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OPENING THE BLACK BOX OF THE RELATIONSHIP BETWEEN HRM PRACTICES AND FIRM PERFORMANCE: A COMPARISON OF USA, FINLAND, AND RUSSIA

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ABSTRACT

This paper investigates the extent to which different human resource management practices (HRMP) work better in different countries. We also try to open up the black box between HRM practices and firm performance by considering how HRMPs affect firm performance. The study utilizes a unique data set consisting of subsidiaries of 241 companies operating in Russia, USA, and Finland. In the partial least square analysis used to examine our hypotheses, we demonstrate that different systems of HRMPs are preferable in different countries and that motivation and ability are important mediating variables in the HRMP-performance relationship.

INTRODUCTION

A large body of research has documented that the way in which a firm's human resources are managed is important for its competitiveness. This is especially important since it has been asserted that collectively a firm's employees can provide one of the most important sources of competitive advantage (e.g., Lado & Wilson, 1994; Guest, 1997; Barney & Wright, 1998) and thus it is important for a firm to carefully choose the human resource management practices which will make the most of this valuable resource. Indeed, the choice of HRM practices is very important since a firm's human resources not only have a great potential to produce great benefits, but are also one of the largest costs which can be controlled and adopted. However, while the importance of choice of HRM practices is now well accepted, there is not sufficient understanding of specifically if and how this differs across countries. As Newman and Nollen (1997:753) stated, "until recently, the dominance of American management theory led to a belief that one size fits all…that effective US management practices will be effective elsewhere." This view is now being seriously questioned. There is increasing evidence that management theory and practice that works in the US may not be optimal in other settings (Boyacigiller et al, 2004; Hofstede, 1993) due to cultural (Boyacigiller et al, 2004; Hofstede, 1993) and institutional (DiMaggio & Powell, 1983; North, 1990) differences. This insight is particularly critical given the fact that the world is becoming increasingly international and as a result most business is taking on some international dimension. Indeed, an increasing number of companies now have employees in multiple countries. However, our understanding of how location affects which systems of HRM practices are most effective in different countries has not kept pace with business' international expansion. Thus, it is increasingly important to develop a detailed understanding of the extent that the same or different HRM practices best contribute to superior performance in different countries.

While there is increasing acceptance that optimal management practices are likely to vary by country due to cultural and institutional differences, there is little knowledge about exactly how they vary. This is due to the fact that most existing studies on the relationship between human resource management (HRM) practices and firm performance have been conducted based on US data. There are some HRM-performance studies which have been conducted in non-US settings, but most of these studies are single country studies with much variance in the practices studied, making country comparisons difficult. This study seeks to contribute to the literature by making a systematic comparison of the relationship between

HRM practices and firm performance in several countries with diverse cultures and institutions - Russia, Finland, and USA.

Most previous literature on the relationship between HRM practices and firm performance has looked at the direct relationship. However, most scholars agree that there are probably mediating variables through which HRM practices affect firm performance. As Wright and Gardner (2000:4) write, "One of the first issues that must be settled in the effort to understand how HR practices impact performance is to theorize the means through which this relationship occurs, in essence specifying the intervening variables between the measure of HR practices and the measure of firm performance." Indeed, there have been many calls for scholars to open up the black box between HRM practices and firm performance and this is another challenge that this paper takes up. Perhaps scholars have focused on the direct relationship because it is much simpler to analyze statistically than more complicated indirect models. With the help of theory and the structural equation modeling technique PLS, our study attempts to open up the black box between HRM practices and firm performance and investigates the role that employee motivation and ability play as mediating variables.

To achieve our goals, we use institutional and cultural theory to develop research hypotheses that explain why human resource management practices work differently in varying countries. Subsequently we explain our sample, variables, and statistical techniques that we used to test the hypotheses on 241 subsidiaries of MNCs in the USA, Russia, and Finland. We then present the study's results and end with a discussion of the results and conclusions.

THEORETICAL BACKGROUND

A belief that employees' performance has critical implications for a firm's performance has been common among academics and practitioners for many years (Huselid, 1995). However, interest in which HRM practices facilitate maximum employee performance, and thus in turn organization performance, has intensified more recently as scholars have suggested that collectively a firm's employees can provide a key unique source of competitive advantage. Indeed, the realization that human resources can be a source of competitive advantage and firm performance has led to expanded research in the field of strategic human resource management. Wright, McMahan and McWilliams (1994: 298) define strategic human resource management as "the pattern of planned human resource

deployments and activities intended to enable an organization to achieve its goals." Because firm performance stands out as a major organizational goal, developing a better understanding of the relationship between human resource practices and firm performance is an important goal for research in this area.

Many studies have been conducted that examine the linkage between investments in human resources and firm performance. The majority of this research reports a positive relationship between so-called "high performance work practices" (Huselid, 1995) and different measures of firm financial performance. Most of the studies in this stream of research have been based on US data (e.g., Arthur, 1994; Huselid, 1995; McDuffie, 1995; Delery & Doty, 1996); however some studies have also been conducted based on data from other countries (e.g., Ngo et. al., 1998; Bae & Lawler, 1998; Fey & Björkman, 2001).

However, recently this line of research has received some criticism (e.g., Gardner et al., 2001; Guest, 2001; Truss, 2001). Methodological questions have been raised by a number of scholars, and the existence of a universal set of high performance work practices suitable for all situations and national contexts has been questioned (Delery & Doty, 1996; Schneider & Barsoux, 2003). Although there may be some areas of universality in human resource management, it may well be that geographical settings affect which HRM practices are suitable. Likewise, on the methodological side, it may well be that a direct relationship between HRM practices and firm performance is too simplistic and that mediating variables are needed. Both of these issues are explored in this paper.

Model Development

As there is no standard set of HRM practices studied in the HRM literature, we identified 18 articles that have focused on the HRM-performance relationship over the last decade as a first step in determining which practices to include in our model. For each study, we identified the HRM practices that were included (see Table 1). Our research focuses on the practices and systems which make employees as effective as possible. Therefore of the 19 practices identified, we focused on the top six most often studied HR practices which may increase employee effectiveness. We then decided to exclude recruitment from our study as we viewed recruitment as an early or initial stage of the employment relationship and does not directly affect a firm's efforts to make employees an effective asset for the organization. Therefore in this study we examine the effect of five different HRM practices (or sub-bundles of HRM practices) on firm performance: competence/performance appraisal, employee

training, performance-based compensation, merit-based promotion, and internal communication.

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Many past studies have analyzed the linkage between either the entire system of HRM practices represented as an aggregate index of the average extent that HRM practices are used in the firm and firm performance or specific individual HRM practices and firm performance. However, as Becker and Huselid (1998) noted, it is more appropriate to study the influence of each element of a human resource system on firm performance simultaneously in one model because when one examines just one element in isolation the effect of the other HRM practices is not controlled. This is the approach that this study takes. Indeed, one can clearly imagine that different HRM practices may influence firm performance differently in various countries and thus considering individual HRM practices is important for our study.

Further, we examine *how* HRM practices affect firm performance. We assert that, as depicted in our theoretical model in Figure 1 and discussed below, HRM practices affect employee ability and motivation which in turn affect firm performance. We choose motivation and ability as the mediating variables as HRM clearly tries to enhance these employee outcomes (Guest, 1997) and there is substantial evidence which supports that employees need to both have ability and motivation to perform well (e.g., Heider, 1958; Baldwin, 1959; O'Reilly & Chatman, 1994).

We suggest that HRM practices are important levers through which firms can increase employee motivation and ability to engage in behaviors that contribute to the achievement of a firm's goals. In his influential study of the impact of high performance work practices on corporate financial performance, Huselid (1995) factor-analyzed a number of HRM practices and categorized practices into two categories that he called employee skills and employee motivation. He found considerable support for the hypothesis that investment in HRM practices is associated with improvements in financial performance. While scholars have had difficulty identifying clear bundles of HRM practices, similar results to those obtained by Huselid (1995) have been obtained by other researchers who have also clustered HRM practices in "bundles", capturing those that influence employees' ability and those that have an impact on employees' motivation (e.g., Delaney & Huselid, 1996; McDuffie, 1995). Thus, there is some evidence to suggest that one set of HRM practices seems to be associated with motivation and a second set of HRM practices is associated with ability. We follow this

suggestion in developing our model of how HRM practices affect firm performance (see Figure 1) and thus group our HRM practices similarly. It is worth pointing out that the above studies including Huselid (1995) simply suggested that one group of HRM practices consisted of practices that were likely to affect motivation and a second set of HRM practices likely to enhance employee ability. Only the direct relationship between the HRM practices and firm performance was analyzed in the above studies. Explicitly analyzing a two-stage model with ability and motivation as mediating variables is one way that our study tries to advance the literature.

Below, we first develop hypotheses concerning the relationship between HRM practices, employee ability and motivation, and MNC subsidiary performance. Subsequently, we present hypotheses concerning how cultural and institutional factors are likely to lead to differences in the relationship between HRM and subsidiary performance in Russia, Finland and in the US.

Ability

Human capital theory focuses on the effects of the variance in employee skills on performance and has concluded that there is a positive relationship between these two variables (Becker, 1975). Indeed, many studies have shown that ability is positively related to performance (e.g., Gottfredson, 1986; Hunter, 1986). Applications of human capital theory focus directly on the knowledge, skills, and abilities of human beings in organizations (Flamholtz and Lacey, 1981; McKelvey, 1983). Wright et al. (1994:315-6) propose that higher levels of human capital lead to greater capabilities to develop more efficient means of accomplishing tasks and greater capability to respond to environmental changes leading to a sustained competitive advantage. HRM practices are the levers through which human capital can be developed to increase ability. Thus, we hypothesize:

Hypothesis 1: Employees' abilities are positively related to firm performance.

Motivation

Pinder (1998) describes work motivation as the set of internal and external forces that initiate work-related behavior and determine its form, direction, intensity, and duration. This definition recognizes the impact of environmental factors such as organizational incentives or HRM practices as influencing the motivation of employees. The idea that employee motivation should be linked to performance is well documented (e.g., Locke and Latham, 1990; Barrick and Mount, 1993). Indeed, it seems fairly intuitive that, all things being equal,

if employees are highly motivated and thus work harder, this combination should result in superior performance. However, at times the results for this relationship have not been as strong as might be expected (O'Reilly, 1991). We assert that these weaker results may be evidence for the need to include ability as a moderating variable and interaction (as we do in this study and will discus more in the next section) in the relationship between motivation and performance. Based on the above we hypothesize the following:

Hypothesis 2: Employee motivation is positively related to firm performance.

Interaction of Ability and Motivation

We assert that a very capable employee who is not motivated is unlikely to perform well. Such an employee might, for example, be lazy and work slowly. At the same time, an employee who is very motivated, but lacks ability is also not likely to perform well. Thus, employees need to be motivated and skilled for optimal effect. In other words, employee motivation and ability interact to affect performance. The idea that motivation and ability are important determinants of human performance is not new. In fact, some of the earliest models of human performance (e.g., Heider, 1958; Baldwin, 1959) have suggested that there exists an interactive relationship between ability and motivation and human performance. Many scholars (e.g., O'Reilly & Chatman, 1994) have developed these ideas further and provided empirical support for this relationship. Even so, most studies of the relationship between HRM practices and firm performance have only focused on the direct relationship.

There are also related debates in the psychology literature between cognitive and behaviorist approaches to learning, which distinguish between "can do" and "will do" factors (Dunette, 1976). In defining ability, dictionaries often include human attributes such as prior achievement, initial skills, aptitude, etc. The ability/can do factor usually denotes "a potential for performing some task which may or may not be utilized" (Vroom, 1966:198), while the motivation/will do factor reflects drive. Indeed, Campbell (1976) noted that many studies in industrial and organization psychology recognize that performance is related to the interaction between motivation and ability. Indeed, an expression that frequently appears in industrial and organizational psychology is that "the effects of motivation on performance are dependent on the level of ability of the worker, and the relationship of ability to performance is dependent on the motivation of the worker" (Vroom, 1966: 203). Empirical evidence in a variety of studies from different traditions supports an interactive, not additive, effect of ability and motivation on performance (e.g., French, 1957; Fleishman, 1958; Heider, 1958; O'Reilly & Chatman, 1994).

Additional support for the interaction effect is provided by considering the results of some studies which have just included one of the constructs. Indeed, scholars have at times had difficulty linking ability to performance (e.g., Reder, 1978) perhaps because they did not include motivation as a moderator. Likewise some studies have failed to find a strong link between motivation and performance and this may be because *ability* was not included as a moderator (Barrick & Mount, 1993).

Wright et al. (1994) recognized that employee characteristics alone do not create firm value. These researchers noted that for employee characteristics/abilities to create firm value, they need to result in employee behavior that creates firm value. And, employees enact behaviors only when they are motivated to do so. Thus, we propose the following hypothesis:

Hypothesis 3: The interaction between employee ability and employee motivation is positively related to firm performance.

HRM Practices

As emphasized by Huselid (1995), HRM practices influence employee skills and competencies through the development of a firm's human capital. Performance appraisal systems help employees obtain feedback on their performance and identify ways to enhance competencies that are useful for the company. Most performance appraisal systems establish objectives for employees, establishing targets for the self-development and training of each employee. Investments in employee training are also beneficial in enhancing the human capital of the firm (Becker, 1975). As Becker (1975:19) writes: "Most on-the-job training presumably increases the future marginal productivity of workers in the firms providing it." In general, a positive relationship has been established between employee training and organizational performance (e.g., Delaney & Huselid, 1996; Koch & McGrath, 1996). Thus, we hypothesize:

Hypothesis 4: Competence/performance appraisal is positively related to employee abilities.

Hypothesis 5: Training is positively related to employee abilities.

Recalling the definition of motivation applied earlier, two important issues should be mentioned related to sustainable motivation. First, employees must have expectations that specific behaviors will lead to the attainment of certain desired outcomes, incentives and recognition. Additionally, trust/support that a firm shows towards its employees is likely to

be reciprocated by employees resulting in their active engagement in behavior that support the fulfillment of firm objectives.

Several HRM practices may influence individual performance by providing incentives that elicit the appropriate behavior. Such incentive systems may include performance-based compensation that promotes the desired behavior and the use of internal promotion systems that focus on employee merit and help employees to overcome invisible barriers to their career growth (Huselid, 1995). Indeed, when an employee understands that his/her results will form the basis of promotion decisions, this provides extra motivation compared to the situation when an employee is not sure how promotion decisions will be made or when decisions are made based on relationships, organizational tenure, employee age, or other factors.

Most studies have included performance-based compensation as a high performance HRM practice (e.g., Arthur, 1994; Huselid, 1995; McDuffie, 1995; Delery & Doty, 1996). Systems that link individual compensation with individual performance, with performance of the group to which s/he belongs, or with performance of the whole organization may all contribute to creating additional efforts on the part of the focal employee (Lawler, 1981). Although from an expectancy theory point of view, it is the existence of a clear linkage between individual effort and reward that matters, from an equity theory (and organizational justice) perspective the main question is whether employees perceive that they receive the rewards that they are entitled to based on their contribution to the organization. Both perspectives would lead us to expect a positive relationship between performance-based compensation systems and employee efforts.

Previous research has also shown that employees are more motivated when they know what is going on in the firm. Sharing of information on, for example, strategy and company performance conveys to the employees that they are trusted. Further, it is important that employees know what is going on in a firm so that they can use the knowledge that resides in the firm to its fullest potential (Pfeffer, 1998). As a result, extensive intra-organizational communication is also likely to contribute to employee motivation. Based on the above arguments, we suggest the following hypotheses:

Hypothesis 6: Performance-based compensation is positively related to employee motivation.

Hypothesis 7: Merit-based promotion is positively related to employee motivation.

Hypothesis 8: Internal communication is positively related to employee motivation.

National Patterns of HRM

The HRM practices adopted by MNC subsidiaries have been analyzed empirically in a number of studies (Beechler & Yang, 1994; Rosenzweig & Nohria, 1994; Hannon et al., 1995; Björkman & Lu, 2001). Some work also has been conducted on the relationship between HRM practices and the performance of MNC subsidiaries (e.g., Fey & Björkman, 2001; Ngo et al, 1998). The most important limitation of the extant work is that they have been based on one-country samples. Thus, it has been impossible to identify whether and how the effectiveness of HRM practices differs from country to country.

There is reason to suspect that different human resource practices are likely to effect employees differently in varying countries, such as Finland, Russia and USA (Adler, 1991; Ngo, et al., 1998). For example, recent studies such as Elenkov (1998, 1997), and Ralston et al. (1997) suggest that Russia and the United States have fairly different national cultures and that national culture has a significant impact on personal values. Further, Elenkov (1998) suggests, but does not test, that different personal values present in Russia and the US lead to preferences for and affect different types of human resource practices such as compensation systems.

Various theoretical approaches can be utilized to explain patterns of HRM practices in different countries. In this paper we use cultural and institutional approaches to develop our hypotheses by explaining why differences between countries endure and lead to different HRM practices being more effective in different countries (Rowley & Benson, 2002).

Country Differences: The Role of Institutions and Culture

Most researchers trying to explain country differences in the use and impact of HRM practices on firm performance have focused on either the national culture perspective or the institutional perspective. The national culture perspective (e.g, Hofstede, 1980) tries to link variance in the way organization practices work to belief systems. The institutional perspective tries to link the choice of and how organizational practices work in a given country to the institutional environment in which the organization is embedded (Wilkinson, 1996). We suggest that the cultural and institutional perspectives are complementary and are both useful for developing an understanding of differences in the way management systems work in different countries.

National Culture

National culture can be defined as the values, beliefs, and assumptions learned as a child that differs from one country to another. National culture tends to be deeply embedded into people's every day life and is difficult to change. National culture imposes values about what one should or should not do, what is important, etc. National culture is, as Hofstede (1991) calls it, "the software of the mind."

While it is difficult to conceptualize culture and especially to measure fully all of its intricacies, there have been several attempts to measure national culture in a wide variety of countries, including Hofstede (1980), Trompenaars (1993), and Maznevski, DiStefano and Jaseph (2002). The most frequently used of these is Hofstede's (1980a) study of how values (uncertainty avoidance, individualism, power distance, and masculinity) of organization members varied across 40 countries around the world. The study has served as a useful aid in studying the impact of national culture on many different issues including management practices and will be used as a point of reference for this study. Although Russia was not part of Hoftede's original study, Elenkov (1997) has replicated Hofstede's study in Russia. Below we present the values for Hofstede's dimensions for Russia, USA, and Finland.

	Russia[1]	USA[2]	Finland[2]
Individualism	40	91	63
Uncertainty Avoidance	87	46	54
Masculinity	50	62	26
Power Distance	89	40	33

1. Data from Elenkov (1997) which replicated Hofstede's study for Russia. Russia was not part of Hofstede (1980a)

2. Data from Hofstede (1980b)

Hofstede's study, however, has weaknesses such as being based only on data from one firm, being fairly old, questions about whether one can characterize national culture by just a few dimensions, and some methodological concerns among others. Other similar studies such as Trompenaars (1993) also exist, but these studies also have weaknesses such as being smaller in scale, not having a single clear published value for each dimension for each country, etc. Clearly, it is very difficult to represent a culture with only four (or a few) dimensions and thus we will also consider other aspects of culture in this study.

National culture is important for this study because of its effect on what sorts of HRM practices are effective in a given country. Hofstede (1980) argued that organizations are

bound by national culture and that there are no universal answers to the problems of organization and management, but rather there are distinct "national economic cultures" and as such optimal management practices differ by country. For example, Russian collectivism rewards group achievement while Anglo–Saxon individualism encourages personal incentives. Holt, Ralston, and Terpstra (1994) and Ralston et al. (1997) compared US and Russian values and noted that Russian managers, compared to their American counterparts, value power more, need gratification less, and place lower value on tradition and higher value on security and stability. Russians are also said to be less individualistic and less open to change. Further, Hofstede (1980) and others have asserted that values are deeply embedded in national cultures and thus they affect the way people living in them work. As a result, host country national cultures are likely to influence which HRM practices will work best in a given country. Indeed, many scholars have suggested that national culture has a significant effect on which management practices work best in a given country (Boyacigiller & Adler, 1991; Boyacigiller, et al., 2004; Hofstede, 1993, Newman & Nollen, 1996).

Institutions

Along with national culture, institutions also have an important effect on which HRM practices are most effective in a particular country. Institutions are shared collective understandings or accepted rules of conduct which are reflected in laws, rules, governance mechanisms, and capital markets (North, 1990; Scott, 2001). Institutional theory argues that traditional values and practices are embedded in a country's social and economic institutions. It has been argued that it is not desirable to examine separate aspects of a system without locating it in its specific societal context (Morishima, 1995).

DiMaggio and Powell (1983) suggest that there are three major types of ‘isomorphisms’ that affect organizations: coercive isomorphism, where a powerful constituency (e.g. the government) imposes certain patterns on the organization; mimetic isomorphism, where organizations in situations of uncertainty adopt the pattern exhibited by organizations in their environment that are viewed as successful; and normative isomorphism, where professional organizations act as the disseminators of appropriate organizational patterns that are then adopted by organizations under the influence of the professional organizations. More recently, Scott (2001) has suggested that there exist three ‘pillars’ of institutional processes: regulatory (corresponding to DiMaggio and Powell’s coersive), cognitive (cf. mimetic) and normative processes--terms that we will adopt in this paper.

Institutional prescriptions play an important role in influencing economic activity (DiMaggio, 1994; North, 1990) and motivating and regulating the behavior of actors in a given environment (Lau et al, 2002; Scott, 2001). Institutional theory suggests that firms experience pressure to conform to the norms for that environment to gain and maintain legitimacy in relation to the environment (e.g., Powell & DiMaggio, 1991) and thus different institutions (present in different countries) are likely to produce different pressures. The way foreign and local businesses need to manage their operations to be effective depends on the constraints imposed by the powerful institutions present in the country where the firm is operating. These institutions include both formal organizations – social, economic and political bodies – and the social norms and rules that those organizations articulate (North, 1990). Taken together, they represent established institutions and ideological frameworks that govern the way individuals and firms behave.

It is also worth noting that unlike in its infancy institutional theory is now commonly used to account for differences, such as those found between different countries. As Scott (1995:135) writes, "Rather than assuming that all organizations are alike, or when differences are found between organizations in varying social and cultural contexts, attempting to understate them or explain them away, current work is more likely to celebrate diversity and seek to account for the reasons why different forms arise." Institutional theory complements under socialized views by addressing the embeddedness of firms in a nexus of formal and informal rules (North, 1990). Much comparative work asserts that national diversity reflects various institutional constraints stemming from coercive political regulation (Roe, 1994), imitation of cognitive models in response to uncertainty (Dobbin, 1994), or other normative pressures to establish legitimacy (Biggart, 1991; Hamilton & Biggart, 1988). Institutions may create opportunities for specialization around diverse economic "logics" and thereby yield comparative institutional advantages for different business systems (Whitley, 1999). Taking this argument a step further, we argue that certain HRM practices may create a larger advantage (are more important for enhancing performance) in particular institutional contexts/countries. Firms which use the HRM systems which fit well with their institutional environment are likely to outperform and outlive those that do not. For example, research has shown that organizational-societal congruence is important for long-term firm survival (e.g., Aldrich, 1999; Kostova, 1999). It is important to point out that several studies such as Aldrich (1999) and Kostova (1999) have suggested that institutions affect management practices. Orru et al. (1997) provide additional evidence that institutions affect management practices by showing that while Japan, South Korea, and Taiwan have much geographic and cultural

similarity, there is significant variation in management practices across these countries. As Gooderham, Nordhaug, and Ringdal (1999: 508) note, "Cross-national dissimilarities in institutional structures are likely to create management practices that vary from country to country, regardless of the fact that management theories are often rapidly disseminated across national borders.

National Differences Affect How HRM Practices Work

We now turn to developing hypotheses related to how the effect of HRM practices will differ across countries with the help of cultural and institutional theory introduced above. Training is one important HRM practice which is impacted by national differences. One important institution which impacts training is the type and number of universities and other types of skill formation organizations present in a country. These are subject to considerable national variation (Brandsma et al., 1996; Locke et al., 1995). Additional state provision of training can help solve firms' training needs. However, such efforts often leave a considerable gap between training provided and skills demanded by firms (Boyer, 1988), especially as sometimes good base or theoretical knowledge is provided but not the specific or applied knowledge needed by a particular firm. For example, many Russians lack basic business skills due to the historical absence of capitalist-style businesses in Russia, and research has shown that foreign MNCs view employee training as being crucial for the competitiveness of their operations in Russia (Shekshnia, 1998). Further, a study of 101 Western firms operating in Russia showed that training is positively associated with firm performance (Fey and Björkman, 2001). In Russia, due to changes in the types of jobs which are needed in Russia's post-Soviet economy, many people are working in areas in which they were not formally trained. For example, it is not uncommon to meet a nuclear physicist who is working as a furniture salesman. Some additional training can reap especially high benefits for such people who are often lacking formal training relevant for their job. Indeed, there is common belief that a great need exists for companies to devote significantly more attention to training in Russia than in the United States (May et al., 1998) even if this has not been empirically proved.

The result of this variation in training (an institution) at the national level means that firms in different countries are likely to obtain different returns on the training that is provided. It is also worth noting that different cultures look upon training differently. Russians have always valued training highly, and most Russians eagerly engage in training as a result. Thus we arrive at our next hypothesis:

Hypothesis 9: Training is likely to have a greater positive effect on employee abilities in Russia than in the USA and Finland.

Historically, Russian employees are not accustomed to receiving much feedback on their work. In Soviet times the focus was on the amount of work accomplished and not on the quality of the work (Fey, Pavlovskaya & Tang, 2004). Even today in-depth performance appraisals where analyses of an employee's performance are conducted are uncommon especially for lower level employees. Further, because managers have not had much practice in conducting performance appraisals those that do engage in such evaluation often are less effective than their Western counterparts. In addition, employees not used to receiving performance appraisal often do not handle themselves well in such meetings and become defensive and aggressively challenge every statement rather than looking at appraisal sessions as being helpful in development. The high power distance in Russia is likely to make it more difficult to use the performance appraisal interviews for the open discussion about objectives and performance improvement that are integral parts of a successful performance appraisal system. This situation is compounded by the fact that historically (within the institutional context found in the Soviet Union era) Russians were severely punished for making mistakes at work and thus it is still difficult to get people to be open about weaknesses or mistakes. Indeed, often people try to hide these and are defensive when their imperfections are disclosed. Thus, we suspect that performance appraisal sessions will not work as well in Russia as in lower power distance countries such as the US and Finland where people have come to expect performance appraisals and understand how to benefit most from them.

Hypothesis 10: Competence/performance appraisal is likely to have a greater effect on employee abilities in Finland and in the USA than in Russia.

In Finland, people have a much greater tendency to work for a company for many years compared to the USA and Russia. This is due in part to the small size of Finland resulting in fewer alternative companies to work for, and in part to employment laws which makes it more difficult to fire employees than in the US and Russia. Therefore, compared to Finland, there is a much greater risk of being fired in the United States and Russia with vacancies more likely to be filled through external labor markets (hiring from outside the firm). Indeed, Russia is at the extreme end of the spectrum with people changing companies as frequently as every one or two years. A manager who has worked at three companies in the last four years is often considered an attractive "up and coming" star as opposed to a

disloyal employee in Russia. As a result of frequent employment changes in Russia and the USA, managers tend to develop portable skills, and remuneration schemes incorporate performance-based incentives to recruit and retain managers. A consequence of fluid labor markets (a labor market where people voluntarily and involuntarily change jobs more often) is the high proportion of variable pay as demonstrated in several studies of management compensation (Baker, Jensen & Murphy, 1988; Stroh, Brett, Baumann & Reilly, 1996). For the three countries in our study, Finland has the least fluid labor market, the US is somewhat more fluid and Russia has become a very fluid labor market in part due to the rapid changes taking place in the Russian business environment in the last decade.

Russians have been exposed to an extreme amount of uncertainty over the last decade. While historically, Russians were not pre-disposed to tolerate uncertainty, over the last decade they have come to tolerate and work well in it. Indeed, when the external environment is full of uncertainty, as is the case of Russia today, the little bit of extra uncertainty which one may be able to control through having fixed or variable pay seems to have very little effect on the total amount of uncertainty one is experiencing and thus not worthwhile to avoid. Indeed, Matveev and Nelson (2004) and others suggest that Russia is now low in uncertainty avoidance. Finns, on the other hand, have a higher preference to avoid uncertainty (House, Hanges, Ruiz-Quintanilla, Dorfman, Javidan, Gupta & GLOBE Country Co-Investigators, 1999). Americans stand in between these two countries in terms of uncertainty. The greater the tolerance for uncertainty, the more likely people are to want performance-based compensation which provides some additional potential income, but also adds some uncertainty to one's total compensation.

Taxes, an important institution that affects business, manifest themselves differently in these three countries. Russia has a low 13% flat personal income tax. Finland, in contrast, has a variable income tax with one of the highest personal income taxes in the world. The US tax rate is someplace in the middle between Russia and Finland. The higher the income tax, the greater the incentive employees have for a fixed salary with more willingness to forgo the opportunity and resultant risk and needed hard work associated with maximizing a variable salary. At some point if taxes are high enough, people decide it would be better to have a better quality of life than to have to put in more work (or more intensive work) to get a very little bit of extra money since so much of the extra earned money is taxed away. Taking all of the above arguments together, we suggest:

Hypothesis 11: Performance-based compensation is likely to have a greater positive effect on employee motivation in Russia than in the USA and Finland.

Career patterns reflect complex incentives and opportunities for employee mobility. Indeed, closed and open labor markets differ substantially in their career patterns (Sorensen, 1977) with careers being determined largely by the nature and stability of organizational opportunity structures (Rosenfeld, 1992). In a more closed labor market like Finland, vacancies tend to be filled through internal promotion of existing staff (Dore, 2000). People in a more closed labor market like Finland are more likely to spend their entire careers in one firm. Internal promotion is especially important for people in closed labor market countries because they are not externally mobile. As a result there is cognitive institutional pressure for firms to use internal promotion in Finland. Indeed, institutions play an important role when considering promotion. Compared to the US and Russia, emphasis on internal labor markets are exacerbated in Finland due to legislation (a regulatory institution) which makes it very difficult to fire employees. This law contributes to employees taking a long-term approach towards working for a firm where internal promotion is a strong motivator for employees. In contrast, in more open labor markets, people expect to be employed by quite a few different firms over the course of their careers and thus while they are keen to have internal promotion opportunities, they are less concerned about them since they can always find employment opportunities in other firms. Thus, Russia is at one extreme with high rates of people switching firms, Finland is at the other extreme with employees staying with one firm throughout their career, and the US is somewhere in the middle. Thus, we hypothesize:

Hypothesis 12: Merit-based promotion is likely to have a greater positive effect on employee motivation in Finland than in Russia and the USA.

A firm's internal communication practice can be expected to be highly correlated with power distance. The higher the power distance, the less employees expect to know what is going on in other parts of the firm and why they should do the tasks they have been asked to perform. Results from Hofstede (1980) and Elenkov (1998) show that Russia has one of the largest power distances in the world, Finland has a very low power distance and USA is someplace in the middle. Hence, Finns are most likely to respond positively to extensive internal communication. In addition, Russians tend to be very secretive in part because of the history of spying in Russia, problems with an erratic tax-police as evidenced by recent actions against Yukos, and laws which encourage companies in Russia to have a set of "internal" books and a set of "official" books. As a result, we hypothesize:

Hypothesis 13: Internal communication is likely to have a greater effect on employee motivation in Finland than in the USA and Russia.

Our conceptual model is presented in Figure 1.

---------- INSERT FIGURE 1 ABOUT HERE ----------

METHODOLOGY

Sample and Data Selection

This research examines foreign-owned subsidiaries located in three host countries: Russia, USA, and Finland. These countries are different in terms of national culture, market institutions, and competitive context, making them a good sample for testing hypotheses about the influence of culture and institutions on the type of human resource management practices that are most effective in a given country. The subsidiaries in our sample have their MNC headquarters located in five home countries--Sweden, Germany, Japan, USA, and Finland-- and home country is controlled for in the analysis. We chose these countries because they were among the more active investors in Russia, while still representing a reasonably diverse sample including countries from each of the triad regions of North America, Europe, and Asia.

To develop a base list of subsidiaries in the USA to draw our sample from, lists of subsidiaries of firms with headquarters in Japan, Germany, Sweden, Finland and the USA were obtained from the foreign commercial sections of the countries' embassies in the USA. In the USA, 320 subsidiaries were randomly selected from the lists, and HRM managers or General Managers of the subsidiaries were contacted via telephone and asked if they would participate in the study. Of those contacted 28 did not meet the age (the subsidiary being at least 2.5 years old) or size (having at least 20 employees) criteria and were thus excluded resulting in a base sampling frame of 292 firms in the USA. These 292 firms were sent a questionnaire and non-respondents were contacted three times at two-week increments resulting in 79 responses or a 27 per cent response rate. In Finland, 188 firms were contacted which met the size and age sampling requirements and a similar procedure to that employed in the USA was followed resulting in 62 responses reflecting a 33 per cent response rate. In Russia, however, where there is little tradition of completing questionnaires and much worry

about disclosing company information, past experience has shown the authors that mail or eMail surveys will result in extremely low response rates of less than 5 per cent. As a result, interviews were set up with the managers and the managers were asked to complete the questionnaires during the interviews. In a few cases, at the manager's request, the questionnaire was left with the manager and collected a few days later. In Russia, 100 of the 357 contacted firms, which met the size and age sampling conditions, agreed to take part in the study (a 28 per cent response rate).

Thus, the resulting data set consists of 100 subsidiaries operating in Russia, 79 subsidiaries operating in the USA, and 62 subsidiaries operating in Finland, for a total of 241 participating subsidiaries. On average, the subsidiaries were 15 years old employing 173 people including 7 expatriates. 17 per cent of our respondents were general managers or deputy general managers and 30 per cent of our respondents were HR managers. No significant differences in responses were found between these sub-groups and thus, following Guest (2001) who used similar respondents for an HRM study, the two groups were combined into one data set for analysis.

A careful process was used to develop the questionnaire for this study drawing on established research (Gardner et al., 2001; Huselid, 1995; Wright et al., 1994). In addition, five experts were asked to review the questionnaire and provide feedback. The questionnaire was then administered to 10 managers (not part of the sampling frame) to obtain their feedback before development of the final questionnaire. The questionnaire was administered in English in the USA and Finland. Respondents in Russia had the option of using an English or Russian version. The Russian version was validated for accuracy using an extensive translation back-translation procedure. Following Podsakoff and Organ (1986), we used Harman's one-factor test to examine the extent of common method bias in our data. The presence of several distinct factors combined with the relatively low amount of variance explained by the first and second factors indicates that the data does not suffer from common method variance (Podsakoff & Organ, 1986).

Measures

The following are brief descriptions of the independent and dependent variables used in this study (internal consistency of the scales is discussed in the results section under the heading "reliability and validity").

Independent Variables

Training. The extent to which subsidiaries use training is measured through two items assessing the number of days of formal training annually received by managerial and non-managerial employees respectively.

Competence and Performance Appraisal. Three items were used to measure the extent to which competence and performance appraisal is used in the firm. One item measures the proportion of the workforce that regularly receives a formal evaluation of their performance (in per cent), another item measures the proportion of jobs where a formal job analysis has been conducted (in per cent), and the final item measures the proportion of new jobs for which a formal analysis of the desired personal skills/competencies/characteristics was carried out prior to making a selection decision (in per cent).

Merit-Based Promotion. The importance of internal promotion schemes is measured by an index comprised of three five-point Likert-type scale items. The first item measures whether qualified employees have the opportunity to be promoted to positions of greater pay and/or responsibility within the subsidiary (1=no opportunities and 5=many opportunities), the second item measures whether the subsidiary places a great deal of importance on merit for promotion decisions (1=not at all and 5=to a large extent), and the third item measures the extent to which upper-level vacancies are filled from within (1=not at all and 5=to a large extent).

Performance-Based Compensation. This three-item scale captures the extent to which compensation is performance-based. One item measures the proportion of employees who have the opportunity to earn individual, group, or company-wide bonuses (per cent), and two items ask the respondents to indicate whether the company uses performance-based compensation (1=not at all and 5=to a large extent) and whether the compensation systems are closely connected to the financial results of the firm (1=not at all and 5=to a large extent).

Internal Communication. The extent to which exchange of information is promoted within the firm is measured through a scale comprised of three items (all on five-point scales ranging from 1=not at all to 5=to a large extent). The items capture communication flows between: 1) employees in different departments, 2) non-managerial employees and managerial employees, and 3) the HR department and the top management team.

Mediating Variables

Employee Ability. This construct captures employees' ability. It is not a measure of individual ability, but a measure of the overall ability of a subsidiary's employees. This

construct was measured by asking respondents to assess the quality of the firm's employees relative to that of its competitors in: overall ability, job related skills and educational level. Respondents indicated this on seven-point Likert-type scales (1=far below average and 7=far above average).

Employee Motivation. This construct consists of five items. In the same vein as employee ability, this is a measure of the overall motivation of a firm's employees and not individual motivation. Two items asked respondents to assess the quality of the firm's employees relative to those of its competitors on motivation and work effort using a seven-point Likert-type scale (1=far below average and 7=far above average). An additional three items were measured using a five-point scale (1=strongly disagree and 5=strongly agree): 1) the extent to which employees behave in ways that help firm performance; 2) the extent to which employees contribute in a positive way to firm performance; and 3) the extent to which the subsidiary, compared with the parent company, has a highly motivated group of employees.

Dependent Variable

Firm Performance. This construct was measured using a subjective assessment of a firm's performance relative to other firms in the same industry. This approach was chosen for several reasons. First, our firms were all subsidiaries and financial information about subsidiaries (as opposed to the entire MNC) is hard to obtain, often not accurate due to transfer pricing and normally not publicly available. Second, the standards of accounting are not identical in different countries making it impossible to receive comparable financial information. Third, firms have varied objectives (for example, gain market share, study the market, maximization of a short-term profit, etc.), which makes it very difficult to make a meaningful comparison of short-term financial results of the firms given their varying objectives. Conceptually, it is the firm's ability to generate superior performance relative to its industry that is viewed as most relevant, rather than absolute measures of performance. The industry-based subjective measurement of financial results allows managers to take into account short-term firm objectives in the assessment of the financial results. While there are potential reporting biases in such measures, research has shown that self-reported subjective performance data are generally reliable (e.g. Dess & Robinson, 1984). Also, similar research has shown positive experiences with the use of subjective performance assessments (Delaney & Huselid, 1996; Youndt et al., 1996). Moreover, it has been shown that subjective measurements of firm performance correlate highly with objective measurements of firm

performance (Geringer & Hebert, 1991). Our performance construct is comprised of five items using five-point Likert-type scales measuring profitability, sales, service, operating efficiency, and quality relative to other firms in the same industry.

Control Variables

Home Country. Home country is the country where the MNC is headquartered. Home country culture and institutions may affect the type of HRM practices used and those which are most effective in the MNC's subsidiaries. Home country dummy variables were included in the analysis for Finland, Germany, Japan, and Sweden. USA is the excluded base case ensuring that the model is not over-determined.

Subsidiary age. The number of years that a foreign corporation has operated in a host country (e.g., Russia, Finland, or the USA) may influence HRM outcomes and firm performance. Companies with more experience in the host country have likely gone through a learning process concerning how to operate in the host country and a positive relationship may exist between firm experience and HRM outcomes as well as firm performance. Therefore, the age of the subsidiary, measured as the number of years the subsidiary has been established is included as a control variable.

Subsidiary size. Firm size was also controlled for since larger firms may have more resources to devote to the business. The log of the number of employees in the subsidiary was taken so that a few extremely large firms would not affect the results disproportionately.

Industry. The percentage of a subsidiary's activity which occurred in manufacturing was included as an industry control.

MNC international experience. Firms likely benefit from two types of experience: country-specific experience and experience working in foreign countries in general. This measure focuses on the latter of these types of learning (subsidiary age captures country-specific experience). The logic is that if a company has experience starting subsidiaries in 20 different countries, during the 21st time through the process they can leverage their accumulated learning and thus be more effective. MNC international experience is operationalized as the number of subsidiaries the MNC has in different countries.

Statistical Method

Our hypotheses may be summarized in three basic equations:

Employees' Ability = Training + Competence and Performance Appraisal + Error

Employees' Motivation = Merit-Based Promotion + Performance Based Compensation + Internal Communication + Error

Firm Performance = Employees' Ability + Employees' Motivation + Employees' Ability x Employees' Motivation and Behavior + Error

To estimate the paths between the constructs shown in Figure 1, and test our hypotheses, we use a multivariate analysis technique known as partial least squares (PLS) (see Fornell and Bookstein, 1982, for a complete description). Partial least squares belongs to a family of techniques called structural equation modeling which also includes the better-known LISREL (Lohmoller, 1988). A key advantage of PLS over LISREL is that it works with much smaller sample sizes. PLS is most appropriate when sample sizes are small and when assumptions of multivariate normality and interval scaled data cannot be made (Fornell and Bookstein, 1982). While it is possible to test our hypotheses using bivariate analysis, this is not totally appropriate given that the model proposed in Figure 1 involves equations that are not totally independent (error terms may be correlated) and thus need to be estimated simultaneously. Another key advantage of PLS is that it simultaneously estimates the path coefficients between the items and the constructs they are measuring and the paths between the constructs.

PLS models are formally defined by two sets of linear equations called the inner model and the outer model. The inner model specifies the relationships between unobserved or latent variables (LVs), and the outer model specifies the relationships between LVs and their associated observed or manifest variables (MVs). The PLS estimation procedure proceeds in two basic steps. The first step involves the iterative estimation of LVs as linear composites of their associated MVs (essentially a series of OLS regressions are performed). The second step involves the non-iterative estimation of the inner and outer model coefficients.

The path coefficients obtained from a PLS analysis are standardized regression coefficients, while the loadings of items on individual constructs are factor loadings. Factor scores created using these loadings are equivalent to weighted composite indices. Thus, PLS results can be easily interpreted by considering them in the context of regression and factor analysis. PLS provides a clear advantage over regression for two reasons: (1) it considers all path coefficients simultaneously to allow the analysis of direct, indirect, and spurious

relationships; and (2) it estimates the individual item weightings in the context of the theoretical model rather than in isolation.

RESULTS

Generally, PLS results are presented in two stages. In the first stage, the researcher ensures that the measures used as operationalizations of the underlying constructs (measurement model) are both reliable and valid. Once convinced of the adequacy of the measurement model, the researcher can then proceed to interpret the resulting inner model coefficients (path coefficients between LVs or constructs).

Validity and Reliability of Measures

We assess the measurement model used here by looking at the reliability of individual items, the internal consistency between items expected to measure the same construct, and the discriminant validity between constructs. Individual item reliability was determined by examining the loadings of measures on their corresponding constructs. In all the cases, individual factor loadings were greater than 0.6 with most being greater than 0.7, indicating a high degree of individual item reliability.

Internal consistency was assessed using a measure suggested by Fornell and Larcker (1981). This measure is similar to Cronbach's alpha as a measure of internal consistency, and interpretation of the values obtained is similar. Following the guidelines proposed by Nunnally (1978), an internal consistency value of 0.7 is suggested as being acceptable. In the current study, the internal consistency values for all constructs exceeded the 0.7 guideline, indicating good internal consistency (see Table 2).

---------- INSERT TABLE 2 ABOUT HERE ----------

The discriminant validity of the constructs used in the model also needs to be assessed (Fornell and Larcker, 1981). We did this in two ways. Table 3 shows the correlation matrix of the constructs. The diagonal elements in this matrix show the square root of the average variance extracted. For adequate discriminant validity, each diagonal element should be greater than all other entries in the corresponding row and column which the diagonal element is a part of. Our results meet this requirement. Second, for good discriminant validity no item should load more highly on another construct than on the construct to which it is

supposed to belong. Our results also meet this requirement. Both of these criteria indicate that the discriminant validity of the constructs used in the current model is more than adequate.

---------- INSERT TABLE 3 ABOUT HERE ----------

Comparison to Alternative Models

While we have shown theoretical justification above for why we have chosen our particular model, one could of course envision slightly different models. As a result, in this section we try to show that other variations on our model (e.g., adding an additional path) would not significantly improve the statistical power of the model using the four step procedure presented below developed by Saris, Stronkhorst, and Satorra (Saris & Stronkhorst, 1984; Satorra & Saris, 1985).

Five alternative models were developed for analysis of statistic power. Each alternative model includes one additional path between one of the human resource management practice and ability or motivation which was not included in the basic focal model. Table 4 provides a description of the different alternative models tested and the statistical power results. For example, in alternative model 1 an additional path was included between training and motivation. The results reveal that for all five alternative models the null hypothesis (the difference between the basic and alternative model is nonsignificant) was rejected at least at the p=.05 level. In addition, the basic model was recognized as significant at the p=.05 level. As a result, we can say that our base model is at least as good as the alternative models.

---------- INSERT TABLE 4 ABOUT HERE ----------

Hypothesis Testing

We used the total database including country dummies and country interaction terms to estimate the differences in effect of HRM practices in different countries. The US was considered as the base case, so we include country dummies and country interactions only for Russia and Finland so that the model is not over determined. All variables were standardized (Mean = 0 and Standard Deviation = 1) before analysis. Table 5 shows the results of analysis of our conceptual model. Overall, the results indicate that the model worked well: all (non-

control) coefficients with the exception of three (Finland x Training; Russia x Promotion; Finland x Compensation) are statistically significant.

---------- INSERT TABLES 5 AND 6 ABOUT HERE ----------

Table 6 presents the path coefficients for the model. As can be seen by looking at Table 6 all our hypotheses received full or partial support. Table 6 provides a summary of which hypotheses were supported and the significance level at which they received support.

DISCUSSION AND CONCLUSIONS

The purpose of this study was to analyze the effect of human resource management practices on firm performance and to uncover if and how these relationships differed in different countries. The empirical results provide evidence to support the majority of the research hypotheses as shown in Table 6. Thus, it was shown that differences in employee ability development, employee motivation, and performance between multinational companies can be partly explained by the systems of HRM practices implemented.

This research makes several important contributions to management theory. First, the study contributes to opening up the black box between HRM practices and firm performance. While there have been many calls to do this previously, most scholars have avoided tackling this problem and instead focused on the direct relationship between HRM practices and firm performance. With the help of theory and the structural equation modeling technique PLS, we show that there are important mediating variables (ability and motivation) that are useful to consider when trying to understand how HRM practices affect firm performance. We demonstrate that HRM practices are levers through which employee ability and motivation can be increased and these practices in turn increases firm performance. This clear demonstration that there are important mediating variables in the black box between HRM practices and firm performance is an important contribution that this study makes to management theory.

Second, the study shows that neither motivation nor ability alone are enough to achieve maximum performance. We demonstrate that there is an interaction effect between

motivation and ability. In other words, when a firm is able to create conditions where its employees are skilled and motivated, these conditions result in a positive effect on performance that is greater than the sum of the individual effects. In practice this means that employees need to have both ability and motivation for a firm to achieve maximum performance. Upon reflection, this result makes good intuitive sense. An unmotivated employee who has great abilities will not make much of a contribution to the firm. Likewise, an employee who is very motivated but has little ability will try hard but will not be capable of contributing much to the firm. This result helps explain why some studies of only the relationship between motivation and performance or only ability and performance have not always received strong support.

Third, results uncover that different sub-systems of HRM practices are more important in different countries. For example, communication is especially important for facilitating employee motivation in Finland, a country known for its egalitarian attitude and not as important in Russia, a country used to authoritarian leadership where employees have little chance for input. The importance of communication in the US is some place in the middle. Training is most important in Russia, a country where many people have been trained in areas other than those they are now working in due to the transition from communism to a market economy and the need for a different distribution of jobs due to the economic transition. Further, in a dynamic environment like Russia, continuous training is especially important. Thus, while training in business is important in all three countries, it is essential for Russia. (See Table 5 for other country differences.) These specific results as to which HRM practices work best in a given country can be very helpful to companies in designing their HRM systems. For theory, the important point is that differences between countries (institutions, cultures, etc.) result in different systems of HRM practices being more efficient in different countries. It is also important to highlight that different HRM practices interacted differently with the host country. This result speaks for the importance of the need for an analysis of multiple sub-systems of HRM practices rather than grouping all HRM practices together into a single high performance HRM practices bundle in the international context.

There has been considerable debate about the importance of fit between the context in which a firm is operating and which HRM practices are most effective. Some scholars (e.g., Pfeffer, 1994) have suggested that there is a uniform set of best HRM practices while others (e.g., Huselid, 1995; Youndt, *et al.*, 1996*)* have suggested that depending on context, different systems of HRM practices are optimal. However, most studies that have investigated this

question empirically have focused only on a firm's strategy when considering context (Dyer & Reeves, 1995; Guest, 1997). Our paper presents powerful evidence that context affects which HRM practices are most effective and that host country is another very important part of the context which needs to be considered.

Fourth, the study provides support for the assertion that the choice of HRM practices is important for firm performance. In an age when many sources of competitive advantage are becoming increasingly easy to copy, this study provides further evidence that human capital, when paired with the appropriate HRM practices, can help a firm obtain competitive advantage and thus maximize performance. Indeed, a switch in viewpoint from considering human resources as a cost to an investment seems appropriate as human resources are becoming an even more important source of competitive advantage today than ever before as the advantages of other resources like technology and capital are being eroded away. Our study also shows the important complementary roles that institutional and cultural theory can play in analyzing cross-national differences in work practices. Most past studies investigating cross-national differences have either used cultural or institutional theory to frame their studies. This study shows that these two theories have complementary roles to play. As a result we encourage scholars to turn from theoretical loyalties to only one tradition and embrace the possibilities that both theoretical perspectives have to contribute.

Like all studies, this study has some limitations that are important to keep in mind. The analysis is based on single respondents, though it would have been ideal to have multiple organizational respondents. However, we do have well in-informed respondents and given resource limitations the question was really whether we should get one respondent from 241 firms, two respondents from 120 firms, or 10 respondents from 24 firms. One can make cases for each of these approaches with each study having a role as to what it contributes. However, considering our focus on comparisons across countries, we believe that our choice to maximize the number of firms represented is a defensible one. It is also unfortunate that we do not have time series data since this is what is needed to truly address issues of causality. Hopefully future studies can move in this direction. With the above limitations acknowledged, we are confident that this study makes an important contribution to opening up the black box between HRM and firm performance and understanding how the relationship between HRM practices and firm performance varies in different countries.

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Table 1: Frequency of Various HRM Practices Included in Previous Studies

	Article Coding Number																	
Practice Name	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	TOTAL
Training		*		*	*	*		*	*	*	*	*	*	*	*		*		13
Recruitment	*		*		*	*			*	*			*	*	*	*			10
Compensation	*			*	*				*	*				*	*		*		8
Communication					*		*					*	*	*		*		*	7
Appraisal					*			*	*		*			*		*			6
Promotion						*						*	*	*		*	*		6
Employee participation		*						*				*	*	*					5
Teamwork						*					*	*	*		*				5
Job security						*		*					*				*		4
Rewards	*							*			*		*						4
Job descriptions								*			*			*	*				4
Career development						*		*									*		3
Decision making practices										*						*	*		3
Leader development		*	*																2
Rotation											*				*				2
Quality improvement			*								*								2
Organisational culture			*				*											*	2
Job analysis												*				*			2
Other (various different practices)		*	*		*	*									*				5

* = practice included in previous studies;
note: shaded practices are those we propose to include in our study

Table 2: Measurement Model

Construct	Number of Items	Internal Consistency
Training	2	0.940
Appraisal	3	0.810
Promotion	3	0.860
Compensation	3	0.790
Communication	3	0.850

Table 3: Correlations and Discriminant Validity[1]

	Correlation Between Constructs				
	Training	**Appraisal**	**Promotion**	**Compensation**	**Communication**
Training	0.884				
Appraisal	0.205	0.591			
Promotion	0.188	0.254	0.683		
Compensation	0.242	0.374	0.287	0.567	
Communication	0.207	0.237	0.313	0.182	0.650

[1] The diagonal elements in this matrix show the square root of the average variance extracted.

Table 4: Significance of Including Additional Paths in the Model

Number of alternative model	Added path	p–value	Significance of the difference between basic and alternative model
1	Training ➔ Motivation	.26	No
2	Appraisal ➔ Motivation	.19	No
3	Compensation ➔ Ability	.54	No
4	Promotion ➔ Ability	.37	No
5	Communication ➔ Ability	.41	No

Table 5: Partial Least Square Estimation

Variable	*Employees' Ability*	*Employees' Motivation*	*Firm Performance*
Host country: Russia	0.001	0.000	-0.001
Home country: Finland	0.000	-0.001	0.000
Subsidiary Size	-0.023	-0.074	0.103
Subsidiary Age	0.013	0.001	-0.016
Industry	0.000	0.000	0.003
MNC International Experience	0.000	0.000	0.014 *
Home country: Finland	0.020	-0.057	-0.002
Home country: Germany	-0.214	-0.007	0.113
Home country: Japan	-0.416 *	-0.110	-0.064
Home country: Sweden	-0.063	0.065	-0.045
Training	0.101 *		
RUS x *Training*	0.110 **		
FIN x *Training*	-0.013		
Appraisal	0.194 **		
RUS x *Appraisal*	-0.087 †		
FIN x *Appraisal*	0.102 *		
Promotion		0.061 **	
RUS x *Promotion*		0.039	
FIN x *Promotion*		0.128 **	
Compensation		0.074 **	
RUS x *Compensation*		0.025 †	
FIN x *Compensation*		-0.007	
Communication		0.430 ***	
RUS x *Communication*		-0.124 **	
FIN x *Communication*		0.064 *	
Employees' Ability			0.087 †
Employees' Motivation and Behavior			0.068 *
Interaction: Motivation* x *Ability			0.201 ***
R Square	.17	.29	.16
Observations	226	226	226

†p < .10; *p < .05; **p < .01; ***p < .001

Table 6: Summary of Hypotheses and Support Received

Hypothesis	**Support received**
H1. Employees' abilities are positively related to firm performance.	Marginally supported p<.10
H2. Employee motivation is positively related to firm performance.	Supported, p<.05
H3. The interaction between employee ability and employee motivation is positively related to firm performance.	Supported, p<.001
H4. Competence/performance appraisal is positively related to employee abilities.	Supported, p<.01
H5. Training is positively related to employee abilities.	Supported, p<.05
H6. Performance-based compensation is positively related to employee motivation.	Supported, p<.01
H7. Merit-based promotion is positively related to employee motivation.	Supported, p<.01
H8. Internal communication is positively related to employee motivation.	Supported, p<.001
H9. Training is likely to have a greater positive effect on employee abilities in Russia compared to the USA and Finland.	Supported, p<.01
H10. Compensation/performance appraisal is likely to have a greater positive effect on employee abilities in Finland and in the USA than in Russia.	Marginally supported, p<.10
H11. Performance-based compensation is likely to have a greater positive effect on employee motivation in Russia than in the USA and Finland.	Partially supported. The ordering is correct, but the differences are not significant.
H12. Merit-based promotion is likely to have a greater positive effect on employee motivation in Finland than in Russia and the USA.	Supported
H13. Internal communication is likely to have a greater effect on employee motivation in Finland compared to the USA and Russia.	Supported

Figure 1: Conceptual Model