



**HUMAN RESOURCE STRATEGY AS A CATALYST FOR THE
SUCCESS OF THE COMPETITIVE STRATEGY: AN ANALYSIS
BASED ON ALIGNMENT**

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3 **Human resources strategy as a catalyst for the success of the competitive**

4 **strategy: An analysis based on alignment**

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11 **Purpose** – Competitive strategy is one of the key factors traditionally related to performance, but

12 research explaining the mechanisms through which this strategy improves business results is

13 scant. This study aims to shed light on this relationship by analysing human resources

14 management (HRM) strategy as an essential tool for transforming business strategy into results.

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16 **Design/methodology/approach** – Focussing on two generic competitive strategies, we establish

17 hypotheses on the need for alignment among four echelons: business strategy, HRM system

18 objectives, HRM system capabilities and business performance. We test these hypotheses with

19 structural equation modelling techniques using data provided by 204 industrial companies.

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21 **Findings** – The results show that to get the most out of a competitive strategy based on quality

22 differentiation, HRM system objectives and capabilities must be focussed on quality. In the same

23 way, a competitive strategy based on innovation differentiation requires HRM system objectives

24 and capabilities focussed on flexibility to achieve the maximum impact on performance. In this

25 second case, alignment is fundamental in low dynamic environments.

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28 **Originality/value** – This research not only provides additional evidence for the strategic

29 relevance of the human resources function but also reveals the potential benefits of focussing on

30 objectives and capabilities rather than on practices. Moreover, it shows that the role of HRM

31 objectives and capabilities in the implementation of a competitive strategy can be shaped by

32 factors beyond the company’s control, such as environmental dynamism.

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34 **Keywords** Alignment, Competitive strategy, Human resources strategy, Performance, Dynamism

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36 **Paper type** Research paper

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1. Introduction

The core purpose of strategic management is to explain the relationship between competitive strategy and firm performance, but the various mechanisms that make up the causal chain of this relationship are still not clear. A commonly accepted principle is that competitive strategy must be translated into consistent functional strategies that develop and support it, leading to its effective implementation (Hofer and Schendel, 1978). Indeed, Legge (1995) and Bratton (2007) understand the business strategy as a “second-order” strategy (the first being corporate strategy) and functional strategies as “third-order” strategies. Although the alignment that occurs between business and functional levels is considered a key premise, the empirical work produced to identify and measure their consequences is paradoxically limited (e.g., González-Benito and Suárez-González, 2010; Kuipers and Giurge, 2016; Lengnick-Hall and Lengnick-Hall, 1988). Our work contributes to this line of research by exploring, in particular, the mediating role of human resource management (HRM) strategy in the relationship between competitive strategy and results. Accordingly, we are interested in examining this type of alignment, in particular whether HRM strategy fit with competitive strategy drives better performance.

An extensive line of research based on strategic human resources management (SHRM) has highlighted the strategic importance of this function (e.g., Gunnigle and Moore, 1994; Kuipers and Giurge, 2016; Lengnick-Hall and Lengnick-Hall, 1988; Schuler and Jackson, 1987). These prior works have investigated the relationship between human resources (HR) strategy and competitive strategy and its impact on performance. However, they focus mainly on reporting types of HRM strategies (Bird and Beechler, 1995; Huang, 2001; Wang and Shyu, 2008) or

describing the target behaviour or best practices according to each competitive strategy (Delery and Doty, 1996; Schuler and Jackson, 1987); in other words, they analyse strategic alignment in terms of the practices, tools or actions chosen in the HR function.

Our study provides a definition of alignment between competitive and HR strategies in terms of goals and capabilities that considers these elements part of the HRM system, in line with other studies (Armstrong, 2006; Arthur and Boyles, 2007; Kepes and Delery, 2007; Posthuma *et al.*, 2013). We have chosen a more content-based approach by considering the ends—that is, what managers deem important in their HR department (goals)—rather than the means for achieving them (practices), while distinguishing between what is pursued (goals) and what is ultimately achieved (capabilities). Considering these two elements together helps clarify how the alignment between strategic management and HR contributes to achieve better results, fundamentally inferring two necessary conditions: first, HR objectives should be proposed in the light of competitive strategy, and second, HR objectives should be realised, that is, they must become capabilities. Only then is the functional strategy implemented and, therefore, the competitive strategy fulfilled. Finally, we consider whether the impact of alignment on results is always positive or whether it depends on the level of environmental dynamism. Through the introduction of these mediating and moderating variables, we address the two core questions posed by Guest (2011) in the HRM field: the process question and the contingency question.

Using a sample of 204 Spanish industrial companies, this research provides evidence that both HRM proposed strategy and HRM realized strategy are essential components through which competitive strategy can lead to improved performance. In contrast with previous empirical literature that focusses on practices and ignores priorities, our work suggests that, over and above the HRM practices implemented, what really matter are the capabilities that these practices generate in the HR function. In doing so, we attempt to open the HRM ‘black box’ by analysing

possible mediating variables between HRM objectives and performance, as Harley (2015) states. Our work contributes to the literature on strategic management and SHRM by showing that the effective implementation of a competitive strategy depends on a particular configuration of objectives and capabilities of the HRM system.

The paper proceeds as follows. Section 2 reviews the literature that covers competitive strategy and the elements of an HRM system (objectives and capabilities). Section 3 presents the hypotheses on the mediating role of HRM strategy in strategy-related results. Section 4 describes the methodological design, and Section 5 reports the main results. Section 6 presents our conclusions, including theoretical and practical implications and limitations.

2. Theory

2.1. HRM as an open system

An open system is a set of neatly interrelated elements that form a unit with a specific goal and that interact with other elements outside the system (Von Bertalanffy, 1950). According to this definition, HRM can be understood as an open system, comprised of, among other things, objectives, practices and capabilities (achievements), and related to other external elements such as competitive strategy and organizational performance. The specific goal is to contribute to the improvement of performance through the implementation of the competitive strategy. The use of the open system concept to include the different HR elements lies at the heart of SHRM (Hendry and Pettigrew, 1986; Snell and James, 1992; Wright and McMahan, 1992; Wright and Snell, 1991), and this conceptualization is similar to that adopted by other studies in the field (i.e., Armstrong, 2006; Arthur and Boyles, 2007; Kepes and Delery, 2007; Lepak and Snell, 1999; Posthuma *et al.*, 2013). Zedeck and Cascio (1984, p. 463) stated that “human resources issues are part of an open system, and research (in SHRM) is theoretically insolvent if it is not located in

the broader context of the organizations”.

An HRM system has three interrelated elements that fall along different hierarchical levels of abstraction (see Figure 1): (1) HRM objectives (goals), understood as the importance HR managers give to different priorities of the HR function; (2) practices, or the politics, programs and decisions made to implement the HRM strategy in each of the main subfunctions (e.g., recruitment, selection, training, compensation) (Wright and Boswell, 2002); and (3) HRM capabilities, or the achievements made with respect to those HRM priorities and in relation to competitors. These elements are therefore interconnected. They distinguish (1) what the HRM system is designed to achieve, (2) how it will achieve it and (3) what it actually achieves. If we adapt Chandler’s (1962) well-known definition of strategy to the HR context, HRM strategy consists of the first two levels, as they can be viewed as “the determination of the basic long-term goals and objectives of” the HR function “and the adoption of courses of action and the allocation of resources necessary for carrying out these goals” (Chandler, 1962, p. 13). For example, if the HRM system determines that the priority should be to increase workforce flexibility, the firm might find it suitable to implement initiatives or practices such as skills training or flexible job assignments. These sequences of decisions define the HRM strategy. Whereas previous studies have focussed on the second level (practices or means), the current research focusses on the first level (objectives or goals) as the relevant element to assess strategic alignment.

‘figure 1 here’

Following Mintzberg’s (1978) terminology, the first two levels actually constitute the *intended* HRM strategy rather than just the HRM strategy, whereas the third level (HRM capabilities) represents the *realized* HRM strategy. The intended strategy cannot always be implemented; consequently, it might differ from the realized strategy. In the aforementioned example, although the objective of the HRM system is to increase workforce flexibility, and this

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3 might lead to the implementation of certain practices, such implementation depends on diverse
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5 factors, and the degree of achieved flexibility (the capability of the HRM system) might vary.
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8 If objectives are the desired capabilities and capabilities can be understood as achieved
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10 objectives, this three-level scheme suggests that an effective internal alignment in the HRM
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12 system basically lies in the good fit between objectives and capabilities, that is, between the first
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14 and third levels. The second level, HRM practices or means, is fundamental to achieve this
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16 internal alignment but not to measure it. Internal alignment refers to the degree of effectiveness
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18 of the HRM systems, that is, the extent to which these systems can achieve the proposed
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20 objectives and build the desired capabilities.
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24 This logical progression is consistent with the literature on SHRM, since it shows that an
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26 adequate configuration of HRM practices is critical to achieve a good alignment between
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28 objectives and capabilities. In line with the systemic view, it is also reasonable that this
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30 configuration will depend not on individual practices but on systems or patterns of practices
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32 (Boxall and Macky, 2009; Combs *et al.*, 2006; Huselid, 1995; Ichniowski and Shaw, 1999).
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34 However, these practices must be consistent with some HRM objectives, and they are actually
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36 means to achieve the capabilities that fit with those objectives.
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40 For HRM system capabilities to contribute to better firm performance, not only is the
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42 internal fit between objectives and capabilities crucial, but an external fit between the HRM
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44 system objectives and the competitive strategy must also be evident. As Figure 2 shows, the HR
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46 function should transfer the competitive strategy's objectives to its own objectives that relate to
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48 the characteristics of both the employees and the system that manages them. It should then ensure
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50 the development of capabilities that are consistent with these objectives. This perspective allows
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52 us to analyse the HR function's strategic contribution in terms of its internal and external
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54 alignment.
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Our view of HRM capabilities is compatible with the concept of ‘organizational capability’ (Ulrich, 1987; Ulrich and Lake, 1991), or the capacity to integrate and sustain other capabilities, such as the financial, marketing and operational. The thesis underlying this concept is that organizational capability can be created with an appropriate set of HRM practices and can be a fundamental source of competitive advantage. Thus, the practices → capabilities → performance chain is already present in Ulrich’s (1987) proposal. We add competitive strategy and HRM objectives as the necessary antecedents to ensure that capabilities are strategically aligned, that is, that the created capabilities fit with the needed capabilities and can consequently generate competitive advantage.

‘figure 2 here’

2.2. Objectives and capabilities of HR and competitive strategy

As we previously mentioned, HRM objectives and capabilities constitute the intended and realized HRM strategies, respectively. Our aim in this regard is to shed light on the relationship between these two sides of HRM strategy and the competitive strategy dimensions. To measure competitive strategy, we use Porter’s (1980) framework of generic strategies, as the one most widely accepted in strategic management literature (Miller and Dess, 1993). This framework distinguishes two sources of competitive advantage: cost leadership and differentiation. In line with Miller and Dess (1993), these sources represent independent dimensions; therefore, in our research we focus on the second one, mainly for parsimony. Our aim is to show that an approach based on objectives and capabilities, not just practices, can further illuminate the HRM system’s strategic role, rather than to comprehensively review all the potential chains of alignment (i.e., all the successful combinations of options at the competitive strategy, HRM objective, HRM capability, and organizational performance levels).

Several empirical studies have defined and measured competitive strategy through various dimensions derived from Porter's (1980) initial proposal (e.g., González-Benito and Suárez-González, 2010; Lee *et al.*, 2010; Nayyar, 1993; Sanz-Valle *et al.*, 1999). Many of them identify more than one dimension associated with differentiation, most commonly distinguishing differentiation in innovation and differentiation in quality (Huang, 2001; Lee *et al.*, 2010). Herein, we follow these studies and focus on these two dimensions.

Thus, we focus on two HR objectives that, rather than reduce costs, aim to contribute to a company's performance by enhancing some characteristic of its employees or its management system to make a difference in the market. The first objective is quality. It is necessary to distinguish between quality as an employee attribute and quality as an HRM system attribute (Quijano *et al.*, 2005) that allows employee quality to have an impact on the company. Employee quality refers to the levels of qualification and training, whereas system quality refers to the orientation towards the development of human capital focussed on improving products/services and processes and increasing customer satisfaction.

The second objective is HR flexibility, which has recently received a great deal of research attention (Beltrán-Martín *et al.*, 2008; Úbeda-García *et al.*, 2017). Sanchez (1995) identified two components of the flexibility construct: resource flexibility and coordination flexibility. The first pertains to the extent to which a resource can be applied to multiple uses, and the cost and time to change a resource to an alternative use. The second attribute refers to the degree to which the company can reassign resources and how they are organized. Therefore, these components applied to HR flexibility refer to both the employee's flexibility and the flexibility of the system to modify employee skills and behaviours.

We view these objectives – as well as the corresponding capabilities and the associated competitive strategy dimensions – as complementary (Lepak and Snell, 1999, 2002; Youndt *et*

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3 *al.*, 1996), not alternatives (Arthur, 1992; Delery and Doty, 1996; Huselid, 1995), and we analyse
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5 them as independent dimensions. Putting less emphasis on one objective does not necessarily
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7 imply giving more importance to another. Rather, the pursuit of a goal, if handled properly, can
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9 lead to the attainment of another objective. As such, the two dimensions considered for
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11 conceptualizing competitive strategy (differentiation in quality and differentiation in innovation)
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13 and the two functional priorities in the area of human resources (quality and flexibility) provide
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15 the conceptual platform for building our model of analysis.
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21 **3. Model and hypotheses**
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24 ***3.1. Alignment between competitive strategy and HR strategy***
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27 Within the HRM system itself, a study may be made of the internal alignment that occurs
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29 between its various elements (objectives, practices and capabilities). Internal alignment will be
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31 present if the HRM practices conducted are consistent with the objectives and, as a result,
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33 developing organizational capabilities to meet these objectives is possible – that is, if internal
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35 efficacy occurs as goals are achieved (see the middle section of Figure 2). According to Kepes
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37 and Delery (2007), this type of adjustment and its consequences is rarely explored in literature,
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39 although it is often recognized indirectly. Posthuma *et al.* (2013) state that an HR system is a
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41 high-performance HR system when the different levels that compose it are aligned. Therefore, we
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43 deem it necessary to provide empirical support for these theoretical ideas through a study that
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45 analyses the alignment between various elements of the HRM system – here, objectives and
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47 capabilities.
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52 Nevertheless, this alignment contributes to the performance of the business unit only to
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54 the extent to which it helps develop a competitive strategy. It is therefore reasonable to assume
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that an external fit must also occur between competitive strategy and HRM strategy if the HRM strategy is to realise its full potential (see the top of Figure 2). This perspective of alignment between strategic levels responds to a basic assumption of strategic planning, which is usually deemed a top-down process (Hofer and Schendel, 1978).

After a competitive strategy has been designed, functional strategies should be rolled out to develop and support this overall strategy. This involves two conditions: (1) coherence (external alignment) between competitive strategy and HRM strategy in terms of the company's competitive priorities must be present, and (2) the intended functional objectives should ultimately be achieved; that is, they must become capabilities (internal alignment). Only then will the full implementation of the functional strategy be achieved, along with the competitive strategy that affects firm performance.

This idea has been defended in a similar way in the field of production. The theory of production competence proposed by Cleveland *et al.* (1989) establishes that objectives and production capabilities should align with the competitive strategy to contribute to its implementation and thus improve firm performance. Other research has extended this approach to other functional areas, such as marketing and design and product development (Droge *et al.*, 1994) and purchasing (González-Benito, 2007). According to these arguments, we propose the following:

H1. The effect of competitive strategy on firm performance is channelled through the HRM system's objectives and capabilities, such that these two elements mediate the relationship between competitive strategy and performance and capabilities mediate the relationship between objectives and performance.

This hypothesis establishes the need for alignment; however, it does not identify its nature—that

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is, it does not specify which HR objectives should be associated with which competitive strategies. Therefore, we review the proposals in the literature on the behaviours each competitive strategy requires, the practices that promote them and the HR objectives that must be consistent with them, and we derive two sub-hypotheses from H1 for each competitive strategy considered.

A company that bases its competitive strategy on quality differentiation needs highly qualified and knowledgeable employees to offer high-performance products, which can be pursued through sophisticated recruitment processes, demanding selection processes or continuous training. However, these means respond to the concept of practices. In industrial sectors, greater product quality usually involves greater technical complexity or an elaborate design, so skills and training are essential. It also requires employees to be concerned about quality, to be cooperative and interdependent and to adopt a medium-long-term approach when performing their tasks (Schuler and Jackson, 1987).

These behaviours can be achieved only if HR practices are designed following the basic criterion of quality improvement, such that the key point lies in the orientation given to practices, rather than in the selected practice itself (i.e., continuous training). On the one hand, the company will try to select the best candidates for each job, for which it is usually necessary to use multiple selection techniques. Alternatively, the company could choose to use continuous training to update employees' knowledge and skills, teaching them the best techniques to do their work. Both rigorous selection and continuous training can facilitate the acquisition of the high-quality human capital required to implement this strategy. On the other hand, concern about reducing errors attributed to employees would strengthen a differentiation strategy based on quality. Accordingly, employee job performance evaluation would be designed to identify opportunities for improvement and inform each employee about the areas in which they can improve

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3 developing their human capital and contributing to a higher-quality offer.
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6 Standing out in the market as a result of this attribute also depends on employees'
7 involvement with their work and their ability to make changes and improvements independently.
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9 All these characteristics describe an HRM system driven by quality. The preceding arguments
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11 allow us to derive the following sub-hypothesis from H1:
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15 *H1a.* A competitive strategy that emphasizes quality differentiation positively influences
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17 firm performance when quality is an HRM system's objective and capability; that is, the
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19 HRM system's objective and capability on quality mediate the relationship between this
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21 competitive strategy and performance.
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25 The second dimension of competitive strategy considered is innovation, which is another
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27 way a company can differentiate itself from its competitors (Porter, 1980). A competitive strategy
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29 that puts emphasis on innovation requires prioritizing the introduction of new products or new
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31 processes, so it will be important to have a flexible HRM system, in which employees have a
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33 broad range of knowledge and skills that allow them to generate new ideas and develop
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35 innovations. A focus on long-term tasks and working in a coordinated manner are also necessary.
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37 Finally, it requires greater risk taking in decision-making and greater creativity than the quality
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39 differentiation strategy (Schuler and Jackson, 1987).
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44 Similar to the two previous cases, the behaviours this competitive strategy entails require
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46 implementing appropriate practices to endow HR and the HRM system with enough flexibility to
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48 adapt to continuous innovation. First, the organization needs to select candidates with greater
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50 adaptability and learning and train them to acquire a wide range of knowledge and skills; that is,
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52 the company needs to invest in flexible human capital. In this regard, a competitive strategy
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54 based on innovation is also related to employees' experience, as "knowledge accumulates
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3 rapidly through experience” (Jackson *et al.*, 1989, p. 731), and this allows generating
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5 innovations. Therefore, high levels of rotation would be detrimental to innovation, as they reduce
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7 employee experience. Conversely, job security favours a long-term view of work and the creation
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9 of informal relationships with colleagues that may result in joint projects or initiatives that
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11 generate innovations. Second, if performance appraisal and compensation include various criteria
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13 and are related to the proposal of new ideas or the development of new products, employees will
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15 be more motivated to act flexibly and pursue innovation development. Finally, job design
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17 practices must allow the employee to develop multiple tasks and collaborate with other
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19 employees in different positions, which facilitates adaptation to new positions and the emergence
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21 of new ideas to be transformed into innovations. These arguments allow us to formulate the
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23 following sub-hypothesis:
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29 *H1b.* A competitive strategy that emphasizes differentiation in innovation positively
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31 influences firm performance when flexibility is an HRM system’s objective and
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33 capability; that is, an HRM system’s objective and capability on flexibility mediate the
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35 relationship between this competitive strategy and performance.
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40 ***3.2. Moderating effect of environmental dynamism on the relationship between***
41 ***alignment and performance***
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44 Achieving alignment in dynamic environments is complicated because it takes time – a
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46 scarce and valuable factor when the market is rapidly changing (Homburg *et al.*, 1999). This
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48 means that the effect of alignment on results is less positive than in stable environments and can
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50 even turn negative.
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53 Dynamic environments require an open definition of strategy in which consideration is
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55 given to different objectives for different functional areas. Adapting to a changing context
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requires that functional-level priorities are continually evaluated and reviewed, sometimes adding new ones. Doing so will require adaptation and reorientation of the HR department, which takes considerable time. Finding a perfect but rigid alignment means that misalignments can occur whenever market conditions change. By contrast, a wider range of objectives represents a greater variety of alternatives in the combination of competing priorities at a functional level, giving the company more flexibility in choosing them. In this case, alignment, or a company's basic strategic capability, can inhibit strategic flexibility (i.e., the ability to reformulate the strategy, changing the emphasis of competitive priorities and adapting to the environment), becoming a basic rigidity that prevents the firm from providing a coordinated response to unexpected changes.

Wright and Snell (1988, p. 759) make a similar argument in their analysis of the compatibility between fit and flexibility: "as change becomes discontinuous and unpredictable, it may be much more difficult for managers to obtain the information they need and to align the HR systems with the strategic initiatives in a timely way". The idea also underlies the concept of 'strategic agility' (Ahammad *et al.*, 2020; Ananthram *et al.*, 2013), which is increasingly used to refer to the ability to adapt strategy to the circumstances of each moment in dynamic environments. Strategic agility requires versatile and responsive HRM systems that are not necessarily focussed on specific objectives and capabilities. Consequently, in dynamic and changing contexts, the company benefits if it allows functional areas to follow a more open definition of the strategy, empowering them to adapt to environmental circumstances. We therefore formulate the following hypothesis:

H2. The connection between competitive strategy and firm performance through the HRM system is stronger in less dynamic environments.

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3 **4. Methodology**
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6 **4.1. Data**
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8 The target population consisted of Spanish manufacturers with 100 or more employees in
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10 five industrial sectors: food and kindred products (SIC 20); fabricated metal products, except
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12 machinery and transportation equipment (SIC 34); transportation equipment (SIC 37); chemicals
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14 and allied products (SIC 28); and industrial and commercial machinery and electronic and other
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16 electrical equipment (SIC 35–36). According to our study’s objectives, we required that the target
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18 population consist of companies with a high number of employees, so that they would likely have
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20 a fairly developed HR function and specifically an HR manager to whom we could address the
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22 questionnaire. This led us to focus on industrial companies with more than 100 workers. We then
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24 decided to focus on a limited number of industrial sectors so as not to introduce too much
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26 heterogeneity. Finally, we chose these five sectors because they have the largest number of
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28 companies in the reference population (Spanish industrial companies with more than 100
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30 employees), altogether representing 50% of that population. Using the Sistema de Análisis de
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32 Balances Ibéricos database provided by Bureau Van Dyck, we identified 1,140 companies: 400,
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34 216, 207, 168 and 149 in each of the five sectors, respectively.
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40 The data were gathered using an online questionnaire addressed to the manager
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42 responsible for HR through the survey platform SurveyMonkey. The survey took place between
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44 March and June 2015 and resulted in 204 complete responses (17.89% response rate) – 76, 28,
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46 49, 30 and 21 in each of the five sectors, respectively. The average number of employees in the
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48 companies in the sample is 315 (305, 235, 434, 240 and 286 in each respective sector), and the
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50 average turnover is €112 million (average of €105 million, €45 million, €160 million, €139
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52 million and €79 million in each respective sector).
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3 We conducted mean difference tests to detect response bias using financial variables (i.e.,
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5 return on equity; return on investment; return on assets; profit margin and earnings before
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7 interest, taxes, depreciation and amortization) and other firm descriptive characteristics such as
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9 total assets, age and number of employees, which were in the database for all the firms of the
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11 population. However, we found no significant differences between respondents and non-
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13 respondents. Likewise, a Levene test indicated no differences in the variance of these variables.
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17 To assess whether our results are likely to be significantly affected by common method
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19 bias, for the set of items used to construct each possible pair of variables in the model, we
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21 conducted a Harmon's single-factor post hoc test for common method variance. In no case did we
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23 find a good fit to a single factor, which indicated no "same-source" factor in our data. Therefore,
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25 we conclude that the data showed no indications of relevant artefactual correlations between the
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27 variables used in the study.
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31 The use of a single informant in each company may also be a source of measurement
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33 error, due to the selection of items, raters or time (Wright *et al.*, 2001). With regard to the
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35 measurement error due to item selection, as shown subsequently, the high Cronbach's alpha
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37 estimates reveal strong internal consistency of the constructs, which minimizes the risk of error
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39 due to item sampling. Furthermore, several researchers reviewed the questionnaire, and we
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41 pretested it on 27 companies to identify ambiguous or confusing aspects. With regard to the
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43 measurement error due to rater selection, we made an extensive effort to identify the most
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45 knowledgeable informant, as Huselid and Becker (2000) suggest. To this end, we contacted each
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47 company by telephone to identify the HR manager so that we could personalize the questionnaire
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49 and prevent it from falling into the hands of poorly informed raters. In addition, because we sent
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51 the questionnaire to the highest level of employee responsible for HRM, we can assume that the
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53 recipient would have, when appropriate, the necessary authority to ask the required information
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from other people more specialized in certain issues. The measurement error due to time refers to the differences in responses resulting from the date when respondents filled out the questionnaire. As Wright *et al.* (2001) and Huselid and Becker (2000) indicate, knowing whether the difference in responses is due to measurement error or to a true change in issues about which the respondent is asked is difficult. Thus, we applied the questionnaire within a short period in which no significant economic or social changes occurred that might have altered HR managers' perceptions or opinions of the issues addressed in the questionnaire.

4.2. Measures

4.2.1. Competitive strategy

To measure the two dimensions of strategy (quality differentiation and innovation differentiation), we asked managers to use a seven-point Likert scale (1 = "no importance", 7 = "great importance") to rate the importance the company gives to a series of objectives shown in Table I. Respondents considered at least three items for each dimension, chosen in line with the studies of González-Benito and Suárez-González (2010) and Nayyar (1993).

We performed a confirmatory factor analysis with AMOS using the maximum likelihood estimation procedure (for all the scales). The goodness-of-fit indices revealed good consistency of the observed data with our measurement model, thus allowing us to verify the unidimensionality and convergent validity of the constructs (see the highly significant weights in Table I).

‘table I here’

We assessed the reliability of the construct using the omega with unequal weights (weighted omega) (Bacon *et al.*, 1995), obtaining satisfactory results in both cases. The weighted omega is an appropriate measure to assess construct reliability in structural equation modelling

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3 because of the implicit assumption that the weights of each indicator in its corresponding
4 construct are not equal. We tested discriminant validity by applying Anderson and Gerbing's
5 (1988) proposed procedure. The two-factor model with the estimated correlation parameter
6 between the constructs set to 1 provides a poor fit ($\chi^2 = 45.173$; $\chi^2/\text{gl} = 3.227$; root mean square
7 error of approximation = 0.105; comparative fit index = 0.966), significantly worse than the fit of
8 our confirmatory model ($\Delta\chi^2(\text{gl} = 1) = 29.544$, $p < .001$). Therefore, the discriminant validity of
9 our scales is supported.

10 11 12 13 14 15 16 17 18 19 20 21 *4.2.2. HRM objectives and capabilities*

22 To measure the HRM goals and capabilities considered herein (quality and flexibility), we
23 used the items shown in Table II. For objectives, HR managers used a seven-point Likert scale (1
24 = "no importance", 7 = "great importance") to rate the strategic importance of each of these
25 aspects to them when making decisions about the HRM system. To measure the achieved
26 capabilities, HR managers indicated, on these same issues, their firm's position with respect to its
27 competitors using a seven-point Likert scale (1 = "well below the competition", 7 = "well above
28 the competition").

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56 A confirmatory factor analysis conducted for both the objectives and capabilities scales
57 provides evidence of the constructs' unidimensionality and convergent validity. Although the
58 goodness-of-fit indices and weights provide less favourable values than those for the competitive
59 strategy scales, they are still acceptable values. The omega with unequal weights reflects
60 acceptable values and provides evidence for the reliability of the constructs. This procedure
supports discriminant validity.

4.2.3. Performance

Previous HR scholars have conceptualized firm performance multidimensionally (Boselie *et al.*, 2005). In this same vein, we distinguish commercial and financial performance. Respondents rated their firm’s performance relative to that of their competitors for each of the aspects listed in Table III on seven-point Likert scales (1 = “lowest”, 7 = “highest”). The first five refer to aspects related to the company’s commercial success, and the other three refer to ratios based on accounting data and are related to the company’s financial performance. Previous research has used similar items to measure various dimensions of business performance (e.g., Chen and Paulraj, 2004; Smith and Reece, 1999; Ward and Duray, 2000). Note that both performance constructs use multiple indicators, in contrast with the majority of the empirical strategic management studies analysed by Boyd *et al.* (2005), which rely on single-indicator measures.

The use of perceived measures is also a usual practice (Morrison and Roth, 1992; Robinson and Pearce, 1988; Venkatraman, 1990). Previous studies have shown a significant, positive correlation between these perceptions and the information provided by other external data sources (Venkatraman and Ramanujam, 1987).

A confirmatory factor analysis provides evidence of unidimensionality and convergent validity, as well as high omega indices of reliability. Again, in this case, discriminant validity is supported.

‘table III here’

4.2.4. Dynamism

To measure the dynamism construct, we asked respondents to rate the extent to which four aspects of the business environment had changed frequently, or not, in recent years (using a

seven-point Likert scale anchored by 1 = “not at all” and 7 = “completely”). Our measure of dynamism (see Table IV) has close similarities to the measures used in the following studies: González Benito *et al.* (2010), González-Benito *et al.* (2012), Homburg *et al.* (1999), Miller and Friesen (1983) and Sutcliffe and Huber (1998). We found evidence of unidimensionality, convergent validity and reliability (see Table IV).

‘table IV here’

4.3. Analysis

To verify H1, we assessed the extent to which the observed data fit the two sub-models presented in Figure 3, in which each focusses on a competitive strategy (quality and innovation) and the corresponding HRM objective and are linked respectively to H1a and H1b. We considered a causal relationship between commercial and financial performance, as is the norm in recent research (González-Benito and Suárez-González, 2010). We used structural equation modelling to simultaneously estimate the relationship model and the measurement model, performing the analysis with AMOS using the maximum likelihood estimation procedure. Table V shows the correlations between all the constructs employed in our analyses.

‘figure 3 here and table V here’

To test H2, we assessed whether the proposed sub-models shown in Figure 3 fit better in less dynamic than highly dynamic environments. Accordingly, we considered two sub-samples, one consisting of companies whose perception of dynamism is above the average (110 companies) and the other consisting of those that are below the average (94 companies), and compared the fit of each sub-model in each of the sub-samples. To confirm H2, we would require that the effects shown in the sub-models in Figure 3 be more significant in the group of companies with less dynamic environments.

5. Results

5.1. Alignment between competitive strategy and HRM strategy

For the models in Figure 3, Table VI shows some of the goodness-of-fit indices typically used to assess the validity of structural models. The chi-square goodness-of-fit test rarely records a *p*-value greater than the recommended value of .05 because it does not take degrees of freedom into account. It is therefore common to use the chi-square estimate divided by the number of degrees of freedom. This ratio presents satisfactory levels for all the models. The other indices also recorded the recommended values or are close to them. Because these indices are penalized by the number of degrees of freedom (except for adjusted goodness of fit), which are high in our sub-models, we can conclude that the fit is acceptable in both cases.

‘table VI here’

Figure 3 shows the estimated coefficients for each of the relationships considered between the latent variables. In both cases, the relationships of the causal chain are significant at a confidence level of 99%, excluding the direct effect of the pertinent HRM capability on financial performance. We estimated the two sub-models again, suppressing the relationship between both types of performance, and in both cases, the direct effect of the pertinent capability in financial performance was significant at a 99% confidence level. This finding indicates that commercial performance mediates the relationship between capabilities and financial performance.

To determine whether other relationships are relevant but not accounted for in our model, we estimated the two sub-models by incorporating the direct effect of the competitive strategy dimension on firm performance, as well as the direct effect of HRM objective on performance. Figure 4 shows the quality sub-model with direct effects as a sample: note that we introduce two additional arrows to the corresponding model in Figure 3. Table VII provides the coefficients of

the two aforementioned effects obtained for each of the sub-models (note that the first line replicates the coefficients of the new effects shown in Figure 4). Both cases are similar. On the one hand, the new sub-models have significantly better fit (expected because the new model imposes fewer restrictions and reduces the degrees of freedom). On the other hand, the direct effect between each differentiation strategy and firm performance is significant, with a confidence level of 99.9%. In addition, the direct effect of the quality and flexibility objectives on commercial performance is significant, albeit negative and with a lower level of significance. These results provide support for H1a and H1b, but HRM objectives and capabilities partially mediate the main relationship between competitive strategy and performance. Full mediation would require that the direct effects introduced in Figure 4 be non-significant, so we conclude that the entire effect is channelled through the mediating variables.

‘figure 4 here and table VII here’

This partial mediation implies that the effect of a differentiation strategy on organizational performance occurs not only because of a proper alignment of the HRM area with the strategy but also for other reasons. We therefore consider the alignment with other functional areas. With regard to the HRM quality and flexibility objectives, the direct effect is negative, implying that putting importance on these objectives may even be counterproductive if it is not accompanied by their effective achievement. These findings reinforce the validity of our model, as they support the need to achieve these capabilities to truly improve firm performance.

5.2. Moderating effect of dynamism

Figure 5 shows the results of the estimation of each sub-model in the two sub-samples considered. In the quality sub-model, internal and external alignments remain significant in both sub-groups. In the innovation sub-model, the causal chain of relationships remains significant

only when dynamism is low, while this chain is broken when dynamism is high. In particular, the impact of external alignment decreases with an increase in dynamism. The results therefore provide support for H2 only for the strategic dimension of innovation.

‘figure 5 here’

6. Discussion

The results show support for the mediating role of the HR function in the competitive strategy–performance relationship. In this section, we discuss our findings’ theoretical implications and the reasons that could explain some of the unexpected relationships.

6.1. H1

That different competitive and functional strategic levels put similar importance on different strategic dimensions (external alignment) is necessary but insufficient to improve performance; what is also required is that the previously proposed objectives be achieved (internal alignment). To establish HRM objectives coherent with competitive strategy dimensions, not only must the HRM contribution involve HR managers being integrated in or interacting with the top management team, but the HRM system must also have internal efficacy in terms of the consecution of that objective. Therefore, the HR function contributes through capabilities, not just functional objectives. These findings highlight the importance of internal alignment in tandem with external alignment, as both are necessary to understand the HR function’s role. Indeed, our data show that putting importance on certain objectives without turning them into capabilities may even be detrimental to the company.

By drawing attention to the various functional objectives and establishing a relationship to different competitive strategies, we maintain that the most appropriate practices for each strategy are those that support the achievement of the relevant objective. However, and in contrast with

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3 prior research, we do not propose specific practices associated with each competitive strategy
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5 (Bird and Beechler, 1995; Huang, 2001; Schuler and Jackson, 1987); instead, we highlight the
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7 objectives that must be pursued in this area, because some practices can be designed to focus on
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9 one objective or another. For example, the generic practice of extensive training could support
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11 the quality priority if it is designed to improve the techniques and tasks currently performed in
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13 the manufacture of the products, but it could also support achieving flexibility if the content of
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15 the training contributes to the development of new skills, to the use of new tools or techniques
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17 and so on.
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21 The results show that the strategies based on differentiation (in quality and innovation)
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23 have direct effects on performance regardless of the HR area, and they are even more significant
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25 than those arising from the corresponding functional objectives. In other words, for a strategy
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27 based on quality or innovation to have positive effects on results, the company can differentiate
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29 itself in other functional areas (e.g., marketing, manufacturing, research and development).
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31 Indeed, in the industrial sectors considered, the proportion of capital goods in the firm's assets is
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33 of paramount importance, and it can increase the manufacturing function's impact. Therefore,
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35 quality or innovation strategies can be based on using new materials that do not require new
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37 worker skills or the incorporation of technology developed by the company's suppliers, actions
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39 that do not involve new training requirements in the sectors in question here. However, although
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41 quality and innovation can have positive effects on firm performance regardless of HRM, this
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43 area can significantly help channel the impact of both strategic dimensions on commercial
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45 performance. Therefore, HR managers should be aware that their contribution is not crucial but
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53 It is worth noting that the results are consistent with Ulrich's (1987) proposals in two
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55 respects. First, organizational capabilities based on adequate HRM are relevant to obtain
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competitive advantage; that is, HRM is critical in explaining organizational performance. Second, these organizational capacities contribute to generating other capabilities (e.g., economic, marketing, technological) typical of other functional areas. In other words, the human resources function enables other functional areas to improve organizational performance.

6.2. H2

The results confirm the relevance of environmental dynamism in explaining phenomena in the HR function (Ketkar and Sett, 2010; Sheehan *et al.*, 2016). Dynamism alters the logical order of the proposed model, though the results for each strategy are different. In the quality sub-model, dynamism does not affect significant relationships. However, when we include direct effects we observe that a quality strategy is more likely to improve firm performance in dynamic environments. Therefore, in addition to confirming that the alignment in the quality priority is beneficial in low- and high-dynamism environments, our data show that this strategy may be a way to achieve economic advantages in highly dynamic environments, and this advantage may hold for not only the HR function but also other functions.

Finally, we find that the emphasis on innovation strategy in dynamic environments does not translate immediately into greater flexibility of HR. This strategic dimension is most affected by environmental dynamism, such that in these situations, it is more difficult to agree on the nature of the mechanisms in the HR area that contribute to greater innovation.

These results indicate that introducing dynamism into the model of analysis entails a dynamic linkage that changes how the firm achieves fit as the environment changes. When the environment is stable, the fit of the innovation sub-model has significant effects, but when dynamism is high, the alignment with the competitive strategy is no longer significant, implying that the efficacy of the HRM strategy is not more important than its efficiency, because the effect

of the flexibility objective remains significant in highly dynamic environments. Pretending that the company is aligned with the environment and the HR strategy at the same time is difficult if the environment changes rapidly. In summary, the effects of alignment are not always the same. Instead, we show that environmental variables, such as dynamism, influence how this occurs. However, the effect associated with dynamism is not universal but dependent on the competitive strategy the company emphasizes. Therefore, this environmental variable will be more relevant for companies in which innovation is a cornerstone of their competitive advantage.

Therefore, firms that want to stand out for their innovative features in a dynamic environment will have a greater range of priorities that the HR function can help achieve, beyond flexibility. The attributes that lead to innovation could be related to excellent customer orientation, personalized service and so on. However, the reason could be even broader, because the greater environmental dynamism could emphasize the relevance of alignment with other functions, which opens the door to new research in which several (dynamic) alignments can be analysed simultaneously. This line of research would draw on existing works that analyse the effect of fit between different functions on performance—for example, between HR and manufacturing (Jayaram *et al.*, 1999; Youndt *et al.*, 1996), between marketing and manufacturing (Weir *et al.*, 2000) or even between structure and environmental variables (Wilden *et al.*, 2013). To achieve this purpose, our findings provide an incentive to examine two or more alignments simultaneously to obtain more robust results.

6.3. Limitations

Our research is not without limitations, which in turn may offer opportunities for future research. On a theoretical level, our work identifies a few alignment chains (business priorities →

HRM objectives → HRM capabilities) that contribute to organizational performance to illustrate the potential of the proposed approach; however, it is far from providing a complete vision on all of the chains. We focus on Porter's (1980) paradigm and consider only one of his generic strategies (business differentiation). Undoubtedly, expanding the range of strategies and considering other typologies of competitive strategies will help identify and understand all the optimal connections between the different strategic echelons. Furthermore, in the specific case we analyse, we find that competitive strategies based on quality and innovation can have an effect on the results through areas other than the HR area. Therefore, further research analysing alignment with other functional areas, as well as the consistency between different areas, is necessary for the effective implementation of competitive strategy based on these two aspects.

At the methodological level, although we employ several measures to minimize the negative effects of using a single source of information, we acknowledge this shortcoming as undoubtedly the main limitation. Using different informants for each construct as well as for different constructs would significantly reduce the measurement error and the possible appearance of artefactual covariations without the need for other control measures.

7. Conclusions

This research sheds light on the effect of competitive strategy on firm performance. It analyses how a business strategy must be implemented if it is to be truly effective. Specifically, we investigate the role of HRM strategy as a mediator between functional objectives and capabilities, providing insight into how to channel business objectives.

The study offers important implications to the SHRM academic literature by highlighting the usefulness of distinguishing between the HR department's objectives and capabilities and thus by providing more detail on alignment and how it is affected by environmental variables.

Considering a firm's emphasised strategic dimension, as well as the environment's degree of dynamism, we present evidence of the effectiveness of different patterns of alignment. If a company aims to achieve differentiation through higher quality, it should work to achieve a high-quality HRM system. Similarly, if the aim is to differentiate through innovation, flexibility of the HRM system will help. However, these strategies can be implemented through other functional areas, leaving the door open to new research. While the HR area does contribute to the development of these strategies, simple consistency between functional and competitive goals is not enough and can even waste time and resources if no substantial changes occur in the area, especially in dynamic environments and when an innovation strategy is pursued. These results signal the importance of capabilities in this model, showing that to outperform competitors, HR professionals must not only understand competitive strategy and value the importance of their role in attaining it but also provide the necessary resources and develop the appropriate practices to hire employees with an ideal profile as dictated by the firm's competitive strategy.

References

- Ahammad, M.F., Glaister, K.W. and Gomes, E. (2020), "Strategic agility and human resource management", *Human Resource Management Review*, Vol. 30 No. 1, <https://doi.org/10.1016/j.hrmr.2019.100700>.
- Ananthram, S., Nankervis, A. and Chan, C. (2013), 'Strategic human asset management: evidence from North America', *Personnel Review*, Vol. 42 No. 3, pp. 281–299.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: A review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411–423.
- Armstrong, M. (2006), *Strategic Human Resource Management: A Guide to Action*. (4th ed.), Kogan Page, London.
- Arthur, J.B. (1992), "The link between business strategy and industrial relations systems in American steel minimills", *Industrial and Labor Relations Review*, Vol. 45 No. 3, pp. 488–506.
- Arthur, J.B. and Boyles, T. (2007), "Validating the human resource system structure: A levels-based strategic HRM approach", *Human Resource Management Review*, Vol. 17 No. 1, pp. 77–92.
- Bacon, D.R., Sauer, P.L. and Young, M. (1995), "Composite reliability in structural equations modeling", *Educational and Psychological Measurement*, Vol. 55 No. 3, pp. 394–406.

- 1
2
3 Beltrán-Martín, I., Roca-Puig, V., Escrig-Tena, A.B. and Bou-Llusar, J. C. (2008), "Human
4 resource flexibility as a mediating variable between high performance work systems and
5 performance", *Journal of Management*, Vol. 34 No. 5, pp. 581–599.
- 6 Bird, A. and Beechler, S. (1995), "Links between business strategy and human resource
7 management strategy in US-based Japanese subsidiaries: An empirical investigation",
8 *Journal of International Business Studies*, Vol. 26 No. 1, pp. 23–46.
- 9 Boselie, J.P., Dietz, G. and Boon, C. (2005), "Commonalities and contradictions in research on
10 human resource management and performance.", *Human Resource Management Journal*,
11 Vol. 15 No. 3, pp. 67–94.
- 12 Boxall, P. and Macky, K. (2009), "Research and theory on high-performance work systems:
13 progressing the high-involvement stream", *Human Resource Management Journal*, Vol. 19
14 No. 1, pp. 3–23.
- 15 Boyd, B.K., Gove, S. and Hitt, M.A. (2005), "Construct measurement in strategic management
16 research: illusion or reality?", *Strategic Management Journal*, Vol. 26 No. 3, pp. 239–
17 257.
- 18 Bratton, J. (2007), Strategic human resource management. In Bratton, J. and Gold, J. (Eds.),
19 *Human Resource Management*, Palgrave Macmillan, London, pp. 37–71.
- 20 Chandler, A.D. (1962), *Strategy and Structure*, MIT Press, Boston.
- 21 Chen, I.J. and Paulraj, A. (2004), "Towards a theory of supply chain management: The constructs
22 and measurements", *Journal of Operations Management*, Vol. 22 No. 2, pp. 119–150.
- 23 Cleveland, G., Schroeder, R.G. and Anderson, J.C. (1989), "A theory of production competence",
24 *Decision Sciences*, Vol. 20 No. 4, pp. 655–668.
- 25 Combs, J., Liu, Y., Hall, A. and Ketchen, D. (2006), "How much do high-performance work
26 practices matter? A meta-analysis of their effects on organizational performance", *Personnel*
27 *Psychology*, 59 No. 3, pp. 501–528.
- 28 Delery, J.E. and Doty, D.H. (1996), "Modes of theorizing in strategic human resource
29 management: Tests of universalistic, contingency, and configurational performance
30 predictions", *The Academy of Management Journal*, Vol. 39 No. 4, pp. 802–835.
- 31 Droge, C., Vickery, S. and Markland, R. E. (1994), "Sources and outcomes of competitive
32 advantage: an exploratory study in the furniture industry", *Decision Sciences*, Vol. 25 No.
33 5/6, pp. 669–689.
- 34 González-Benito, J. (2007), "A theory of purchasing's contribution to business performance",
35 *Journal of Operations Management*, Vol. 25 No. 4, pp. 901–917.
- 36 González-Benito, J., Reis da Rocha, D. and Queiruga-Dios, D.A. (2010). "The environment as a
37 determining factor of purchasing and supply strategy: An empirical analysis of Brazilian
38 firms", *International Journal of Production Economics*, Vol. 124 No. 1, pp. 1–10.
- 39 González-Benito, J. and Suárez-González, I. (2010), "A study of the role played by
40 manufacturing strategic objectives and capabilities in understanding the relationship
41 between Porter's generic strategies and business performance", *British Journal of*
42 *Management*, 21, pp. 1027–1043.
- 43 González-Benito, J., Aguinis, H., Boyd, B. K., and Suárez-Gonzalez, I. (2012), "Coming to
44 consensus on strategic consensus: A mediated moderation model of consensus and
45 performance", *Journal of Management*, Vol. 38, No. 6, pp. 1685–1714.
- 46 Guest, D.E. (2011), "Human resource management and performance: Still searching for some
47 answers", *Human Resource Management Journal*, Vol. 21, No. 1, pp. 3–13.
- 48 Gunnigle, P. and Moore, S. (1994), "Linking business strategy and human resource management:
49 Issues and implications", *Personnel Review*, Vol. 23 No. 1, pp. 63–84.
- 50
51
52
53
54
55
56
57
58
59
60

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2
3 Harley, B. (2015), "The one best way? 'Scientific' research on HRM and the threat to critical
4 scholarship", *Human Resource Management Journal*, Vol. 25 No. 4, pp. 399–407.
- 5 Hendry, C. and Pettigrew, A. (1986), "The practice of strategic human resource management",
6 *Personnel Review*, Vol. 15 No. 5, pp. 3–8.
- 7 Hofer, C. and Schendel, D. (1978), *Strategy Formulation: Analytical Concepts*. West Publishing
8 Company, Eagan, MN.
- 9
10 Homburg, C., Krohmer, H. and Workman Jr., J. P. (1999), "Strategic consensus and
11 performance: the role of strategy type and market- related dynamism", *Strategic*
12 *Management Journal*, Vol. 20 No. 4, pp. 339–357.
- 13 Huang, T. (2001), "The effects of linkage between business and human resource management
14 strategies", *Personnel Review*, Vol. 30 No. 2, pp. 132–151.
- 15 Huselid, M. A. (1995), "The impact of human resource management practices on turnover,
16 productivity, and corporate financial performance", *The Academy of Management*
17 *Journal*, Vol. 38 No. 3, pp. 635–672.
- 18 Huselid, M.A. and Becker, B.E. (2000), "Comment of measurement on measurement error in
19 research on human resources and firm performance: How much error is there in research
20 on human resources and firm performance", *Personnel Psychology*, Vol. 53 No. 4, pp.
21 835–854.
- 22
23 Ichniowski, C. and Shaw, K. (1999), "The effect of human resource management systems on
24 economic performance: An international comparison of US and Japanese plants",
25 *Management Science*, Vol. 45 No. 5, pp. 704–721.
- 26 Jackson, S.E., Schuler, R.S. and Rivero, J.C. (1989), "Organizational characteristics as predictors
27 of personnel practices", *Personnel Psychology*, Vol. 42 No. 4, pp. 727–786.
- 28 Jayaram, J., Droge, C. and Vickery, S. K. (1999), "The impact of human resource management
29 practices on manufacturing performance", *Journal of Operations Management*, Vol. 18
30 No. 1, pp. 1–20.
- 31
32 Kepes, S. and Delery, J. E. (2007), "HRM systems and the problem of internal fit", in Boxall, P.,
33 Purcell, J. and Wright, P.M. (Eds.), *The Oxford Handbook of Human Resource*
34 *Management*, Oxford University Press, London, pp. 385–404.
- 35 Ketkar, S. and Sett, P.K. (2010), "Environmental dynamism, human resource flexibility, and firm
36 performance: analysis of a multi-level causal model", *International Journal of Human*
37 *Resource Management*, Vol. 21 No. 8, pp. 1173–1206.
- 38 Kuipers, B.S. and Giurge, L.M. (2016), "Does alignment matter? The performance implications
39 of HR roles connected to organizational strategy", *The International Journal of Human*
40 *Resource Management*, Vol. 28 No. 22, pp. 1–23.
- 41
42 Lee, F.-H., Lee, T.-Z. and Wu, W.-Y. (2010), "The relationship between human resource
43 management practices, business strategy and firm performance: Evidence from steel
44 industry in Taiwan", *The International Journal of Human Resource Management*, Vol. 21
45 No. 9, pp. 1351–1372.
- 46
47 Legge, K (1995), *Human Resource Management: Rhetorics and Realities*. Macmillan,
48 Basingstoke, UK.
- 49
50 Lengnick-Hall, C.A. and Lengnick-Hall, M.L. (1988), "Strategic human resources management:
51 A review of the literature and a proposed typology", *Academy of Management Review*,
52 Vol. 13 No. 3, pp. 454–470.
- 53
54 Lepak, D.P. and Snell, S.A. (1999), "The human resource architecture: Toward a theory of
55 human capital and development allocation", *The Academy of Management Review*, Vol.
56 24 No. 1, pp. 31–48.
- 57
58
59
60

- Lepak, D.P. and Snell, S.A. (2002), "Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations", *Journal of Management*, Vol. 28 No. 4, pp. 517–543.
- Miller, A. and Dess, G. G. (1993), "Assessing Porter's (1980) model in terms of its generalizability, accuracy and simplicity", *Journal of Management Studies*, Vol. 30 No. 4, pp. 553–585.
- Miller, D. and Friesen, P.H. (1983), "Strategy-making and environment: The third link", *Strategic Management Journal*, Vol. 4, No. 3, pp. 221–235.
- Mintzberg, H. (1978), "Patterns in strategy formation", *Management Science*, Vol. 24 No. 9, pp. 934–948.
- Morrison, A. J. and Roth, K. (1992), "A taxonomy of business-level strategies in global industries", *Strategic Management Journal*, Vol. 13 No. 6, pp. 399–417.
- Nayyar, P. R. (1993), "On the measurement of competitive strategy: evidence from a large multiproduct U.S. firm", *Academy of Management Journal*, Vol. 36 No. 6, pp. 1652–1669.
- Porter, M. E. (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, New York.
- Posthuma, R.A., Campion, M.C., Masimova, M. and Campion, M.A. (2013), "A high performance work practices taxonomy: Integrating the literature and directing future research", *Journal of Management*, Vol. 39 No. 5, pp. 1184–1220.
- Quijano, S., Cornejo, J.M., Yepes, M. and Flores, R. (2005), "La calidad de los procesos y recursos humanos (CPRH) como componente de la calidad del sistema humano de la organización: conceptualización y medida", *Anuario de psicología / The UB Journal of psychology*, Vol. 36 No. 1, pp. 7–36.
- Robinson, R.B. and Pearce, J.A. (1988), "Planned patterns of strategic behavior and their relationship to business-unit performance", *Strategic Management Journal*, Vol. 9 No. 1, pp. 43–60.
- Sanchez, R. (1995), "Strategic flexibility in product competition", *Strategic Management Journal*, Vol. 16 No. S1, pp. 135–159.
- Sanz-Valle, R., Sabater-Sanchez, R. and Aragon-Sanchez, A. (1999), "Human resource management and business strategy links: an empirical study", *The International Journal of Human Resource Management*, Vol. 10 No. 4, pp. 655–671.
- Schuler, R.S. and Jackson, S.E. (1987), "Linking competitive strategies with human resource management practices", *The Academy of Management Executive*, Vol. 1 No. 3, pp. 207–219.
- Sheehan, C., De Cieri, H., Cooper, B. and Shea, T. (2016), "Strategic implications of HR role management in a dynamic environment", *Personnel Review*, Vol. 45 No. 2, pp. 353–373.
- Smith, T. and Reece, J. (1999), "The relationship of strategy, fit, productivity, and business performance in a services setting", *Journal of Operations Management*, Vol. 17 No. 2, pp. 145–161.
- Snell, S. and James, D. (1992), "Integrated manufacturing and human resource management: A human capital perspective", *Academy of Management Journal*, Vol. 35 No. 3, pp. 467–504.
- Sutcliffe, K.M. and Huber, G.P. (1998), "Firm and industry as determinants of executive perceptions of environment", *Strategic Management Journal*, Vol. 10 No. 8, pp. 793–807.
- Úbeda-Carcía, M., Claver-Cortés, E., Marco-Lajara, B and Zaragoza-Sáez, P. (2017), "Human resource flexibility and performance in the hotel industry", *Personnel Review*, Vol. 46

- No. 4, pp. 824–846.
- Ulrich, D. (1987), “Organizational capability as a competitive advantage: Human resource professionals as strategic partners”, *Human Resource Planning*, Vol. 10 No. 4, pp. 169–184.
- Ulrich, D. and Lake, D. (1991), “Organizational capability: creating competitive advantage”, *Academy of Management Executive*, Vol. 5 No. 1, pp. 77–92.
- Venkatraman, N. (1990), “Performance implications of strategic coalignment: a methodological perspective”, *Journal of Management Studies*, Vol. 27 No. 1, pp. 19–41.
- Venkatraman, N. and Ramanujam, V. (1987), “Measurement of business economic performance: An examination of method convergence”, *Journal of Management*, Vol. 13 No. 1, pp. 109–122.
- Von Bertalanffy, L. (1950), “The theory of open systems in physics and biology”, *Science*, Vol. 111 No. 2872, pp. 23–29.
- Wang, D. and Shyu, C. (2008), “Will the strategic fit between business and HRM strategy influence HRM effectiveness and organizational performance?” *International Journal of Manpower*, Vol. 29 No. 2, pp. 92–110.
- Ward, P.T. and Duray, R. (2000), “Manufacturing strategy in context: environment, competitive strategy and manufacturing strategy”, *Journal of Operations Management*, Vol. 18, pp. 123–138.
- Weir, K. A., Kochhar, A.K., LeBeau, S.A. and Edgeley, D.G. (2000), “An Empirical Study of the Alignment between Manufacturing and Marketing Strategies”, *Long Range Planning*, Vol. 33 No. 6, pp. 831–848.
- Wilden, R., Gudergan, S.P., Nielsen, B.B. and Lings, I. (2013), “Dynamic Capabilities and Performance: Strategy, Structure and Environment”, *Long Range Planning*, Vol. 46 No. 1–2, pp. 72–96.
- Wright, P.M. and Boswell, W.R. (2002), “Desegregating HRM: A review and synthesis of micro and macro human resource management research”, *Journal of Management*, Vol. 28 No. 3, pp. 247–276.
- Wright, P.M., Gardner, T.M., Moynihan, L.M., Park, H.J., Gerhart, B. and Delery, J.E. (2001), “Measurement error in research on human resources and firm performance: Additional data and suggestions for future research”, *Personnel Psychology*, Vol. 54 No. 4, pp. 875–901.
- Wright, P.M. and McMahan, G. C. (1992), “Theoretical perspectives for strategic human resource management”, *Journal of Management*, Vol. 18 No. 2, pp. 295–320.
- Wright, P.M. and Snell, S.A. (1988), “Toward a unifying framework for exploring fit and flexibility in strategic human resource management”, *Academy of Management Journal*, Vol. 23 No. 4, pp. 756–772.
- Wright, P.M. and Snell, S.A. (1991), “Toward an integrative view of strategic human resource management”, *Human Resource Management Review*, Vol. 1 No. 3, pp. 203–225.
- Youndt, M. A., Snell, S. A., Dean, J. W. and Lepak, D. P. (1996), “Human resource management, manufacturing strategy, and firm performance”, *The Academy of Management Journal*, Vol. 39 No. 4, pp. 836–866.
- Zedeck, S. and Cascio, W.F. (1984), “Psychological issues in personnel decisions”, *Annual Review of Psychology*, Vol. 35 No. 1, pp. 461–518.

TABLES

Table 1. Confirmatory factor analysis of differentiation competitive strategy

Differentiation competitive strategy		Mean (SD)	Weight	Alfa	Omega	Weighted Omega	Goodness of fit
Quality differentiation	To develop a good image of products and to increase the company's reputation	6.48 (0.778)	0.804 ***	0.875	0.877	0.885	χ^2 (p value)= 15.629 (0.270) $\chi^2/df= 1.202$
	To offer products with superior quality	6.44 (0.837)	0.890 ***				
	To ensure that our products are a benchmark in the market	6.46 (0.862)	0.820 ***				
Innovation differentiation	To foster the research and development of new products	5.94 (1.183)	0.838 ***	0.883	0.888	0.913	RMSEA= 0.032 CFI= 0.997
	To continually incorporate new technologies into the company's products and processes	5.90 (1.149)	0.846 ***				
	To be the first on the market in introducing innovations	5.58 (1.346)	0.911 ***				
	To offer products adapted to the particular needs of each one of our clients	6.06 (1.132)	0.649 ***				

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table 2. Confirmatory factor analysis of the HRM objectives and HRM capabilities

		HRM objectives					HRM capabilities				
		Mean (SD)	Weight	Alfa	Omega	Weighted Omega	Mean (SD)	Weight	Alfa	Omega	Weighted Omega
Quality	High average employee expertise	5.67 (1.030)	0.561 ***	0.826	0.552	0,845	4.90 (1.052)	0.654 ***	0.899	0.649	0.904
	Reduction of errors attributed to employees	5.85 (1.040)	0.451 ***				4.83 (1.071)	0.714 ***			
	Resolution of problems by employees	5.91 (0.984)	0.631 ***				4.98 (1.162)	0.786 ***			
	Employees' involvement with their work	6.39 (0.844)	0.697 ***				5.13 (1.194)	0.764 ***			
	Customer satisfaction-oriented employees	6.13 (1.063)	0.632 ***				4.99 (1.309)	0.783 ***			
	Improvements in work introduced by employees	5.74 (1.053)	0.728 ***				4.71 (1.259)	0.809 ***			
	Employees' human capital development	5.94 (1.039)	0.754 ***				4.94 (1.117)	0.736 ***			
Flexibility	Breadth in the range of knowledge and skills of employees, enabling them to perform multiple tasks	6.04 (0.920)	0.682 ***	0.881	0.691	0,886	5.09 (1.010)	0.761 ***	0.905	0.738	0.908
	Updating of employees' knowledge and skills	5.96 (0.876)	0.742 ***				4.97 (1.022)	0.836 ***			
	Employee autonomy to configure the set of tasks performed	5.64 (1.126)	0.696 ***				4.74 (1.053)	0.814 ***			
	Employee initiative to promote changes	5.65 (1.176)	0.754 ***				4.59 (1.173)	0.773 ***			

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	HR management system capability to assign employees to different jobs or tasks according to their abilities	5.64 (1.189)	0.761 ***	4.79 (1.255)	0.747 ***
	Adaptability of employees to new work situations	5.93 (1.069)	0.817 ***	4.99 (1.145)	0.768 ***
Goodness of fit	χ^2 (p value)= 180.956 (0.000) χ^2 /df= 2.827 RMSEA= 0.095 CFI= 0.903			χ^2 (p value)= 226.546 (0.000) χ^2 /df= 3.540 RMSEA= 0.112 CFI= 0.905	
+p<0.10; *p<0.05; **p<0.01; ***p<0.001					

Table 3. Confirmatory factor analysis of performance

Firm performance		Mean (SD)	Weight	Alfa	Omega	Weighted Omega	Goodness of fit
Commercial performance	Reputation and image	5.41 (1.030)	0.770 ***	0.837	0.906	0.958	χ^2 (p value)= 42.295 (0.002)
	Customer satisfaction	5.64 (0.885)	0.652 ***				
	Market share (of the main product)	5.19 (1.157)	0.699 ***				
	Sales growth	5.12 (1.156)	0.960 ***				
	Success of new product launches	5.10 (1.110)	0.945 ***				
Financial performance	Profits as a percent of sales	4.60 (1.112)	0.730 ***	0.952	0.792	0.798	RMSEA= 0.078 CFI= 0.976
	Return on assets	4.77 (1.059)	0.713 ***				
	Return on equity	4.80 (1.080)	0.800 ***				

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table 4. Confirmatory factor analysis of dynamism

		Mean (SD)	Weight	Alfa	Omega	Weighted Omega	Goodness of fit
Dynamism	The technology in our industry has changed very frequently	4.95 (1.321)	0.626 ***	0.731	0.732	0.742	χ^2 (p value)= 2.777 (0.249)
	Tastes and preferences of customers in our industry have changed very frequently	4.85 (1.128)	0.660 ***				$\chi^2/df=$ 1.389
	Strategies/commercial activities of our key competitors have changed very frequently	5.10 (1.065)	0.714 ***				RMSEA= 0.044
	Regulations and legislation applicable to our industry have changed very often	4.88 (1.298)	0.545 ***				CFI= 0.995

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table 5. Correlations between the model's variables

		1	2	3	4	5	6	7	8
Competitive strategy	1. Differentiation in quality								
	2. Differentiation in innovation	,68**							
Objectives of the HRM strategy	3. Quality	,38**	,33**						
	4. Flexibility	,40**	,32**	,68**					
Capabilities of the HRM strategy	5. Quality	,44**	,45**	,47**	,36**				
	6. Flexibility	,41**	,39**	,34**	,41**	,72**			
Performance	7. Commercial performance	,37**	,49**	,14*	,15*	,45**	,44**		
	8. Financial performance	,28**	,30**	,11	,18*	,38**	,37**	,52**	
Dynamism	9. Dynamism	,17*	,20**	,19**	,10	,17*	,24**	,10	,02

*p , 0.05 and **p , 0.01 (two-tailed); Spearman's correlation coefficients

Table 6. Goodness-of-fit indexes for the two sub-models

	χ^2 (p value)	χ^2/df	RMSEA	RMR	GFI	AGFI	CFI
Sub-model quality	558.949 (0.000)	2.07	0.073	0.085	0.821	0.784	0.897
Sub-model innovation	612.367 (0.000)	2.48	0.085	0.144	0.806	0.764	0.883

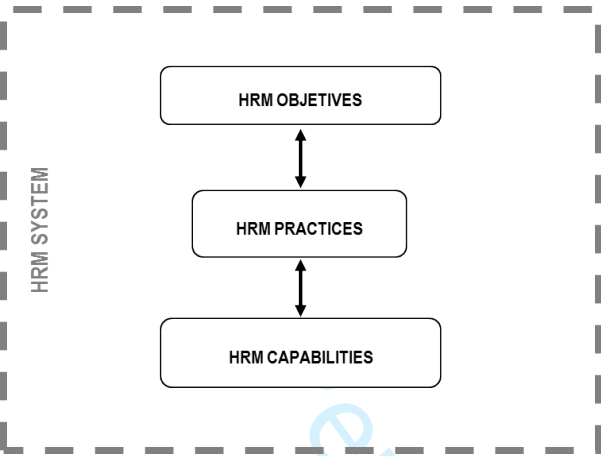
Table 7. Direct effects on commercial performance

	Competitive Strategy	HR objectives
Sub-model quality	0.339***	-0.275*
Sub-model innovation	0.511***	-0.183*

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

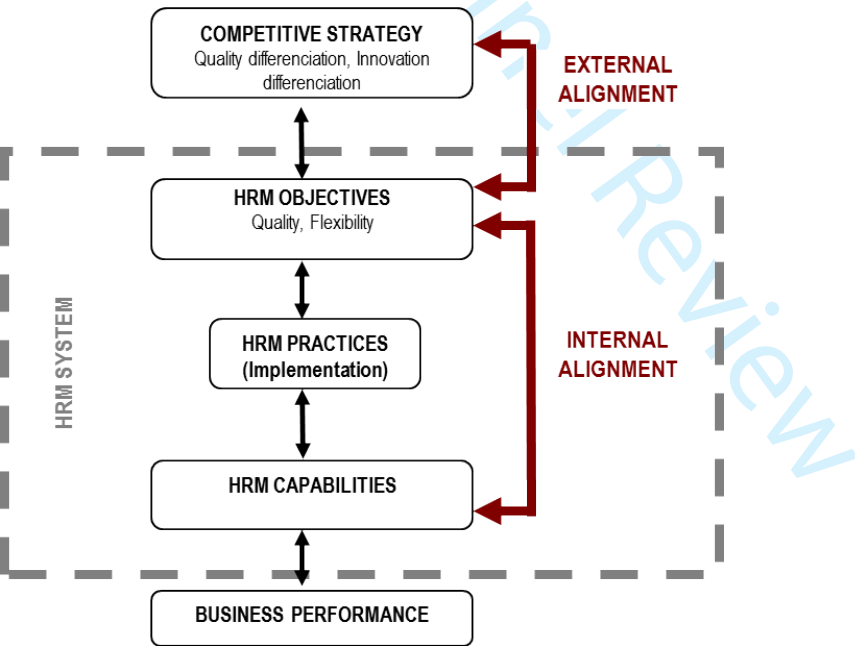
FIGURES

Figure 1. Elements of the HRM system



Source: Own elaboration

Figure 2. Strategy from the perspective of alignment



Source: Own elaboration

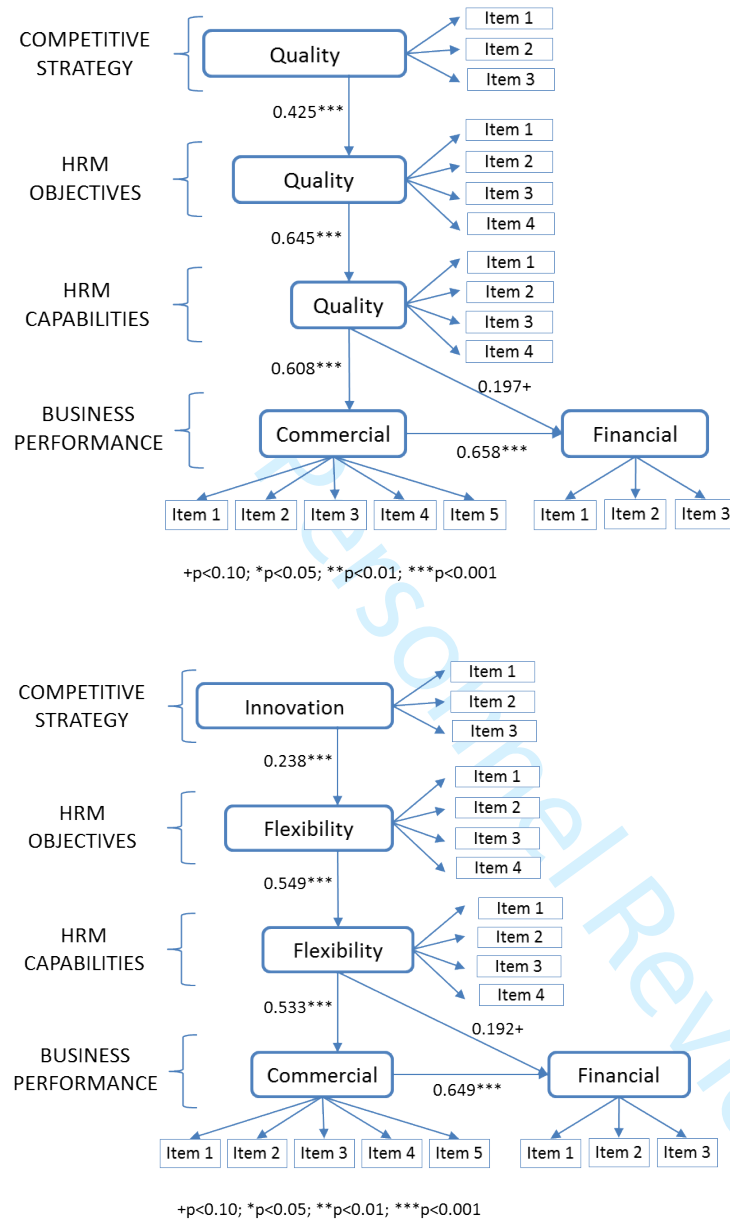
Figure 3. Proposed sub-models

Figure 4. Quality sub-model with direct effects

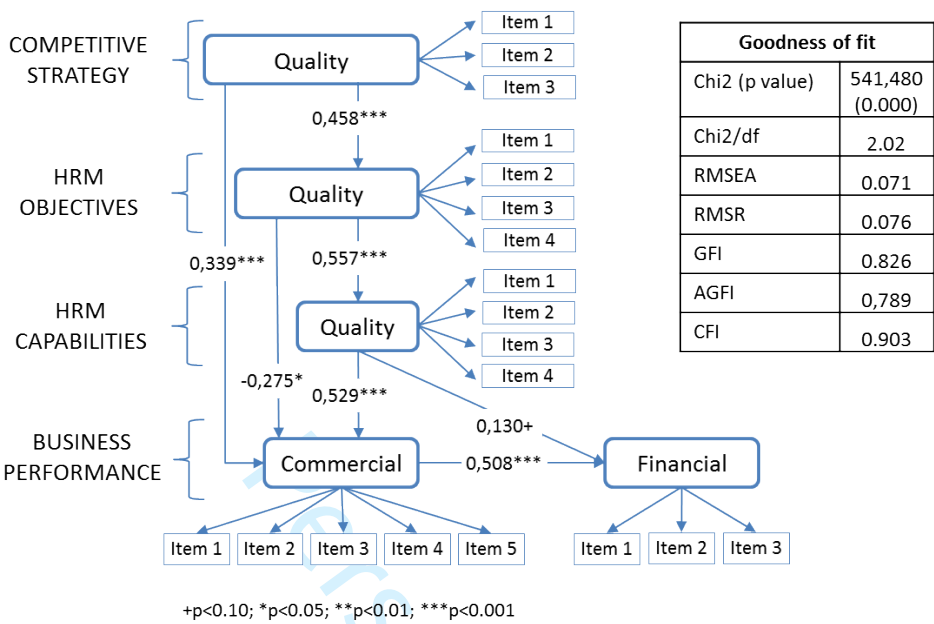
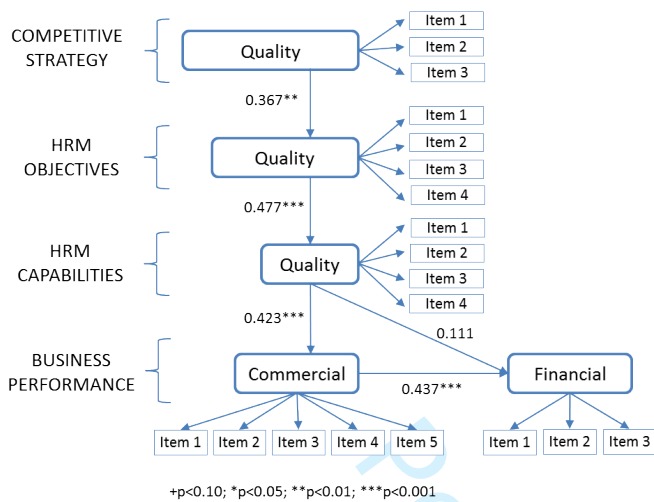
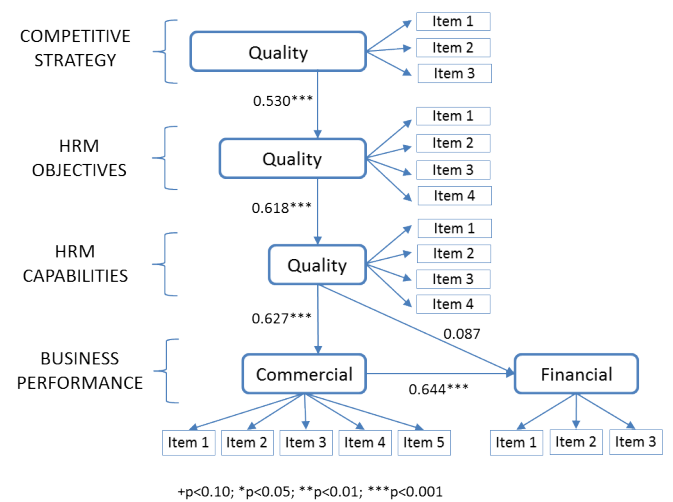


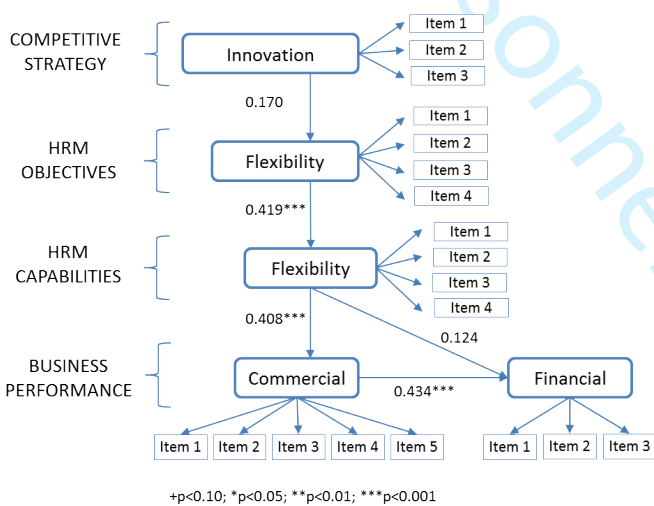
Figure 5. Subgroup analysis



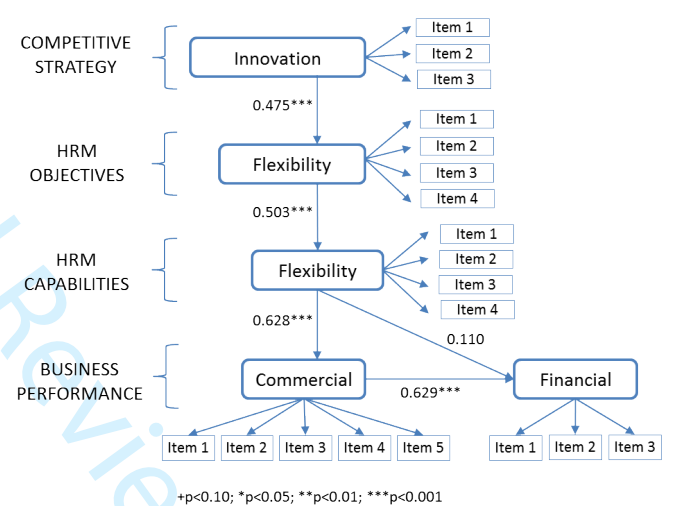
5a) Quality. High dynamism



5b) Quality. Low dynamism



5c) Innovation. High dynamism



5d) Innovation. Low dynamism