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# Perceived Acute Human Resource Management Problems in Small and Medium Firms: An Empirical Examination

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The main objective of this study was to introduce and empirically test a novel and useful framework from which to study human resource management (HRM) problems in small- and medium-sized enterprises (SMEs). Specifically, the “perceived acute HRM problems framework” introduced in this study was an attempt to advance the literature by moving beyond simply studying when HRM problems may exist in SMEs, to instead studying when SME owners and managers perceive that HRM problems are the firm’s most significant concern. Recent literature suggests that SME owners and managers do not conceptualize specific HRM problems on a spectrum. Rather, they are more likely to perceive only “people problems” in the aggregate and then only when severe. Thus, the acute problems framework may be a more appropriate angle from which to study HRM problems in SMEs. We employ binary logistic regression on a sample of 1,693 SMEs to analyze the effect of owner/manager characteristics and firm characteristics on the likelihood of perceiving acute HRM problems. Our results indicate that SME owners and managers who were running higher-performing firms were less likely to perceive acute HRM problems. Conversely, SME owners and managers who were more experienced, who were more educated, and who were running larger SMEs were more likely to perceive acute HRM problems. Finally, gender, owner age, firm age, and firm growth showed no significant relationship with likelihood of SME owners and managers perceiving acute HRM problems.

## Introduction

Human resource management (HRM) problems have been an area of interest to entrepreneurship researchers for at least 15 years (e.g., Hornsby & Kuratko, 1990; Kazanjian & Drazin, 1989; Terpstra & Olson, 1993). Since these early studies, interest in the topic has intensified mostly because of the dual contention in small-firm HRM research, which holds that an inability to identify and manage HRM problems is a

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common cause of failure, and conversely the ability to perceive and overcome HRM problems is a key area in which small firms can gain competitive advantage (Barney, 1995; Dess & Lumpkin, 2003; Hornsby & Kuratko, 2003). While this increased interest has led to increased research, the empirical work on the topic has focused on identifying when (in the life cycle) small- and medium-sized enterprises (SMEs) may experience varying levels of HRM problems (e.g. Huang & Brown, 1999). While such research is important and informative, it may not be the most appropriate lens from which to examine SME HRM problems. Specifically, research indicates that SME owners and managers are not likely to focus on administrative issues such as HRM, unless they perceive such issues to be an acute concern of the firm (Cooper, Ramachandran, & Schooman, 1997; McCarthy, Krueger, & Schoenecker, 1990). Hence, the current manuscript proposes an acute HRM problems framework that may be a more appropriate lens from which to examine SME HRM problems.

Why study acute HRM problems? On one hand, HRM has been theorized and empirically demonstrated to be an area where sustainable competitive advantages can be developed (Barney, 1991, 1995; Berman, Down, & Hill, 2002). Specifically, it is argued that advantages developed through HRM such as a positive organizational culture and a strong firm knowledge base, can help create sustainable competitive advantages, because such intangible assets are valuable, rare, and difficult to imitate (Arthur, 1994; Hayton, 2003; Huselid, 1995). Furthermore, developing competitive advantages through HRM are likely more important to SMEs because SMEs do not likely possess the tangible resource bases to compete with larger and more established firms (Cardon & Stevens, 2004; Hornsby & Kuratko, 2003).

On the other hand, in spite of the importance of HRM to SMEs, research also indicates that SME owners and managers do not tend to focus on administrative issues such as HRM, until they perceive that such issues are critically important to the firm (Cooper et al., 1997; McCarthy et al., 1990). Specifically, the SME owner/manager's time constraints, lack of planning intensity, and lack of power *vis-à-vis* the environment contrive to make the SME a much more reactive—than proactive—entity (Hrebiniak & Joyce, 1985; Mintzberg, 1980). Since the SME owner/manager cannot manage all facets of the business or affect the environment significantly, he or she often must follow the risky tactic of prioritizing critical concerns and ignoring less critical concerns (Jawahar & McLaughlin, 2001). This prioritization is largely based on the severity of the problem, and consequently only the most severe problems are given credence (Jawahar & McLaughlin; Kahneman & Tversky, 1979). Thus, it is important to determine when SME owners and managers perceive HRM problems as acute, because SME owners and managers are not likely to focus on and therefore attempt to develop competitive advantages through HRM until they perceive HRM problems as acute.

The above discussion indicates that it may be more informative and appropriate to examine HRM problems in SMEs at a different level of analysis. Hence, the main objective of this manuscript is to introduce and empirically test a novel and useful framework from which to study HRM problems in SMEs. Specifically, the “perceived acute HRM problems framework” introduced in this study attempts to advance the literature by moving beyond simply studying when HRM problems may exist in SMEs to instead studying when SME owners and managers perceive that HRM problems are the firm's most significant concern.

To accomplish the goals of this manuscript, we first briefly summarize HRM literature and highlight the critical role that HRM plays in SME success. We next draw on SME HRM literature to introduce the acute HRM problem perceptions framework as a novel and useful lens from which to examine HRM problems in SMEs. Third, an exploratory

empirical examination will be conducted to determine when SME owners and managers are more likely to perceive HRM problems as acute. Finally, results will be reported and implications will be discussed.

## **Human Resource Management and the SME**

The HRM as a field of study contains considerable ambiguity both in conceptualization and in application. Numerous definitions of HRM exist (e.g., Storey, 2001, p. 5), different frameworks have been submitted (e.g. Legge, 2005), and the effect of HRM on desired outcomes has been debated (e.g., Kochan & Dyer, 2001, p. 273). Accordingly, we submit the following definition of HRM: “A set of distinct but interrelated activities, functions, and processes that are directed at attracting, developing, and maintaining (or disposing of) a firm’s human resources” (Lado & Wilson, 1994, p. 701). It should be noted that our conceptualization in this work is primarily focused on using HRM to maximize firm performance (i.e., profitability). HRM can also be viewed through various other paradigms that emphasize a critical/constructivist framework whereby HRM is increasingly concerned with the satisfaction of a variety of stakeholders such as employees, trade unions, governments, and the company’s reputation, in addition to traditional profit maximization issues.<sup>1</sup>

Empirical research indicates that SMEs do engage in HRM. Specifically, while SMEs do not generally have an HRM department and do not use HRM practices to the same extent as large firms, SMEs do typically rely on a mix of HRM practices in a variety of areas such as training, compensation, recruiting, and selection (e.g., Cardon & Stevens, 2004; Hornsby & Kuratko, 1990, 2003; Kotey & Slade, 2005).<sup>2</sup> Furthermore, small firms have seen improvements in performance as a result of implementing these practices (e.g., Chandler & McEvoy, 2000; Hayton, 2003).

The HRM has been theorized and empirically demonstrated to have both a traditional and a strategic role in organizations of all sizes (Hayton, 2003; Huselid, Jackson, & Schuler, 1997). The traditional (or technical) aspect of HRM focuses on conducting job analyses to identify the tasks, duties, and responsibilities that are needed to perform various jobs and then predicting the personal characteristics and behaviors that are needed for each specific position (Hayton). During the job analysis process, detailed formal job descriptions for each position are developed. Armed with these job descriptions, employers attempt to recruit and select employees with the exact knowledge, skills, and abilities necessary to perform each specific job. Employees are then monitored and rewarded based on whether they properly perform their specific duties (Hayton). Thus, the traditional aspect of HRM involves the administration of such activities as recruiting, selection, training, and performance appraisal (Huselid et al.). Furthermore, a variety of studies have indicated that the implementation of traditional HRM practices is beneficial for firms of all sizes. For example, the use of formal recruiting and selection measures (Terpstra & Rozell, 1993), the provision of employment training (King-Kauanui, Ngoc, & Ashley-Cotleur, 2006; Litz & Stewart, 2000), and the use of formal performance appraisal systems (Borman, 1991; Gerhart & Milkovich, 1992) have all been empirically demonstrated to positively influence firm performance.

The strategic aspect of HRM, on the other hand, is instead focused on the design and implementation of a set of HRM practices that focus on a firm’s human resource base

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1. For more information on these paradigms, please see Boxall and Purcell (2003) and Paauwe (2004).

2. For an overview the reader is referred to Cardon and Stevens, 2004.

toward accomplishing the firm's strategic goals and objectives (Baird & Meshoulam, 1988; Huselid et al., 1997). Examples of strategic HRM practices include but are not limited to employee empowerment programs, incentive compensation plans, involving employees in organizational decision making, and total quality management initiatives (Arthur, 1994; Hayton, 2003; Huselid et al.). Strategic HRM practices are based on two basic ideas. First, it is not likely that all duties necessary to perform a job can be identified and put in a job description. Second, it is also not likely possible to monitor and reward employees for all the contributions they make toward accomplishing the firm's strategic objectives (Hayton). Thus, firms can benefit from implementing HRM practices that focus employees' efforts on accomplishing the firm's strategy.

Research provides support for the above notion, as studies indicate that implementing HRM practices that focus employees on achieving the firm's strategy positively increase firm performance in both small and large firms (e.g., Arthur, 1994; Chandler & McEvoy, 2000; Hayton, 2003). For example, in a study of 293 American firms, it was found that strategic HRM practices such as total quality initiatives, empowerment programs, and employee job design programs positively influenced firm performance (Huselid et al., 1997). Additionally, an examination of U.S. small firms indicated that firms that emphasized HRM practices that encouraged extra employee effort, such as empowerment, participative management, and incentive compensation, experienced higher firm performance compared with firms that relied less on such practices (Hayton). Furthermore, in a study of small manufacturing firms, it was found that when coupled with group-based compensation and extensive formal training, strategic implementations such as total quality management improved firm performance (Chandler & McEvoy). Finally, in a study of U.S. steel minimills, it was found that mills that emphasized strategic HRM practices such as formal employee participation programs, team-based problem solving, and detailed employee socialization, experienced higher productivity, as well as lower turnover and lower scrap rate in comparison with mills that did not emphasize such practices (Arthur).

Finally, it is important to note that while firms may tend to place more emphasis on either the traditional or the strategic aspect of HRM, few if any firms are likely to take a purely traditional or a purely strategic approach to HRM. Empirical research provides support for this notion as two separate empirical studies of nearly 400 American firms indicated that while strategic HRM practices tend to have more of a positive influence on firm performance, firms do tend to rely on a balance of traditional and strategic HRM practices (Hayton, 2003; Huselid et al., 1997).

In sum, we submit that the preponderance of literature suggests that HRM is measurable, performance enhancing, and a possible source of competitive advantage in organizations of all sizes. Moreover, the advantages gained through HRM are particularly important for smaller firms because these firms often do not have the tangible resources to compete with larger and more established firms (Cardon & Stevens, 2004; Hornsby & Kuratko, 2003). However, in spite of its importance to SMEs, research indicates that SME owners and managers do not tend to focus on administrative issues such as HRM, unless they perceive such issues to be at a critical level of importance (Cooper et al., 1997; McCarthy et al., 1990). As a result, we propose in the following section that a "perceived acute HRM problems framework" is a novel and appropriate paradigm for studying HRM in SMEs.

### **Perceived Acute HRM Problems Framework**

Entrepreneurship scholars have firmly stated that researchers cannot simply extend large-firm HRM theory for SME application; instead, we must develop HRM theories specifically for the smaller firm (Barber, Wesson, Roberson, & Taylor, 1999; Cardon &

Stevens, 2004; Heneman & Tansky, 2002). The notion that small businesses are different is at the heart of entrepreneurship research, regardless of the construct under study (Gartner, 1989). Yet, most SME HRM studies use the same typologies and taxonomies developed by large-firm HRM studies, instead of drawing from the rich body of SME research to look at the field from a different, and more appropriate, angle. For example, most SME HRM problem studies follow the large-firm literature by examining—almost in lock step—compensation, recruiting, selection, training, appraisal, and labor relations (Cardon & Stevens). In addition, any measurement of the severity of HRM problems is done by using a Likert-type scale. This is disconcerting, especially when there is substantial literature to suggest that owner/manager's do not—and cannot—conceptualize HRM in this manner. Rather, they are more likely to perceive only “people problems” in the aggregate (Kazanjian, 1988; Terpstra & Olson, 1993) and then only when severe (Adizes, 1979, 1988; Kazanjian & Drazin, 1989; Steinmetz, 1969).

A number of studies have assessed the severity of HRM problems that SMEs are experiencing at various stages of the organizational life cycle (OLC) as levels on a 5-point Likert scale (e.g. Hornsby & Kuratko, 2003; Huang & Brown, 1999; Rutherford, Buller, & McMullen, 2003). While these studies are important and informative, they do not capture the idea that SME owners and managers may not act upon—or perceive—HRM problems until they reach an elevated level. Thus, these studies may not be measuring HRM problems in the same manner that SME owners and managers perceive them. As a result, we believe it makes sense to take a slightly different angle.

We seek to identify under what conditions SME owners and managers are most likely to perceive that HRM problems are their most critical concern. As stated above, the reasoning behind this is based on the notion that SME owners and managers may only perceive and act upon the most salient issues confronting them. Moreover, it is reflective of the substantial literature base, which indicates that SME owners and managers do not necessarily perceive underlying phenomena or “build up”; rather, they perceive the resultant manifest issue (Dodge, Fullerton, & Robbins, 1994; Dodge & Robbins, 1992; Gupta & Chin, 1993; Hanks & Chandler, 1994; Kazanjian, 1988; Lippitt & Schmidt, 1967; Terpstra & Olson, 1993). Acute problem perception captures contextual, structural, and strategic variables because as these evolve, they manifest themselves to management as problems that must be solved—a manager or entrepreneur may not be aware of structural or strategic change but will be aware of the problems caused by these issues. In other words, SME owners and managers will not act on underlying constructs—they will act on the problems that they perceive, and they are likely to only perceive acute problems.

In a seminal study on this issue, Kazanjian (1988) found empirical support for the notion that an owner's reaction to these “dominant problems” was the central component to organizational adaptation and progression. Other authors (Greiner, 1972; Huang & Brown, 1999; Starbuck, 1971) state that development in small organizations is implicitly driven by owners' responses to these acute problems. Kazanjian and Drazin (1989) submit that it is the ability to perceive and solve these problems that best predicts the success or failure of a given venture.

This is a direct result of the fact that SME owners and managers are frequently time starved and, as a result, are unlikely to perceive—or will ignore—more minor issues. This becomes especially salient when investigating HRM problems because these are particularly unlikely to be forefront in the owner's mind until they reach an acute level. The literature provides support for this notion as research indicates that critical issues of concern to an owner are much more likely to be “doing” activities rather than administrative activities such as HRM, unless such administrative activities reach acute levels (Cooper et al., 1997; McCarthy et al., 1990).

The above discussion indicates that the “perceived acute HRM problems framework” is a novel and possibly more appropriate angle from which to examine HRM problems in SMEs. Specifically, the perceived acute HRM problems framework appears to be more aligned with the manner in which SME owners and managers conceptualize HRM. That is, owners and managers are not likely to focus on HRM issues unless they perceive them to be of critical importance to the SME (Cooper et al., 1997; McCarthy et al., 1990). Since developing competitive advantages through HRM is likely more critical for SMEs (Cardon & Stevens, 2004; Hornsby & Kuratko, 2003), it is important to determine when SME owners and managers perceive HRM problems as acute.

Hence, we next propose and empirically examine correlates to acute HRM problems at two levels of analysis (SME owner/manager characteristics and firm characteristics). We examine characteristics that have been identified in the literature as being significantly related to HRM problems (e.g., Dodge & Robbins, 1992; Hanks & Chandler, 1994; Hornsby & Kuratko, 1990, 2003; Huang & Brown, 1999; Kazanjian, 1988; Terpstra & Olson, 1993).

### **Owner/Manager Characteristics**

Individual characteristics are those attributes possessed by the owner/manager that may affect perceived HRM problems in the SME. We examine characteristics that have been identified in the literature as being significantly related to HRM problems: gender, age, experience, and education.

**Gender.** Male owners and managers may be more likely to perceive HRM problems as acute for two reasons. First, male owners and managers are more likely to manage high-growth firms (Cinamon & Rich, 2002; Demartino & Bartato, 2003; Mitra, 2002; Stephens & Feldman, 1997). This finding is important because high-growth firms consistently face a higher level of HRM problems in comparison with no-growth or slowly growing firms (McCann, Leon-Guerrero, & Hailey, 2001; Rutherford et al., 2003; Terpstra & Olson, 1993). Second, the female owners and managers tend to follow more-participative, team-based management styles, while the male are more autocratic (Rosa, Carter, & Hamilton, 1996; Verheul, Risseuw, & Bartelse, 2002). Such participative management styles, more commonly employed by female owners and managers, are positively associated with high levels of employee satisfaction (Kim, 2002). Consequently, male owners and managers will be more likely to perceive higher levels of HRM problems both because they are more likely to manage fast growing firms with their increased levels of HRM problems and because they are less likely to use participative management styles, which keep employees satisfied. Hence, the following is proposed:

**Hypothesis 1:** Male owners and managers will be more likely to perceive HRM problems as acute.

**Experience.** It has been stated that management is as much an art as a science, and as such cannot be learned without a hands-on approach (Mintzberg, 1987). This learning simply takes time and the curve can be steep, as the entrepreneur encounters and conquers management problems, he or she becomes more adept at handling them in the future. Empirical research has provided support for the above statement. For example, in a study of firms with less than 500 employees, it was found that owners and managers with previous experience were more successful than their counterparts (Miller & Toulouse, 1986). Likewise, in a study of small manufacturing firms, it was found that successful

entrepreneurs had prior experience in related industries (Steiner & Solem, 1988). Finally, as owners and managers become more experienced within their firms and industries, they will be more likely to accumulate higher levels of social competence. One of the many theorized benefits of a high level of social competence is a better ability to attract and select employees (Baron & Markman, 2000, 2003). Thus, previous experience in a related business appears to help entrepreneurs and we would expect this relationship to extend to HRM. Hence, the following is proposed:

**Hypothesis 2:** Less-experienced owners and managers will be more likely to perceive HRM problems as acute.

**Age.** While age and previous business experience are certainly related, we argue that each characteristic will uniquely impact the development of HRM skills. As mentioned above, one of the many benefits of social competence for small-firm owners and managers is a better ability to attract and select human resources (Baron & Markman, 2000). It is theorized that social competence is accumulated over time through the development of social skills such as social perception, impression management, social adaptability, and persuasiveness (Baron & Markman, 2000, 2003). As a result, we argue that older owners, regardless of previous experience in a similar business, will have had more time to develop and perfect social skills and accumulate social competence. This additional social competence will better prepare older owners and managers to deal with their human resources. Considering the above discussion, the following is proposed:

**Hypothesis 3:** Younger owners and managers will be more likely to perceive HRM problems as acute.

**Education.** The HRM skills are likely becoming more important for all businesses for two reasons. First, legal developments related to such issues as the Family and Medical Leave Act, tax compliance, wrongful termination cases, and the Americans with Disabilities Act have greatly complicated HRM functions such as recruiting, selection, training, and evaluation (Lee, 2001; Steingold, 2004). Second, the baby boom generation is beginning to retire, making talented young workers a hotter commodity than ever before (Gandossy & Kao, 2004). However, the need for owners and managers to possess highly developed HRM skills is likely much more critical for smaller firms. Smaller firms with their limited resource bases must rely more strongly on their people to develop competitive advantages in the market (Dess & Lumpkin, 2003; Gatewood & Feild, 1987; Hornsby & Kuratko, 2003). Considering the above, we argue that a formal college education will help small-firm owners and managers to develop their HRM skills by providing them both knowledge of relevant laws and regulations such as the Americans with Disabilities Act, as well as increasing their interpersonal and critical thinking skills. Hence, the following is proposed:

**Hypothesis 4:** Highly educated owners and managers will be less likely to perceive HRM problems as acute.

## **Firm Characteristics**

With regard to SMEs, the characteristics that have been shown to be associated to HRM issues are essentially the variables that make up OLC of firm size, firm age, and firm growth (Kazanjian & Drazin, 1989; Rutherford et al., 2003). Additionally, we examine the understudied relationship between performance and HRM issues.

**The OLC Variables.** Research on HRM problems in SMEs seems to provide support for the proposed notion that as small firms become more mature they employ more HRM activities to deal with increased HRM problems (Rutherford et al., 2003; Van Fleet & Bedeian, 1977). Specifically, firms in different life cycle stages seem to have different types and amounts of HRM problems. For example, small-firm owners did not rank HRM issues as a primary concern during the start-up phase of operations (Terpstra & Olson, 1993). Similarly, small firms in the start-up phase have been found to be primarily concerned with only recruiting, moving on to a host of other activities as they move out of the start-up phase (Baird & Meshoulam, 1988; Kotey & Slade, 2005). Exhibiting this point, two examinations of HRM activities in U.S. companies found that larger small firms use more-complex selection devices, performance appraisals, and compensation plans (Hornsby & Kuratko, 1990, 2003).

Research also indicates that SMEs in the growth stage have a higher proportion of HRM problems in comparison with no-growth or slowly growing firms. For example, a study of family business and HRM issues found that growth firms ranked general HRM issues significantly higher on a scale of importance than firms that were not growing (McCann et al., 2001). Similarly, using a sample of 2,903 American firms, it was found that among small- and medium-sized firms, HRM problems did indeed vary by growth (Rutherford et al., 2003). Specifically, high-growth firms demonstrated more aggregate HRM problems than low-, no-, and moderate-growth firms. Finally, while small firms did not report HRM issues as problematic during the start-up phase of operations, as these firms entered the growth stage, HRM problems became a significant owner concern, ranking only behind marketing and finance (Terpstra & Olson, 1993). Considering the above, the following are proposed:

**Hypothesis 5:** The owners and managers of larger SMEs will be more likely to perceive HRM problems as acute.

**Hypothesis 6:** The owners and managers of older SMEs will be more likely to perceive HRM problems as acute.

**Hypothesis 7:** The owners and managers of high-growth SMEs will be more likely to perceive HRM problems as acute.

**Firm Performance.** Extending the concepts of liability of smallness and newness (Carroll & Delacroix, 1982; Singh, Tucker, & House, 1986), many researchers have suggested that firms with more financial slack should experience fewer HRM problems. For example, in an 8-year longitudinal study, high-performing firms tended to have highly satisfied employees, while low-performing firms had less-satisfied employees (Schneider, Hanges, Smith, & Salvaggio, 2003). Furthermore, it is also generally accepted that low-performing, cash-strapped owner/managers have difficulty attracting, developing, and retaining quality employees (Dess & Lumpkin, 2003; Kanungo & Mendonca, 1992). Considering the above, the following is proposed:

**Hypothesis 8:** The owners and managers of lower-performing SMEs will be more likely to perceive HRM problems as acute.

## Method

### Data

The sample in this study comes from the Survey of Small Business Finances (SSBF). The SSBF conducted the survey during 1998–2000 for the Board of Governors of the

Federal Reserve System. The target population was all for-profit, nonfinancial, nonfarm, nonsubsidiary business enterprises that had fewer than 500 employees and were in operation as of the year ended 1998. Businesses were contacted in advance of the survey to determine eligibility, verify addresses, and identify a contact person. Not all businesses met the target population definition, some businesses could not be contacted, and others were determined to have erroneous frame data. The overall eligibility rate of sampled businesses averaged 60%. Each business meeting the eligibility criteria was sent an advance work sheet to encourage the use of written records in responding to the subsequent computer assisted interviews. The interviews of each firm's owner or top manager were conducted by the National Opinion Research Center and averaged 42 minutes in length.

A total of 3,561 firms, across six industries, are included in this public use data set. The firms included in the sample represent 5.3 million small businesses as defined by the Small Business Administration general guidelines as firms having less than 500 employees. A total of 1,868 cases contained missing data and were omitted leaving a final sample of 1,693. We tested for statistical difference between omitted and included cases on variables that were not missing and no significant differences were found.

## Measures

**Dependent Variable.** In this study, we were interested in SME owners and managers who were perceiving acute HRM problems. The SSBF survey makes it ideal for this approach because it asks the open-ended question: "What is the single most important problem facing your business today"? This question taps into the construct because of its open-ended nature—the answers were mutually exclusive so a respondent was forced to state only the issue that he or she perceived was affecting the firm most heavily. While the question was open-ended, the interviewer had a list of categories that could simply be checked after the response. When the respondent mentioned an HRM issue such as selection, retention, or development, the interviewer could simply check HRM. The categories were chosen based on the information gained from a pretest of the survey and subsequent versions of the survey in 1988 and 1993. An "other, please specify" category was included to capture reasons outside of the categories given. Answers in the other category were later recoded into the categories if possible. The recoding, however, was minimal. Almost three-fourths of the respondents selected one of the original categories.

If the answer was an HRM one such as retention, selection, or development, the dependent variable was assigned a value of 1. If some other issue was cited, it was assigned the value of 0. Twenty-one percent of the respondents indicated that HRM was, in fact, the area of most concern, while 79% of the respondents indicated that some other area was of the most concern. HRM issues were the most commonly cited problem followed by competition (12%).

**Independent Variables.** Firm-level independent variables of interest are: size (employees), firm age, firm growth, and financial performance. Owner–manager-related independent variables of interest are: owner age, education, experience, and gender. All the above variables are those factors identified in the literature as having a significant impact on HRM problems and are described in more detail in Table 1.

Firm performance was measured as the log transform of return on sales. Dummy variables were created for all dichotomous variables to represent membership in that

Table 1

## Independent Variable Definitions

Variable	Definition
Entrepreneur variables	
Gender	Firm is over 50% owned by the female = 1, by the male = 0
Owner age	Owner's age (years)
Owner experience	Owner's experience in managing or owning a business (years)
High school degree or less	Owner's education fell into this category = 1, into other = 0
Some college	Owner's education fell into this category = 1, into other = 0
Associate degree	Owner's education fell into this category = 1, into other = 0
Trade degree	Owner's education fell into this category = 1, into other = 0
College degree	Owner's education fell into this category = 1, into other = 0
Firm variables	
Employees	Full-time equivalent employees
Growth	(sales98 – sales97)/sales97
Return on sales	Natural log of [profit/1998 sales]
Firm age	Company's age (years)

category. For example, for the variable college degree, 1 = the owner has a college degree and 0 = the owner has some other form of education. The coding for each of the dichotomous variables can also be found in Table 1.

With regard to ownership structure, the highest percentage (40%) were sole proprietorships, 29% were listed as s-corporations, 24% were c-corporations, 5% were partnerships, 2% were limited liability partnerships, and less than 1% were limited liability companies. Additionally, 85% were majority owned by one family.

## Analysis

This study employs hierarchical binary logistic regression to analyze the effect of owner/manager's characteristics (gender, age, experience, and education) and firm characteristics (age, size, growth, and performance) on the likelihood that SME owners and managers will perceive HRM problems as acute. Additionally, we controlled for industry with five dummy variables (services was the default category) and region with seven dummy variables (New England was the default category). After the control variables were entered, we then entered the firm-level variables, followed by the individual-level variables.

We chose logistic regression as our analysis technique because it is appropriate for use with a dependent variable having two categories. Furthermore, hierarchical logistic regression adds to the researcher's understanding of the data by providing a unique partitioning of the total variance explained by variables of interest and is one of the most powerful tools for extracting unique variance (Cohen & Cohen, 1983).

Logistic regression is a log-linear model, which uses maximum likelihood to estimate the regression's response function and allows for the use of both qualitative and

quantitative predictor variables (Neter, Kutner, Nachtsheim, & Wasserman, 1996). Unlike standard multiple linear regression, the dependent variable in logistic regression is an odds ratio, where:

$$\text{odds for } Y = \exp[b_0 + b_1X_1 + b_2X_2 + \dots + b_pX_p + e].$$

The log is taken of the link function to obtain:

$$\text{logit } [Y] = b_0 + b_1X_1 + b_2X_2 + \dots + b_pX_p + e.$$

## Results

### Descriptive Statistics

Table 2a shows means, standard deviations, and medians of the raw study variables before transformation and correlations among the parameters evaluated at the fitted estimates. The correlation matrix for the raw variables before transformation can be seen in Table 2b. Not surprisingly owner age was related to owner experience ( $r = .58$ ). Although scale development literature suggests that items are linearly redundant when item-intercorrelations exceed .70 (Boyle, 1991), we realize that this correlation is approaching multicollinearity status. As a result we examined the variance inflation factors (VIFs) for the owner experience and owner age variables. The VIFs were in the acceptable range, 2.59 and 2.05, respectively. Neter et al. (1996) state that a maximum VIF value in excess of 10 is frequently taken as an indication that multicollinearity may be unduly influencing the estimates. While we realize that in logistic regression the VIF heuristic of 10 may be elevated, the relatively low values present in our data appear to be tolerable (Allison, 1999; Belsey & Welsch, 1980). In light of these statistics, we elected to keep each of the variables in the model.

### Owner/Manager Characteristics

Hypothesis 1, which asserted that male owners and managers would be more likely to perceive HRM problems as acute, was not supported by our data. As seen in Table 3, our data indicate that there is no significant relationship between gender and perception of acute HRM problems. Hypothesis 2 posited that less-experienced SME owners and managers would be more likely to perceive HRM problems as acute. This hypothesis was significant but in the opposite direction ( $\beta = .061, p < .01$ ). Our data indicate that more-experienced SME owners and managers are more likely to perceive acute HRM problems. On the other hand, hypothesis 3, which asserted that younger SME owners and managers would be more likely to perceive HRM problems as acute, was not supported. Finally, hypothesis 4, which asserted that less-educated SME owners and managers would be more likely to perceive HRM problems as acute, also showed significance in the opposite direction. Specifically, the positive  $\beta$  coefficient indicates that SME owners and managers with college degrees were actually more likely to perceive acute HRM problems ( $\beta = .449; p < .05$ ).

### Firm Characteristics

Hypothesis 5, which asserted that owners and managers of larger SMEs would be more likely to perceive HRM problems as acute, was supported ( $\beta = .015; p < .01$ ).

Table 2

(a) Correlation Matrix of Parameter Estimates; (b) Correlation Matrix (Bivariate)

(a)	Mean	Median	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1 Construction	.11	.00	.31																									
2 Manufacturing	.11	.00	.31	.25																								
3 Transportation	.04	.00	.20	.16	.16																							
4 Wholesale/retail	.27	.00	.44	.35	.34	.21																						
5 Financial services	.06	.00	.24	.18	.15	.09	.22																					
6 Mid-Atlantic	.12	.00	.33	.02	.02	-.01	.02	.04																				
7 Northeast	.14	.00	.34	.02	.00	.00	.02	.04	.73																			
8 Northwest	.08	.00	.27	.01	.03	-.03	.04	.02	.69	.72																		
9 South Atlantic	.18	.00	.38	.03	.04	.00	.00	.04	.75	.79	.73																	
10 Southeast	.06	.00	.23	.01	.02	.01	.03	.03	.65	.68	.64	.70																
11 Southwest	.11	.00	.31	.00	.04	-.01	.01	.03	.69	.72	.68	.74	.64															
12 Mountain	.07	.00	.25	-.02	.03	.00	.00	.02	.65	.68	.64	.70	.61	.64														
13 Pacific	.21	.00	.40	.01	.02	.00	.01	.04	.74	.78	.73	.80	.69	.73	.69													
14 Total employees	25.53	5.00	54.6	.00	-.12	-.07	-.03	.04	.00	.01	.00	-.02	.00	-.01	-.03													
15 Firm age	14.44	11.00	12.11	-.02	.00	.01	-.01	.03	-.01	-.01	.02	.03	.01	.02	.01	-.04												
16 Growth	.58	.06	5.31	-.01	.01	.00	.02	-.01	-.02	.00	-.04	-.02	-.03	-.02	.01	.00	-.01	.06										
17 Firm performance (LnROS)	-1.87	-1.52	1.51	.03	.06	.03	.07	-.01	-.01	.01	.02	.01	-.01	-.02	.02	-.01	.19	-.01	-.03									
18 Gender	.22	.00	.42	.13	.05	.00	.02	.06	.04	.04	.02	.03	.02	.03	.02	.03	.07	.00	-.03	-.04								
19 Owner age	5.72	5.00	11.27	.00	.01	-.03	.00	.01	-.01	-.02	-.02	.00	.01	.01	-.02	-.02	.02	.06	-.03	.03	.00							
20 Experience	19.21	18.00	11.79	.02	-.03	.00	-.01	-.05	.01	.02	.03	.01	.00	-.01	.01	-.05	-.16	.09	.01	.11	-.58							
21 Some college	.17	.00	.38	-.09	-.08	-.02	-.13	-.08	-.01	-.02	-.04	.00	-.01	-.05	-.04	-.03	.05	-.02	.01	.02	-.05	-.01	-.01					
22 Associate degree	.06	.00	.23	-.01	-.06	.00	-.01	-.03	.02	.03	.05	.03	.04	.04	.04	.02	.01	.03	-.04	.00	-.05	.02	-.03	.20				
23 Trade degree	.04	.00	.2	-.05	-.01	.03	.02	.02	-.01	-.01	-.04	-.01	.01	.01	.00	-.02	.04	-.01	.02	-.04	-.06	.00	-.02	.16	.10			
24 College degree	.33	.00	.47	-.01	-.07	.00	-.06	-.06	.00	.04	.02	.01	.03	.02	.01	.01	-.01	.34	.10	-.34	-.02	.00	-.01	.20	.15	.12		

(b)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Construction																							
2 Manufacturing	-.12**																						
3 Transportation	-.07**	-.07**																					
4 Wholesale/retail	-.21**	-.21**	-.12**																				
5 Financial services	-.09**	-.09**	-.05**	-.16**																			
6 Mid-Atlantic	-.02	-.01	.02	-.01	.00																		
7 Northeast Central	-.01	.06**	.00	-.01	-.03	-.15**																	
8 Northwest Central	.03	-.01	.04	-.05	.03	-.11**	-.12**																
9 South Atlantic	-.04	-.01	-.01	.04	-.02	-.17**	-.18**	-.14**															
10 Southeast Central	.01	-.01	-.01	-.02	.00	-.09**	-.10**	-.07**	-.12**														
11 Southwest Central	.02	-.03	.01	.02	.02	-.13**	-.14**	-.10**	-.16**	-.09**													
12 Mountain Pacific	.05	-.03	-.01	.01	.01	-.10**	-.11**	-.08**	-.13**	-.07**	-.09**												
13 Pacific	-.01	.01	-.01	.00	-.02	-.19**	-.20**	-.15**	-.24**	-.13**	-.18**	-.14**											
14 Total employees	.00	.19**	.02	.03	-.08**	-.02	-.01	.01	.01	.01	.02	-.02	.00										
15 Firm age	.03*	.06**	.00	.05	-.01	.03*	.02	.01	-.03*	-.01	.02	-.01	-.02	.25**									
16 Growth	-.01	.02	-.01	-.03	-.01	-.01	.01	.01	.06**	-.01	-.02	-.01	-.03	-.02	-.06								
17 Firm performance (LnROS)	-.01	-.09**	-.05**	-.11**	.09**	.04	-.03	-.04	-.02	.01	.04	-.03	.03*	-.25**	-.07	-.04							
18 Gender	-.11**	-.06**	-.01	.00	-.03	-.03*	-.02	.01	.00	.01	.00	-.01	.03	-.10**	-.11**	.03	.11**						
19 Owner age	-.04	.07**	.03	.03	.03*	-.01	.00	-.05*	.01	.01	.03	.01	.00	.15**	.50**	-.06**	-.07**	-.08**					
20 Experience	.00	.06**	.04	.08**	.02	.01	.00	-.02	.01	.01	.02	.01	-.04	.22**	.63**	-.06**	-.11**	-.19**	.70**				
21 Some college	.05**	.00	.00	.06**	.05	-.05*	.01	.04*	-.06**	-.02	.06**	.05	.02	-.07**	.01	-.02	.03	.04	.01	.01			
22 Associate degree	-.01	.03	-.01	-.03	.02	.03	.01	-.04*	.00	-.01	-.03	-.03	.02	-.03	-.04**	.01	.03	.03	-.05**	-.02	-.11**		
23 Trade degree	.06*	-.05**	-.03*	-.05*	-.05*	-.01	.00	.03*	.01	-.03	.00	-.03	.02	-.06**	-.01	-.01	.06**	.07**	-.04	-.09**	-.05**		
24 College degree	-.06**	.09**	-.01	.07**	.05**	.02	-.02	.00	.01	.00	-.02	.02*	-.02	.12**	.02	-.02	-.13**	-.04**	.01	.02	-.32**	-.17**	-.15

\*p < .05; \*\*p < .01. SD, standard deviation.

Table 3

## Results of Logistic Regression Analysis

Variable	Equation (standardized $\beta$ )			
	1	2	3	4
Step 1: industry variables				
Construction	.736***			
Manufacturing	-.273			
Transportation	-.252			
Wholesale/retail	.043			
Financial services	-.385			
Mid-Atlantic	.339			
Northeast Central	.167			
Northwest Central	.178			
South Atlantic	.091			
Southeast Central	.314			
Southwest Central	-.216			
Mountain	-.074			
Pacific	-.367			
Step 2: firm variables				
Total employees		.015***		
Firm age		.007		
Growth		.022		
Firm performance (LnROS)		-.145***		
Step 3: individual variables				
Gender			-.068	
Owner age			-.048	
Experience			.061***	
Some college			.002	
Associate degree			.007	
Trade degree			-.202	
College degree			.449**	
Step 4: <i>post hoc</i> variables				
Experience <sup>2</sup>				-.001
Owner age <sup>2</sup>				.000
Growth <sup>2</sup>				-.001
Total employees <sup>2</sup>				-.001***
College degree $\times$ total employees				.002
College degree $\times$ firm age				-.005
College degree $\times$ growth				-.127
College degree $\times$ LnROS				.070
Growth $\times$ gender				.107
-2 log likelihood	2,761.30	2,678.45	2,633.93	2,578.02
$\chi^2$	70.39***	153.24***	197.76***	253.66***

\*\*  $p < .05$ ; \*\*\*  $p < .01$

Owners and managers of larger firms, in terms of employees, are more likely to perceive acute HRM problems. However, hypothesis 6, which asserted that SME owners and managers of older SMEs would be more likely to perceive HRM problems as acute, was not supported. Similarly, hypothesis 7, which asserted that owners and managers of high-growth SMEs would be more likely to perceive HRM problems as acute, was not supported. Finally, hypothesis 8, which asserted that owners and managers of lower-

performing SMEs would be more likely to perceive HRM problems as acute, was supported. The negative and significant coefficient ( $\beta = -.145$ ;  $p < .01$ ) indicates that owners and managers of lower-performing SMEs are more likely to perceive acute HRM problems.

While not a variable of interest, the significance of the industry variable for the construction dummy ( $\beta = .736$ ;  $p < .01$ ) was interesting. This is likely indicative of the fact that the construction industry enjoyed a boom in the late 1990's, making it difficult for firms in this industry to attract, develop, and retain a quality workforce (Tynan, 2003).

### ***Post Hoc Analysis***

After looking at the results, several interesting relationships presented themselves. To delve further into the effect that our variables of interest had on the likelihood of experiencing acute HRM problems, we tested four nonlinear variables and five interaction terms.

Because experience and owner/manager age counterintuitively showed opposite signs, we investigated the possibility that this relationship may be nonlinear. An investigation of residuals indicated that a nonlinear term might be appropriate for both. However, no significance was found on either variable. Likewise, the nonlinear-growth variable showed no significance. However, size, which was significant as a linear term, also demonstrated significance as a nonlinear variable ( $\beta = -.001$ ,  $p < .01$ ).

Because the sign on the college degree dummy was opposite from the hypothesized direction, we surmised that this relationship may be moderated by stage of the venture (i.e., birth, growth, maturity). As can be seen in Table 3, testing for moderation with stage variables (size, age, and growth) shows no significance. The lack of significance on the gender variable was also surprising. So, considering the recent literature on interesting relationships between gender and growth orientation, we tested an interaction term  $\text{gender} \times \text{growth}$ . No significance was found.

## **Discussion**

The main objective of this manuscript was to introduce and empirically test a novel and useful framework from which to study HRM problems in SMEs. Specifically, the "perceived acute HRM problems framework" introduced in this study was an attempt to advance the literature by moving beyond simply studying when HRM problems may exist in SMEs to instead studying when SME owners and managers perceive that HRM problems are the firm's most significant concern. Thus, the preceding exploratory empirical examination attempted to identify under what conditions firm owners and managers are most likely to perceive that HRM problems are their most critical concern. Hypotheses 1 through 4 examined SME owner/manager characteristics (gender, age, experience, and education) on the likelihood of SME owners and managers perceiving acute HRM problems, while hypotheses 5 through 8 examined firm-level characteristics (size, age, growth rate, and financial performance) on the likelihood of SME owners and managers perceiving such problems.

### **Owner/Manager Characteristics**

In the examination of individual characteristics of firm owners and managers, several interesting findings were discovered. First, no support was found for hypothesis 1, which

proposed that male owners and managers would be more likely to perceive HRM problems as acute in comparison with female owners and managers. This is consistent with a number of recent studies that have found gender to be a significant predictor of management problems and success only when combined with myriad mediating or moderating variables (e.g., Collins-Dodd, Gordon, & Smart, 2004).

Second, in comparison with our expectations, opposite results were discovered with regard to both education and previous experience of SME owners and managers. Specifically, the more experienced the SME owner/manager, the more likely the SME owner/manager was to perceive HRM problems as acute. Additionally, SME owners and managers who possessed a college degree were more likely to perceive HRM problems as acute. Although these results were in direct contradiction to hypotheses 2 and 4, it is possible that more-experienced and -educated managers perceive HRM problems simply because they are more attentive to such issues. Through education and experience, it is likely that owner/managers become aware of the critical nature of HRM problems, while less-enlightened owner/managers may not perceive problems simply because they are not aware of the manifest symptoms (Huang & Brown, 1999; Rutherford et al., 2003). It is also important to note that the results for college educated owners were in contrast to owners with a high school degree or less.

The above results, however, are somewhat confounded by the finding that age of owners and managers had no significant effect on the likelihood of perceiving HRM problems as acute. One would think that age would relate to HRM problems in the same fashion as experience. However, according to the sample examined in the current study, experience was a more-powerful predictor than age of a SME owner/managers' likelihood of perceiving that HRM problems are acute. This finding indicates that scholars may want to place more emphasis on the influence of owner experience than the influence of owner age in future SME HRM studies (e.g. Baron & Markman, 2000; Steiner & Solem, 1988).

## **Firm Characteristics**

The examination of firm-level variables on the likelihood of SME owner/managers perceiving HRM problems as acute also yielded some interesting findings. Hypothesis 5, which proposed that the owners and managers of larger SMEs would be more likely to perceive HRM problems as acute, was initially supported. Additional examination showed, however, that this relationship may instead be an inverted U-shape. One explanation for this finding may be that small firms indeed have fewer human resource issues, and large firms may have had them but were able to overcome them as they developed. Hypothesis 6, which proposed that the owners and managers of older SMEs would be more likely to perceive HRM problems as acute, was not supported. These findings provide limited support for the notion that as small firms become larger they employ more HRM activities to deal with increased HRM problems and complexity (Rutherford et al., 2003; Van Fleet & Bedeian, 1977). It is also illustrative of a Penrosian dynamic whereby the firm approaches managerial capacity at the top of the inverted "U" (Penrose, 1959). Specifically, a growing firm will eventually hit "managerial capacity" where it will stagnate because the firm's managers simply lack the managerial acumen to solve problems and take advantage of opportunities. If the firm develops the managerial acumen to solve these problems, it overcomes managerial capacity and moves on to enjoy lower levels of HRM problems (Penrose).

Surprisingly, no support was found for hypothesis 7, which asserted that the owners and managers of growing SMEs would be more likely to perceive HRM problems as

acute. This finding was surprising because previous studies have indicated that growth firms tend to have more HRM problems in comparison with no-growth or slowly growing firms (McCann et al., 2001; Rutherford et al., 2003; Terpstra & Olson, 1993). However, this study focused on identifying antecedents that influenced whether HRM problems were the most dominant problem perceived by the SME owner or manager at the current time. While a firm is in the growth stage, HRM problems may very well be perceived by owners and managers, but many other problems, such as financing and profitability, may be perceived by owners and managers as more critical.

Furthermore, hypothesis 8, which submitted that the owners and managers of low-performing SMEs would be more likely to perceive HRM problems as acute, was supported. Our study indicates that SME owners and managers of firms that experience better financial performance are less likely to perceive HRM problems as acute. This supports the idea that organizational slack eases many of the problems associated with managing an organization's human resources. During the early stages of development, firms simply do not have the resources or managerial capacity to engage in necessary activities to mitigate these problems (Muse, Rutherford, Oswald, & Raymond, 2005; Penrose, 1959).

Finally, possibly the most important finding in this exploratory study is that acute HRM problems were the most commonly perceived problem by SME owners and managers. When 1,693 SME owner/managers were asked in an open-ended format to indicate the issue that was currently the most critical issue facing their firms, 21% mentioned HRM problems. Furthermore, HRM problems were far and away the most commonly mentioned issue. It is well documented in the literature that SMEs face a wide variety of critical issues that hinder their chances of success, such as undercapitalization, resource scarcity, intense competition, endless government regulation, and cash flow problems. However, our study indicates that SME owners and managers may be the most concerned about HRM issues. This finding also indicates how critical it is for future research to examine the intersection of HRM and entrepreneurship.

## **Study Implications and Future Research Agenda**

The current study has three main implications. First, HRM plays an important role in SME success and is a possible area where SMEs can gain competitive advantages. For example, previous research indicates that the implementation of a variety of both traditional and strategic HRM practices tends to increase SME performance (e.g., Chandler & McEvoy, 2000; Hayton, 2003; King-Kauanui et al., 2006; Litz & Stewart, 2000). Second, HRM problems appear to be an area of serious concern to many SME owner/managers. Specifically, when nearly 1,700 SME owner/managers were asked to indicate the most critical issue that was currently facing their firm, over 21% of the sample indicated that an HRM issue was most critical. Furthermore, HRM issues were mentioned significantly more often than all other possible problems. Third, the conditions surrounding the perception of acute HRM problems by SME owner managers were somewhat surprising. For instance, contrary to what was expected, more-experienced and -educated SME owner/managers were actually more likely to perceive HRM problems. Additionally, factors such as firm growth and owner age, had no influence on the likelihood that SME owner/managers would perceive acute HRM problems. Thus, future research should be undertaken both to validate study findings and to determine the actions that SME owner/managers tend to take when they perceive acute HRM problems.

A first possible area for future research is to examine why more-educated and -experienced SME owners and managers are more likely to perceive HRM problems as acute. Are experienced and educated owners actually more aware of the importance of

HRM and are thus more likely to perceive HRM problems? On the other hand, are there steps that less-experienced and -educated owners and managers need to take to perceive HRM problems?

Second, future studies should also examine if SME owners and managers who perceive HRM problems as acute are actually running SMEs that are experiencing acute HRM problems. Research in other fields indicates that perceptions are, in fact, related to real outcomes (e.g., Byrne, 2005; Kacmar, Bozeman, Carlson, & Anthony, 1999). While there are not likely any objective measures to determine if SMEs are actually experiencing acute HRM problems, it would be interesting to know if other stakeholders of SMEs whose owners and managers perceive HRM problems as acute also perceive such problems. Future studies should attempt to determine if stakeholders, such as employees, customers, and financiers, also perceive HRM problems as acute when the owner/manager perceives such issues. Identifying if multiple stakeholders perceive HRM problems as acute would provide a fairly robust indication that the SME is experiencing acute HRM problems and should strongly consider focusing on HRM.

On a similar note, future research should examine whether SME owner/managers who perceive acute HRM problems take steps to address their firm's perceived HRM issues. As discussed earlier, HRM plays an important role in SME success and is a possible area where SMEs can gain competitive advantages. For example, previous research indicates that the implementation of a variety of both traditional and strategic HRM practices tends to increase SME performance (e.g. Chandler & McEvoy, 2000; Hayton, 2003; King-Kauanui et al., 2006; Litz & Stewart, 2000). Furthermore, it was also theorized that since SME owner/managers do not tend to focus on administrative issues such as HRM unless they perceive that such issues are at a critical level of importance to their firms (Cooper et al., 1997), determining when SME owners and managers are more likely to perceive acute HRM problems is critical, because SME owner/managers are not likely to focus on, and hence attempt to develop competitive advantages through HRM, until they perceive HRM problems as acute. However, empirical research is necessary to determine if SME owner/managers who perceive acute HRM problems tend to put more emphasis on competing through HRM. Furthermore, do such SME owner/managers rely more on traditional or strategic HRM practices when attempting to develop competitive advantages through their employees?

Additionally, future research should examine SME owners' and managers' perceptions of HRM problems over several different time periods. Time series data would allow a more-rigorous investigation of the implications of SME owner/manager HRM problem perceptions. For example, are certain types of SME owners and managers simply more predisposed to perceiving HRM problems as acute? It is possible that more-experienced and -educated owners are simply more aware of HRM issues and accordingly more prone to perceive HRM problems as acute. Furthermore, data from multiple time periods would also allow scholars to more clearly examine whether SME owner/managers who perceive HRM problems as acute in one time period actually take steps to address their firm's perceived HRM problems in later time periods.

Furthermore, future studies should examine why owners and managers of higher-performing SMEs tend not to perceive HRM problems as acute. Specifically, do owners and managers of higher-performing SMEs focus on implementing HRM activities to enhance performance and avoid HRM problems? On the other hand, do the owners and managers of higher-performing SMEs not perceive HRM problems as acute because their firms are performing so well that owners and managers are not noticing HRM problems even if they do exist? It may be that owner/managers in higher-performing SMEs are more apt to embrace a critical/constructivist view (as opposed to a traditional or strategic view)

of HRM, and as a result, they are able to mitigate HRM issues before they become acute (Boxall & Purcell, 2003; Paauwe, 2004). Research by Kaplan and Norton (1996) indicates that owner/managers who are aware that they operate within a larger framework of stakeholders are more proactive in managing human resource needs before problems arise, and consequently, they may be higher performing. An interesting area for future research would be to examine if SME owners and managers who use a balanced scorecard or a similar approach to monitor the satisfaction of a variety of stakeholders are better able to perceive and solve acute HRM problems.

Finally, another interesting avenue for future research would be to examine the influence that a SME owner/manager's personality (i.e., the big five model) has on the likelihood that a SME owner/manager will perceive HRM problems as acute. Recent meta-analytic work by Zhao and Seibert (2006) indicates that entrepreneurs scored higher than managers on conscientiousness and openness to experience and lower on neuroticism and agreeableness. Not surprisingly, the study further finds that substantial variability exists within the entrepreneurial population. This variation has implications for the relationship under examination here. For example, are SME owner/managers who score high on neuroticism more likely to perceive acute HRM issues, whether present or not? Conversely, are SME owners and managers who score high on agreeableness less likely to perceive acute problems even though they are at an acute level? Examining whether SME owner/manager personality influences the perception of HRM problems may help scholars determine if certain SME owners and managers are more likely to perceive HRM problems as acute regardless of whether such problems actually exist.

## Research Limitations

Like any other, this study has its limitations. The most prevalent limitation of this research is that it uses cross-sectional data. The data used for analysis only allows us to examine what the correlates of SME owner and manager perceptions of acute HRM problems were at one specific point in time. It would be very informative to know if SME owners and managers who perceive acute HRM problems at one point in time continue to perceive such problems at later points in time. Time series data would allow us to examine whether certain types of SME owners and managers are more disposed to perceiving HRM problems as acute. Such data would also allow us to begin examining whether SME owners and managers who perceive HRM problems as acute in one time period actually take steps to address their firm's perceived HRM problems in later time periods.

Second, it is important to note that a strength of this study—the fairly large sample size ( $n = 1,693$ )—is also cause for concern. While we report several significant results, this study had high power, and some of the  $\beta$  weights were modest. Like many studies utilizing log linear models, this one was more interested in direction of the relationship. However, some caution should be used in interpretation. Finally, it should be noted that this study set out to measure perception of problems and should not be confused with an objective measure of problem presence or HRM activities.

## Conclusion

The main objective of the current study was to introduce and empirically test a novel and useful framework from which to study HRM problems in SMEs. Specifically, we argue that the “perceived acute HRM problems framework” introduced and empirically

examined in this study advanced the SME HRM literature in two ways. First, the new framework appears more aligned with the manner in which SME owner/managers tend to conceptualize HRM problems. For example, research indicates that SME owners and managers do not tend to focus on administrative issues such as HRM unless they perceive such issues to be at a critical level of importance (e.g., Cooper et al., 1997). Second, the framework may help researchers identify SMEs that are more likely to develop competitive advantages through HRM. Since SME owner/managers do not tend to focus on HRM issues until they perceive that such issues are at a critical level of importance, it is important to determine when SME owners and managers perceive HRM problems as acute, because SME owners and managers are not likely to focus on and hence attempt to develop competitive advantages through HRM until they perceive HRM problems as acute.

Study results indicate that while HRM problems appear to be an area of serious concern to many SME owner/managers, the conditions surrounding the perception of acute HRM problems by SME owner managers were somewhat surprising. For example, contrary to what was expected, more-experienced and -educated SME owner/managers were actually more likely to perceive acute HRM problems. Thus, the “perceived acute HRM problems framework” advances the SME HRM literature and indicates that acute HRM problems are an important issue to SME owner/managers. However, more empirical research is necessary to verify the current study’s findings as well as examine the actions that SME owner/managers tend to take when they perceive acute HRM problems. For instance, why are more-educated and -experienced SME owners and managers more likely to perceive HRM problems as acute? Do their increased levels of education and experience make such SME owner/managers more sensitive to such problems? Second, do SME owner/managers who perceive acute HRM problems tend to put more emphasis on competing through HRM? If so, do such SME owner/managers rely more on traditional or strategic HRM practices when attempting to develop competitive advantages through their employees?

Entrepreneurship scholars have firmly called for the development of HRM theories specifically designed for SMEs (Barber et al., 1999; Cardon & Stevens, 2004; Heneman & Tansky, 2002). The current manuscript answers this call by introducing a novel and useful framework from which to study HRM in SMEs, conducting an initial study of that framework and developing a future research agenda intended to encourage others to examine that framework.

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