A Supply - Scarcity and Strategic Decision-Making Angle: 
High Performance Work Practices in Small Firms

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ABSTRACT:
High performance work practices (HPWPs) are human resource management practices aimed at stimulating employee and organizational performance. The application of HPWPs is not widespread in small organizations. We examine whether the implementation of coherent bundles of HPWPs (aimed at employee ability, employee motivation or at the opportunity to perform) depends on the scarcity of resources, as reflected in the size of the company, and on strategic decision-making in small firms related to the owner’s expertise and attitudes. In our research, a total of 350 employees from 70 small organizations were asked to rate the presence of HPWPs in their organization. These averaged perceptions were linked to information provided by the owner–managers on the size of their firm and their own expertise and attitudes.

The findings support that smaller but coherent bundles of HPWPs can be found in small organizations and that the implementation of these bundles depends on available resources, strategic decision-making and the combination of the two. These findings highlight the need to integrate the notions of supply scarcity and strategic decision-making to understand the uptake of bundles of HPWPs within small firms.

Keywords: High performance work organization, Entrepreneurial orientation, Small firms, Strategic human resource management, Supply scarcity, Strategic decision making, Best-practice awareness, Innovative HR vision

INTRODUCTION
Research into human resource management (HRM) and performance in small firms has embraced the investigation of the presence of high performance work practices (HPWPs). HPWPs are modern employee management practices, such as formal employee training, high pay levels, group-based performance pay and self-directed teams (Appelbaum et al., 2000). It is claimed that increased implementation of HPWPs results in better performing organizations in terms of financial and employee outcomes (Combs et al., 2006). However, the uptake of the package of HPWPs has been found to be quite low in small firms (Kauhanen, 2009; Way, 2002). One of the unresolved issues is whether this low uptake is the result of smaller firms simply doing a bit of everything but in a less sophisticated manner than larger firms (Dandridge, 1979; Mayson and Barrett, 2006), or that smaller firms deliberately adopt smaller sets of related practices instead of the whole package of HPWPs. This avenue has not been explored much to date.

In order to understand this issue in greater depth, we turn to the theoretical foundation of HPWPs. Appelbaum et al. (2000) argued that a combination of three bundles of HR practices is theoretically involved in building a HPWP system (HPWPS). These bundles are: employee ability-enhancing practices (such as training and...
skill development) (A), employee motivation-enhancing practices (including high pay, career development and top-down information sharing) (M) and practices that give employees the opportunity to go the extra mile (such as employee involvement and teamwork) (O). Together, these are referred to as the AMO model of HPWPs. Although no distinction is made between these elements in most research, Boxall and Macky (2009) have recently theorized that each component of the AMO bundle is aimed at different goals, which in turn suggests that it may be possible to find organizations where only Ability or Motivation or Opportunity practices dominate (Toh et al., 2008). This concept of focused bundles of HPWP could advance the debate on HRM and performance in small firms.

By integrating these two theoretical perspectives on the uptake of HPWS bundles in small firms, namely, the supply-scarcity and the strategic decision making perspective, our aim is to advance the debate on the use and suitability of the HPWP model in smaller firms.

This study adds to the existing knowledge on HRM in small firms in three ways. Our intermediate approach, which focuses on smaller bundles, could advance our understanding of the presence of modern employee management practices in small firms. We argue that strategic choice and the availability of resources differ considerably even within a population of micro- and small firms, thereby helping to explain potential variation in the uptake of HPWP bundles in such firm and helping to account for the reported heterogeneity of HRM in small firms (Cassell et al., 2002; Heneman et al., 2000). Finally, a methodological contribution is that we involve both owner-managers of small firms and their employees in our study (i.e. a multi-actor approach). Owner-managers provide information on their own entrepreneurial orientation, their HR vision and their HPWP awareness, while employees rate the presence of HPWPs in the firm.

The outline of the remainder of the paper is as follows. First, we outline HPWP theory and introduce the AMO model as the underlying structure (Sect. 2). Next, we introduce the research hypotheses based on the supply-scarcity and strategic decision-making perspectives, followed by the research method adopted (Sect. 3). This is followed by the Results section (Sect. 4) and our discussion of the findings (Sect. 5).

Literature Review

In this section, we provide an overview of HPWP theory to demonstrate how the AMO model that underlies HPWPs can be used to discern three smaller but coherent bundles of HR practices. This overview is followed by a literature review based on (1) the supply-scarcity perspective and (2) strategic choice models, which results in the generation of the hypotheses.

HPWPs and the AMO Model

An HPWP system is conceptualized as the thorough application of only the best practices for HRM (Chadwick, 2010), with the latter considered to be individual HRM practices that have been extensively researched and shown to contribute to the enhancement of employee performance. For example, the use of restrictive selection procedures helps to create a workforce of above-average employees who subsequently deliver a better-than-average work performance. Other well-researched best practices are self-managed teams, continuing education, employee involvement in organizational strategy, team performance-based pay and paying high salaries.

Further, a combination of best practices impacts on employee and organizational performance beyond the sum of the individual effects of each practice (Boxall and Purcell, 2008; Boxall and Macky, 2009). That is, there is a bundling or synergy effect (Macduffie, 1995; Combs et al., 2006). For example, introducing self-managed work teams without proper training and without the support of team incentives would reduce the increase in employee performance that would normally be expected from teamwork (Macduffie, 1995).

Indeed, systematic approaches have been found to have a greater influence than individual practices (Combs et al., 2006). However, a closer inspection of the HPWP research carried out over the past decade reveals several problems. First, not as many organizations have adopted HPWP systems as might be expected given the claimed advantages (Kauhanen, 2009). This seems to be especially the case with small organizations (Sels et al., 2006).

Second, the practices said to constitute a HPWPs vary from
one research project to another, leading to the observation that as few as four practices seem to be consistently part of the HPWP ‘system’ measured by researchers (Boselie et al., 2005; Boxall and Macky, 2009): (1) training and development, (2) contingent pay and reward schemes, (3) performance management (including appraisal) and (4) careful recruitment and selection. This poses the question as to what the ‘celebrated’ HPWP bundle actually is. Further, the argued-for synergies between all of the best practices in a ‘system’ are not always found, placing a question mark over the evidence for synergy effects in HPWP systems (Gerhart, 2007). In reality, synergies take many forms, and the theoretical foundation for the synergies is as yet not well explored (Chadwick 2010).

A better understanding of synergy effects within bundles of HR practices can be derived from a closer inspection of the drivers of synergy. A theoretical foundation for this synergy occurring is the AMO model (Boxall and Purcell, 2008). Here, AMO is an acronym for the three elements that together build sustainable employee performance: individual ability (A), motivation (M) and the opportunity to perform (O). Each of these elements is firmly grounded in industrial/organizational (I/O) psychology, work psychology and human capital theory.

To conclude, the literature overview presented above provides mixed support for the single-system approach to HPWPS. The synergy effects of combining HR practices only occur when the practices serve a common goal. By combining the theoretical work of Boxall and Macky (2009) with the empirical findings of Toh et al. (2008), we conclude that each element of the AMO model bundle serves a distinct goal: high employee performance (A), high employee commitment (M) or high workforce empowerment (O).

Although these different performance types can be combined in an overall performance-boosting system, this will not necessarily fit with the needs and circumstances of a specific firm and, in particular, not with the needs and circumstances of small firms.

Supply-Scarcity Perspective

The first theoretical perspective holds that the availability of means will influence the implementation of the HR practices. According to the supply-scarcity perspective (Welsh and White, 1981), means are constrained by the limited availability of financial supplies and time, both of which are available in larger quantities in firms with more employees.

Related to the supply-scarcity perspective, explanations for the low score of small firms on the number of HPWPs present as compared to large organizations have been sought in the costs associated with HPWPs (Sels et al., 2006) and with the concept of informality (Mayson and Barrett, 2006).

The explanation based on costs seems straightforward: the size of small firms places constraints on the availability of financial means and the time available to implement advanced HPWPs (Welsh and White, 1981). Furthermore, the concept of informality derives from the simple structure of small firms, which reduces the need for complex employment management systems (Jack et al., 2006). Larger firms have more complex organizational structures than smaller firms and require more sophisticated ways to align employee behavior with the goals of the firm (Mintzberg, 1979). In the smallest firms, close and interpersonal interactions between employees and direct control by the owners reduce or remove the need for formalized control mechanisms (Davila, 2005; De Grip and Sieben, 2009). In larger organizations, the complexity of aligning people to organizational goals increases as there is a greater task differentiation between employees which requires more management (Lawrence and Lorsch, 1967; Mintzberg, 1979).

Formalized systems of HR practices reduce the need for direct control and interpersonal interactions (Mintzberg, 1979), but these more formal systems for HRM only produce a return when a sufficient number of employees are involved: the returns for smaller firms do not outweigh the time and resources needed to implement HPWPs (Sels et al., 2006).

In combination with the availability of more means, this will lead to the implementation of more formalized HR practices, such as HPWPs, in larger organizations. In terms of the AMO elements of HPWPs, the largest required investments will be in practices related to boosting ability and motivation, since these involve training expenses and high levels of pay.
Career opportunities in larger organizations are also more likely to become formalized as roles become more differentiated (Davila, 2005). Practices related to opportunity creation are less size dependent because these involve lower costs and can take place in organizations even when jobs are not clearly differentiated (Drummond and Stone, 2007). Based on this argument, our first hypothesis is that: Hypothesis 1 Employees in smaller organizations will perceive fewer motivation and ability practices on average than those in larger organizations.

Strategic Decision-Making

Although resources need to implement the more expensive bundles of HPWPs are restrict by firms size, size by itself is insufficient to explain the existence of the different configurations of HPWPs in comparable firms (Lacoursière et al., 2008). As our second theoretical perspective, we focus on the strategic choice of the entrepreneur. In small firms, it is primarily the entrepreneur who is responsible for most of the decisions relating to HRM. Indeed, when asked, small firm entrepreneurs commonly indicate that they critically evaluate the introduction and use of HR practices against the situation and needs of their firm (Drummond and Stone, 2007). Together, these arguments illustrate that the decision of whether or not to implement HPWPs is as much a strategic choice as it is a result of resource constraints. In short, the decision-making process leading to the implementation of HPWPs seems to be based on two elements: first, an evaluation of the issue at hand as an HR-related issue and, second, the evaluation of the resources needed to deal with the issue by implementing HPWPs (de Kok and Uhlaner, 2001). The first element includes the diagnosis by the firm’s management of an organizational problem as an issue worthy of an HR intervention (Cassell et al., 2002). As such, the effects of individual differences will tend to be magnified especially in small firms, where the owner–manager is the key decision-maker and often enjoys considerable freedom of action (Staw, 1991). In particular, the owner’s level of knowledge about the beneficial effects of HPWPs (best-practice awareness) is a clear example of restricted expertise that may hamper the performance of small firms (Welsh and White, 1981). However, the passion that owner–managers have for various activities in their firms also impacts on their HR-related decisions (Cardon et al., 2009). In this context, their strategic ambition (entrepreneurial orientation) and their general attitude towards people management (HR vision) are particularly important.

The second element directs attention to the fact that when the entrepreneur is in favor of an HR-related intervention, an evaluation of the available resources for implementing the HR intervention then becomes important (Cassell et al., 2002). Here too, the expertise and attitudinal forces that influence strategic decision making with respect to HPWPs will similarly color the evaluation of the financial resources and time constraints involved in the implementation of HPWPs (Cassell et al., 2002). In some cases, this strategic choice may even counter the straightforward expectation that only available resources (determined by firm size) will determine the uptake of certain HPWPs elements. In the next section, hypotheses are developed for the second argument, which is the concept that small firms entrepreneurs adopt bundles of HPWPs depending on attitudinal and knowledge-related processes that intervene in the diagnosis and in the resources evaluation made by the entrepreneur as to whether a firm’s problem justifies the (partial) implementation of HPWPs. Depending on the entrepreneurial orientation, HR vision and best practice awareness of the entrepreneur, this may lead to the uptake of different HPWP bundles.

Entrepreneurial Orientation

Entrepreneurial orientation refers to the strategic orientation of the firms. In small firms, the entrepreneur is the person who drives this orientation. An entrepreneurial orientation is reflected in the initiatives related to the firm’s innovativeness, proactiveness and risk taking; for example by trying out new products and services or being more proactive than competitors towards new market opportunities (Covin et al., 1990). Small business owners who demonstrate an entrepreneurial orientation look to implement growth-oriented activities (Kim and Mauborgne, 1997).

In terms of the AMO elements, the emphasis will be on selecting and developing a team that shares the ambitions of the entrepreneur. Hence,
practices related to ability are likely to be used in firms led by entrepreneurial owner–managers; it is less likely that these entrepreneurs will adopt motivation and opportunity practices. An owner with an entrepreneurial orientation evokes in employees a sense of being part of a ‘winning team’ (De Clercq and Rius, 2007). The entrepreneurial orientation of the owner–manager energises motivation as a substitute for formal HPWP systems (Liu et al., 2003). In addition, motivation practices are relatively expensive, and their contribution to the entrepreneurial strategy of the firms could be judged as marginal since, as a result of a highly entrepreneurial orientation, employees are already motivated and there is no need for further motivation development. Lastly, opportunity practices involve delegating responsibilities, which would seem to conflict with the preferences of an entrepreneur to keep a tight rein and lead the firms to success.

Barringer et al. (2005) compared growth-oriented and non-growth-oriented firms and found that growth oriented firms indeed invested more in training, development and incentive schemes. It was apparent that rapid-growth firms depend heavily on the abilities and efforts of their employees to maintain their growth-oriented strategies. This leads to our second hypothesis:

Hypothesis 2: In firms where the owners have a greater entrepreneurial orientation, employees will perceive more practices related to boosting employee ability.

Best-Practice Awareness

One reason why many organizations do not adopt HPWP is that managers may not be aware of—or actually disagree with—academic research findings on HR ‘best practices’ (Colbert et al., 2005). Particularly in small firms that do not employ a HR professional, the uptake of best practices is dependent on the owner–manager’s insights into this professional field. The awareness of best practices depends on the information channels used by the owner and personal experiences with employee management (Colbert et al., 2005). The decision to delegate and empower employees will be made more quickly by entrepreneurs who have a better understanding of the added value of best practices. Supportive findings for this reasoning were reported by Drummond and Stone (2007) who found that in a population of best small firm employers, owner–managers stated that they had a strong belief in the advantages of involving employees in teamwork, in developing the firm strategy, in daily managerial routines and in designing their own work. These arguments lead to our third pair of hypotheses:

Hypothesis 3A: In firms where owners are more aware of best practices, employees will perceive a greater presence of opportunity practices.

Hypothesis 3B: In larger small firms, the relationship between the owners’ best-practice awareness and opportunity practices will be stronger.

Innovative HR Vision

Some small firms are quicker than others to adopt modern HR practices (Bacon et al., 1996; Harney and Dundon, 2006). The decision to implement modern practices, such as an entire HPWP system, is driven to a certain extent by normative considerations relating to beliefs surrounding the practices (Paauwe and Boselie, 2005). Cardon et al. (2009) state that entrepreneurs can be passionate about various activities needed to manage their firms. Leaders and fast followers are relatively early in introducing new knowledge or technology to their organizations. They take greater risks than slow followers and laggards, but will benefit the most from competitive advantages if an adopted practice turns out to be beneficial for employee performance.

The attitude of the entrepreneur towards novel HR practices determines the speed at which these practices will be implemented (Mirvis, 1997). Drummond and Stone (2007) found that really successful small firms entrepreneurs not only copied existing practices but also developed innovative HR practices that supported their business philosophy—and that this would lead to HR systems similar to complete HPWP systems, including practices related to increasing ability, motivation and opportunity. This strategic evaluation of available resources will be most apparent in smaller firms whose owners have a more innovative HR vision. Just in such a situation [where resources (time and money) are restrained], an owner–manager’s vision to be
ahead when it comes to implementing novel HR practices is crucial when taking the decision to implement all three HPWP bundles. This leads to the following hypotheses:

Hypothesis 4A: In firms where owners pursue a more innovative form of HR, employees will perceive more practices related to all elements of HPWPs: ability, motivation and opportunity.

Hypothesis 4B: The relationship between innovative HR and all elements of HPWPs will be stronger in smaller firms than in larger firms.

RESEARCH METHOD
Procedure and Sample
According to Indian guidelines, an organization is categorized as small when it has fewer than 50 employees and its annual turnover is less than 1 million Rupees (Small & Micro Enterprises Development Strategy of India, published 2011). Using these criteria, 70 organizations in Indian local industry network in Sivkasi, Tamilnadu will be approached. About half of the organizations operated in the service sector (for example, as financial agency, an advertising agency or a printing office); the others were in the construction industry (for example, in building, plumbing, stage building).

Data will obtain using questionnaires to test our hypotheses. Most HRM studies use HR managers as respondents but, given concerns related to single-rater bias (Gerhart et al., 2000) and the reality that in small organizations the entrepreneur has an important role in shaping HRM (Cassell et al., 2002), it was considered important to test the hypotheses with data from both entrepreneurs and employees of independent MSEs. For these reasons, two questionnaires will develop: one for the entrepreneurs and one for their employees.

Entrepreneurs were asked to provide information about best-practice awareness, innovative HR and entrepreneurial orientation and about the sector, the age and the size of the organization. Once the consent of the entrepreneur of an identified company will be secured, the questionnaires for the entrepreneurs and the employees will be filled by the researchers by using interview mode.

In total, survey data from employees working in the MSEs from Sivkasi, Tamilnadu whose entrepreneurs will participate in the research.

Measures
Entrepreneurial Orientation
The nine items in Covin and Slevin (1989) entrepreneurial orientation scale will re-word to make them more appropriate for the entrepreneurial context of our study. Given that we will interest in the orientation of the entrepreneur, we will extent to the various statements applied to their way of managing the organization. This scale contains items on innovation, proactiveness and risk-taking. In line with Lumpkin and Dess (2001) and Stam and Elfring (2008), we replaced the original Covin and Slevin (1989) question that asked whether an organization prefers to ‘undo competitors’ or to ‘live and let live’, with an item asking whether the organization ‘has a strong tendency to follow the leader’ or to ‘be ahead of other competitors’ in introducing new products and services, as a way of measuring proactiveness rather than competitive aggressiveness. All of the items will compose of pairs of opposing statements, with a seven-point response scale between these two extremes. The Cronbach’s alpha for this nine-item scale.

Best-Practice Awareness
Best-practice awareness will measure by calculating a knowledge ratio. The degree to which entrepreneurs agree with HR research findings will assess using 12 true/false questions design to be either consistent or inconsistent with research findings on various HRM activities (management, staffing, participation in decision-making, performance appraisal, teamwork, compensation) (Rynes et al., 2002). We select these 12 (of 35 available) statements because these are the most applicable to the research context (MSEs in Sivkasi, Tamilnadu) and because we expect owners to have various levels of knowledge about them. A knowledge ratio will computed for each entrepreneur (correct answers divided by 12). The original statements will be translated from English into Tamil. The Tamil version will back-translate to English by a Translator; differences will be discussed and adjustments make where necessary.

Innovative HR
To measure the degree of innovation in the organization’s HR strategy, we are using two items drawn from Colbert et al. (2005), which
will based on Miles and Snow’s (1978) strategic typology. The first item reflects an analyzer approach: ‘We adopt new human resource practices shortly after they will be tried by other companies’. The second item reflects a prospector approach: ‘We are often the first to adopt new or innovative HR practices’. Entrepreneurs will ask to rate their HR strategy on a five-point scale (1 = ‘strongly disagree’ to 5 = ‘strongly agree’) with these two statements. In line with a continuum of-types interpretation (Doty et al. 1993), responses to the two items will be averaged to reflect the degree of innovation and proactiveness in an organization’s HR strategy.

**Organization Size**

As an indicator of organizational size, we will use the number of employees in the organization.

**Bundles of HPWPs**

High performance work practices will be measured in the employee questionnaire [see Takeuchi et al. (2009) for a similar approach]. A list of HR practices covering the three broad areas or ‘bundles’ (ability, motivation and opportunity) will develop based on Appelbaum et al. (2000) and on their appropriateness in an Ethiopian context. Five items will include measuring HPWPs that focused on employees’ abilities. The first item reflects the willingness of their organization to develop their employees (Boselie, 2002), three items focus on the amount of internal and external training offered by the organization (Den Hartog and Verburg, 2004; Boselie, 2002) and the final item concerned the willingness of the organization to develop employee skills.

Two items focus on rewards in order to measure the extent to which the organization paid above-average salaries and the existence of benefits over and above wages (Den Hartog and Verburg, 2004), one item was include that measure the presence of career plans for employees (Den Hartog and Verburg, 2004) and, as a final indicator, three items focus on the extent of information sharing within the company (Den Hartog and Verburg, 2004).

A further five items will reflect those HPWPs that focus on providing employees with opportunities to perform (Boselie, 2002). The first two items will concern autonomy in on-the-job decision-making and focused on the amount of autonomy in work planning and in investing in new materials and technology. The next two items will provide indications of the extent of participation in work meetings and in policy-making. A final item will address teamwork.

A confirmatory factor analysis reveal that the hypothesis three-factor model (ability, motivation and opportunity) fit the data significantly better than a one-factor model in which all items will loaded onto a single factor. These results support the classification of HPWPs into ability-, motivation- and opportunity-focused practices.

**Control Variables**

We will control for organization age (the number of years since start-up) and industry (service sector vs. construction industry) in the analyses because these control variables may influence relationships between agency factors, size and HPWPs (Aldrich, 1999; Cassell et al., 2002; Chandler and McEvoy, 2000).

**Data Analysis**

The analyses for Hypotheses 1–4B will involve regression methods. For each HRM bundle (ability, motivation and opportunity), three analyses will perform predicting HRM intensity, depth and scope. We start by testing the effect of owner characteristics and size on the three HRM bundles [Model (M) 1]. Next, we will test the hypothesized interaction between owner characteristics and size on the three HRM bundles (H3 and H4). Here we follow the procedures propose by Baron and Kenny (1986) and Aiken and West (1991). To compute interaction terms we standardized the predictors, namely, the owner characteristics and the size measure, and then multiplied these standardized values to compute the interaction terms. These interaction terms were then incorporated into the main effect model (M2) (for opportunity practices, interaction effects were modelled separately). Given the relatively small sample size and to gain a clear indication of the relationships involve, we apply a bootstrapping procedure (involving the creation of 2,000 bootstrap samples) using AMOS 6 (Arbuckle 2006) for M1 and M2. The significance of the effects will determine by comparing the
probability level (p) from the bootstrapping results (biased corrected percentile method) at a significance level of 0.05 (one-tailed significance test). All the analyses will perform at the organizational level of analysis.

The one-factor (M1) and three-factor (M2) models will fit. First, two factor-analytic models will test: a model that assumes that all engagement items weight on one single factor (M1) and a model that assumes three regression factors (M2). The significance of the effects was determined by comparing the probability level (p) from the bootstrapping results (biased corrected percentile method) at a significance level of 0.05 (one-tailed significance test). All the analyses were performed at the organizational level of analysis.

RESULTS

Table 1 shows the means, standard deviations and correlations among the studied variables for the complete sample. As can be seen from Table 1, the mean scores of the three bundles of HPWPs differ. Practices stimulating motivation are less widely implemented than opportunity-creating practices, which are in turn implemented less often than practices that enhance ability. The three elements of HPWPs are moderately correlated with each other (between 0.30 and 0.44). Table 1 further shows that the three approaches to perceiving the bundles of HPWPs (intensity, scope and depth) are moderately to highly correlated (0.27–0.83) with each other. As regards best-practice awareness, the mean score was 0.61, indicating that the entrepreneurs on average correctly answered 61% of the HRM knowledge items. Significant correlations were found between entrepreneurial orientation, best-practice awareness, organization size and the perceived use of ability, motivation and opportunity practices.

Our investigation of the influence of organization size (Hypothesis 1) revealed a positive effect between organization size and both ability and motivation practices (but not in terms of depth). The effects were between 0.36** and 0.66**, indicating that employees in smaller organizations perceive fewer ability and motivation practices (tables 2 and 3; M1). As such, Hypothesis 1 is largely confirmed.

The next three hypotheses all concerned the influence of owner characteristics on the presence of bundles of HPWPs in the firm. Hypothesis 2 posited a positive relationship between entrepreneurial orientation and the use of ability practices. Table 2 (M1) shows that employees perceive more practices related to ability in firms where the owners have a greater entrepreneurial orientation (scope b = 0.18*). Hence, Hypothesis 2 was confirmed.

A second owner characteristic concerned best practice awareness (Hypothesis 3). Best-practice awareness was positively related to opportunity practices (in terms of intensity b = 0.34**, scope b = 0.28** see table 4, M1), thereby supporting Hypothesis 3A. The relationship between best-practice awareness and opportunity practices (intensity and depth) was found to strengthen with size (ß = 0.26* and ß = 0.40**, respectively). To further illustrate the effect of size on the link between best practice awareness and opportunity practices, we have shown the significant interactions graphically.

Following Aiken and West (1991), simple slopes of the effects of the best-practice awareness on opportunity practices are represented for organizations that are small (one standard deviation below the mean) versus relatively large (one standard deviation above the mean).

In the larger organizations, there is the expected positive association between best-practice awareness and opportunity practices. However, in small organizations the relationship between best-practice awareness and opportunity practices is slightly negative. Finally, we tested the significance of the simple slopes of regression lines at 1 SD above and below the mean of organization size (Aiken and West, 1991). The test confirmed the positive relationship between best-practice awareness and opportunity practices for larger organizations (b = 0.58** and b = 0.65**, respectively). For small organizations, the negative relationship between best practice awareness and opportunity practices was non significant. These results largely confirm Hypothesis 3B.

Further, moderate support was found for Hypothesis 4A, which argued that employees
would perceive more of all elements of an HPWP (ability, motivation and opportunity practices) in firms where the owners adopted an innovative HR strategy. Our results show that an innovative HR strategy is positively related to the scope dimension (ability $b = 0.31^{**}$, motivation $b = 0.25^{*}$; opportunity $b = 0.26^{*}$), indicating that employees in firms where the owners have a more innovative HR strategy do perceive ability, motivation and opportunity practices to be more widely applied than their peers in firms where the owner has a less innovative HR strategy. However, the intensity and the depth of HPWPs seemed to be unrelated to an innovative HR strategy.

Finally, only moderate evidence was found to support Hypothesis 4B, i.e. only one significant interaction effect was found. The relationship between innovative HR and motivation scope was stronger in smaller firms than in larger firms ($b = -0.26^{*}$).

### Table 1: Descriptive

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<td>7. Ability Intensity</td>
<td>3.23</td>
<td>0.67</td>
<td>-0.42</td>
<td>0.62</td>
<td>0.02</td>
<td>0.33</td>
<td>0.31</td>
<td>-0.07</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8. Ability Scope</td>
<td>4.17</td>
<td>0.63</td>
<td>-0.40</td>
<td>0.72</td>
<td>0.18</td>
<td>0.41</td>
<td>0.21</td>
<td>0.23</td>
<td>0.77</td>
<td>1</td>
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<tr>
<td>9. Ability Depth</td>
<td>1.16</td>
<td>0.80</td>
<td>-0.29</td>
<td>0.33</td>
<td>-0.14</td>
<td>0.16</td>
<td>0.21</td>
<td>-0.15</td>
<td>0.83</td>
<td>0.45</td>
<td>1</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10. Motivation Intensity</td>
<td>2.85</td>
<td>0.57</td>
<td>-0.10</td>
<td>0.26</td>
<td>-0.17</td>
<td>0.02</td>
<td>0.17</td>
<td>0.09</td>
<td>0.44</td>
<td>0.45</td>
<td>0.48</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. Motivation Scope</td>
<td>4.55</td>
<td>0.80</td>
<td>-0.25</td>
<td>0.45</td>
<td>0.06</td>
<td>0.15</td>
<td>0.21</td>
<td>0.18</td>
<td>0.48</td>
<td>0.65</td>
<td>0.28</td>
<td>0.78</td>
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<tr>
<td>12. Motivation Depth</td>
<td>1.09</td>
<td>0.85</td>
<td>-0.06</td>
<td>0.05</td>
<td>-0.14</td>
<td>-0.16</td>
<td>-0.03</td>
<td>0.22</td>
<td>0.26</td>
<td>0.20</td>
<td>0.40</td>
<td>0.82</td>
<td>0.44</td>
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<tr>
<td>13. Opportunity Intensity</td>
<td>3.04</td>
<td>0.53</td>
<td>0.10</td>
<td>0.00</td>
<td>-0.45</td>
<td>0.19</td>
<td>0.31</td>
<td>-0.15</td>
<td>0.38</td>
<td>0.17</td>
<td>0.47</td>
<td>0.30</td>
<td>0.18</td>
<td>0.11</td>
<td>1</td>
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</tr>
<tr>
<td>14. Opportunity Scope</td>
<td>4.33</td>
<td>0.54</td>
<td>0.09</td>
<td>0.17</td>
<td>-0.33</td>
<td>0.23</td>
<td>0.18</td>
<td>0.13</td>
<td>0.34</td>
<td>0.38</td>
<td>0.41</td>
<td>0.41</td>
<td>0.13</td>
<td>0.67</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>15. Opportunity Depth</td>
<td>0.93</td>
<td>0.72</td>
<td>0.10</td>
<td>-0.10</td>
<td>-0.35</td>
<td>0.03</td>
<td>0.22</td>
<td>-0.13</td>
<td>0.29</td>
<td>0.01</td>
<td>0.42</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
<td>0.83</td>
<td>0.27</td>
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</tbody>
</table>

Note: ** $p<0.05$, * $p<0.10$.  

### Table 2: Overview of regression models predicting ability

<table>
<thead>
<tr>
<th>Sector</th>
<th>Intensity</th>
<th>Scope</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M1</td>
<td>M1</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.25*</td>
<td>-0.14</td>
<td>-0.24</td>
</tr>
<tr>
<td>Organisation age</td>
<td>-0.20</td>
<td>-0.07</td>
<td>-0.27*</td>
</tr>
<tr>
<td>Size</td>
<td>0.53*</td>
<td>0.66**</td>
<td>0.28</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>0.15</td>
<td>0.18*</td>
<td>0.06</td>
</tr>
<tr>
<td>Innovative HR</td>
<td>-0.00</td>
<td>0.31**</td>
<td>-0.10</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.48</td>
<td>0.67</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Note: ** $p<0.05$, * $p<0.10$. Interaction effects between innovative HR and size (M2) were non-significant and not reported here. 

1 = construction industry, 2 = service sector
Table 3: Overview of regression models predicting motivation

<table>
<thead>
<tr>
<th>Sector</th>
<th>Intensity</th>
<th>Scope</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M1</td>
<td>M2</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.02</td>
<td>-0.08</td>
<td>-0.12</td>
</tr>
<tr>
<td>Organization age</td>
<td>-0.30*</td>
<td>-0.13</td>
<td>-0.12</td>
</tr>
<tr>
<td>Size</td>
<td>0.36**</td>
<td>0.49**</td>
<td>0.52**</td>
</tr>
<tr>
<td>Innovative HR</td>
<td>0.16</td>
<td>0.25*</td>
<td>0.30**</td>
</tr>
<tr>
<td>Innovative HR x size</td>
<td></td>
<td></td>
<td>-0.26*</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.16</td>
<td>0.28</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Note: ** p<0.05, * p<0.10. Interaction effects between innovative HR and size (M2) were non-significant for intensity and depth and not reported here.

Following Aiken and West (1991) that the relationship between innovative HR and motivation scope is positive in small organizations.

In comparison, in larger organizations, the relationship between innovative HR and motivation scope is only slightly positive. We tested the significance of the simple slopes of regression lines at 1 SD above and below the mean of organization size (Aiken and West, 1991). The test confirmed the positive relationship between innovative HR and motivation scope for smaller organizations (b = 0.59**); for larger organizations the relationship between innovative HR and motivation scope was non-significant. These results partially confirm Hypothesis 4B (for the scope of motivation practices).

DISCUSSION

Research into HRM and performance in small firms has embraced the search for HPWPs without really considering the suitability of this model in the context of small firms. In order to advance the discussion on the presence of HPWPs in small firms, we have looked into the probability that small firms adopt smaller sets of related practices instead of the whole package of HPWPs. The AMO model provided a theoretical rationale for the distinction of three smaller bundles of best practices aimed at employee ability (A), motivation (M) and the opportunity...
to perform (O).

In a study of 70 small organizations (employing between 6 and 50 employees) and a total of 350 employees, we indeed found variation in the presence of the three bundles. This finding emphasizes that in studies of best practices, justice is not served by looking only for complete systems of HPWPs and not considering possible alternative strategic applications of best practices. Looking into explanations for this variation, we addressed two complementary perspectives: supply scarcity and strategic decision-making.

Supply scarcity has to do with constraints in time and money, both of which are typically less available in smaller firms (Welsh and White, 1981). In our study, fewer ability and motivation practices were reported by our sample of employees working in the smaller firms (Hypothesis 1). The costs involved in implementing formal training (A), career paths and high salaries (M) can be substantial and particularly difficult to shoulder by smaller firms (Sels et al., 2006). In addition, the greater organizational complexity of larger firms and the increased difficulty in these firms to maintain direct control through an informal approach will lead to the implementation of more formalized ability and motivation practices (Mayson and Barrett, 2006). Notably, the scope (i.e. the number of different practices) and the intensity of application (i.e. the proportion of employees covered by these practices) of the ability and motivation bundles were related to organizational size such that, although these practices were present, they did not necessarily apply to all employees. However, size alone did not explain all of the variation in the AMO bundles in small firms. Notably, our findings illustrate that it is the strategic choice of the owner–manager that also influences which investments in an AMO system are given priority.

In line with Hypothesis 2, we found that entrepreneurial orientation was related to practices concerning abilities. Small firms that achieve large financial and employee growth are often managed by owners with entrepreneurial orientations. These entrepreneurs are keen resource managers who align all of their resources with organizational growth. As such, for these firms to achieve their goals, it is sufficient to have able employees who can follow the ambitious leader (Kuratko, 2007).

A striking finding was that when entrepreneurs had a greater awareness of best practices, their employees reported a larger presence of opportunity practices, thereby supporting Hypothesis 3A. In other words, employees were experienced at being involved in determining the strategy of the firm and deciding on investments, and they also had a say in how to organize their work. The impact of the entrepreneur’s best practice awareness on employee reports of opportunity practices was especially evident in the somewhat larger organizations; in the smaller organizations, best practice awareness did not really influence the level of opportunity practices used (Hypothesis 3B). In our sample of micro- and small organizations, entrepreneurs of the somewhat larger firms could still use autocratic and centralized styles of decision-making (Edwards et al., 2006). One of the most difficult steps for entrepreneurs is to delegate responsibilities to employees (Spreitzer and Mishra, 1999). Clearly, knowledge of the beneficial effects of advanced people management practices may help the reluctant entrepreneur to overcome his/her reluctance to empower and involve employees. It would appear entrepreneurs with younger organizations are more open to the use of opportunity practices. The most likely explanation for this finding is that in younger organizations, fewer routines will have crystallized, and more negotiation takes place between owners and employees with the aim of embedding these routines. Maintaining this habit of involving and empowering employees when the firm grows older is a strategic decision related to the entrepreneur’s best-practice awareness.

Another finding further illustrates that size alone is not enough to explain the absence or presence of HPWPs. Entrepreneurs who aim to be ‘innovative’ in their HR strategy can be expected to lead in terms of demonstrating the use of all dimensions of HPWPs.

Indeed, employees of such ‘innovative’ entrepreneurs reported a greater scope associated with each of the three AMO bundles, indicating that these employees perceived that more practices from each of the AMO bundles were present in their firms, although these practices
were not necessarily applied to all employees (Hypothesis 4A). In addition, our findings indicate that the relationship between the owner’s preference for innovative HR and the scope of motivation practices was most prominent in smaller organizations. This means that in smaller organizations, employees of entrepreneurs with an innovative HR strategy were more likely to report the presence of above-average salaries, financial rewards, formal career plans and company communication. In larger firms, the relationship was less prominent, indicating that it is not merely the greater availability of financial means that facilitates the implementation of motivation practices. This partially confirms Hypothesis 4B. This finding is counter-intuitive, since motivation practices involve pay-related incentives that are considered to be expensive for small firms. Hence, it raises a question about innovativeness in relation to company performance.

According to Paauwe and Boselie (2005), a positive attitude towards innovative HR is not necessarily driven by performance considerations; rather, it could be driven by a desire to be the first to try out new things, analogous to the product lifecycle theory’s claim of there being innovators, fast followers, slow followers and laggards. This in turn could imply that the more innovative the entrepreneur, the more he/she is willing try out new practices quickly, but without actually intending to develop a performance strategy out of their HRM approach. This would align with the finding that an innovative HR orientation was only related to the scope—and not to the depth—of the actual practices used. Entrepreneurs claiming to be innovative in terms of HR only implement related practices for some employees, rather than working on the basis that providing these practices to all employees would enhance their performance. This raises the question as to whether pursuing modern management practices (such as HPWP elements) without reflecting on performance considerations is indeed, as Paauwe and Boselie (2005) put it, ‘pursuing best practices in spite of performance’.

Overall, the findings highlight the fact that implementing all the AMO elements of HPWP can be at odds with the resources of a small firm. In addition, we found that the entrepreneurial orientation, the awareness of best practice and the HR innovativeness of owner–managers lead to different preferences when HPWP elements are being adopted.

**Contributions**

The present focus on smaller bundles of strategic combinations of HR practices provides a fruitful and promising approach to investigating HPWP elements in small organizations. Hence, the first contribution concerns the investigation of three bundles of HR practices. Much of the theoretical development related to HPWP elements has evolved around the AMO model, but without truly considering the diverse performance goals of the practices involved in the bundles (Boxall and Macky, 2009). In particular, in small organizations, entrepreneurs have adopted specific HPWP elements and claim to have done so because these fit with the needs of their firms (Drummond and Stone, 2007).

HPWPs are expensive to implement, and their costs can outweigh the performance benefits (Sels et al., 2006). However, when smaller bundles of practices, aimed at more specific performance goals, are implemented, the associated costs are more modest and the results more closely aligned with the contingent needs of the firm.

The findings presented in this paper illustrate the importance of considering the general notion of supply scarcity (given by the size of the organization) in combination with strategic decision-making models in the framework of HRM investment in small firms.

The study shows that the expertise and attitudes of the owner–manager inform the decision-making processes concerned with the implementation of HPWP elements in small firms, over and above restrictions caused by limited financial resources and time constraints (both of which tend to become less problematic with increases in organization size). Interestingly, the three characteristics of the owner–manager considered (best-practice awareness, entrepreneurial orientation and the desire to have innovative HR practices) were shown to be related to the presence of HPWP elements in various ways. As such, the human capital of an owner–manager indeed warrants consideration when researching HRM in small firms. Moreover, the findings indicate that the effect of best-practice awareness and the desire to have innovative HR
practices interact with the availability of resources (the size of the small firm). The mechanisms that cause these interactions can be explained by a strategic choice perspective. The felt need to delegate responsibilities to employees (O) does not automatically increase with size, but depends on the awareness of the owner that delegating is a good thing to do. In addition, the drive to be innovative in their HR strategy is of crucial importance for the implementation of motivation practices in smaller firms.

Overall, our research confirms that supply scarcity and decision-making factors are both related to the uptake of different HR bundles. Another contribution involves the measurement of HPWPs. Research into HRM in small firms has struggled with the question of how to measure HR practices. Given the small number of employees, practices are often informal, or they apply to only a few employees (de Kok and Uhlaner, 2001). In addressing these measurement issues, we evaluated the presence of the AMO elements in three ways: their intensity, their scope and their depth. An example of the strength of this approach is shown by our finding that the level of innovative HR was only related to the ability, motivation and opportunity bundles, as hypothesized, in terms of scope. Although more practices related to each of the AMO bundles are reported by employees of innovative entrepreneurs, not all employees benefit equally from these practices as they only apply to a few employees. The depth measure of an AMO bundle reflects the number of practices that are applied to all employees. Here we found a negative relationship between the age of the firm and the depth of use of ability practices, indicating that older organizations are more selective in which employees can enjoy ability practices. One possible explanation for this finding is that in the younger organizations the building of the core group of employees is still crucial (Aldrich, 1999).

A final contribution concerns the use of multisource data obtained from both owner–managers and employees of small firms in our study (i.e. a multifactor study). This design has enabled us to investigate whether the implementation of HR practices is related to the expertise and knowledge of entrepreneurs while ensuring that common method variance does not bias our results.

Limitations
This research has several limitations. First, the sample was quite small and was focused on a geographically concentrated group of small firms. Due to their geographical proximity, some characteristics of the sample, such as their labor market and employment legislation, can be assumed to have been uniform.

However, the advantages of sample homogeneity may come at the cost of being able to generalize the findings. Nevertheless, despite its small size, the sample did provide sufficient variation in both the use of HPWPs and in the hypothesized predictors of high performance work bundles.

Although we used employee perceptions as indicators of the presence of HPWPs in their firms, the sample of respondents was determined by the contact person in the organization (usually the manager/entrepreneur). Despite high intra-class correlations which indicate that the averaged perceptions are reliable, it is possible that the samples are not representative of all employees in each organization. However, the procedure of using multiple respondents in each firm and drawing on multiple actors (employees and entrepreneurs in our study) is advocated as a way of reducing the single respondent bias from which many HR research designs suffer (Gerhart et al., 2000).

Finally, as we took a cross-sectional approach, we cannot be confident of any causal relationships suggested by the results. In order to more confidently understand how HR practices and the availability of resources develop over time, it would be valuable to perform longitudinal case studies.

Recommendations
Despite claims about the limited uptake and applicability of HRM in small firms, this study contributes to the literature on HRM in small firms by uncovering the presence of aligned bundles of HPWPs in such firms.

In addition, this study adds to the literature on supply scarcity and strategic decision-making by showing that the implementation of bundles of HPWPs in small firms depends on the size of the organization, the decision-making by the
entrepreneur and the combination of both. In line with a supply-scarcity perspective, this study confirms that smaller firms implement fewer ability and motivation practices due to time and financial limitations related to firm scale.

However, the influence of the availability of resources needs to be nuanced. This study highlights the fact that the implementation of ability, motivation and opportunity practices is also related to the expertise and outlook of the individual entrepreneur who tends to drive strategic decision-making in small firms. Moreover, this study shows that the expertise and attitudes of these entrepreneurs help to moderate the effect that limited resources have on the uptake of certain elements of HPWPs. More research is needed that integrates the supply-scarcity concept and strategic decision-making models to gain greater insight into the conditions under which HPWPs are adopted by small firms.

REFERENCES


Dhamodaran Lingappan
