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#### Abstract

This article examines the impact of high-performance work systems (HPWS) on employee well-being in small and medium-sized Italian companies. The survey was conducted with 321 employees of enterprises characterized by the same type of production system and competitive dynamics. This study aimed to explore the effect of HPWS bundle practices on work-related well-being dimensions such as work engagement, emotional exhaustion, and employee satisfaction. The results indicate that HPWS bundle practices have a strong influence on job satisfaction and work engagement but have no effect on emotional exhaustion. Furthermore, the perception of the employee-employer relationship moderates several relationships under consideration. Policymakers should consider the employee-employer relationship as a crucial factor in enhancing the effectiveness of HPWS.

**Key words**: Employees well-being; SMEs; Organizational well-being; Organizational performance

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## 1. Introduction

Turbulent environments, characterized by high uncertainty and rapid change, are increasingly challenging organizations and their sustainability. These challenges are particularly acute for small- and medium-sized enterprises (SMEs), which are simultaneously required to optimize the use of their resources and deploy product, process, and marketing innovations to distinguish themselves from their competitors (Petroni et al., 2017). To achieve these strategic goals, SMEs must redefine their business models by improving processes at both operational and managerial levels (Osei-Bonsu, 2016). According to the resource-based view (RBV), enterprises should develop a sustainable competitive advantage by creating value from internal resources that are rare and difficult to imitate by competitors (Barney, 2001; Wright et al., 2001). As many authors have pointed out, in SMEs, human resources are the main assets for achieving competitive success (Carlson et al., 2006; De Kok & Uhlaner, 2001). These authors argue that while competitors can imitate structural, capital, and technological resources, human capital and social structure are unique in each enterprise (De Kok & Uhlaner, 2001). These theories have prompted researchers and practitioners to develop managerial models geared toward optimizing the use of human capital, while increasing the ability of organizations to attract, hire, and retain the most valuable human resources (Sindhura, 2022). Among the most widely discussed models in the literature is the model referred to "High Performance Work system" (HPWS) (Boxall & Macky, 2009). The HPWS model has many definitions (Kehoe & Wright, 2013). They changed over time following the evolution of the model.

Although the HPWS is universally considered an integrated set of complementary and synergistic practices for optimal human resource management, the practices and strategic focus of the model have undergone significant changes. These changes have resulted from transformations in the labor market and expectations regarding social relations in organizations (Kehoe & Wright, 2013; Bilan et al., 2020). Although most studies have demonstrated the positive impact of HPWS on operational and financial performance, in the last decade, many researchers have shown that the relationship between HPWS and organizational performance is not self-evident (Zhang et al., 2013). The implementation and management of the HPWS practices requires a significant organizational effort from both a managerial and a technical-operational point of view. Brown et al. (1992) emphasize the importance of integrating human resource practices geared towards employee safety, involvement and training.

According to these authors, the integration of the three factors mentioned above generates a virtuous circle of organizational improvements and leads to positive effects on economic performance, while the absence of one of them undermines the adoption of the other two, thus also weakening the effects on performance. Analyzing the diffusion of HPWS practices in SMEs in the Milan area, Della Torre and Solari (2011) showed that the potential benefits of HPWS on operational and economic performance can only be fully achieved and realized by fully integrating practices related to work organization, personnel management, work coordination and all organizational innovations.

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As pointed out by many authors, it is also crucial to recognise further challenges related to the managerial and relational aspects of managing HPWS models. This concerns the management of factors related to perceptions of social relationships and employee behaviour (Shin & Konrad, 2017; Zhang et al., 2013). As discussed by Bowen and Ostroff (2004), for an HRM system to be effective, it should be perceived and experienced as valuable by employees and be able to create a climate of trust between the organization and employees. In this regard, the authors describe the concept of HRM System Strength, emphasizing the efforts the organization must undertake to achieve distinctiveness, consistency and consensus, which are the critical success factors for an effective HRM system. Albertini and Leoni (2009), exploring the spread of HPWS models in Italy, expand deeper on issues related to relations between organizations and employees, emphasizing how trust and involvement are linked both to direct relations between organizations and employees and to indirect relations, i.e. mediated and moderated by union representation. The inability to govern these issues may lead to a reduction in organizational performance because employee behavior would not align with the HRM system's objectives (Shin & Konrad, 2017; Guerci et al., 2019). Moreover, researchers have pointed out that the mismanagement of HPWS practices could undermine well-being in the workplace (Zhang et al., 2013; Guerci et al., 2019). Regarding performance-related pay schemes (PRPs), for example, recent research by Salimi et al. (2020) highlights the positive and negative effects of incentive and counter incentive schemes on employee mental health. The authors show that while the adoption of individual PRPs as a stand-alone system negatively impacts employee mental health, the implementation of group PRP is positively associated with employee mental health. Their study also reveals the interaction effects of multiple forms of PRP. These interactions show that in companies that adopt individual and organizational PRP policies in a systemic manner, employee mental health is higher. These findings underline the importance of the integration of multiple payroll-related personnel management practices.

Currently, employee well-being in organizational dynamics is a hot topic in the scientific debate (Rubio-Andrés et al., 2022). It is widely recognized as a key determinant of group and employee performance; moreover, this factor positively impacts attractiveness and the ability to retain intellectual capital (Rubio-Andrés et al., 2022). Therefore, to achieve competitive success, SMEs should implement human resource management practices aimed at high performance and focus on organizational well-being. The literature provides mixed results regarding the relationship between the HPWS and employee well-being (Zhang et al., 2013; Rubio-Andrés et al., 2022). Moreover, since this relationship in SMEs is still an underexplored topic (Albertini & Leoni, 2009), this study aims to explore the relationship between high-performance work systems (HPWS) and employee well-being in Italian small and medium-sized enterprises (SMEs) by analyzing the effects of HPWS bundle practices on the main dimensions of work-related well-being, such as work engagement, emotional exhaustion, and employee satisfaction.

A tailored survey was administered to a sample of employees belonging to Italian SMEs. To ensure the consistency of the analysis and avoid introducing bias, enterprises characterized by the same type of production system and the same

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competitive dynamics were selected. Finally, to better understand employees' perspectives, the perception of the employee-employer relationship was introduced as a moderating variable. The introduction of this variable into the model under investigation is justified by the fact that the effectiveness of communication, the dissemination and acquisition of organisational values, the perception of justice and psychological satisfaction are highly dependent on the employees' sense of their relationship with the employer (in a broad sense) (Blau, 1964; Adams, 1965). In turn, these variables may impact both on the consensus and common view of HPWS practices (Guerci et al., 2019; Brown et al. 1992), as well as on the intrinsic value of work and the eudemonic and hedonic dimensions of work well-being (Wrzesniewski & Dutton, 2001; Lawson et al., 2009). Because the moderating effect of the perceived relationship between employees and employers on the relationship between HPWS and well-being has been studied in the health care sector and other (unspecified) sectors without taking into account the size of organizations, this paper aims to assess its impact in the manufacturing sector and relative to SMEs.

This article is structured as follows: after this brief introduction, Section 2 presents the theoretical background and the hypotheses development of the research. Section 3 illustrates the sample and statistical methods employed to investigates the research purposes. Section 4 informs the readers with the main findings of this study. Section 5 comprises the discussions and the conclusions.

# 2. Theoretical background and hypotheses development

An HPWS can be defined as the synergetic implementation and management of organizationally consistent policies and practices geared towards optimizing the contribution of human capital (employees' collective knowledge, skills, and abilities) to organizational objectives (Armstrong et al., 2010; Rubio-Andrés et al., 2022; Guerci et al., 2019). As discussed by many authors, it is worth emphasizing the futility as well as the impropriety of defining a univocal list of HPWS practices. Each firm should adopt those particular or tailored practices that best suit the organization and enable the principles of the HPWS models to be realized (Della Torre & Solari, 2011).

The International Labour Organisation recognizes five pillars of the HPWS: 1) People's management, 2) employee involvement, 3) training and development, 4) work organization, and 5) diversity and equality practices (Armstrong et al., 2010).

As human capital is increasingly seen as a determining factor for success, there is increasing interest in the HPWS and its effects on performance (Rubio-Andrés et al., 2022; Della Torre & Solari, 2011). Although there is an extensive literature on the topic, there are currently a considerable number of unanswered questions in this domain. In particular, mixed results emerge from the literature on the relationship between HPWS bundles practices and employee well-being (Rubio-Andrés et al., 2022; Guerci et al., 2019).

There are several determinants of these non-convergent and in some cases strongly conflicting results; the most obvious ones are three (Guerci et al., 2019). Firstly, some research does not specify the point of view through which the

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phenomenon is investigated (i.e. operational base, middle management, top management) (Zhang et al., 2013). In contrast, in research discussing the impact of HPWS on economic and operational performance, the organizational levels under analysis are made explicit. As the practices and goals of HPWS differ across organizational levels, consequently the perceptions and actual impact of the practices on different levels of the organization also change (Andersèn & Andersèn, 2019). Furthermore, it must be emphasized that different organizational levels correspond to different levels of autonomy, job demand and resources, decision-making power, perceived fairness and career possibilities. All these elements moderate the impact of HR practices on well-being (Deci et al., 2017; Demerouti & Schaufeli, 2009).

Secondly, many studies do not contextualize the organizational antecedents (i.e. organizational culture, social structure, and strategic goal of implementation) necessary to explain the impact of the HPWS model on well-being performance (Rubio-Andrés et al., 2022). In organizations where the organizational culture is oriented towards listening to the voice of employees, transformational and empowering leadership and employee engagement, employees' perceptions of HPWS are significantly more positive. This influences the impact of HR practices on employee well-being (Wood & Wall, 2007). Della Torre and Solari (2011) highlighted the importance of the role of trade union representatives with respect to the effective implementation and acceptance of HPWS practices. The increased trust between employees and the organization due to relations mediated by trade union representatives increases employee involvement towards company goals while reducing emotional exhaustion.

Finally, several studies do not fully capture the complexity of the relationship between HPWS bundle practices and employee well-being (Wood & Wall, 2007). The complexity of this relationship is due to the multidimensional nature of well-being (Grant et al., 2007; Guerci et al., 2019), as well as the numerous social and technical organizational factors that can mediate or moderate it (Ramsay et al., 2000). Most studies focus only on one dimension of well-being, thus not revealing the possible trade-offs between them (Guerci et al., 2019). In the literature, there is considerable research focusing only on health wellbeing (e.g. psychosomatic symptoms) that shows that HPWS have a positive impact on operational performance but a negative impact on wellbeing (Truss, 2001), while there are others on work attitudes (e.g. job satisfaction) that show the positive impact of HPWS bundles practices on operational performance and wellbeing (Riordan et al. 2005). As an example, research by Rubio-Andrés et al. (2022) focusing on Spanish SMEs found that the implementation of HWPS has a positive impact on well-being interpreted in terms of worker motivation and work absenteeism. Insightful research that has empirically revealed the trade-off between the dimensions of well-being - previously conceptualized and hypothesized (Grant et al., 2007) - is that of Guerci et al. (2019). The authors showed that individual performance-oriented incentive pay systems negatively affect health and relational well-being yet increase happiness-related well-being; autonomy- and team management-oriented practices negatively affect health well-being yet increase relational well-being. In addition, there are very few empirical studies showing the

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influence of moderation/mediation variables in the HPWS and well-being relationship.

Concerning social issues, there are two conflicting points of view regarding the impacts of HPWS on employee well-being: the unitarist perspective and the pluralist perspective. These two perspectives have their roots in the theories of social exchange relationships (Blau, 1964) and equity theory (Adams, 1965). According to the unitarist point of view, HPWS bundle practices promote the alignment of employee and employer interests, thereby improving employee well-being. Unitarists believe that employees' interests are aligned with organizational goals; thus, they tend to overlook or minimize the conflicting interests of the two parties (Guerci et al., 2019; Zhang et al., 2013). On the other hand, the pluralist perspective strongly criticizes the HPWS model for its "management-centric" nature. Pluralists believe that the adoption of HPWS bundle practices was merely aimed at increasing the performance of human resources, without considering the needs of those employees. They state that organizational goals are not always aligned with employee interests and emphasize the potential negative impact of HPWS on employees' well-being (Guerci et al., 2019; Zhang et al., 2013).

Based on social exchange theory (Blau, 1964) and equity theory (Adams, 1965), the key dimensions of employee well-being, including emotional exhaustion, job satisfaction, and job commitment, are strongly influenced by employees' perceptions of their relationships with the organization. Based on this thesis, Zhang et al. (2013), in their study focusing on Chinese hospitals, hypothesized that employees' perceptions of social exchange (SEP) and economic exchange (EEP) are moderators of the relationship between HPWS and employee well-being. Social exchange refers to the long-term employment relationship characterized by trust, mutual exchange, high involvement between employers and employees, and "open and widespread obligations". Social obligations include elements inherent to both health and safety and human resource management aspects such as fair treatment, social recognition, inclusion, investment in training, benefits, and so on. Economic exchange refers to fixed-term or financially oriented, impersonal working relationships and interactions that do not include social and emotional aspects such as obligations and trust.

Scholars argue that SMEs, as a result of various features, such as lack of resources, absence of bureaucracy, adaptable organizational structures, and agile decision-making and communication processes, differ from large companies in the selection and implementation of HPWS bundles practices (Drummond & Stone, 2007; Sheehan, 2014). Since the combination of HR practices (tools, modalities, objectives) implemented in SMEs and consequently the level of adoption of HPWS differs from large companies, it can be assumed that SMEs employees experience different results in terms of workplace well-being. Perceptions of social and economic exchanges, on the other hand, should not depend on characteristics related to the company size.

As widely discussed in the literature, HPWSs, include bundles of HR management practices related to rigorous recruitment and selection, training and performance development management, compensation systems, flexible work design, and decision-making processes (Zhang et al. 2013; Sun, Aryee, and Law 2007). The conceptualization of HPWSs is based on the integrated system view because the

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synergistic implementation of packages results in continuous feedback of performance improvement. In addition, there is great consensus in the literature with respect to that HR bundles are more powerfully related to organizational performance compared to individual practices combined (Armstrong et al., 2010; Zhang et al., 2013; Drummond & Stone, 2007). Therefore, the perspective behind this research is that the combined effects of the different bundles of HPWS are stronger than the sum of the individuals and that, in line with the dominant views, HPWS bundles should be considered as belonging to a single dimension. Thus the first statement related to the model under exploration is: *HPWS in considered in unidimensional perspective.* 

Since as stated, the social perspective of HPWS adoption strongly impacts employees' perceptions of work well-being, this research assumes that organizations adopt a unitarist perspective in addressing HPWS implementation. According the Job Demand – Job Resource Model (JD-R), the state of physical and emotional fatigue, often accompanied by a sense of exhaustion and inability to cope with the demands of one's job, is a function of a lack of job resources (Bakker et al., 2005), while a high perception of relational and instrumental job resources is correlated with work engagement, job satisfaction and proactive behavior to improve performance (Bakker et al., 2007). In addition, as Tims and Bakker's (2010) research has shown, increased stimulating job demands can induce workers to increase commitment and job satisfaction. In light of the unitarist perspective and under the assumption that HPWS practices can simultaneously generate increasing job resources and increasing challenge demands, the first hypotheses formulated of the relationship between HPWS and well-being dimensions are:

H1: HPWS has a positive impact on Job Satisfaction;

*H2: HPWS has a positive impact on Work Engagement;* 

H3: HPWS has a negative impact on Emotional Exhaustion.

With reference to SEP, the numerous studies that have investigated the relationship between organizational support and job well-being have shown that organizational orientation to employees' needs (personal goals, training, motivation, meaning of work) has a positive impact on both job commitment and job satisfaction (Bakker et al., 2005; Wrzesniewski & Dutton, 2001).

The economic exchange, based on extrinsic (performance-driven) reward systems and impersonal short-term relationships, while guaranteeing the satisfaction of employees' basic needs, may lead them to perceive that their employers place too much emphasis on goal-oriented work demands (Zhang et al., 2013; Ramsay et al. 2000). This perception is not per se negative or positive. Its valence depends on the characteristics of the job and employee's goals (Tims & Bakker, 2010). The general effect of EEP is the reinforcement of behaviors oriented toward maximizing operational performance (e.g., workers make great efforts to achieve organizational goals and reward). However, while in the short run these efforts may result in operational and personnel benefits, in the long run they could determine the exhaustion of the worker's mental and physical energies and to a sense of dissatisfaction with their job (Ganster et al., 2013; Guerci et al., 2019).

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When the inherent values of the social perspective are assumed in the process of adopting HPWS practices, these values can reinforce both employees' perceptions of the alignment of organisational and personal goals and their sense of trust in the organisation (Zhang et al., 2013; Zhang et al., 2019). On the other hand, the discrepancy between the perception of HPWS practices geared concurrently to personal and organizational goals and the relationship with the employer based on impersonal and economic aspects (hedonic rather than eudemonic), is likely to generate a negative result on trust and consequently on job commitment and satisfaction (Zhang et al., 2013; Ramsay et al., 2000). In turn, these effects could generate vice-cycles of self-reinforcing perceptions of excessive work effort and lack of work resources. In light of these insights, the following mediating relationships were hypothesised:

H4: SEP positively moderate the relationship between HPWS and Job Satisfaction; H5: SEP positively moderate the relationship between HPWS and Work Engagement;

H5: SEP negatively moderate the relationship between HPWS and *Emotional Exhaustion*;

H6: EEP negatively moderate the relationship between HPWS and Job Satisfaction;

H5: EEP negatively moderate the relationship between HPWS and Work Engagement;

H5: EEP positively moderate the relationship between HPWS and *Emotional Exhaustion* 

Based on the insights of Zhang et al. (2013) and assuming that HPWS in Italy are implemented with specific focus on employee well-being (a 'win-win' perspective), the theoretical model proposed by this study and to be tested is presented in Figure 1.

## 3. Methods

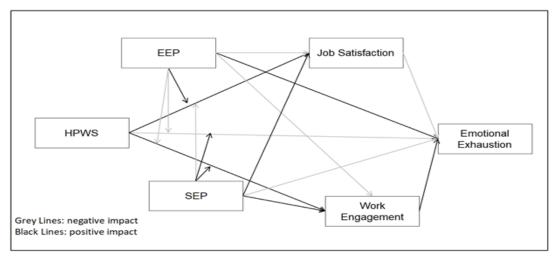
# 3.1 The units of analysis

The focus of this study was limited to employees of SMEs in Italy. To better contextualize the analysis, a set of inclusion criteria for building the sample was adopted. First, the selected organizations were classified as make-to-order (MTO) companies and belonged to the mechanical, furniture, and fashion sectors. Second, the production systems of the included MTOs featured low-volume-high-variety (LVHV) customized products. Third, the employees included in the analysis belonged to the design, production, and R&D functions. Fourth, in order to assess the impact of HPWS practices on the operational base and above all to avoid introducing bias into the analysis due to differing perceptions due to the organizational role, managers and executives were excluded.

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Figure n.1 - The hypothesized model.



Source: our elaboration

# 3.2 The dimensions of analysis

Table 1 presents the research framework. Based on Zhang et al. (2013), a list of items related to the factors EEP, SEP, work engagement (WE), emotional exhaustion (EE) and employee satisfaction (JS) was drawn up. The list of preliminary items inherent to the HPWS factor was drawn from Armstrong et al. (2010) (Table 2). The list of HPWS items was refined based on a comprehensive literature review and content analysis. Three university professors and three human resource specialists were involved in the content-analysis phase. The panel of experts pointed out the need to include performance-related pay schemes (PRPs) in the analysis (these include supplementary company bargaining) (Table 2, in factor HPWS item (8)). In accordance with Salimi et al. (2020), the expert stated that supplementary company bargaining can have a positive impact on employee involvement and motivation. Moreover, according to the expert group, the involvement of employees or their representatives in discussions and decisions on performance-based remuneration systems can lead to several benefits, including increased transparency of relationships, fairness and equity, motivation and involvement, the establishment of a positive workplace culture and finally conflict resolution.

Subsequently, the face validity was assessed using a pilot test of the questionnaire.

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Table n.1 - The four-phased research methodology adopted.

Research phase				
Step 1: Preliminary constructs definition	A preliminary list of constructs regard HPWS, SEP, EEP, work engagement, emotional exhaustion, employee satisfaction, was formulated and operationalized through a series of sub-items.			
Step 2: Questionnaire construction	Constructs and their bundles were used to build a comprehensive questionnaire. Due to statistical validation, content and face validity were performed on the data collected from the subsample.			
Step 3: Data validation	The questionnaire was sent to a large number of SMEs. A total of 321 responses were collected from 141 SMEs. Subsequently, a factor analysis was performed to test the constructs.			
Step 4: Data Analysis	Structural equation modelling (SEM) was used to test the model.			

Source: our elaboration

Table n.2 - Factors and items included in the analysis.

Factor	Item
Social exchange	
perception (SEP)	see the eight-item scale developed by Shore et al. (2006)
Economic echange	
perception (EEP)	see the nine-item scale developed by Shore et al. (2006)
Work Engagement	
(WE)	see OLBI developed by Demerouti et al. (2003)
Job Satisfaction (JS)	see the three-item scale developed by Cammann et al. (1979)
Emotional	
Exhaustion (EE)	see OLBI developed by Demerouti et al. (2003)
	see Armstrong et al. (2010). Items included as a result of the panel
	discussion: (1) recruiting practices; (2) training practices; (3) coaching and
	mentoring practices; (4) feedback practices; (5) practices to foster
High performance	autonomy and empowerment; (6) reward systems; (7) self-directed work
work system bundles	teams practices; (8) remuneration systems; (9) leadership style; (10)
practices	diversity and equality practices.

Source: our elaboration

A representative sub-sample was contacted by telephone, and once the companies' agreements to participate were obtained, the questionnaire was administered to 84 employees from 42 SMEs. After the questionnaire was finalized, 1,546 SMEs were sent. A total of 321 people from 141 SMEs participated in this survey. Table 3 shows the description of SMEs and Table 4 shows the profile of the responders. All the items were assessed using a five-point Likert-type (1-5). The logic of the pre-validated multi-item scales employed associates the value of 1 with 'strongly disagree' and 5 with 'strongly agree'. In order to simplify the interpretation of the level of HPWS

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practices implementation for each level of the likert scale (1-5) a brief description was offered.

# 3.3. Analytical technique

Structural equation modeling was applied to test the hypothesized model structural equation modelling (SEM) was applied. SEM is a statistical technique to perform simultaneous tests of the causal relationships among multiple variables in a model and offers tools to assess and correct for measurement errors that are potential biases in behavioral research (Byrne, 2016). Before SEM, a confirmatory factor analysis was performed to test the adequacy of the measurement model (Field, 2005). During the analysis, the hypothesized model was compared to a series of nested models. This comparison permits the definition of the best-fitting model (Hoyle, 1995; Byrne, 2016). The chi-square goodness-of-fit to degrees of freedom ratio ( $\chi$ 2/df), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), Tucker–Lewis coefficient (TLI), and comparative fit index (CFI) were used to assess and compare the models. The criteria used to assess the models are listed in Table 5.

Table n.3 - Smes' description

			No.	[%]
SMEs	Mechanical		43	0.30
	Forniture		51	0.37
	Fashion		47	0.33
		Mechanical	Forniture	Fashion
Employess	<10	5	8	7
[#]	1050	20	37	35
	51150	15	6	4
	151250	3		1
Turnover	<2	6	22	24
[M€]	210	22	27	18
	1125	11	2	5
	2650	4	-	-

Source: our elaboration

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Table n.4 - Respondents' profile

		No.	[%]
Position	Production	144	0.45
	Technical office	104	0.32
	R&D	73	0.23
Gender	Male	209	0.65
	Female	112	0.35
Age	50 +	34	0.11
	40-49	71	0.22
	30-39	121	0.38
	29 -	95	0.30
Gross annual salary	40k +	23	0.07
[€]	30k - 39k	95	0.30
	20k - 29k	168	0.52
	20k-	35	0.11

Source: our elaboration

Table n.5 - Criteria of goodness-of-fit-indices (Hoyle, 1995).

Indices	Criteria of goodness-of-fit
$\chi^2/df$	<5.00
RMSA	<.08
SRMR	<0.10
TLI	>0.90
CFI	>0.90

Source: our elaboration

# 4. Results

CFA revealed that all multiple-item measures had good discriminant and convergent validity. Table 6 shows the means, standard deviations, correlations, and scale reliabilities of the study variables. The regression weights of each item were significant (p < 0.001) showing convergent validity and supporting the distinctiveness of the constructs in our study.

The SEM results of the hypothesized model showed that some hypothesized relationships were not significant. Thus, although the model fit indices seemed to validate its goodness, several nested models were tested by eliminating the non-significant relationships one by one and comparing the global model indices obtained case by case. The best model emerged after the comparison steps were completed (Figure 2). Table 7 lists the indices of the hypothesized model and the best derived model. Akaike's information criterion (AIC) shows that the final model is better than hypothesized (Byrne, 2016).

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Table n.6 -  $\alpha$  coefficients and correlation measurements.

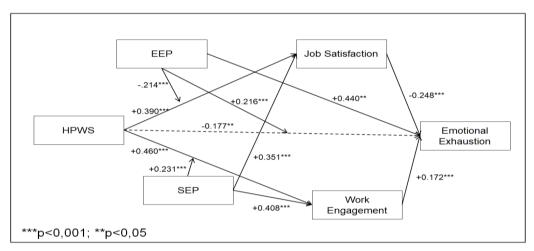
Variables	Mean	SD	HPWS	EE	WE	JS	EEP	SEP
HPWS [10]	2.99	.98	(0.91)					
Emotional exhaustion [4]	3.10	.90	17**	(0.87)				
Work engagement [4]	2.70	.80	.46**	16**	(0.85)			
Employee satisfaction [3]	2.94	1.01	.18**	19**	.21**	(0.82)		
EEP [9]	2.80	1.05	.01	.37**	25**	22**	(0.87)	
SEP [8]	3.09	1.07	.03	19**	.45**	.24**	48**	(0.90)

Tests' statistics: KMO = 0.92; Bartlett's test:  $\chi^2$  = 76,76.605, d.f. = 703,  $\alpha$  = 0.000

Note: N= 321; number of items in square brackets; Cronbach's  $\alpha$  is in parentheses. \*p < .05; \*\*p < .01.

Source: our elaboration

Figure 2 - Test results for the best model.



Source: our elaboration

Table n.7 - Comparison between the hypothesized model and the best model.

Indices	Hypothesized model	Final model
$\chi^2/df$	1.245 (df,1)	0.800 (df, 5)
RMSA	0.028	0.000
SRMR	0.007	0.014
TLI	0.980	1.009
CFI	1.000	1.000
Akaike's information criterion (AIC)	71.245	66.000

Source: our elaboration

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#### 5. Discussion and conclusions

This study explores the impact of HPWS practices on worker well-being in Italian make-to-order SMEs, focusing on workers' perceptions of their relationship with employers. The model theorized is based on the research of Zhang et al. 2013, but it is focused on SMEs because, as discussed in the literature, the mix of HPWs practices adopted changes in them compared to large companies. By changing the level of adoption of HPWSs it is conceivable to assume a different impact of practices on performance levels. The choice of an unambiguous perspective related to sectors is crucial for a better understanding of the issue (Guerci et al., 2019). To deepen the analysis and clarify the potential mixed results, two moderation variables were used to explain employees' perceptions of the employee-employer relationship. Specifically, moderation variables were derived from the theory of social exchange and economic exchange perceptions (Adams, 1965; Blau, 1964).

Results on the direct relationship between HPWS and well-being performance show that the combination of human resource performance optimization-oriented practices implemented by SMEs generates positive results in job satisfaction, work engagement, and weakly contributes to reducing emotional exhaustion. Such results confirm the hypothesis of the 'win-win' HPWSs implementation perspective in Italian SMEs. They also weakly reveal that when HPWS bundles practices are managed from a unified perspective, they can help narrow trade-offs related to different dimensions of well-being. Thus, this partially confirms the counter intuitive theory stating an increase in challenging job demand is not associated with an increase in emotional exhaustion (Tims & Bakker, 2010).

Regarding the theorized moderating effect of SEP and EEP, the results show that social exchange issues related to perceptions of employee-employer relations could help to better characterize the relationship between HPWS bundles practices and employee well-being. Specifically, while a high perception of economic exchange negatively moderates the impact of HPWS bundle practices on job satisfaction and emotional exhaustion, a high perception of social exchange positively moderates the impact of HPWS bundle practices on work engagement.

These results provide interesting insights into the conflicting findings in the literature on the impact of HPWS on employee well-being in SMEs. Firstly, they support the assumption of Guerci et al. (2019) regarding the existence of moderating variables that explain the divergent relationships between employees' perceptions of HPWS practices and the dimensions of employee well-being. Then, these results confirm the importance of assessing well-being through a multidimensional perspective and, more interestingly, show that the perception of the two perspectives of employee-employer interaction moderates different relationships. It could be hypothesized that the two perspectives are complementary. Thus, for HPWSs to be effective on all dimensions of work well-being, employees will need to simultaneously perceive high SEP and low EEP.

Comparing the results obtained with those of Zhang et al. (2013) few but pivotal differences appear. The first regards the impact of HPWS bundles practices on emotional exhaustion performance. While this study shows that a weak but

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significant relationship exists in the SMEs, Zhang et al. (2013) found a non-significant relationship in health care organizations. Moreover, moderation effects differ between the model tested in this study and the one proposed by Zhang et al. (2013). The authors find that the two perceptions of employee-employer relationships only moderate the relationship between HPWS and emotional exhaustion, whereas in this study moderating effects emerge as crucial elements of the model. There are also significant differences between the results of the two studies with regard to the direct impact that perceptions of employee-employer relationships have on well-being performance. In this work, the impact appears to be much stronger than in Zhang et al. (2013). These differences emphasize the need to study the impact of HPWSs and EEP and SEP with respect to specific structural, cultural, regulatory, and relational organizations characteristics (in this study: sector size, and country).

The results should guide policymakers to strongly value the perception of employee-employer relations when implementing HPWS bundles practices. Employee-employer relationships geared toward enhancing human resources through trust, empowerment, emotional support, training, and a sense of belonging are likely to act stimulus in the adoption of HPWS bundles practices. Conversely, relationships based on short-term, extrinsic incentive systems could undermine the effectiveness of HPWS bundles practices even when these are designed and implemented to align organizational goals with personnel goals.

Adopting a 'win-win' approach based on the unitarist perspective and oriented towards emphasizing the social exchange perspective can increase the effectiveness and sustainability of HPWS practice.

Some limitations of the work need to be shown. First, although the choice to consider HPWSs as an integrated set of practices is supported by the literature, this choice limits the opportunity to understand which of the bundles has the greatest impact on each dimension of well-being. Next considering the large number of variables under consideration a larger sample of companies could certainly improve the analysis.

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