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"Are you gonna go my way?": A first contribution to the Italian validation of the HRM Policies and Practices Scale

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* ABSTRACT. L'etichetta Human Resource Management Policies and Practices si riferisce all'insieme delle credenze e dei valori di una organizzazione che ispira azioni e pratiche riferite al modo in cui vengono valorizzate le persone, viene supportata la gestione della loro carriera e viene progettato il contesto organizzativo. Negli ultimi decenni la letteratura di settore si è concentrata sulla necessità di raccogliere le percezioni dei lavoratori circa le pratiche di gestione delle risorse umane per allineare le scelte strategiche a tali esigenze. Lo studio di seguito riportato propone la versione italiana della Human Resources Management Policies and Practices Scale (HRMPPS): si tratta di una misura breve ed affidabile, utile nella pratica professionale come nella ricerca applicata, per supportare le organizzazioni nella definizione di proposte operative e decisioni strategiche in tema di sviluppo delle persone.

• SUMMARY. The label 'Human Resource Management Policies and Practices' refers to the set of beliefs and values of an organisation that inspire actions and practices related to the way people are valued (e.g. through recruitment and selection, compensation and reward processes), the way their career management is supported (through training and development opportunities) and the way the organisational context is designed (through actions aimed at improving the quality of life and psycho-social wellbeing). The purpose of these actions is to better manage organisational and individual effectiveness, affecting employee engagement and at the same time the resilience of the organisation over time. In the light of this evidence over the past decades, the literature has focused on the need to gather workers' perceptions of human resource management practices in order to align strategic choices with these needs. Hence, a vast scientific production geared towards providing scholars and practitioners with tools to investigate these dimensions. In line with these assumptions, the following study proposes the Italian version of the Human Resources Management Policies and Practices Scale (HRMPPS) developed in English by Demo and collaborators (2012). It is a short and reliable tool, useful in professional practice as well as in applied research, to support organisations in the definition of operational proposals and strategic decisions on the subject of people development.

Keywords: Human Resource Management, HRMPPS, Validity, Reliability

INTRODUCTION

The strategic value of HRM policies and practices for organizations

Human Resource Management (HRM) is the term used to refer to the strategic function that an organization may exercise to efficiently govern its complexity, combining demands from personnel administration, performance management, employee relations and resource planning. Therefore, considering organizations as sociotechnical systems, the objective of HRM is to maximize the return on investment from the organization's human capital and to minimize financial risk, enhancing economic competitiveness. To meet these ambitious goals, the function of HRM concretely operates through the activation of specific policies and practices, as for instance programmes for recruitment and selection, training, compensation, that should be coherent with the wider organizational mission, vision, and strategic plans. Yet, the more employees will perceive that the organization has a clear strategy to manage its evolution across time and that this strategy also involve its human capital, the more they will engage in positive organizational behaviours supporting the achievement of its goals, invest the most of their energies, motivations, skills.

In this perspective, conscious about the intangible precious value of people in organizations, over the past 20 years, a resource-based or soft approach to HRM emerged as opposed to a control-based or hard approach, arguing that to invest in human resources could make a return in terms of commitment which is intangible but strictly related to performance and competitiveness. This perspective is fully attuned with the social exchange theory (Gouldner, 1960), according to which the relationship between workers and the organization is based on a set of reciprocal social and economic acknowledgements resulting in higher levels of mutual trust and loyalty.

This approach has been used extensively as a framework to explain the relationship between what are labelled High-Performance Human Resource Practices (HPHRPs) and employee outcomes. HPHRPs are conceived as strategically planned combinations of HR practices meant to improve performance (see Sheng, 2022, Wood, 2019 for a review). Some authors also refer to them in terms of high-commitment practices (Boon, Den Hartog & Lepak, 2019) underlining the scope of such work systems designed to foster employee commitment, control/efficiency, or involvement (Alqudah,

Carballo-Penela & Ruzo-Sanmartín, 2022; Zhao, Yu, Liu & Yan, 2022).

Beyond labels, Human Resource Management policies and practices encompass a set of beliefs, attitudes, expectations, and values of the organization inspiring how workers are treated (recruitment and selection, compensation, and reward), how their career is managed (training and development opportunities) and how work environments are designed (work conditions with special reference to health, safety, and technology) to allow them to perform efficiently. Indeed, HRM policies are also the reference for the development of organizational practices and for the strategic decisions making organizations sustainable contexts (Demo, Neiva, Nunes & Rozzett, 2012).

Based on these assumptions, recent developments showed that when organizations invest in HPHRPs, employees perceived this effort as an expression of the organization's trust and commitment to them, as an appreciation of their work and as a desire to engage in a long-term relationship (Hai et al., 2020; Sun, Aryee & Law, 2007) rather than in a short-term economic exchange relationship with employees (Kehoe & Wright, 2013; Zeb, ur Rehrman, Arsalan & Usman Khan, 2021) especially if they perceive a stronger managerial support (Yunus, Whitfield & Sayed Mostafa, 2023). Most of perceived HRM studies have showed job satisfaction (Kremmydas & Austen, 2020; Savanevičienė & Stankevičiūtė, 2011), affective organizational commitment and work engagement (Peccei & Van de Voorde, 2019) as some of the main attitudinal outcomes of the person/organization relationship.

In view of the above, organizations have a great potentiality: they could manage people through enlightened people-based HR policies and practices, addressed not simply to distribute tasks and to control results, rather designed to support workers' wellbeing and consequently to foster a reciprocal and interdependent, win-win, sustainable development. This goal is easily achievable if organizations engage in collecting employees' perceptions and in considering them in the making of a HRM strategic plan. Accordingly, the assessment of this information is crucial.

Assessing employees' perception of HRM policies and practices

Moving from the widely shared acknowledgement of the importance of a strategic management of people

in organizations, the issue of measuring the consistency, coherence, and appreciation of policies and practices is a priority for all organizations. Accordingly, to gather knowledge about what employees think about the way their organization treat them and about the extent to which it succeeds in corresponding their expectations is crucial to voice workers' attitude and behaviours and to attune them to a wider strategic plan for development, cultivating their motivation and engagement.

However, to measure HRM policies and practices is, as already Guest (2002) suggested, one of the most difficult methodological issues, because often organizations fail to follow how human resources are concretely managed for many reasons (e.g, external influences on HRM policies and practices, technological changes, and organizational structure) as well as for the lack of an explicit HRM organizational plan governing these practices. Thus, a focus on the methodologies useful to investigate employees' feedbacks on HRM policies and practices is inevitably a priority for theory development and for good organizational practices.

As argued above, despite the growing interest toward the impact of employees' perception about human resources management policies and practices, there is still a lack of validated self-report measures, useful to catch them. Basically, this gap could be related to at least two kinds of difficulties.

First, although most studies concentrated on the investigation of HR practices, research on HR policies useful to mark and clarify the difference between the two remains scarce. Yet, these two concepts, often used as synonyms, concretely refer to different aspects of a HRM plan: policies being strictly linked with the organizational mid and long-term strategy and practices to the short-term actualization of it through actions and choices oriented to manage the workforce coherently.

Second, the evidence according to which it is hard to agree upon an exhaustive list of HRM policies and practices indispensable to operationalize the concept, since each organization differently interpret and manage this important function, choosing the actions that best suit to one's own strategy and culture or even choosing not to act any HR practice at all.

Moving from the acknowledgement of these difficulties, a pioneering contribution to the identification of HRM practices is the study by MacDuffie (1995) who analysing results coming from a large international longitudinal dataset survey identified a consistent HR bundle or system which was

proved to best affect performance, productivity, and quality. Although limited to the automotive context, this study was the start of a valuable debate about possible classifications of HR practices. In 1998 Pfeffer gave a further relevant contribution relating a bundle of best practices in HRM with high commitment or high performance. The elements identified by the author and recalling the ones proposed by MacDuffie (1995) are now widely recognised and were also used lately to develop measures of HRM practices perception. These are employment security, selective hiring, teamworking, high wages linked to organizational performance, extensive training, communication, and employee involvement. Likewise, using suggestions coming from previous studies in 1997 Guest and Conway conducted a study involving 1308 managers adopting a sequential tree analysis and finding a set of effective HR practices that partly overlapped with the ones already discussed and that were proved to be related to positive organizational behaviours.

Therefore, in line with all this evidence, the assumption that a bundle of HR practices impacts on performance was largely adopted (Guest, Conway & Dewe, 2004) supporting the development of scales useful to capture employees' perceptions about this set of actions. MacDuffie and Pfeffer's list of HR practices was used as a common basis.

In 1995 Huselid first engaged in the development and validation of a measure the High-Performance Work Practices. The scale is composed by 13 items distributed in two factors basically referring to specific categories of HR practices: employees' skills and organizational structures and employees' motivation. Further studies by Huselid and Becker (1996) and by Huselid, Jackson and Schuler (1997) found results consistent with the bundles of High-Performance Work Practices developed in the previous study.

Some years later, the systematic review of the literature conducted in 2005 by Boselie, Dietz and Boon and covering studies published from 1994 to 2003 showed that the relationship between HRM practices and performance is not so clear as it seemed. Therefore, the authors proposed to reconsider the bundle of High-Performance Work Practices linking them to the Ability-Motivation-Opportunities to participate (AMO) model (Appelbaum, Bailey, Berg & Kalleberg, 2000). According to the model, people perform well when they have the capabilities, they have the adequate motivation, and their work environment provides opportunities to participate, therefore if organizations wish their employees to show high performance could develop HRM practices addressed to stimulate these

driving forces. In line with this premise, the AMO model has soon become a point of reference to explain the linkage between human resources management and performance.

A crucial contribution in this direction came in 2010 when Boselie proposed to classify high-performance work practices (HPWPs) according to their focus on abilities, motivation and/or opportunities to participate enhancement (AMO model). According to the author, HPWPs aimed at enhancing employees' abilities should include skills training, general training, job enrichment and coaching. HPWPs aimed at strengthening their motivation should focus on high wages, fair pay, and pay for performance. Finally, HPWPs addressed to improve the opportunity to participate should focus on employee involvement in decision making, participation, job and team autonomy, and decentralisation. The operationalisation of the measures relied upon the scales developed by Huselid (1995) and by den Hartog and Verburg (2004). The scales proposed by Boselie were converted from the organisational-level items originally used by the authors (e.g. "what is the average number of hours of training received by a typical employee over the last 12 months"; Huselid, 1995, p. 646) into individual employee-level items (e.g. "the organisation offers opportunities for training and development").

Parallel to this effort, in 2008 Demo and colleagues gave a great contribution to the discussion about HRM practices and policies assessment by developing the Perception of Personnel Management Policies Scale (PPMPS). The scale, which is in Portuguese, is composed by 19 items distributed across 4 factors representing HRM policies: involvement; training, development, and education; work conditions; and compensation and rewards. This is a valuable effort to systematize a large literature on HRM policies and to classify them into shared categories. The authors regained the term organizational policy from Singar and Ramsden (1972) and defined it as a set of principles established by the organization marking a general course of action in which some practices are developed collectively, in a constructive way, to reach certain objectives. Consequently, HRM policies define the attitude, expectations and values of the organization concerning how individuals are treated, and still serve as point of reference for the development of organizational practices and for decisions made by people, besides resulting in equal treatment among individuals.

In 2012 Demo and colleagues worked on a validation in English of this measure and presented the *Human Resources*

Management Policies and Practices Scale (HRMPPS). Based on an extensive literature review and on a qualitative pilot study conducted in three times with a panel of more than 60 managers, the authors proposed to enlarge the classification of HR bundles coming from previous studies adding policies for recruitment and selection and competency-based performance appraisal. Therefore, the measures proposed by Demo and colleagues encompasses 40 items articulated into 6 areas of HRM policies and practices: recruitment and selection, involvement, training and development, work conditions, competency-based performance appraisal, compensation, and reward. Items represent general assumptions about HRM actions carried out in each area by the organization and ask employees to express if they are present in their context by rating their agreement/ disagreement using a 5-point Likert scale, varying from "I totally disagree" to "I totally agree". The explorative and confirmative factor analysis conducted on the tool showed good psychometric properties and a high reliability. The scale in its final version encompasses 19 items.

In line with Demo et al. (2012) the present study aims to propose a valid measure of the HRMPPS in Italian. Moreover, considering that the length of the instrument may be a barrier for its application for practitioners and researchers, the study proposes a short version of the HRMPPS and evaluations of its validity, reliability, and measurement invariance across different groups.

METHOD

Procedure and participants

Two studies with two data collections and different samples were conducted. A non-probabilistic and convenience sampling procedure was used to recruit both samples through digital calls for participation launched in social networks and blogs. The studies observed the Helsinki Declaration and the prescriptions of the General Data Protection European Regulation (GDPR, EU n. 2016/679). Respondents participated voluntarily giving their informed consent after reading the aims of the research.

Study 1. Participants to the first study were 440 Italian workers, among which 47% of women and 53% of men, with a mean age of 36.6 (SD = 12.7) and different levels of education (42% had a bachelor's degree, 45% had a secondary school

degree, 13% had lower education). They were blue-collars (33%) and white-collars (67%) from small and medium-sized (61%) or large (39%) enterprises of private (61%) or public (39%) sector, with many service industries (59%). They had different levels of seniority (60% had less than ten years of working activity, 40% had more).

Study 2. Participants to the second study were 580 Italian workers, among which 51% of women and 49% of men, with a mean age of 36.3 (SD = 11.8) and different levels of education (41% had a bachelor's degree, 46% had a secondary school degree, 13% had lower education). They were blue-collars (26%) and white-collars (74%), from small and medium-sized (57%) or large (43%) enterprises of private (69%) or public (31%) sector, with many service industries (64%). They had different levels of seniority (59% had less than ten years of working activity, 41% had more).

Materials

Study 1. The HRMPPS (Demo et al., 2012) was administrated in Italian. The original items passed through a back-translation procedure supported by a native English speaker. A pilot test was carried out with 21 Italian employees to verify the clarity of the translated items.

Study 2. A short form of the HRMPPS was administrated to the second sample. This version was composed by 18 items, three for each sub-scale described above. The choice of the items of this new version was guided by the results of Study 1.

Work engagement was measured using the *Italian Version* of the Utrecht Work Engagement Scale (Balducci, Fraccaroli & Schaufeli, 2010) with nine items on a 5-point Likert scale (e.g., "At my work, I feel bursting with energy", $\alpha = .94$).

Affective commitment was assessed using the correspondent scale of the measure developed by Meyer and colleagues (Meyer, Allen & Smith, 1993) with six items on a 7-point Likert scale (e.g., "I would be very happy to spend the rest of my career with this organization", $\alpha = .88$).

Job satisfaction was measured using a single item (Wanous et al., 1997) on a 7-point Likert scale.

Data analysis

Study 1. An explorative factorial analysis (EFA) was conducted after checking for skewness and kurtosis of

observed variables distributions, for sampling adequacy, and for sphericity. To determine the number of factors to extract in the EFA, we used both theoretical (i.e., the original validation of the instrument) and analytical (i.e., parallel analysis) criteria. A maximum likelihood estimation method with Oblimin rotation was used because it was theoretically evident and empirically reasonable that different components of HRM would be related.

Study 2. A series of CFA with maximum likelihood estimation was conducted on the data of the second sample to confirm the factorial validity of a 18-item form. Different measurement models were tested and compared investigating, in addition to the exact fit test of the chisquared statistic (χ^2), the following pragmatic fit indices: Comparative Fit Index (CFI); Tucker-Lewis Index (TLI); Standardized Root Mean Square Residual (SRMR); Root Mean Square Error of Approximation (RMSEA); Akaike's Information Criterion (AIC); and Bayesian Information Criterion (BIC). Values of CFI and TLI greater than .90 and values of SRMR and RMSEA lower than .08 suggest a good fit of the model. As for AIC and BIC, smaller values indicate better models (Kline, 2023).

Measurement invariance tests using multigroup CFA was run to verify whether the 18-item form is interpreted the same way by respondents belonging to different groups. Four levels of invariance were tested, comparing nested measurement models with additional equality constraints across groups: configural invariance (equivalent factor structure); weak invariance (equivalent items' factor loadings); strong invariance (equivalent items' intercepts); and strict invariance (equivalent items' residual variances). Each level of invariance was tested comparing the correspondent model to the model of the previous level adopting a Δ CFI value of .010 as a criterion to evaluate their difference (Cheung & Rensvold, 2002).

RESULTS

Study 1. Observed variables showed acceptable skewness and kurtosis values <|1.00|. The sampling adequacy was checked with the Kaiser-Meyer-Olkin test, which revealed an excellent value of .95. The Bartlett's test of sphericity ($\chi^2 = 15528.79$, df = 780, p<.001) revealed correlations high enough to not being similar to zero, allowing the process of the extraction of latent factors. The parallel analysis

suggested the extraction of six factors, which was in line with the original validation of the instrument (Demo et al., 2012).

Results of the EFA (see Table 1) with the extraction of six factors showed adequate loadings for the items on the respective theoretical factors. On the other hand, results showed some cross-loadings higher than .30, revealing that the meanings of the items 28, 29, 30, and 40 may be misleading for the interpretation of the different factors, suggesting the deletion of these items. The factor solution accounted for 66.54% of the total variance and highlighted relevant correlations between factors ranged between .29 and .62. The interpretation of the pattern matrix was focused on the development of a new shorter form of the tool composed by 18 items, three for each of the six factors. The three items showing the highest loadings on each factor were retained for the new version.

Study 2. A series of CFA were conducted to analyse the factorial validity of a short form of the instrument. Different measurement models (see Table 2) were tested and compared to highlight the best factor solution for the 18 items: a single-factor solution (Model 01), a sixfactor solution with uncorrelated factors (Model 02), a six-factor solution with intercorrelated factors (Model 03), and a second-order factor solution (Model 04). Model 01 showed a poor fit to the data, suggesting that a single factor did not account for all the covariances among the indicators. Also Model 02 showed a poor fit, suggesting the addition of the covariances between the six factors. Model 03 showed a good to the data with significant standardized factor loadings ranged between .70 and .93, suggesting the factorial validity of a measurement model with intercorrelated latent variables. Model 04 consisted of one second-order latent variable and six uncorrelated first-order factors. Also this model showed a good fit to the data. Model 04 was a more parsimonious solution (i.e., with more degrees of freedom) but it showed lower fit indices compared to Model 03.

In view of the above, we selected the best fitting model, namely Model 03, to conduct measurement invariance analyses (see Table 3) for gender (man or woman), seniority (more or less than ten years of working activity), and company size (small, medium, or large enterprises). Results sustained all levels of measurement invariance (configural, weak, strong, and strict) since each model showed adequate fit indices and the differences in CFI between a nested model

and the less constrained one were lower than .010.

Considering the stability of measurement across different groups, we analysed internal consistency of each subscale of the instrument on the total sample of Study 2, revealing adequate reliability indices for each set of items with Cronbach's alphas ranged between .79 and .91. Since the six factors showed high intercorrelations and the measurement model with one second-order factor showed good fit indices, internal consistency of the entire questionnaire was also analysed, showing a α value of .95.

Criterion validity was investigated analysing the relationships of HRM factors with measures of theoretically related constructs. The correlation analysis (see Table 4) showed moderate to strong relationships of HRM factors with affective commitment, work engagement, and job satisfaction.

DISCUSSION AND CONCLUSION

The purpose of the study was to contribute to the evaluation of the psychometric properties of a shorter Italian version of the HRMPPS developed by Demo and colleagues (2012). The EFA conducted on the Italian complete version (40 items) of the instrument revealed a valid six-factor structure. The CFA performed on the shorter version (18 items) sustained a six-factor measurement model, which had better fit indices than the alternative solutions. The measurement invariance analyses showed that the instrument was able to measure the perceptions of HRM policies and practices in the same way for men and women, for workers with different levels of seniority, and for workers coming from organizations with different sizes. The reliability of each dimension of the HRMPPS was satisfactory, as well as the reliability of the total scale. The correlation analysis sustained the criterion validity of the measure showing significant relationships with affective commitment, work engagement, and job satisfaction.

The study has relevant implications for researchers and practitioners because it provides an easy-to-use short instrument for the evaluation of employees' perceptions of HRM which was lacking in the Italian context and that could be complemented with objective measures of HRM policies and practices efficacy (e.g. turnover rates, production, etc.) both in research and in professional practices. Yet, focusing specifically on the perception and opinions that human

Table 1 – Exploratory factor analysis of the initial 40-item HRMPPS (N = 440)

Items				Fac	tors		
		1	2	3	4	5	6
circa i [The c	nizzazione per cui lavoro diffonde ampiamente le informazioni processi di reclutamento sia interno che esterno organization I work for widely disseminates information about xternal and internal recruitment processes]	.84					
dei cri [The c	nizzazione per cui lavoro informa i candidati della procedura e teri del processo di selezione organization I work for discloses information to applicants ling the steps and criteria of the selection process]	.95					
loro p [The o	nizzazione per cui lavoro comunica ai candidati i risultati della erformance al termine del processo di selezione organization I work for communicates performance results to dates at the end of the selection process]	.72					
persor [Selec	rganizzazione in cui lavoro, i test di selezione sono condotti da lale opportunamente formato ed imparziale tion tests of the organization where I work are conducted by and impartial people]	.57					
compe [The c	nizzazione per cui lavoro mette in atto processi di selezione stitivi in grado di attrarre candidati competenti rganization I work for has competitive selection processes that competent people]	.56					
(es. te [The c	nizzazione per cui lavoro utilizza vari strumenti di selezione st psico-attitudinali, colloqui individuali e/o di gruppo, ecc.) rganization I work for uses various selection instruments (e.g. ews, tests, etc.)]	.49					
_	nizzazione per cui lavoro mi tratta con rispetto e attenzione organization I work for treats me with respect and attention]		.75				
_	nizzazione per cui lavoro ha a cuore il mio benessere organization I work for is concerned with my well-being]		.78				
comp	rganizzazione in cui lavoro, si respira un clima di rensione e fiducia tra manager e dipendenti e organization where I work, there is an environment of standing and confidence between managers and employees]		.83				
risulta o artic [The c	nizzazione per cui lavoro riconosce il lavoro da me svolto ed i ti raggiunti (es. con riconoscimenti verbali, attraverso mailing list oli pubblicati sull'house aziendale o affissi in bacheca, ecc.) rganization I work for recognizes the work I do and the results I e (e.g., in oral compliments, in articles in corporate bulletins, etc.)]		.51				
delle r	nizzazione per cui lavoro incoraggia l'autonomia sia nella gestione nansioni che nella presa di decisioni rganization I work for favors autonomy in doing tasks and making ons]		.44				
aspetts [The c	nizzazione per cui lavoro cerca di soddisfare le mie necessità ed ative professionali rganization I work for seeks to meet my needs and professional ations]		.58				

continued

Items			Fac	tors		
	1	2	3	4	5	6
13. Nell'organizzazione per cui lavoro, i dipendenti ed i manager sono costantemente in comunicazione al fine di svolgere al meglio il proprio lavoro [In the organization where I work, employees and their managers enjoy constant exchange of information in order to perform their duties properly]		.54				
4. L'organizzazione per cui lavoro incoraggia la mia partecipazione al processo di presa di decisioni e di soluzione dei problemi [The organization I work for encourages my participation in decision-making and problem-solving]		.46				
15. Nell'organizzazione in cui lavoro, si respira un clima di fiducia e cooperazione tra colleghi [In the organization where I work, there is an environment of trust and cooperation among colleagues]		.62				
6. L'organizzazione in cui lavoro incoraggia l'interazione tra colleghi (es. incontri conviviali di tipo informale, eventi sociali, eventi sportivi, ecc.) [The organization I work for encourages interaction among its employees (e.g., social gatherings, social events, sports events, etc.)]		.36				
 L'organizzazione per cui lavoro incoraggia i dipendenti ad adattarsi alle necessità del proprio ruolo [The organization I work for follows up on the adaptation of employees to their functions] 		.46				
8. Nell'organizzazione per cui lavoro vi è coerenza tra quel che il management dice e quel che fa [In the organization where I work, there is a consistency between discourse and management practice]		.42				
9. Posso utilizzare le conoscenze e i comportamenti appresi durante la formazione nel mio lavoro [I can use knowledge and behaviors learned in training at work]			.47			
20. L'organizzazione in cui lavoro mi aiuta a sviluppare le competenze di cui ho bisogno per svolgere al meglio il mio lavoro (es. seminari, training specifici, ecc.) [The organization I work for helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.)]			.73			
21. L'organizzazione in cui lavoro investe nella mia formazione e nel mio sviluppo promuovendo la mia crescita personale e professionale in senso più ampio (es. corsi di lingua, partecipazione a master e formazione professionale qualificata, permessi per il completamento dello studio universitario)			0.1			
[The organization I work for invests in my development and education promoting my personal and professional growth in a broad manner (e.g., full or partial sponsorship of undergraduate degrees, postgraduate programs, language courses, etc.)]			.81			
22. Nell'organizzazione in cui lavoro, l'utilità della formazione viene valutata dai partecipanti [In the organization where I work, training is evaluated by participants]			.61			

continued

Iter	ms			Fac	tors		
		1	2	3	4	5	6
23.	L'organizzazione per cui lavoro stimola l'apprendimento e favorisce l'applicazione delle conoscenze apprese [The organization I work for stimulates learning and application of knowledge]			.68			
24.	Nell'organizzazione in cui lavoro, vengono identificati periodicamente i bisogni formativi dei dipendenti [In the organization where I work, training needs are identified periodically]			.58			
25.	L'organizzazione per cui lavoro fornisce benefit basilari (es. assicurazione sanitaria, buoni pasto, agevolazioni per l'uso di trasporti, ecc.) [The organization I work for provides basic benefits (e.g., health care, transportation assistance, food aid, etc.)]				.59		
26.	L'organizzazione per cui lavoro prevede programmi e/o processi specifici che aiutano i dipendenti a far fronte ad incidenti sul lavoro e/o a prevenirli [The organization I work for has programs or processes that help employees cope with incidents and prevent workplace accidents]				.51		
27.	L'organizzazione per cui lavoro garantisce la sicurezza dei suoi dipendenti attraverso il controllo delle persone che entrano nell'edificio e/o usufruiscono dei suoi servizi [The organization I work for is concerned with the safety of their employees by having access control of people who enter the company building/facilities]				.54		
28.	L'organizzazione in cui lavoro fornisce benefit aggiuntivi (es. iscrizioni agevolate a centri sportivi, stabilimenti balneari, scontistica dedicata in servizi convenzionati, ecc.) [The organization I work for provides additional benefits (e.g., membership in gyms, country clubs, and other establishments, etc.)]				.45	.32	
29.	Nell'organizzazione in cui lavoro, i servizi e le condizioni fisiche della struttura sono ergonomici, confortevoli e adeguati (es. illuminazione, temperatura d'ambiente, rumori, ecc.) [The facilities and physical condition (lighting, ventilation, noise and temperature) of the organization I work for are ergonomic, comfortable,		.48		.38		
30.	and appropriate] L'organizzazione in cui lavoro ha a cuore la mia salute e la qualità della mia vita [The organization I work for is concerned with my health and quality of life]		.60		.31		
31.	L'organizzazione per cui lavoro discute i criteri ed i risultati del sistema di valutazione delle competenze e delle performance con i dipendenti [The organization I work for discusses competency-based performance appraisal criteria and results with its employees]					.55	
32.	Nell'organizzazione in cui lavoro, il sistema di valutazione delle competenze e delle performance è la base per definire il piano di sviluppo individuale dei dipendenti [In the organization where I work, competency-based performance appraisal provides the basis for an employee development plan]					.53	

continued on next page

continued

Items			Fac	tors		
	1	2	3	4	5	6
33. Nell'organizzazione in cui lavoro, il sistema di valutazione delle competenze e delle performance è la base per decidere promozioni ed aumenti di stipendio [In the organization where I work, competency-based performance appraisal is the basis for decisions about promotions and salary increases]					.47	
34. L'organizzazione per cui lavoro condivide con i dipendenti i criteri ed i risultati della valutazione delle competenze e delle performance [The organization I work for disseminates competency-based performance appraisal criteria and results to its employees]					.61	
35. L'organizzazione per cui lavoro conduce periodicamente la valutazione delle competenze e delle performance [The organization I work for periodically conducts competency-based performance appraisals]					.52	
36. Nell'organizzazione in cui lavoro, ricevo incentivi come promozioni, deleghe, premi, bonus, ecc. [In the organization where I work, I get incentives such as promotions, commissioned functions, awards, bonuses, etc.]					.39	
37. Nell'organizzazione in cui lavoro, il mio stipendio è adeguato ai miei risultati [In the organization where I work, my salary is influenced by my results]						.93
38. L'organizzazione per cui lavoro mi offre uno stipendio coerente con le mie competenze, la mia formazione e la mia esperienza [The organization I work for offers me a salary that is compatible with my skills, training, and education]						.95
39. L'organizzazione in cui lavoro mi offre uno stipendio commisurato alla retribuzione che riceverei con la mia formazione e con le mie competenze in una qualsiasi altra organizzazione nel mercato del lavoro pubblico o privato [The organization I work for remunerates me according to the remuneration offered at either the public or private marketplace levels]						.83
40. L'organizzazione per cui lavoro prende in considerazione le aspettative ed i suggerimenti dei suoi dipendenti nel definire un sistema retributivo [The organization I work for considers the expectations and suggestions of its employees when designing a system of employee rewards]					.32	.44

Legenda. Factor 1 = Recruitment and selection; Factor 2 = Involvement; Factor 3 = Training and development; Factor 4 = Work conditions; Factor 5 = Competency-based performance appraisal; Factor 6 = Compensation and reward.

Note. The items that were retained for the 18-item version of the scale are shown in bold. Factor loadings <.30 are not shown for the sake of clarity.

Table 2 – Confirmatory factor analysis on the 18-item HRMPPS: model comparison (*N* = 580)

Model	χ^2	df	p	CFI	TLI	RMSEA	SRMR	AIC	BIC
Model 1	2406.60	135	.00	.72	.69	.17	.09	29529.60	29686.67
Model 2	2339.19	135	.00	.73	.69	.17	.43	29462.20	29619.27
Model 3	387.72	120	.00	.97	.96	.06	.04	27540.72	27763.24
Model 4	482.74	129	.00	.96	.95	.07	.05	27617.74	27800.99

Legenda. df = degree of freedom; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; AIC = Akaike's Information Criterion; BIC = Bayesian Information Criterion; Model 1 = single-factor solution; Model 2 = six-factor solution with uncorrelated factors; Model 3 = six-factor solution with intercorrelated factors; Model 4 = second-order factor solution.

Table 3 - Measurement invariance analyses of the 18-item HRMPPS for gender, seniority, and company size

Grouping variables	Levels of invariance	χ ²	df	р	CFI	TLI	RMSEA	SRMR	AIC	BIC	ΔCFI
Gender	Configural invariance	597.43	240	.00	.957	.94	.07	.04	27571.04	28173.14	
	Weak invariance	605.34	252	.00	.957	.95	.07	.04	27554.95	28104.69	.000
	Strong invariance	641.33	264	.00	.954	.95	.07	.05	27566.94	28064.32	003
	Strict invariance	690.65	282	.00	.951	.95	.07	.05	27580.26	27999.11	004
	Configural invariance	582.78	240	.00	.959	.95	.07	.04	27555.86	28157.96	
Canianita	Weak invariance	605.18	252	.00	.958	.95	.07	.05	27554.25	28104.00	001
Seniority	Strong invariance	651.79	264	.00	.953	.95	.07	.05	27576.87	28074.25	004
	Strict invariance	687.90	282	.00	.951	.95	.07	.05	27576.98	27995.83	002
	Configural invariance	535.65	240	.00	.965	.95	.07	.04	27335.75	27937.85	
Commonweite	Weak invariance	547.34	252	.00	.965	.96	.06	.04	27323.44	27873.19	.000
Company size	Strong invariance	627.00	263	.00	.956	.95	.07	.05	27381.10	27882.85	008
	Strict invariance	711.99	280	.00	.948	.94	.07	.05	27432.09	27859.67	008

Legenda. df = degree of freedom; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; AIC = Akaike's Information Criterion; BIC = Bayesian Information Criterion.

Table 4 – Cronbach's alpha values and correlations associated with the study variables (N = 580)

Variables	1	2	3	4	5	6	7	8	9	10
1. Recruitment and selection	(.84)									
2. Involvement	.45	(.91)								
3. Training and development	.53	.76	(.91)							
4. Work conditions	.44	.56	.60	(.79)						
5. Competency-based performance appraisal	.54	.62	.72	.65	(.87)					
6. Compensation and reward	.40	.65	.60	.60	.63	(.91)				
7. HRMPPS total score	.69	.83	.87	.79	.86	.80	(.95)			
8. Organizational affective commitment	.39	.60	.52	.38	.45	.41	.57	(.88)		
9. Work engagement	.30	.46	.46	.26	.46	.39	.48	.58	(.94)	
10. Job satisfaction	.40	.58	.58	.38	.53	.54	.62	.62	.77	_

Note. All correlations are statistically significant at p<.001. Cronbach's alpha values are shown on the diagonal within parentheses.

resources have on organizational policies and practices, the instrument can be useful for practical assessment purposes to support the strategic decisions of managers and organizations (e.g to assess employees' wellbeing and to plan coherent HR and welfare actions), but also for research purposes to expanding the scientific knowledge in the field of HRM, correlating information gathered with this measure with those coming from the assessment of more individual variables explaining positive organizational behaviours (e.g. organizational commitment, work engagement, job satisfaction) used in this study to assess the criterion validity

and proved to be strongly related constructs.

The limitations of the study concern the cross-sectional design, the non-probabilistic sampling procedure, and the use of only self-reported measures. Future studies should confirm the psychometric properties of the shorter version of HRMPPS on larger samples using a longitudinal design and including the comparison with multiple sources of evaluation of the same variables.

Despite these limitations, the present study provides a valid and reliable short form of the HRMPPS that can be used for research and practical purposes.

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