pursue a dedicated integration, diversification and cooperation strategy with emphasis on economies of scope through product diversification and on the formation of alliances and networks with other firms in the industry to gain access to new knowledge and markets (Williamson 1975; Pitelis 2009).

Once more we employed factor analysis to identify whether the covariance structure of the strategy-related items in the data is consistent with any of the typologies discussed and to assess the dedication by which a firm pursued a given business strategy. The results of factor analysis of strategy-related items presented in Table 3 seem to confirm the a priori expectations about the structure in the strategy subset of the data. In particular, factor 1 is labelled as RIB strategy, but it can also represent a prospector-type of strategy, because it is characterised by high R&D expenditure (this includes expenditure on developing new products and services as well as new ways of doing business and expenditure on the adoption of new technologies), advertising expenditure and expenditure on business

Table 3. Varimax rotated factor matrix of strategy items.

Item	*Factor 1*	*Factor 2*	*Factor 3*	*Factor 4*
Factor 1: Impregnable base				
R&D expenditure	0.84	0.036	0.02	0.11
Advertising expenditure	0.71	0.09	−0.12	0.02
Expenditure on business support	0.6	−0.034	−0.049	0.19
Factor 2: Differentiation				
Pricing	0.087	−0.79	0.32	−0.22
Quality	0.029	0.8	−0.48	−0.04
Personal attention	−0.006	0.81	−0.33	−0.01
Innovation	0.052	−0.85	0.36	0.07
Factor 3: Cost leadership				
Cost control key for strategy	−0.03	0.46	0.81	−0.15
Importance of reducing costs for business success	−0.07	0.27	0.73	−0.23
Cooperation with other stakeholders to reduce costs of business	0.05	0.48	0.78	0.12
Factor 4: Cooperation/diversification				
Number of memberships in professional associations	−0.18	−0.06	−0.28	0.77
Number of cooperations with other stakeholders	−0.04	0.07	−0.07	0.85
Number of activities/products	−0.002	−0.006	−0.04	0.79
Eigen Value	5.265	3.068	2.041	1.144
% of variance explained	40.5	23.6	15.7	8.8

support, indicators related to know-how advantage and to a focus on developing new products. Factor 2 is labelled as product differentiation and is based on factor loadings presented in Table 3. High scores of this factor correspond to differentiation based on pricing and innovation, whereas low scores are linked to differentiation based on quality of service and personal attention to customers. Factor 3 is labelled as cost reduction/leadership, because higher score values of this factor are associated with businesses in which the manager considers cost control as one out of three main means to achieve business objectives, considers cost reduction over time very important for business success and has established cooperation with other stakeholders with the primary purpose to reduce costs.

Finally, factor 4 is a composite measure of the extent to which the business pursues a cooperation/diversification strategy. Higher score values of this factor are associated with more intensive cooperation and networking activities, as measured by the number of memberships of the entrepreneur/owner in professional associations and the number of cooperations with other stakeholders (customers, suppliers, government, etc.) and more intensive product diversification as measured by the number of different products/services offered by the business.

Strategy factors 1 and 4 related to RIB and to cooperation/diversification strategy combine only metric variables expected to be strongly associated with the underlying construct, whereas factors 2 and 3 related to differentiation and cost leadership include attitudinal items that are picking up directly manager's perception of the business' key source of competitive advantage.

Thus, a distinctive feature of our analysis is that we do not adopt a particular typology of strategies as the previous SHRM literature but instead we operationalise all different strategy constructs across the three main typologies in the literature,[3] as the four strategy factors produced by our analysis can individually and collectively measure all distinct strategies identified by the dominant typologies. This seems to be appropriate for the analysis of SMEs profitability, as previous empirical research based on case studies and statistical analysis of surveys from SMEs suggests that SMEs mainly pursue one of the above value appropriation strategies depending on their particular characteristics such as the industry in which they operate and the resource constraints they face (Lefebvre and Lefebvre 1993; Rangone 1999).

HR and business strategy fit. We operationalise the synergies/complementarities of HR and strategy adopting the standard approach in the SHRM literature, i.e. using interactions of the employees' human capital and OCE with the four strategy measures[4] (Huselid 1995).

Analysis and results

Table 4 presents Pearson correlations of the dependent and independent variables and Table 5 the estimation results of several specifications of the PCM model. The first column of Table 5 reports linear regression results, whereas in column two are reported estimates produced by Heckman's (1979) two-step method (Heckit)[5] that addresses sample selection bias. As discussed in the Research design and sample section, sample selection bias may arise in our analysis from the fact that SMEs participating in DTI business support programmes are systematically different in profitability and HR architecture from other THL SMEs (Heckman 1979). Linear regression results are very similar to the Heckit, and the inverse Mill's ratio is insignificant suggesting that sample selection is not a major concern for our analysis and thus one can proceed with OLS rather than Heckit estimation of the model.

We follow a general to specific model selection strategy (Hendry 1987) by starting with a general specification and gradually omitting all variables with strongly insignificant estimated coefficients to derive the most parsimonious model representing the data, as that presented in column four of Table 5.

Results presented in column 4 seem to suggest that out of all HR factors only entrepreneur's experience has a direct and strong positive association with financial performance. This result seems to support the importance of the entrepreneur/owner for SMEs (stemming from the concentrated decision-making power), which has also been acknowledged by the UK DTI (Small Business Service 2002). Moreover, a potential interpretation of the lack of direct correlation between employees' human capital and OCE with profitability may be the lack of complementary resources, as for example a dedicated value appropriation strategy that would assist in effectively deploying human capital and HR practices to boost performance.

Moving to the associations/correlations between interactions/complementarities of business strategies and HR factors with performance we find all kind of associations, i.e. positive, negative and zero. Positive associations of interactions of strategy and HR with profitability are consistent with the 'contingency'/external fit approach in SHRM (Huselid 1995; Becker and Huselid 2006). Moreover, the negative and zero associations of HR and strategy interactions with profitability are consistent with the hypothesis of the SHRM literature that for the HR-strategy fit to lead to higher profitability, it is necessary that it contributes more to revenues than to costs. (The negative and zero associations may therefore indicate that higher revenues generated by a given HR-strategy fit are exactly or more than offset by an increase in costs, Huselid (1995).)

In particular, we find that profit margins of firms pursuing a dedicated RIB strategy are higher the larger the human capital stock of the firm. This is consistent with the idea that the successful implementation of a strategy based on technological and know-how-based

Table 4. Pearson correlation matrix.

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
1. Profitability (price–cost margin)	1.00											
2. Size	0.05	1.00										
3. Imp. Base	−0.17	−0.25	1.00									
4. Differentiation	0.11	0.12	−0.03	1.00								
5. Cost leadership	0.12	−0.11	−0.06	−0.39	1.00							
6. Coop/divers	0.01	0.32	−0.01	0.05	−0.06	1.00						
7. Manager's education	−0.02	0.06	0.05	0.08	−0.11	0.17	1.00					
8. Manager's experience	0.13	0.12	−0.01	−0.06	0.1	0.13	−0.11	1.00				
9. Proportion of skilled/trained employees	0.08	0.13	−0.05	0.09	−0.07	0.08	0.1	−0.01	1.00			
10. OCE 1	0.01	0.2	−0.03	−0.01	0.08	0.28	0.02	0.06	0.18	1.00		
11. OCE 2	−0.03	−0.08	−0.04	−0.09	0.04	−0.04	−0.02	−0.07	0.05	0.36	1.00	
12. OCE 3	0.02	−0.16	0.04	−0.3	0.27	−0.06	0.04	0.07	−0.01	0.07	0.08	1.00

Notes: OCE 1 stands for organisation's commitment to employees related to staff development, OCE 2 stands for organisation's commitment to employees related to employees' well-being and OCE 3 stands for organisation's commitment to employees related to fair pay. Correlations of 0.2 or more are significant at beyond the 0.05 level under a two-tailed test.

Table 5. Ordinary least squares (OLS) and Heckman's two-step method (Heckit) estimates of the profitability model.

	(1)	(2)	(3)	(4)
	OLS	Heckit	OLS	OLS
Strategy				
Impregnable Base	− 0.43**	− 0.42**	− 0.42**	− 0.53***
Differentiation	0.11	0.1	0.18	
Cost leadership	− 0.2	− 0.21		
Cooperation/diversification	0.07	0.05		
HR				
Entrepreneur's education	0.08	0.07		
Entrepreneur's experience	0.31**	0.31***	0.3***	0.27***
Proportion of skilled/trained employees (PSE)	0.16	0.17	0.19	
OCE 1 (staff development)	0.01	0.01	0.009	
OCE 2 (employees wellbeing)	− 0.13	− 0.14	− 0.13	
OCE 3 (fair pay)	− 0.09	− 0.09	− 0.06	
Interactions				
PSE × impregnable base	0.55**	0.55**	0.57**	0.61***
PSE × differentiation	0.31	0.3	0.29	
PSE × cost leadership	0.001	0.006		
PSE × cooperation/diversification	− 0.17	− 0.17		
OCE1 × impregnable base	0.22	0.24	0.23	
OCE1 × differentiation	− 0.81**	− 0.81**	− 0.84**	− 0.64**
OCE1 × cost leadership	− 0.16	− 0.16		
OCE1 × cooperation/diversification	0.23	0.24		
OCE2 × impregnable base	− 0.77**	− 0.78**	− 0.81**	− 0.76**
OCE2 × differentiation	0.42	0.43	0.41	
OCE2 × cost leadership	− 0.041	− 0.045		
OCE2 × cooperation/diversification	− 0.22	− 0.22		
OCE3 × impregnable base	− 0.58*	− 0.59**	− 0.56*	
OCE3 × differentiation	− 0.47	− 0.47	− 0.55**	− 0.6**
OCE3 × cost leadership	0.15	0.17		
OCE3 × cooperation/diversification	− 0.004	0.018		
Other controls				
Size (log employees)	− 0.21	− 0.21	− 0.18	− 0.17
Industry dummies	Yes	Yes	Yes	Yes
Location dummies	Yes	Yes	Yes	Yes
R^2	0.16		0.15	0.13
Inverse Mills ratio		− 0.1		
No. of observations	430	2267	430	430
Censored Obs.		1857		
Uncensored Obs.		430		

Notes: **p*-value < 0.1, ***p*-value < 0.05, ****p*-value < 0.01. PSE stands for proportion of skilled employees in the firm whereas OCE1, OCE2 and OCE3 are referring to the staff development dimension, the employees well-being dimension and the fair pay dimension of the organisation's commitment to employees. Hotels are the reference industry. For the Heckit model the participation equation includes as independent variables, size (log of employees), industry dummies, regional dummies and ownership dummies. Calculations of *p*-values in (2) are based on Heckman-corrected standard errors. Column (3) excludes all variables with strongly insignificant coefficients in (1) and (2), and (4) excludes all variables with strongly insignificant coefficients in (3).

assets requires that employees possess sufficient skills and knowledge to implement it (Wright et al. 2001). In fact, in the absence of a sufficiently high share of skilled employees in the business, pursuing an RIB strategy will lead to losses, as suggested by the negative and significant direct association with RIB strategy and profitability in all estimated models presented in Table 5. Conversely, human capital can only be effectively deployed when the firm adopts a strategy that makes full and efficient use of the human capital and does not waste employees' specific skills.

Our results show a negative association of the interactions of product differentiation strategy with the HR development dimension of OCE (OCE1) and with the compensation aspect of OCE (OCE3). Given that higher values of the differentiation strategy indicator are associated with differentiation based on pricing and innovation and low values with differentiation based on quality of service and personal attention to customers, this result implies that firms that combine investment in HR development and a more generous compensation package with quality of service and attention to customer exhibit better financial performance. The latter result is in line with Hoque (1999), who finds that hotels pursuing a strategy based on an ethos of service quality coupled with a high number of HRM practices are performing best. Additionally, this finding suggests that profit margins of firms that combine more attention to staff development and fair pay, with differentiation based on pricing and innovation, tend to be lower. Overall, this seems quite plausible and intuitive to the extent that personal attention to customers and quality of service may hinge largely on the motivation, dedication and commitment of the workforce, which can be elicited via a positive attitude towards employees' training[6] and development and generous compensation. This is in contrast to innovation and pricing that may also require among others, investment in market knowledge, R&D and marketing (Porter 1985).

Another result seems to suggest that a combination of commitment to employees' well-being (OCE2) with a RIB strategy is negatively associated with profitability. This finding may suggest that investing in employees' well-being as a means to implement successfully a knowledge-based strategic differentiation of the firm as a whole may not pay-off and in particular may contribute more to costs than to revenues. This may be because although overall employees' satisfaction may lead to higher effort and motivation (Bartel, Freeman, Ichniowsky and Kleiner 2004), this may not be sufficient for executing a strategy based on technological and knowledge-based bundles, which requires specific expertise from employees.

In all, our results support the argument that high-performing SMEs in the THL sector are on average managed by more experienced managers/entrepreneurs and employ a combination of technological and know-how firm differentiation strategies together with a highly skilled workforce. Alternatively, superior THL SME performance is strongly associated with the deployment of product differentiation strategies, based on quality of service and personal attention to customers combined with a generous compensation package and attention to employees development.

Conclusions, implications for managerial practice and limitations

The primary aim of this study was to identify the key HR factors and the HR-strategy linkages, associated with superior financial performance of medium, small and micro-businesses in the UK THL industry. This remains a surprisingly under-researched area in the SHRM field, considering especially the heavy reliance of service SMEs on employees and thus the key role of HR in these businesses, as well as the importance of SMEs and the service sector in today's economies.

Building on extant theory and empirical evidence and taking into account the particular characteristics of SMEs and the idiosyncrasies of the service industry, we suggested that the employees' and entrepreneur's human capital and the OCE development, well-being and fair pay are potentially the key areas of HR that are expected to have a strong link with SMEs profitability, either directly or indirectly, operating through the business strategy adopted (RIB, differentiation, cost leadership and cooperation/diversification strategy).

Our analysis suggests that entrepreneur's experience is a strong positive predictor of profit margins. Also our results suggest that SMEs exhibiting higher financial performance are more likely to combine a high share of skilled employees with the pursuit of a strategy focusing on know-how and product development advantages (RIB). Moreover, we find that paying more attention to staff development and having a generous compensation policy are positively correlated with profits, when the firm adopts at the same time a product differentiation strategy, based on personal attention to customer and quality of service. However, both attention to staff development and a generous compensation package are negatively correlated with performance, when the firm pursues simultaneously a product differentiation strategy based on pricing and innovation.

Our results add new evidence on a little investigated area that is concerned with the link between the HR system and the financial performance in service SMEs. They also have important implications for managerial practice. In particular, our results provide support to the fundamental role of entrepreneur/business owner in the success of small service firms that has been emphasised in the design of new policies for small business support (Small Business Service 2002). Moreover, what seems to be a significant predictor of profitability is the external fit of HR, i.e. the combination/complementarity of HR factors such as human capital and HR practices and business strategy. Our results suggest that there is 'good' and 'bad' fit of strategy and HR as some combinations of strategy and HR are associated with higher and some with lower profitability. An immediate implication of this is that one needs to investigate what factors determine whether the strategy and HR are successfully 'matched' to contribute towards the achievement of SCA.

A major advantage of our paper is that our sample includes very small and micro-businesses that have been excluded from samples analysed by other empirical studies in the HRM literature largely because of the lack of data. Given that very small firms comprise a significant share of all firms in the THL industry, our results are representative of the industry as a whole and provide a picture of the nature of HRM and its link with business performance for micro-firms that have been missing in the literature. However, a limitation related to the inclusion of micro-firms in the sample is the lack of detailed information on HR architecture (all aspects of HR practices and systems) and business strategy which further limits our proxies of the HR factors and business strategy.

Our analysis is based on single-respondent measures of both dependent and independent variables, which raises concerns for 'single-respondent survey bias' and 'common method' bias (Gerhart et al. 2000; Becker and Huselid 2006; Hoque 1999). Although there is some disagreement in SHRM on the extent of measurement of error-driven bias in single-respondent surveys and on the added value of surveys based on multiple respondents (Becker and Huselid 2006), we believe that this kind of concerns is less acute in our analysis, as we are focusing on very small firms in which the entrepreneur/business owner is the CEO and the HR manager, and thus it is expected to be the most appropriate survey respondent and to provide an accurate picture of the different areas of the business. In the context of HR–performance link, common method variance (when respondents who report that adopt certain HRM practices also tend to over report performance) may be a potential problem. However, we tend to find no systematic positive direct relationship between HR factors and performance (except of the manager's experience), which could suggest that the observed associations are the results of genuine performance effects (Hoque 1999).

Furthermore, one should recognise that our analysis has several distinctive features, as compared to the extant SHRM literature. First, we operationalise HR by using human capital measures and OCE as opposed to HPWPs. This approach has the advantage that it takes seriously into account the distinctive context of UK THL SMEs that are not likely to adopt sophisticated HPWPs but has also the limitation that findings may be partly the result of this distinct operationalisation of HR. Second, in contrast to previous studies that seem to focus only on strategies identified by a single-strategy typology, our analysis is more broad and refined, as it takes into account most of the different categories of strategies postulated across the main strategy typologies, including the hitherto unexplored resource-based RIBs.

Another potential limitation of our analysis is that although we deal with some of the threats to internal validity, that is a prerequisite for causal inference (sample selection bias), our analysis may still mask other omitted factors that may explain the observed associations. This is why we are cautious and interpret the results as statistical associations and not as causal effects running from HR to profitability. However, we believe that our exercise is fruitful and informative in that knowing what patterns and correlations are in the data does restrict the set of possible conceptual frameworks to those that can explain that correlations. It is also important to remember that there is little quantitative evidence of the type we present on the SHRM of service SMEs. Clearly more evidence is needed to fill such an important vacuum, but we feel our research opens new avenues for us and may hopefully motivate others to work on this important and under-explored area.

Notes

1. We find that not all employees are receiving formal training as in family businesses or in micro-businesses in general, many employees learn the job ‘by doing’ and others receive non-formal training by more senior and experienced staff.
2. Note that some of the items heavily loaded on OCE1 and OCE3 are indirectly linked with these constructs. For example, clear communication of HR may indicate the presence of (formal or informal) communication systems, which are linked to staff development (Way 2002). Management’s perception of HR importance is also expected to be correlated with staff development as evidence from SMEs surveys suggest that businesses are more likely to offer training to staff, the more important they consider employees for achieving business goals (Small Business Service 2001). Moreover, the average wage, the impact of the minimum wage and the staff turnover are all expected to be correlated with the shape of the wage distribution within the firm, which reflects strongly the fairness of compensation. In particular, average wage is an important feature of the wage distribution. The impact of the minimum wage is expected to capture the share of employees in the firm paid below the minimum wage and thus provides a sketch of the bottom part of the firm’s wage distribution (Draca et al. 2008). Staff turnover in the small business sector is associated with the level of compensation (Storey 2002) and the opportunities for wage progression (Holtman and Idson 1991).
3. Except perhaps of Porter’s focus strategy, unfortunately our questionnaire does not include questions directly related to focus. However, again the four strategy factors may also collectively pick up variation across businesses in the intensity they pursue a ‘focus’ strategy.
4. We do not include interactions of manager’s human capital with value capture strategies because the intensity of pursuing a value capture strategy reflects manager’s education and experience. As suggested by Azhdar, Farhad and Nada Korak (2006) managerial human capital attributes, such as education and experience, are formed prior to the choice of strategy and thus are fundamental determinants of this choice.
5. In the first stage of Heckman’s two-step method we estimated a probit model with dependent variable a binary indicator taking the value 1 if the firm is participating in DTI business support programmes and 0 otherwise. As independent variables in the probit model were included variables that are likely to be associated with the decision of a business to participate in business support programmes as size, industry, ownership type and region. The sample used in the first stage is a mixed sample that includes all businesses participating in DTI programmes but also all THL SMEs from FAME that do not receive business support. In the second stage we run a linear regression of the PCM model in the DTI sample only, including also as an independent variable a selection bias control (the inverse Mill’s ratio) estimated by the first stage (Wooldridge 2002).

6. Note that, as shown in Table 1, OCE1 is weakly correlated with the share of qualified/trained employees in the firm, which suggests that these two variables measure different aspects of HR, which can further explain the difference in their complementarities with value capture strategies.

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