

# High Performance Work Systems and Employee Outcomes: A Meta-analysis for Future Research

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**CeBER Working Papers** 

No. 1 2019

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**Abstract** 

This paper consists of a literature review of the impact of High Performance Work

Systems (HPWS) on employee outcomes such as job satisfaction and organizational

affective commitment, based on employees' perceptions. After reviewing the strategic

importance of Human Resources Management, we draw on theories like AMO and Social

Exchange to understand the impact of HPWS on employee outcomes, suggesting possible

relations that can shed some light into the "blackbox" of HPWS-performance linkage.

Keywords: High Performance Work Systems; Employee Outcomes; AMO Theory;

Social Exchange

JEL classification: O15; M12; M54

#### 1. Introduction

Firms strive to achieve sustained competitive advantages. But how can they do that? According to Barney (1991, p. 102), "A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy". Following the Resource Based View (RBV), the Human Resources (HR) of a firm can be a source of sustained competitive advantage, thus, they must be properly managed (Barney, 1991; Fu et al., 2017; Messersmith & Guthrie, 2010; P. M Wright & McMahan, 1992).

High Performance Work Systems (HPWS) consist of a group of interconnected Human Resources Management practices, such as comprehensive recruitment and selection, design to enhance employee and firm performance outcomes, through the improvement of workforce competence, attitudes and motivation (Huselid, 1995). One of the main critics on the HPWS literature is its highly management-centric point, ignoring both employees' experience and perception of HPWS (Boselie, Dietz, & Boon, 2005; M. Zhang, Di Fan, & Zhu, 2014).

In order to explain the HPWS-performance linkage and following Ability, Motivation and Opportunity (AMO) (Appelbaum, Bailey, Berg, Kalleberg, & Cornell, 2000) and Social Exchange Theories (Blau, 1964), we need to understand what impact HPWS have on employee outcomes, since HPWS first influence employees attitudes and behaviours, which in turn affect organizational performance (Boselie et al., 2005; Guest, 2011; Katou & Budhwar, 2010; Mihail & Kloutsiniotis, 2016; Purcell & Kinnie, 2007; Úbeda-García, Claver-Cortés, Marco-Lajara, Zaragoza-Sáez, & García-Lillo, 2018).

More research is needed before HPWS and the HPWS-performance linkage can be well understood (M. Zhang et al., 2014). Therefore, the main objective of this paper is to address some of the gaps in the HPWS literature; specifically, we suggest several hypothesis linking HPWS to employee outcomes like innovative work behaviour, job satisfaction and intention to leave.

The paper is organized as follows: on section 2 we will have the literature review, arguing the strategic importance of Human Resources and then elaborating on the concept of High Performance Work Systems, highlighting specific frameworks (AMO, PIRK,

Social Exchange), related concepts (High Commitment Work Systems and High Involvement Work Systems), different views of the impact of HPWS on employee outcomes and theoretical perspectives under which HPWS have been studied. On section 3 we will suggest some study hypothesis relating HPWS with different employee outcomes that can be used in future research.

#### 2. Literature Review

#### I. Resource Based View

The Resource Based View (RBV) emphasizes the internal resources controlled by a firm as a source of sustained competitive advantage (Barney, 1991; Fu et al., 2017; Patrick M. Wright & Mcmahan, 1992). Barney considered firm resources as including all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable it to conceive of and implement strategies that improve its efficiency and effectiveness. Firm resources can be classified into three categories: physical capital resources (physical technology, equipment, geographic location...), human capital resources (training, experience, intelligence...) and organizational capital resources (formal reporting structure, formal and informal reporting structure) (Barney, 1991). Sustained competitive advantage can only occur when there is heterogeneity and immobility of firm resources.

Heterogeneity refers to the fact that there is a difference in the resources possessed across firms. For this heterogeneity to be long lasting, resources must be immobile. Resource immobility refers to the difficulty of resource transference from one firm to another (Barney, 1991; Lado & Wilson, 1994; Patrick M. Wright & Mcmahan, 1992). In order for heterogeneous resources to be a source of competitive advantage, they must be (a) valuable, enabling the exploitation of opportunities or the neutralization of threats in the competitive environment of the firm and (b) rare, meaning that only a small number of firms possess these resources in a particular competitive environment (Barney, 1991; Lado & Wilson, 1994). Regarding the resource immobility, the resources (c) must be imperfectly imitable and (d) there cannot be a strategic equivalent substitute (Barney, 1991; Lado & Wilson, 1994).

Resources are valuable when they enable the firm to create or implement strategies that improve a firms efficiency and effectiveness (Barney, 1991). Resources must be rare.

Valuable common resources provide only competitive parity, ensuring that a firm is not at competitive disadvantage due to the lack of this resources. If the valuable resources are not rare then these resources are possessed by a large number of other firms, enabling them the possibility of exploiting it in the same way, creating and implementing the same strategies, giving no firm the possibility of generating a sustained competitive advantage through the use of this resources (Barney, 1991; Barney & Wright, 1998). Valuable and rare resources, can only be sources of sustained competitive advantage if they cannot be obtained by other firms, meaning that they are imperfectly imitable. This can happen because of unique historical conditions, causal ambiguity and social complexity. Regarding unique historical conditions, Barney states that the ability of firms to acquire and exploit some resources depend upon their place in time and space and when this particular time in history passes. He gives the example of a "unique and valuable organizational culture that emerged in the early stages of a firm's history may have an imperfectly imitable advantage over firms founded in another historical period". Causal Ambiguity exists when the connection between the resources of a firm and a firm's competitive advantage is poorly understood. This causes difficulties when a firm wants to imitate other firm's strategies through the imitation of its resources, because they don't know which ones they should imitate. The level of causal ambiguity must be the same for the firms that want to imitate and the ones that are the subject of imitation, otherwise, the gap of knowledge, linking the resources and the competitive advantage, among firms might be eliminated, for example, by hiring personnel from the company with the competitive advantage. Social Complexity can constrain significantly the imitation of a firm's resources. Interpersononal relationships between managers in a firm, a firm's culture, a firm's reputation among suppliers and costumers, are examples given by Barney to illustrate social complex resources that although have a very clear connection to the competitive advantage, they are so complex that a sistematic management or influence of these resources is impossible, making them imperfectly imitable (Barney, 1991; Patrick M. Wright, McMahan, & McWilliams, 1994).

Even if the resource is valuable, rare and imperfectly imitable, but other firms can use a strategically equivalent valuble resource, which enables them to use the same strategies, that is not rare nor imperfectly imitable, then this resource cannot be source of sustained competitive advantage. If a firm has a valuable, rare and imperfectly imitable resource, but other firms have acess to a strategically equivalent resource, then these other firms

can implement the same strategies in a different way. If these substitute resources are not rare nor imperfectly imitable, then numerous firms will have acess to these resources and will be able to implement the same strategies and those same strategies will not generate sustained competitive advantage (Barney, 1991; Barney & Wright, 1998).

## **II.** Importance of Human Resources

As recognized by Barney, Human Resources are one of the three categories of resources that a firm has and that can be a source of competitive advantage. Wright, MacMahan and McWilliams, argued that human resources have the four requirements of the RBV to be a source of sustained competitive advantage (Barney, 1991; Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994). They defined Human Resources as the pool of human capital under the firm's control in a direct employment relationship (Barney, 1991; Patrick M. Wright et al., 1994).

Regarding the valuable requirement, Human Resources add value to a firm, because there is a heterogeneous demand and supply for labour. Firms have jobs that require different skills and individuals also differ in the skills they possess and in the level of those skills; the variance in contribution by the individuals shows that Human Capital can indeed create value for the firm (Steffy & Maurer, 1988; Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994). Firms that have Human Resources with high ability levels, possess more valuable human resources than their competitors. Since ability is normally distributed, Human Resources with high ability are rare (Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994).

Firms unique histories have an impact on their culture and norms, which influence their Human Resources (Patrick M. Wright et al., 1994). This influence can be positive, for example, making individuals work towards the organization goals, or negative, doing the opposite, either way this historical conditions that affect Human Resources are hard to imitate, making them imperfectly imitable (Patrick M. Wright et al., 1994). Causal Ambiguity also affect HR. The output of team production is not the sum of the cooperating parts, this makes impossible to identify the source of competitive advantage that arises from team production. Even if competing firms tried to assemble a similar team, it is unlikely that they could assemble one with the same atribbutes and imitate the competitive advantage (Patrick M. Wright et al., 1994). Human resources interaction

create very specific relations highly complex that develop over time and are very dificult to imitate (Barney, 1991; Patrick M. Wright et al., 1994). Even if a competing firm wanted to hire the human resources of another firm, in order to imitate its sustained competitive advantage, that wouldn't be that simple. There are transaction costs to the human resources to move from one job to other (Patrick M. Wright et al., 1994). Causal ambiguity and social complexity make it very hard to understand which personnel are responsible the sustained competitive advantage. The Human Resource effectiveness might be dependable of the unique historical conditions of the firm. In conclusion, Human Resources are imperfectly imitable (Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994).

Only valuable, rare, inimitable and non-substitutable resources can substitute Human Resources. Even if a competing firm develops a new technology that provides a productivity increase greater than the productivity difference resulting of the different Human Resources, technology is likely to be imitated, for example, by purchase, and once this is done, Human Resources would once again become a source of sustained competitive advantage (Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994).

Other sources of competitive advantage such as natural resources, technology and economies of scale, on which competitive advantage was built in the past, although valuable to a firm, have become easier to imitate, therefore less relevant for the creation of sustained competitive advantage. Even if a new technology is developed that only one firm has access to, other firms can try to imitate it, and although in the mean time the firm that developed it has a competitive advantage, once competitors can imitate it, it is no longer a source for competitive advantage, which doesn't classify it as a source of sustained competitive advantage (B. E. Becker & Huselid, 1998; B. Becker & Gerhart, 1996; Guthrie, Flood, Liu, & MacCurtain, 2009; Lado & Wilson, 1994; Pfeffer, 1995; Steigenberger, 2013; Patrick M. Wright & Mcmahan, 1992). This makes Human Resources specially important as a source of sustained competitive advantage, because compared with other resources, they are very hard to imitate (Barney, 1991; B. E. Becker & Huselid, 1998; B. Becker & Gerhart, 1996; Patrick M. Wright & Mcmahan, 1992; Patrick M. Wright et al., 1994). Supporting this view, there are papers that state that nowadays there is the dominant view that the success of firms is mainly derived from the firm's Human Resources (Mihail & Kloutsiniotis, 2016; B. Zhang & Morris, 2014).

# III. Human Resource Management

In order to have a sustained competitive advantage, the mere possession of resources is not enough. Resources need to be properly managed so that they can create value to the firm (Fu et al., 2017; Messersmith & Guthrie, 2010). The way Human Resources are managed provides a potential source of sustainable competitive advantage (B. E. Becker & Huselid, 1998; Combs, Liu, Hall, & Ketchen, 2006; Guest, 1987; Patrick M. Wright & Mcmahan, 1992; N. Wu, Hoque, Bacon, & Bou Llusar, 2015).

The field of Human Resource Management (HRM) includes everything associated with the management of employment relations within a firm (Boxall & Purcell, 2000), which consists in various practices used to manage people in organizations (Patrick M. Wright & Mcmahan, 1992). Practices like recruitment, selection, performance appraisal, training, incentive compensation, internal promotions, quality circles and job rotation are examples of Human Resource Management Practices (Combs et al., 2006; Huselid, 1995; Pfeffer, 1998; Schuler & MacMillan, 1984; Patrick M. Wright & Mcmahan, 1992).

Following the behavioral perspective, the use of HRM practices allows the firm to elicit and control behaviors and attitudes of their employees, managing them (García-Chas, Neira-Fontela, & Castro-Casal, 2014; Jackson, Schuler, & Rivero, 1989). Wright, Dunford, & Snell (2001), recognize individuals as cognitive and emotional beings who possess free will, which enables them to make decisions about their behaviours. Even within prescribed organizational roles employees exhibit discretionary behaviours that may affect the firm in a positive or negative way. For example, "a machine operator who hears a "pinging" has discretion to simply run the machine until something breaks or to fix the problem immediately, and thus save significant downtime" (Patrick M. Wright et al., 2001, p.10)If not properly managed, valuable Human Resources may not have strategic impact. Competitive advantage can only be achieved if the firm's Human Resources choose to engage in behaviours that benefit the firm.

According to Bailey (1993) Human Resources often perform below their potential because they possess discretionary use of their time and talent. He argued that HRM practices can have an impact on employees discretionary efforts, influencing their knowledge, skills and abilities (KSA) and their motivation, while the organizational structures enable them to control how their roles are performed (Combs et al., 2006; Huselid, 1995). For example, recruitment and selection procedures will have influence on the quality and type of skills new employees possess, while training will have an

impact on their development, influencing employees KSA's (Bailey, 1993; Huselid, 1995; Jiang, Lepak, Hu, & Baer, 2012; Subramony, 2009). The use of performance appraisals linked with incentives and compensation and internal promotions are examples of HRM pratices that can motivate employees (Bailey, 1993; Combs et al., 2006; Huselid, 1995; Jiang et al., 2012; Subramony, 2009). The contribution of highly skilled and motivated employees can be enhanced through organizational structures or tools, such as quality circles or job rotation, that give employees the opportunity to participate in the improvement of how their own jobs are performed (Bailey, 1993; Combs et al., 2006; Huselid, 1995).

# IV. Strategic Human Resource Management

Strategic Human Resource Management (SHRM), as defined by Wright and MacMahan (1992), is "the pattern of planned human resource deployments and activities intended to enable an organization to achive its goals" (Patrick M. Wright & Mcmahan, 1992, p. 298). This concept integrates the HRM with the Strategic Management field, considering the HRM practices as potential source of sustained competitive advantage (M. R. Allen & Wright, 2007; Boxall & Purcell, 2000). This field focus on the organizational performance rather than on individual performance and how it can create sustainable competitive advantage that in turn creates better performance outcomes (B. E. Becker & Huselid, 2006; Boselie et al., 2005; Bowen & Ostroff, 2004).

SHRM differs from traditional HRM, focusing on the system or bundle of HRM practices emphasizing the vertical and horizontal fit of the HRM practices system. Vertical fit considers the alignment of the HRM practices with the overall strategy of the organization (Patrick M. Wright & Mcmahan, 1992). The basic premise is that organizations that adopt different strategies also use different sets of HRM practices to influence and align employees attitudes and behaviours with the strategic goals of the organization (Bartram, Karimi, Leggat, & Stanton, 2014; Delery & Doty, 1996; Schuler & Jackson, 1987; Patrick M. Wright & Mcmahan, 1992). Conversly, the same set of HRM practices will not be equally efective in organizations with different business strategies (Guest, Michie, Conway, & Sheehan, 2003). This explains the variation of HRM systems between organizations following different business strategies (Delery & Doty, 1996).

Horizontal fit emphasize the coordination and the complementarity between the different HRM practices that constitute the HRM system (Guest et al., 2003; Patrick M. Wright & Mcmahan, 1992). This system or bundle perspective supports the idea that the

implementation of an HRM system incorporating mutually supportive HRM practices is superior to any single practice in achieving sustained competitive advantage (M. R. Allen & Wright, 2007; Fu et al., 2017).

## V. The importance of People or People Management

There are some authors that defend that the source of sustained competitive advantage is in the Human Resources of the firm affected by the HRM system, and not in the HRM system itself (e.g. Huselid, 1995; Takeuchi, Lepak, Wang, & Takeuchi, 2007; Wright & Mcmahan, 1992). Arguing that the Human Resources of a firm satisfy the valuable, rare, inimitable and non-substitutable RBV criteria, they support this idea on the rationale of Wright and MacMahan (1992) and Wright, MacMahan and MacWilliams (1994), where it's argued that high-quality Human Resources are rare, since there is an heterogenous demand and supply of labour, are valuable because of their normally distributed ability, are inimitable in a way that competitive advantage based on Human Resources are characterized by unique historical conditions, causal ambiguity, social complexity and non-substitutability. On the contrary, any individual HR practice could be easily copied by competitors (Patrick M. Wright et al., 2001, 1994; Patrick M. Wright & Mcmahan, 1992). More recently Takeuchi et al. (2007) added that Human Resources are generally embedded in the organization's complex social systems, that may cause it to take firm specific features, making it more useful to that speficific firm; for example, a firm's human resources may have complex interrelationships with other physical, financial, legal or information resources. This also makes the link between the Human Resources and the firm more difficult to explain. The specific features of the HR of a particular firm make it more dificult to be traded, readily imitated or substituted without incurring in significant costs. All this adds to the idea that the HR of a firm are the potential source of sustained competitive advantage and not their HRM practices (Takeuchi et al., 2007). Other authors defend the HRM system as the source of competitive advantage instead of the Human Resources themselves (e.g. B. E. Becker & Huselid, 2006; Fu et al., 2017; Lado & Wilson, 1994). They argue that HR systems (as opposed to individual practices) can meet the four criteria of RBV, valuability, rarity, inimitability and non-substability to be classified as a source of sustained competitive advantage.

Lado & Wilson (1994) stated that contrary to individual practices, the system with all the complementarities and interdependencies among the practices would be unique, causaly ambiguous and sinergistic, making it impossible to imitate (Wright et al., 2001).

Becker & Gerhart (1996) supported this view by stating that a single HRM practice is developded over time in specific circumstances, reflecting the culture and philosofies of a firm and its management. An HRM system is composed by many individual practices, each of them developed under unique historical conditions, which makes it very hard to replicate. The interactions between the practices that compose the HRM system and between the Human Resources of the firm make the system causualy ambigual. Finally, the way the HRM practices are communicated and implemented is influenced by multiple social complex relationships, making it hard to imitate (M. R. Allen & Wright, 2007; B. Becker & Gerhart, 1996). Becker & Huselid (2006) added that the HRM system has a greater potential for inimitability due to its alignment with a firm's strategy and that unlike human capital, the HRM system is immobile. According to the Dinamic Capability Theory, competitive advantage relies on a firm's ability to integrate, build and reconfigure internal and external resources and competencies (Fu et al., 2017; Teece, Pisano, & Shuen, 1997). Following this theory, the resources a firm possesses need to be properly managed in order to achieve competitive advantage, which means that HRM practices, by promoting the strategic and effective use of the Human Resources of a firm, are creating value for the firm (Fu et al., 2017; Messersmith & Guthrie, 2010).

Nevertheless, both perspectives agree that an HRM system is an important piece of an organization's strategy, whether it is the direct source of sustained competitive advantage or by influencing that source, the Human Resources of a firm.

## VI. Employee Perceptions

The effectiveness of an HRM system depends on more than just its mere existence (Choi, 2014). Even though present, the HRM system may still not elicit the appropriate behaviors and attitudes for the firm, because individuals may interpret it idiosyncratically (Bowen & Ostroff, 2004). According to Wright & Nishii (2006) in their Process Model of SHRM, between the actual HRM practices and the employee's reaction to those same practices there is the employee perception about the practices implemented, making the relationship between actual HRM practices and the employee's reactions mediated by perceptions (Choi, 2014; Patrick M Wright & Nishii, 2006). Thus, employee's behaviors and attitudes will depend on their perceptions of the HRM practices, and those same behaviors and attitudes will influence the effectiveness of the HRM system (Ang, Bartram, McNeil, Leggat, & Stanton, 2013; García-Chas et al., 2014; Stirpe & Zárraga-Oberty, 2017; B. Zhang & Morris, 2014). This is supported by Kooij, Jansen, Dikkers &

De Lange (2010) that have found that employee's perceptions of HRM practices are positively related to their work-related attitudes (Stirpe & Zárraga-Oberty, 2017).

#### VII. Frameworks

## i. Social and Economic Exchange Theory

Employees and the organization develop an exchange relationship between them (Shore, Lynch, Tetrick, & Barksdale, 2006). According to the Social Exchange Theory (Blau, 1964), the relationship and interactions between interdependent partners generate a bond in the form of reciprocal obligations, in which one part contributes to the interest of the other expecting that the other part will develop a sense of obligation to reciprocate and will contribute in a future time, although this future contribution is uncertain in terms of what and when it will happen (Arthur, Herdman, & Yang, 2016; Chang & Chen, 2011; Gouldner, 1960; Mihail & Kloutsiniotis, 2016; Shore et al., 2006). Social exchanges are long-term oriented since the relationship is continuous and evolves over time; also, each part invests in the other, taking the risk of that investment not being repaid, although reciprocity is expected, thus, making trust essential to the relationship (Blau, 1964; Cropanzano & Mitchell, 2005; Shore et al., 2006).

HRM systems signal the employees about the degree to which the organization values them and how it is concerned with them (García-Chas et al., 2014; Wayne, Shore, & Liden, 1997). They are interpreted by employees as signs of appreciation, investment, recognition by the organization and as the intention to establish a long-term exchange relationship, motivating employees to enter into a social exchange logic, reciprocating with positive attitudes and work behaviours towards the job, the organization and their co-workers (Chang & Chen, 2011; Cropanzano & Mitchell, 2005; García-Chas et al., 2014; Giannikis & Nikandrou, 2013; Stirpe & Zárraga-Oberty, 2017; Takeuchi et al., 2007; M. Zhang et al., 2014).

On the contrary, Economic Exchange refers to financially oriented, impersonal and short-term interactions with a lack of trust and feelings of obligation, emphasizing the more tangible and financial aspects of the exchange relationship (Mihail & Kloutsiniotis, 2016; Shore et al., 2006; M. Zhang, Zhu, Dowling, & Bartram, 2013). An example of this type of interactions is temporary work with a specific paying and no other investments included (M. Zhang et al., 2013). If the employment relationship is based

only on an economic exchange, employees might perceive that the gains they receive are not proportional to what they give and expect to receive, negatively affecting their attitudes and work-behaviors such as commitment and satisfaction with the organization (Mihail & Kloutsiniotis, 2016).

#### ii. PIRK

The PIRK model (Lawler, 1986) posits that for high employee involvement to happen in an organization four attributes need to be diffused among the employees (Vandenberg, Richardson, & Eastman, 1999). Those are: Power (P), Information (I), Rewards (R) and Knowledge (K). These attributes are found in all organizations, although traditionally concentrated in the upper levels of management, they must be spread throughout all organization levels in order to foster high employee involvement (Vandenberg et al., 1999).

The focus of these attributes is to empower employees to make more and better decisions, enhance the information and knowledge they need to do so and reward them after that (Boxall & Macky, 2009; Kilroy, Flood, Bosak, & Chênevert, 2016, 2017). The attributes should not be considered in isolation, but as mutually reinforcing (Boxall & Macky, 2009; Kilroy et al., 2016, 2017; Vandenberg et al., 1999). The lack of knowledge, information and rewards in the presence of power might lead to poor decisions. The presence of information and knowledge without power to exert it might lead to frustration because the employee cannot make use of his expertise. Rewards for organizational performance without the presence of power, knowledge and information might lead to frustration, because the employee cannot influence the reward. Information, knowledge and power together without rewards for organizational performance might lead to lack of motivation to exercise power in the benefit of the organization (Lawler, 1986; Vandenberg et al., 1999).

#### iii. AMO

The "AMO" framework, developed by Appelbaum, Bailey, Berg, Kalleberg, & Cornell, (2000) argued that employee performance and consequently superior organizational performance is a function of three factors: Ability (A), which includes skills, experience

and knowledge, Motivation (M) to apply the abilities and Opportunity (O) to engage in discretionary behaviour (Appelbaum et al., 2000; Y. Huang, Fan, Su, & Wu, 2018; Jiang et al., 2012; Mihail & Kloutsiniotis, 2016; B. Zhang & Morris, 2014).

Employee ability sets the upper limit for performance, while motivation influences the degree to which the employee ability is used and opportunity removes the barriers that might prevent the capable and motivated employee to use his/hers abilities (Macky & Boxall, 2007). Knowledgeable and skilled employees are more capable of generating valuable ideas; that ability combined with empowerment and incentives motivates them to engage in discretionary effort, suggest and act on new ideas and improvements upon the workplace, thus enhancing performance (Shin & Konrad, 2017).

HRM systems can develop employees' abilities, by including practices like recruitment and selection procedures and extensive training (Huselid, 1995; Katou & Budhwar, 2010; Macky & Boxall, 2007; Messersmith, Kim, & Patel, 2018), employees' motivation, by making use of practices such as performance appraisals linked with incentive compensation (Fu, Flood, Bosak, Morris, & O'Regan, 2015; Huselid, 1995; Katou & Budhwar, 2010; Macky & Boxall, 2007) and also employee's opportunities by encompassing practices like employee participation in decision making, quality circles and job design (Fu et al., 2015; Gilman & Raby, 2013; Huselid, 1995; Katou & Budhwar, 2010).

By including practices vertically and horizontally integrated that develop employees' abilities, increase their motivation for discretionary behaviour and create the opportunities for motivated employees to apply their abilities, HRM systems can improve employee performance and consequently organizational performance (Macky & Boxall, 2007; Meuer, 2017; Úbeda-García et al., 2018).

The AMO framework is based on the notion of social exchange, entailing that human resources that are rigorously selected, trained adequately, provided with development opportunities, given a voice in the organization and compensated upon merit will reciprocate with positive attitudes and behaviours towards the organization, such as commitment and engagement, which in turn will influence, directly or indirectly, organizational performance (Katou & Budhwar, 2010; Messersmith et al., 2018).

The PIRK model can also be related to the AMO framework. Improvements in knowledge (K) enhance the employees ability (A), while empowerment (P) and information (I) enhance the opportunity (O) for the employee to contribute and finally

rewards (R) are a direct attempt to improve employees motivation (M), which may also be improved through empowerment, making the employee have a more autonomous work, information, making the employee feel better informed or even knowledge, making the employee enjoy the growth in his knowledge and skills (Boxall & Macky, 2009).

## VIII. High Performance Work Systems

High Performance Work Systems (HPWS) are described as a system of HRM practices, horizontally and vertically aligned, designed to enhance employee knowledge, skills and abilities, motivation and opportunities to contribute, which consequently will lead to improved employee and organizational performance (Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008; Chang & Chen, 2011; Chiang, Shih, & Hsu, 2014; Guidice, Mero, Matthews, & Greene, 2016; Huselid, 1995; Lepak, Liao, Chung, & Harden, 2006; Patel, Messersmith, & Lepak, 2013; Shen, Benson, & Huang, 2014; Subramony, 2009; Takeuchi, Chen, & Lepak, 2009; Úbeda-García et al., 2018; Patrick M. Wright & Snell, 1991).

These systems have the overarching objective of attracting, selecting, managing, training, retaining and motivating Human Resources, eliciting desired attitudes and behaviours, in order to achieve organizational goals (Baluch, Salge, & Piening, 2013; Bowen & Ostroff, 2004; Gilman & Raby, 2013; Kellner, Townsend, & Wilkinson, 2017; Way, 2002). They accomplish this by creating a fit between the KSA's of an employee and the tasks, duties and responsibilities required by a job (Appelbaum et al., 2000; Combs et al., 2006; Gilman & Raby, 2013; Huselid, 1995; Patel et al., 2013; Shen et al., 2014; Úbeda-García et al., 2018; Patrick M. Wright et al., 2001, 1994; N. Wu et al., 2015). HPWS should be composed by multiple and mutually reinforcing HRM practices (Bartram et al., 2014; B. E. Becker & Huselid, 1998, 2006; Gilman & Raby, 2013; Zacharatos, Barling, & Iverson, 2005). While there is no consensus about what specific bundle of practices should be part of the HPWS (Boxall & Macky, 2007; Stirpe & Zárraga-Oberty, 2017), it is generally agreed that it includes: rigorous recruitment and selection procedures, extensive training, performance appraisal, incentive compensation, flexible job assignments, information sharing, internal merit-based promotion, employee participation, job description, job security, grievance procedures and profit-sharing (Combs et al., 2006; Datta, Guthrie, & Wright, 2005; Della Torre & Solari, 2013; Demirbag, Tatoglu, & Wilkinson, 2016; Huselid, 1995; Michaelis, Wagner, & Schweizer, 2015; Posthuma, Campion, Masimova, & Campion, 2013; Shen et al., 2014; Stirpe & Zárraga-Oberty, 2017; Sun, Aryee, & Law, 2007; Takeuchi et al., 2007).

Several studies report positive impacts upon the implementation of HPWS on organizational performance (Bae & Lawler, 2000; Bartel, 2004; Huselid, 1995; Katou & Budhwar, 2010; Ngo, Lau, & Foley, 2008; B. Zhang & Morris, 2014). Although positive impacts on organizational performance have been reported, the diffusion of HPWS is still limited (Arthur et al., 2016; Shin & Konrad, 2017). Establishing an HPWS can be costly and the results are long-termed, which makes the availability of slack resources essential, creating a barrier to its implementation even though organizations would benefit from doing so (Godard, 2004; Godard & Delaney, 2000; Shin & Konrad, 2017).

## IX. High Involvement Work Systems and High Commitment Work Systems

The term HPWS is often used interchangeably with High Involvement Work Systems (HIWS) and High Commitment Work Systems (HCWS) (Demirbag et al., 2016). HIWS is a system of HRM practices that are designed to promote employee participation and involvement in the decision-making processes in organizations, meeting employees' needs for competence, autonomy and belongingness, while providing the opportunity for employees to identify with the organization and feel an increased sense of ownership (Camuffo, De Stefano, & Paolino, 2017; Lepak et al., 2006), triggering positive job attitudes (Bonet, 2014), ultimately improving organizational performance (Chênevert, Jourdain, & Vandenberghe, 2016; Flinchbaugh, Li, Luth, & Chadwick, 2016; Guthrie, 2001; Kilroy et al., 2016; Lee, Hong, & Avgar, 2015; Riordan, Vandenberg, & Richardson, 2005; Vandenberg et al., 1999; Wood, van Veldhoven, Croon, & de Menezes, 2012). They typically include HRM practices such as information sharing, team-based design, aggregate compensation, flexible job design, job security, job rotation and employee training (Butts, Vandenberg, DeJoy, Schaffer, & Wilson, 2009; Li, Wang, Van Jaarsveld, Lee, & Dennis, 2018; Von Bonsdorff et al., 2016; Zatzick & Iverson, 2006).

HCWS is similar to HIWS but the focus is on eliciting employees' commitment providing them equitable pay and job security, so that employees' behaviour is self-regulated rather than controlled by supervisors (Boxall, 2012; Demirbag et al., 2016; Kilroy et al., 2016; Walton, 1985; Wood & De Menezes, 1998). This systems include HRM practices like recruitment and selection procedures, internal labour markets,

training, job security, information sharing, teamworking, problem-solving groups and job flexibility (Wood & De Menezes, 1998). Contrary to the HPWS notion, these two systems do not assume that configuration is necessarily performance enhancing (Boxall & Macky, 2009). It is argued that HPWS encompass elements of both HIWS and HCWS (Demirbag et al., 2016; Zacharatos et al., 2005).

# X. Employee Outcomes

Employee outcomes are regarded as the primary variable that can explain the unclear HPWS-performance linkage, shedding some light into the so called "Blackbox" of HRM (Boselie et al., 2005; Guest, 2011; Katou & Budhwar, 2010; Mihail & Kloutsiniotis, 2016; Purcell & Kinnie, 2007; Úbeda-García et al., 2018). The basic logic is that HPWS influence employees attitudes and behaviours, which in turn affect organizational performance, mediating the HPWS effect on performance (Mihail & Kloutsiniotis, 2016; Purcell & Kinnie, 2009; Úbeda-García et al., 2018).

There are basically two views concerning the impact of HPWS on employees, that can be separated in positive impacts and negative impacts. Views like mutual gains (Kalmi & Kauhanen, 2008; Van De Voorde, Paauwe, & Van Veldhoven, 2012), optimistic perspective (Peccei, 2004), unitarist perspective (Kroon, van de Voorde, & van Veldhoven, 2009) and even win-win HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013) defend positive impacts on employees. This view is based on theories such as Social Exchange Theory (Blau, 1964) and AMO Theory (Appelbaum et al., 2000), arguing that HPWS that enhance employees KSA's, motivation and opportunities and also take in consideration employees interests, will elicit positive attitudes and behaviours towards the organization and consequently having a positive impact on organizational performance, making both the firm and the employees beneficiaries of the HPWS (Kalmi & Kauhanen, 2008; Sparham & Sung, 2007; Stirpe & Zárraga-Oberty, 2017; Takeuchi et al., 2007; Van De Voorde et al., 2012; B. Zhang & Morris, 2014).

Positive impacts on employee productivity (Datta et al., 2005; Guthrie, 2001; Huselid, 1995; Ichniowski, Shaw, & Prennushi, 1997; Sun et al., 2007), lower intention to leave and turnover (Ang et al., 2013; García-Chas et al., 2014; Guthrie, 2001; Huselid, 1995; Sun et al., 2007), well-being (Fan et al., 2014), job satisfaction (Ang et al., 2013; García-Chas et al., 2014; Giannikis & Nikandrou, 2013; Takeuchi et al., 2009), commitment (Ang et al., 2013; Giannikis & Nikandrou, 2013; Takeuchi et al., 2009), work engagement (Ang et al., 2013), social identification (Bartram et al., 2014), intrinsic

motivation (García-Chas et al., 2014) and also innovative work behaviour (Fu et al., 2015) have been reported in the HRM literature.

In contrast, views like Confliting Outcomes perspective (Van De Voorde et al., 2012), Critical perspective (Kalmi & Kauhanen, 2008), pessimistic perspective (Peccei, 2004), pluralist perspective (Kroon et al., 2009; M. Zhang et al., 2013) and profit-oriented HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013) emphasize negative employee outcomes. The "Dark-Side" of HPWS states that these HRM systems are based on an economic exchange relationship and although rhetorically concerned with employee outcomes, in reality they are used as a tool to boost organizational performance overlapping employee outcomes by intensifying job demands, leading to negative attitudes and behaviors such as stress, emotional exaustion and work disengagement (Danford, Richardson, Stewart, Tailby, & Upchurch, 2004; Godard, 2001; Jensen, Patel, & Messersmith, 2013; Ramsay, Scholarios, & Harley, 2000; Sparham & Sung, 2007; M. Zhang et al., 2013).

Ramsay et al. (2000) found that HPWS increases job strain as a result of work intensification and stress that employees experience due to enhanced discretion and responsabilities (Kroon et al., 2009; Stirpe & Zárraga-Oberty, 2017; Van De Voorde et al., 2012; White, Hill, McGovern, Mills, & Smeaton, 2003).

Godard (2001) concluded that although initially HPWS yielded positive outcomes for employees, more intensive HPWS were related to work intensification, stress, low-job satisfaction and self-esteem (Kroon et al., 2009; Van De Voorde et al., 2012; White et al., 2003). Truss (2001) found some HPWS to be related with feelings of increased stress and work pressure (Stirpe & Zárraga-Oberty, 2017). White et al. (2003) concluded that HPWS were a negative interface between employees work and their domestic lives, making HPWS a source of workhome spillover (Stirpe & Zárraga-Oberty, 2017).

Macky & Boxall (2008) concluded that HPWS can lead to job satisfaction or dissatisfaction depending on the amount of workload and working hours (M. Zhang et al., 2013).

Kroon et al. (2009) found out that in organizations that reported more employees covered by HPWS, higher levels of job demands were also reported, which was also associated with more emotional exhaustion (Jensen et al., 2013).

Wood & de Menezes (2011) found that HPWS is not related to job satisfaction and increases employee anxiety (M. Zhang et al., 2013).

Van De Voorde et al. (2012) found support for the conflicting outcomes perspective, relating HPWS with a negative impact on health-related well being, although for happiness and relationship well being evidence for the mutual gains perspective was stronger. The general consensus is that HPWS result in improved organizational performance, although it might not benefit employees (Van De Voorde et al., 2012).

# **XI.** HPWS Perspectives

Generally, HPWS have been studied under three different theoretical perspectives: the universalistic, the contingent and the configurational perspectives

# i. Universalistic Perspective

The Universalistic Perspective argues that some HRM practices are always better than other and that the implementation of these "universally" better practices will lead to higher performance independently of the implementation of other HRM practices or contextual factors, proposing a linear and independent association between an HRM practice and organizational performance (Delery & Doty, 1996; Meuer, 2017).

Supporting this perspective, Pfeffer (1995, 1997, 1998) concluded that successful firms implemented certain common HRM practices, like selectivity in recruitment, incentive pay and training and skill development, making such practices universally more effective than others (Lepak & Shaw, 2008; B. Zhang & Morris, 2014).

# i. Contingency Perspective

Contingency Perspective emphasizes contextual factors, either internal or external, as a determinat variable in the effectiveness of HRM practices (Delery & Doty, 1996; Meuer, 2017; B. Zhang & Morris, 2014). Although organizational strategy is considered to be the primary contingency variable (Delery & Doty, 1996), suggesting that different strategies require different HRM practices (Chadwick, Way, Kerr, & Thacker, 2013; Meuer, 2017), other variables like manufacturing/service sector (Combs et al., 2006), industry sector (Datta et al., 2005) and technology (Snell & Dean, 1992) have been found to be important contingencial variables. Datta et al. (2005) found that industry characteristics such as capital intensity, industry growth and industry product differentiation moderated the HPWS-labour productivity relationship (Lepak & Shaw, 2008).

## ii. Configurational Perspective

Rather than asserting that individual HRM practices independently contribute to performance, the Configurational Perspective on organizational focus the complementarities between the different HRM practices that compose the HRM system (Lepak & Shaw, 2008; Meuer, 2017; B. Zhang & Morris, 2014). Employees are exposed to more than a single practice in their organization, making the effectiveness of an individual practice dependent of its fit with other practices of the HRM system (Lepak & Shaw, 2008). The implementation of multiple practices that complement each other will create an higher effect in performance enhancement than the sum of the contributions of each individual practice (Meuer, 2017). For example Ichniowski et al. (1997) and Macduffie (1995) reported that HRM systems had a greater impact on productivity and organizational performance, compared to HRM individual practices (Lepak & Shaw, 2008).

This perspective also accounts for the fit with the firm's strategy, arguing that besides horizontal fit, there must be also vertical fit, meaning that the HRM system will enhance firm performance only when it is implemented in association with the appropriate firm strategy (Delery & Doty, 1996). This perspective differs from universalistic perspective because it focus on a system of HRM practices instead of individual HRM practices and includes the assumption of equifinality, implying that different HRM systems can be equally effective for the same set of conditions, rather than assuming that certain individual HRM practices are better than other in all conditions (Delery & Doty, 1996).

The primary difference between contingency and configurational perspectives is that the contingency perspective focus is on individual practices, while configurational is on the "bundle" of practices horizontally aligned (Delery & Doty, 1996).

## iii. Contingent Configurational Perspective and Weak and Strong Contingency

More recently the three dominant perspectives have been complemented. Lepak & Shaw (2008) combine the configurational and contingency perspectives into a "contingent configurational perspective", stating that the effectiveness of HRM systems may also depend on external contingency factors, thus, internally consistent HRM systems must also achieve external alignment with contingencies (Meuer, 2017). They exemplify this with Osterman (1994), which found that companies with a 'high road' strategy utilized

more innovative work practices such as quality circles and team-based production, compared to companies with a 'low road' strategy (Lepak & Shaw, 2008).

Kaufman (2010), distinguishes between weak and strong contingency. While the weak contingency is a universalistic relation between HRM practices and organizational performance, moderated by contingent factors, such as alternative business strategies, the strong contingency assumes that "it depends" and in some situations more investment in HRM may have a positive effect on organizational performance and in other situations that effect might be null or even negative. Kaufman exemplifies that while a "commitment" HRM model means high performance in certain firms, in others (following cost minimization or labour exploitation strategy), it means losing money (Meuer, 2017).

## 3. Hypothesis Suggestions

#### • Job Satisfaction

Job Satisfaction is defined by Locke (1976) as a pleasurable or positive emotional state, resulting from the appraisal of one's job experience (García-Chas et al., 2014). HPWS should have a positive impact on job satisfaction as this employee outcome is seen as an end in itself (García-Chas et al., 2014). This idea is supported by AMO Theory (Appelbaum et al., 2000), social exchange theory (Blau, 1964), and reciprocity (Gouldner, 1960). in which organizations invest in a long-term relationship with their employees by developing highly-skilled, motivated and empowered employees, and these, in turn, by perceiving that investment will reciprocate with positive employee outcomes such as job satisfaction (García-Chas et al., 2014; Mihail & Kloutsiniotis, 2016; M. Zhang et al., 2013). Several empirical studies support this HPWS-Job satisfaction linkage (e.g García-Chas et al., 2014; MacKy & Boxall, 2008; Mihail & Kloutsiniotis, 2016; P. C. Wu & Chaturvedi, 2009). More recently, Messersmith, Patel, Lepak, & Gould-Williams (2011) in a study involving local government authorities from Wales, have reported that HPWS increase job satisfaction. Takeuchi et al. (2009) using a sample of 56 Japanese companies showed that HPWS is positively related with job satisfaction. In a meta-analytic review, considering 83 studies, Kooij et al. (2010) found out that employees' perception of HPWS is significantly and positively related with job satisfaction, with a mean correlation of 0.34.

On the contrary other studies question the assumption of the positive effect of HPWS on job satisfaction, for example Ramsay et al. (2000) reported that HPWS may be associated with higher job strain and lower pay satisfaction.

Furthermore job satisfaction is also regarded in HRM literature as a mediator of the HPWS-Organizational performance link (e.g. B. Zhang & Morris, 2014)

Therefore, we expect the following:

H1: HPWS will be positively related to job satisfaction.

#### • Intention to Leave

Intention to leave refers to the conscious and deliberate wilfulness of the employees to leave the organization (Tett & Meyer, 1993). HPWS encompass a wide range of practices that lead to positive employee outcomes, such as enhanced satisfaction, organizational commitment, motivation, trust, work engagement which may reduce intention to leave and employee turnover (Ang et al., 2013; Sun et al., 2007; Way, 2002). For example, organizations that are less selective in hiring are prone to experience higher quit rates (Batt, 2002).

This negative effect of HPWS on intention to leave has been reported in HRM literature (e.g. García-Chas et al., 2014). Therefore, we expect the following:

H2: HPWS will be negatively related to intention to leave.

## Organizational Commitment

Organizational Commitment has been emphasized as a core mediator between HPWS and financial performance, as it is an attitude that reflects the nature of the relationship between an employee and an employer (Giannikis & Nikandrou, 2013; M. Zhang et al., 2014). This concept is defined as the strength of an individual's identification with and involvement in a particular organization (Porter, Steers, Mowday, & Boulian, 1974). This concept includes three components: affective commitment, normative commitment and continuance commitment (N. J. Allen & Meyer, 1990; Miao, Newman, Schwarz, & Xu, 2013). Affective commitment is defined as an emotional attachment to, identification with, and involvement in the organization (Meyer, Stanley, Herscovitch, & Topolnytsky,

2002; Van Dierendonck & Jacobs, 2012), making individuals remain with the organization because they want to (Miao et al., 2013). Normative commitment a perceived obligation to remain in the organization, making employees remain in the organization because they ought to do so (Meyer et al., 2002; Miao et al., 2013). Continuance commitment refers to "individuals' economic attachment to the organization", and it derives from the perceived costs that the employee will have if he decides to end the relationship with the organization (N. J. Allen & Meyer, 1990; Miao et al., 2013).

HPWS conveys the message that the organization values and is willing to commit itself to its employees, and based on social exchange, this leads to positive attitudes from the employees towards the organization, such as improved commitment (Mihail & Kloutsiniotis, 2016). Extensive training and internal labour market are practices included in HPWS that let employees know that they are important to the organization and have opportunities to develop and advance in their career within the organization, fostering organizational commitment (Chang & Chen, 2011)

This HPWS-commitment relationship is supported in the literature (e.g. Giannikis & Nikandrou, 2013; Macky & Boxall, 2007; Takeuchi et al., 2007). Godard (2001) reported higher commitment related to a moderate adoption of HPWS.

Mathieu & Zajac (1990) concluded that, in general, affective involvement tends to be most relevant as a behavioural predictor and several meta-analyses confirmed the essential role of affective commitment, showing relationships with work attitudes and behaviours such as turnover and organizational citizenship behaviours (Van Dierendonck & Jacobs, 2012). Therefore, we expect the following:

H3: HPWS is positively related to affective organizational commitment

# • Social Identity

Wright & Haggerty (2005) argue that the impact of HRM practices on employees' attitudes and in-role performance is also a social process (Bartram et al., 2014). Social identity theory suggests that people wish to belong to specific groups, that they perceive distinct from other groups, in order to raise their self-esteem, thus forming their individual social identity (Bartram et al., 2014; Tajfel & Turner, 1986). Social identification plays a major role in the formation and development of collective attitudes and behaviour

(Bartram et al., 2014; Tajfel & Turner, 1986). HPWS can develop employees' social identification, increasing their attachment to the organization and willingness to contribute (Bartram et al., 2014). For example, extensive training, particularly at team level, may improve communication, cohesion and coordination, enabling its members to develop a shared understanding of the tasks, ensuring that the identity of the team is consistent with broader organizational goals (Bartram et al., 2014). Furthermore, information sharing signals employees that the organization trusts them conducting to feelings such as pride and loyalty (Bartram et al., 2014; Pfeffer, 1998). Therefore, we expect the following:

H4. HPWS is positively related with social identification.

## • Subjective Well Being

Although an important employee outcome on its own, employee well-being has a central role explaining the link of HRM practices and organizational performance (Fan et al., 2014; Peccei, 2004). Subjective Well Being (SWB) refers to people's cognitive affective evaluations of their lives (Diener, 2000), including satisfaction with their life as a whole and other life domains such as work (Fan et al., 2014). According to Diener (2000) happy people participate more in community organizations and perform better at work.

There is no consensus whether HPWS have a positive or negative influence on employee well-being, with reported mixed findings (Fan et al., 2014; Kilroy et al., 2016). Consistent with views like mutual gains (Kalmi & Kauhanen, 2008; Van De Voorde et al., 2012), optimistic perspective (Peccei, 2004), unitarist perspective (Kroon et al., 2009) and win-win HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013), some authors argued that HPWS are beneficial for employees well-being (Kilroy et al., 2017). For example, Fan et al. (2014) reported a positive and significant effect of HPWS on SWB.

By contrast, following views like Confliting Outcomes perspective (Van De Voorde et al., 2012), Critical perspective (Kalmi & Kauhanen, 2008), pessimistic perspective (Peccei, 2004), pluralist perspective (Kroon et al., 2009; M. Zhang et al., 2013) and profit-oriented HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013), other authors report negative influence of HPWS (Fan et al., 2014). For example, Godard (2001) concluded that although initially HPWS yielded positive outcomes for employees, more intensive HPWS were related to work intensification, stress, low-job satisfaction

and self-esteem (Kroon et al., 2009; Van De Voorde et al., 2012; White et al., 2003). Therefore, we expect the following:

H5: HPWS is positively related with subjective well-being.

#### Innovative Work Behaviour

Innovative Work Behaviour (IWB) is defined as "the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group or the organization", consisting in idea generation, idea promotion and idea realization (Janssen, 2000). Idea generation corresponds to the production of novel and useful ideas in any domain (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Janssen, 2000). Idea promotion consists in finding backers and sponsors who can provide the necessary power behind it (Janssen, 2000; Kanter, 1988). Idea realization refers to the production of a prototype or model of the innovation that can be experienced and ultimately applied within a work role, group or the whole organization (Janssen, 2000; Kanter, 1988).

This behaviours are critical for organizational innovation, as they foster knowledge exchange and combination, generating new knowledge (Fu et al., 2015). In turn, organizational innovation contributes to organizational performance has it has been reported by some authors (Fu et al., 2015; Jiménez-Jiménez & Sanz-Valle, 2008). Following AMO Theory (Appelbaum et al., 2000), HPWS improve employees KSA's to innovate by building their expertise and talent, also increasing their motivation (for example through incentive compensation) and opportunities (for example, through employee participation) to develop new ideas (Fu et al., 2015; Messersmith & Guthrie, 2010). Moreover, HPWS helps to create a strong and efficient organizational structure and climate, allowing employees to create, transfer and implement their knowledge, leading to IWB (Fu et al., 2015). Therefore, we expect the following:

H6: HPWS is positively related with IWB.

#### • Work Engagement

Work Engagement is defined by Kahn (1990) as a state in which employees and work roles are fully integrated and devoted to work (Y. Huang et al., 2018). Demerouti, Mostert, & Bakker (2010) uses an alternative definition, stating that work engagement refers to a positive fulfilling, work-related state of mind that is characterized by vigour, dedication and absorption (M. Zhang et al., 2013). According to Kahn (1990) work engagement emerges through psychological meaningfulness, which can be seen as a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive or emotional energy, psychological availability, which refers to the sense of having the physical, emotional or psychological resources to personally engage at a particular moment and psychological safety, which forms employee engagement through dealing with conflict management among peers and/or with leaders, and mitigate fear of negative consequences (Y. Huang et al., 2018). It is argued that HPWS create a working environment that leads to higher employee potential, motivates employees with job fulfilment and improves job security, meeting the three preconditions of Kahn (1990), thus resulting in improved work engagement (Y. Huang et al., 2018).

Some empirical studies have found a positive relationship between practices included in HPWS, such as performance feedback (M. Salanova & Schaufeli, 2008) and learning and development opportunities (Marisa Salanova, Agut, & Peiró, 2005), and work engagement (Y. Huang et al., 2018). Other researchers have concluded that HPWS stimulate work engagement (Alfes, Shantz, Truss, & Soane, 2013; Muduli, Verma, & Datta, 2016). Therefore, we expect the following:

H7: HPWS will be positively related with work engagement.

#### Social and Economic Exchange Relationship

According to Shore et al. (2006), employees and the organization develop an exchange relationship between them. On one hand, following social exchange theory (Blau, 1964) this relationship generates a bond of reciprocal obligations, in which one contributes to the interest of the other, expecting a future return (Mihail & Kloutsiniotis, 2016). But on the other hand, the relationship might be more focused on tangible and financial aspects

of the exchange relationship, being an economic exchange (Mihail & Kloutsiniotis, 2016; Shore et al., 2006; M. Zhang et al., 2013).

HPWS send signals to the employees that their organization values them and is concerned with them, showing the interest in establishing a long-term exchange relationship; this motivates employees to enter in a social exchange with the organization, reciprocating with positive attitudes and work behaviors (Chang & Chen, 2011; Cropanzano & Mitchell, 2005; García-Chas et al., 2014; Giannikis & Nikandrou, 2013; Stirpe & Zárraga-Oberty, 2017; Takeuchi et al., 2007; Wayne et al., 1997; M. Zhang et al., 2014).

Therefore we expect the following:

H8a: HPWS will be positively related with a social exchange relationship.

H8b: HPWS will be negatively related with an economic exchange relationship.

# • Stressfulness and Workload

The HRM literature has reported mixed findings on whether HPWS result in positive or negative employee outcomes. Following AMO Theory (Appelbaum et al., 2000) and Social Exchange Theory (Blau, 1964), views like mutual gains (Kalmi & Kauhanen, 2008; Van De Voorde et al., 2012), optimistic perspective (Peccei, 2004), unitarist perspective (Kroon et al., 2009) and win-win HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013) support that HPWS will lead to positive employee outcomes, such as higher well-being (Fan et al., 2014), job satisfaction (Ang et al., 2013; García-Chas et al., 2014; Giannikis & Nikandrou, 2013; Takeuchi et al., 2009), commitment (Ang et al., 2013; Giannikis & Nikandrou, 2013; Takeuchi et al., 2009), work engagement (Ang et al., 2013), social identification (Bartram et al., 2014) and also innovative work behaviour (Fu et al., 2015).

On the contrary, views like confliting outcomes perspective (Van De Voorde et al., 2012), critical perspective (Kalmi & Kauhanen, 2008), pessimistic perspective (Peccei, 2004), pluralist perspective (Kroon et al., 2009; M. Zhang et al., 2013) and profitoriented HPWS (Sparham & Sung, 2007; M. Zhang et al., 2013) support negative employee outcomes, like increased stress and workload (Danford et al., 2004; Godard, 2001; Ramsay et al., 2000). Stress is defined as a substancial imbalance between

environmental demands and the response capability of the focal organism (McGrath, 1970; Rauch, Fink, & Hatak, 2018), whereas workload represents the sheer volume of work required of an employee (Spector & Jex, 1998).

The ultimate goal of HPWS is to help the organization improve competitive advantage and organizational performance (Godard, 2001). This can be achieved by motivating employees to make extra efforts in favor of the firm and although employees may value the investment that the organization makes in them by implementing HPWS, the message the whole system conveys is of expectations of increased performance, making the implementation of HPWS to be accompanied by higher workloads, stressing employees with higher completion rates and time pressures (Y. Huang et al., 2018; Kroon et al., 2009). The investment on the implementation of HPWS involve high start-up costs and needs higher returns to justify its maintenance, thus demanding more effort from the employees, resulting in increased workloads, time pressure and demands (Chaudhuri, 2009; Whitfield & Poole, 1997). Some practices included in HPWS, reported as having positive effects on employee outcomes can actually increase stress (Chaudhuri, 2009). For example, performance appraisal could generate feelings of frustration and hostility if they were meant to evaluate pay hike rather than personal development, particularly when employees were subjected to inadequate staffing levels and unrealistic targets (Chaudhuri, 2009).

It is possible that HPWS may have contradictory effects, intensifying the work and stress while at the same time enhancing employee outcomes like job satisfaction and commitment and trust (Godard, 2001; Van De Voorde et al., 2012). For example, teambased work can be expected to have positive implications for employees, increasing group interaction and belongingness, although it may also result in increased workload and stressfulness as employees feel increased pressure to perform (Godard, 2001).

Following this reasoning, we would like to understand if HPWS will also be associated with increased stress and workload, because, like Godard (2001) we want to understand how HPWS are actually implemented and perceived by employees and not how they should be. Therefore, the testing of the following hypothesis is needed:

H9a: HPWS will be positively related with increased stress.

H9b: HPWS will be positively related with increased workload.

# • Participative Leadership

Participative Leadership is a leadership style in which the leader involves the subordinates in the problem-solving and decision-making process (Miao et al., 2013; Somech, 2006). This style is regarded by several scholars as the most humanistic (Lythreatis, Mostafa, & Wang, 2017; Sauer, 2011). Participative leaders prefer consensus building, consultation over direction and exhibit behaviours that allow followers to manage themselves, which implies that the subordinates must take a certain amount of responsibility themselves (Miao et al., 2013; Sauer, 2011).

When employees are given the opportunity to participate in the decision-making process and take greater responsibility over their participative work, they will interpret this as a sign that their managers wish to develop relationships based on social exchange, and thus they will reciprocate accordingly, promoting organizational affective commitment, trust (X. Huang, Iun, Liu, & Gong, 2010; X. Huang, Shi, Zhang, & Cheung, 2006; Miao et al., 2013), morale, perceived support (Lythreatis et al., 2017), self-efficacy and performance (Lam, Huang, & Chan, 2015). When involved in participation, employees tend to seek more information from their managers, making participative leadership combined with information sharing highly effective in inducing higher performance (Lam et al., 2015).

HPWS tend to include opportunity enhancing practices like employee participation practices, job rotation, job autonomy, communication programs and information sharing (Fu et al., 2017; Jiang et al., 2012; Messersmith et al., 2018; Patel et al., 2013; Takeuchi et al., 2007). Therefore, we expect the following:

H10: HPWS will be positively related with participative leadership.

## Self-efficacy

Self-efficacy refers to a person's judgement about his or her ability to perform specific tasks (Bandura, 1986). It has been argued that HPWS can enhance employee self-efficacy through a wide range of practices, such as adequate training (Axtell & Parker, 2003; Butts et al., 2009; Shen et al., 2014), information sharing (Butts et al., 2009), increased task control (Axtell & Parker, 2003), feedback mechanisms (Baluch et al., 2013; Shen et al.,

2014), reward systems linking individual performance to organizational goals (Butts et al., 2009) and performance appraisal (Baluch et al., 2013). The increased feeling of competence is expected to lead to superior job performance (Spreitzer, 1995). Therefore, we expect the following:

H11: HPWS will be positively related with self-efficacy.

#### 4. Conclusion

HPWS stand as a strategic and operational option for organizations to create a sustained competitive advantage. In this paper we hypothesized how they do so, by linking them to several important employee outcomes. By linking HPWS to those outcomes and considering the suggested hypothesis, rather than financial performance, we aimed to address a gap identified in the HPWS literature. Since employee's attitudes and behaviours are influenced by the perception of HPWS rather than the mere implementation of these systems and how they should operate, like stated above, the hypothesis should be tested using data collected out of employees' perceptions, and not only objective data. Although we used a wide range of employee outcomes in our hypothesis, there are other variables that we didn't cover (e.g. trust and intrinsic motivation), that have been previously linked to HPWS and can be used in future researches. In order to better understand the HPWS phenomenon and have a diverse set of results, studies should try to cover other regions and countries (e.g. Portugal), which are not as represented in the HPWS literature as countries like USA, China and England.

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