

Performance Management Behaviour Questionnaire (PMCGD) applied to the management of healthcare organisations

Cuestionario de Comportamiento de Gestión del Desempeño (PMCGD) aplicado a la gestión de organizaciones sanitarias

Gaspar T.^{1,2} Sousa B.¹ Faia-Correia M.³

¹*Universidade Lusófona, HEI-LAB, Portugal*

²*ISAMB/Lisbon University, Portugal*

³*Universidade Lusíada de Lisboa, COMEGI-Centro de Investigação em Organizações, Mercados e Gestão Industrial, Portugal*

ABSTRACT

The present study aims at adapting and validating the Performance Management Behavior Questionnaire (PMBQ) of Kinicki et al., (2013) into Portuguese to assess the Performance Management Behavior (PMBQ) applied to the management of health organizations. Data were collected in three hospital organizations reaching 470 health professionals. The most positive dimensions are related to Communication and Establishes/monitors/regulates Performance expectations. The least positive dimension of Performance Management is related to the Decision Making/Setting Goals process. The study Performance Management Behaviour Questionnaire (PMCMC) proved to be a psychometrically sound and theoretically valid measure with adequate psychometric properties and proved to be an innovative contribution to the assessment and promotion of the professionals' participation in the performance management process and monitoring of policies and strategies to improve human resource management promoting a better performance of the worker and the organisation as a whole.

KEYWORDS

Performance Management; Health Management, Satisfaction of Health Professionals, Psychosocial Work Risks, Healthy Workplaces.

RESUMEN

El presente estudio tuvo como objetivo adaptar y validar al portugués el Performance Management Behavior Questionnaire (PMBQ) de Kinicki et al., (2013) para evaluar la conducta de gestión del rendimiento o Performance Management Behavior (PMBQ) aplicado a la gestión de organizaciones de salud. Los datos se regieron en tres organizaciones hospitalarias y alcanzaron a 470 profesionales de la salud. Las dimensiones más positivas están relacionadas con la Comunicación y Establece/monitorea/regula las expectativas de Desempeño. La dimensión menos positiva de la gestión del desempeño está relacionada con el proceso de Toma de Decisiones/Establecimiento de Metas. El instrumento Performance Management Behaviour Questionnaire (PMCMC) demostró ser una medida psicométricamente sólida y teóricamente válida con propiedades adecuadas y demostró ser una contribución innovadora para la evaluación y promoción de la participación de los profesionales en el proceso de gestión del desempeño y el seguimiento de las políticas y estrategias para mejorar la gestión de los recursos humanos promoviendo un mejor desempeño del trabajador y de la organización en su conjunto.

PALABRAS CLAVE

Gestión del desempeño, gestión de la salud, satisfacción de los profesionales de la salud, riesgos psicosociales en el trabajo, ambientes de trabajo saludables.

Recibido: 30/07/2024; aceptado: 06/08/2024

Correspondencia: Tania Gaspar. E-mail: taniagasparbarra@gmail.com

Introduction

Guest (2002) advocates a worker-centred approach to Human Resource Management (HRM) in the analysis and study of HRM. He also argues that there is a positive relationship between HR practices and organizational performance. His main criticisms of HRM are that sometimes professionals are not involved in the processes of designing and implementing policies or even practices, managers seek efficient exploitation of HR without relying on the partnership of professionals. Other times, they apparently implement an HRM strategy that promotes the involvement and commitment of professionals, but results in the implementation of management techniques related to a manipulative organisational culture. The professionals feel involved and committed, but at the cost of enormous effort and damage to their stress and quality of life. The author argues that, without losing sight of the results of the organisation, the understanding of HRM should be focused on the results of the professional, and not only taking into account the performance of the organisation.

Den Hartog et al., (2013) identify a strong and positive relationship between professionals' satisfaction, management communication and their commitment, especially affective commitment. HRM must ensure committed and competent professionals. Commitment comes from the process of investing in professionals through HR practices linked to training, development and information sharing with professionals and careful management of the organisational culture. It is trusted that, committed professionals can exercise responsible

autonomy and be motivated by organisational goals, thus contributing to the performance of the organisation. A system based on high performance is associated with better organisational performance, more positive results, and greater satisfaction on the part of the professionals. High organisational performance practices and commitment are associated with higher job performance, financial performance and product and service quality and lower turnover (Boon et al., 2019). Also, positive relationships between professional and management are associated with higher performance. The promotion and implementation of HRM based on high engagement and high performance is critical (Guest et al., 2013).

Professionals can be involved in the process of deepening the relationship between HRM and aspects related to their satisfaction and well-being. This perspective assumes that employee outcomes are seen as an end rather than a means. Employee satisfaction depends on the HRM practices implemented, how they are implemented and how employees perceive them. Guest and Conway (2001) conducted a study on professionals' perceptions of HR practices in different professional sectors and in the public and private sector. They found a positive and significant correlation between the number of practices reported and job and life satisfaction. It is concluded that the most relevant practices are associated with equal opportunities in the workplace, and with strategies to prevent harassment or bullying in the work context, and also with opportunities for training and skills development. Compared to the total results, health professionals show

lower values for performance evaluation, career advancement opportunities and extra performance-related pay.

According to Kinicki et al., (2013), performance management is a set of management processes and behaviours aimed at defining, assessing, motivating and developing a better performance of professionals, with implications for organisational performance. According to the authors, the performance management process involves four steps: 1) define performance (establish with the professional the performance goals); 2) assess performance (monitor performance and identify strengths and points for improvement); 3) reassess/adjust performance (together with professionals reflect on the assessment and adjust if necessary); 4) provide performance consequences (assign and provide fair and sufficient rewards).

Performance management is a key process in the sustainability of organisations; this process allows for the alignment between performance, objectives, and strategies. Performance management is associated with the identification of the competencies of a professional or team and integrated into a broader set of Human Resources subsystems and allows for better monitoring, optimisation, and higher performance of professionals (Bititci et al., 2010).

In a study conducted by Kinicki et al. (2013), the authors defined six key dimensions to assess performance management: 1) Process of Goal-setting; 2) Communication; 3) Feedback; 4) Coaching; 5) Providing Consequences; 6) Establishing/Monitoring Performance Expectations. The authors add that all these dimen-

sions of performance management are highly correlated with dimensions of leadership and with organisational results and performance.

Performance management, if implemented effectively, benefits practitioners, managers and the organisation. However, professionals often consider it to be a merely bureaucratic process, which is often unfair and does not help them to improve their performance (Aguinis et al., 2011). According to the authors, it is essential to distinguish between performance appraisal and performance management. Performance management is an ongoing process that involves the identification, measurement and development of professionals and teams' performance, aligning performance with the organisation's strategic objectives, while performance appraisal is a cross-cutting assessment of professionals' strengths and weaknesses (Aguinis, 2009).

Aguinis et al., (2011) highlight benefits of a performance management system for professionals, managers and the organisation. At the practitioners' level it can contribute to an increase in their self-esteem, to a better understanding of the behaviours and outcomes required from their jobs and to better identify how to optimise their strengths and minimise their weaknesses. For managers it can result in a more motivated and competent group of professionals, a more aligned communication with professionals, a deeper knowledge of their professionals which allows an anticipation of performance and even an opportunity to improve performance. Organisations that take on more appropriate processes and actions make organisational objectives clearer

for managers and professionals, achieve more positive behaviour and attitudes and greater engagement and commitment from professionals, and finally, facilitate organisational change.

An effective performance management system creates opportunities for systemic analysis of the organisation, including organisational management issues such as staff motivation and commitment, improving individual and organisational performance, promoting effective internal communication, aligning objectives with organisational, team and staff goals and identifying training, development and change needs. Performance management and appropriate performance evaluation are tools that have the potential to guide the efforts of professionals and managers to achieve better individual and organisational goals and results. Integrated into human resource management, they allow for a better monitoring and optimisation of organizational potential and commitment (Crispim & Lugoboni, 2012; Houghton & Neck, 2002).

Performance management should involve the perspective of the manager and the professional. The performance management conducted by the professional him/herself implies an active role, since he/she assesses his/her performance against the established objectives by analysing the assessment criteria and giving a final opinion. Performance management can also be carried out at the competencies level, i.e. managers and professionals establish the necessary competencies for each position and the assessment is carried out on this basis, allowing for the development of hu-

man potential, identify and develop the appropriate competencies and, consequently, improve the organisational and human resource management effectiveness (Aguinis, 2009; Bititci et al., 2010; Sonnentag et al., 2004).

In the evaluation phase of the performance management process, both the practitioner and management are responsible for assessing the extent to which the behaviours performed are the appropriate ones and whether the desired outcomes have been achieved. Although many sources can be used to collect performance information (e.g. colleagues or subordinates), in most cases the direct manager provides the information. The extent to which the goals set out in the development plan have been achieved should also be assessed (Aguinis & Pierce, 2008).

It is important that both the professional and the management take ownership of the evaluation process, both must carry out the evaluation which allows access to useful information to be used productively in the review phase. Specifically, the inclusion of self-evaluations helps to emphasise possible discrepancies between one's own views and those of relevant others (management). The discrepancy between these two views can trigger development efforts, particularly when feedback from management is more negative than practitioner self-assessments. Self-assessments can reduce a practitioner's defensive attitude and increase their satisfaction with the performance management system, as well as improve perceptions of accuracy and fairness and thus acceptance of the system (Breevaart

et al., 2014; Naser & Al Shobaki, 2017; Smither & London, 2009).

Van Diemen and Beltman (2016) argue that an appropriate fit between individual work styles and the personal needs of professionals appears to be a critical factor in achieving better performance and outcomes.

The multi-level model presented by Guest (2017) and Grote and Guest (2017) includes antecedents of professionals' well-being and integrates the principles associated with a positive working relationship. At the level of HRM practices associated with well-being, including promoting investment in professionals, engagement at work, positive physical and social environment, communication/giving voice and organisational support. Well-being and positive work relationship (reflected in trust, fairness, safety, psychological contract and high quality and life at work), in addition to being influenced by perceptions of HRM practices, are also influenced by well-being and quality of life (psychological, social and physical). All these factors will be reflected in individual professional and organisational performance.

High levels of well-being and job satisfaction are associated with improved performance (Bryson et al., 2014), lower levels of turnover (Proudfoot et al., 2009) and burnout (Bakker et al., 2008).

The relevance of promoting practitioner well-being and satisfaction has been recognised globally, and supported by health professionals, researchers and economists (Leka & Jain, 2010; NICE, 2016; O'Donnell et al., 2014; OECD, 2018, 2020a, 2020b; WHO, 2002). The

outcomes of an organisation, namely the performance of professionals is highly influenced by their Health and Quality of Life (QoL). An organisational culture with an approach focused on the promotion of the professionals' quality of life and healthy workspaces (Healthy Workplace) is associated with better job satisfaction, fewer psychosocial risks at work, and, consequently, better outcomes, namely a better performance of professionals and customer satisfaction (Burton, 2010; Gaspar et al., 2021).

The main objective is the study, adaptation and validation into Portuguese of the Performance Management Behavior Questionnaire (PMBQ) of Kinicki et al., (2013) to assess the Performance Management Behavior (PMBQ) applied to the management of health organizations.

Method

Participants

Data were collected in three hospital organisations reaching 470 health professionals. 376 were female (80%), aged between 20 and 68 years, mean 44.18 and standard deviation 9.8. In this study, ages will be organised in three groups: participants aged 35 years or less (21.4%), participants aged between 36 and 50 years (48%) and participants aged 51 years or more (30.6%). Regarding marital status they are married or cohabiting (79.9%) the remaining (20.1%) are single, divorced or widowed. In terms of schooling, 16.4% of the participants have up to the 12th grade of schooling (included), 55.7% refer to having a degree and 27.9% have a Master's and/or a PhD.

Instruments

Instruments were used to assess three variables: Performance Management, Psychosocial Work Risks and Worker Satisfaction.

Professionals' Performance Management

A translated and adapted version of the Performance Management Behavior Questionnaire (PMBQ) by Kinicki et al., (2013) was used to measure health professionals' Performance Management (self-assessment).

The instrument was translated and adapted through the following translation and back-translation procedure: translation of the English version into Portuguese by two researchers, comparison and homogenization of the versions, translation of the resulting version into English, comparison of this version with the original version by an expert in English, and definition of the final version with the agreement of both researchers (Fortes & Araújo, 2019). The instrument has 27 items, organised into 6 dimensions: Process of Goal setting (5 items), Communication (4 items), Feedback (5 items), Coaching (5 items), Providing Conse-

quences (3 items) and Establishing/Monitoring Performance Expectations (5 items). The response interval is a 5-point scale (1- rarely or never; 5 - often or always) (Table 1).

Psychosocial Work Factors

The Copenhagen Psychosocial Questionnaire - COPSOQ II (middle version) by Kristensen (2002) translated and adapted to Portuguese by Silva et al. (2011) was used to measure the Psychosocial Work Factors. The instrument consists of 76 items, organised into 29 dimensions: work demands (6 items), work organisation and content (6 items), social relationships and leadership (7 items), work-individual interface 4 items), workplace values (5 items), personality (1 item), Health and well-being (7 items) and offending behaviours (4 items), responses follow a 5-point Likert-type scale (1 - never / almost never to 5 - extremely) (Table 2). The internal consistency values of the Portuguese version range between 0.20 and 0.90 (Silva et al. 2011). The internal consist-

Table 1

Characterisation of the Professionals' Performance Management Behavior Questionnaire regarding the dimensions, number of items, sample item and internal consistency

Dimension	Nº items	Example item	Alpha Cronbach (Kinicki et la., 2013)
Performance Management	27		
Process of Goal setting	5	Ensures performance targets are linked to the strategic or operational objectives of the Hospital	0,91
Communication	4	Has a communication style that makes others defensive	0,86
Feedback	5	Gives others timely feedback on their performance	0,85
Coaching	5	Helps identify solutions to overcome performance obstacles	0,91
Providing Consequences	3	Relates recognition and/or rewards to performance	0,93
Establishing/Monitoring Performance Expectations	5	Monitors their own work performance	0,73

ency value of the total scale used in this study is 0.94 (Gaspar, 2021).

Professional Job Satisfaction

A translated and adapted version of the Satisfaction of Employees in Health Care (SEHC) scale (Alpern et al., 2013) was used to assess Job Satisfaction.

The instrument was translated and adapted through the following translation and back-translation procedure: translation of the English version into Portuguese by two researchers, comparison and homogenisation of the versions, translation of the resulting version into English, comparison of this version with the original version by an expert in English, and definition of the final version with the agreement of both researchers (Fortes & Araújo, 2019). The scale consists of 20 items, 18 of them with a 4-point response scale (1- strongly disagree to 4 - strongly agree), these items with organized by three dimensions: relationship with management and supervisors (11 items), work content (5 items), relationship with co-workers (2 items). The scale also includes 2 more items: "I would recommend this service to others as a good place to work" with a 4-point response scale (1- not at all to 4 - yes, at all) and "How would you rate this health unit as a place to work, on a scale from 1 (the worst) to 10 (the best)". The internal consistency values of the original version range between 0.70 and 0.89 (Alpern et al., 2013). The internal consistency value of the total scale used in the present study is 0.92 (Gaspar, 2021).

Procedure

In a first stage, the study was submitted to the Ethics Committee of the Lisbon Academic Medicine Centre of the Centro Hospitalar Lisboa Norte of the Faculty of Medicine of the University of Lisbon and obtained a favourable opinion ref^a no. 35/19.

For the implementation of the research study, and after the identification of the hospitals that would be the target of the study and the approval of the respective administrations, meetings were held with the clinical directors of the specialties involved for the presentation of the project and involvement in the data collection process. After the presentation of the project to the management and collaborators of the hospitals under study and acceptance of participation in the study, it was submitted to the ethics committees and boards of directors of the three participating hospitals who wished to remain anonymous and received a favourable opinion.

After collecting all the necessary authorisations, we moved on to data collection. The quantitative instrument was applied through a link that was disseminated to the participants.

For the application of the Professionals Instrument, an email was sent by the hospitals to raise awareness about the participation in the study and then another email was sent to each health professional in the organisation with a link to the respective instrument. The homepage consists of the informed consent letter and only follows for completion if the participant deliberately marks their consent. In the database, each participant had an identi-

fier number guaranteeing anonymity and confidentiality.

For any of the instrument's anonymity and confidentiality was ensured, since the researcher didn't have cumulative access to the participant's identification and the data collected. The association with the data was made by an identification number.

Data Analysis and Treatment

For the analysis of quantitative data, such as those obtained through the application of questionnaires, statistical analysis was performed using the SPSS software, version 24.0. Confirmatory Factor Analyses were performed using the EQS software, version 6.3.

In the analysis of the data related to the professionals, Descriptive Statistics and Internal Consistency were performed, the association between variables was studied through Pearson's correlations and ANOVA variance analysis was used to study the differences between groups regarding variables of socio-demographic characterisation (gender, age, organisation under study, type of professional and satisfaction with remuneration) of all scales under study and respective dimensions: Performance Management Assessment Scale, Psychosocial Risks of Work Assessment Scale and Professional Satisfaction Assessment Scale.

The analysis of variance is a robust procedure for comparison of means that takes into account the variance when comparing two or more groups (Martinez & Ferreira, 2007). In this study, the confidence interval (CI) of 95% was considered.

In relation to the instrument Performance Management Behavior Questionnaire (PMBQ) of Kinicki et al. (2013), the psychometric study of the scales was performed and presented through the analysis of construct validity using confirmatory factor analysis, reliability through the analysis of internal consistency and sensitivity through the analysis of skewness and kurtosis. Asymmetry and kurtosis values tend towards 0 and are considered acceptable and sensitivity indicators are values between -1.96 and 1.96 (Martinez & Ferreira, 2007).

In the present study, the reliability of the instruments was assessed by Cronbach's alpha. The instrument was considered to have appropriate reliability when Cronbach's alpha value is greater than or equal to 0.70 (Marôco, 2007; Nunnally, 1978).

For the study of sensitivity, which is the ability of a scale to discriminate subjects according to the characteristic that is being measured. For the study of psychometric sensitivity, the values of the mean, standard deviation and absolute values of asymmetry and kurtosis and histogram are presented for the overall measurement of the scales under study.

The confirmatory factor analysis was performed using structural equation modelling. The ratio between the chi-square (χ^2) and the degrees of freedom (gl), and the fit indices NNFI (Non-Normed Fit Index), CFI (Comparative Fit Index), RMSEA (Root-Mean-Square Error of Approximation) and range were considered. The χ^2 indicates the magnitude of the discrepancy between the observed and the modelled covariance matrix, assessing the probability of the model's fit to the data. The higher this

value is, the worse the fit. It is generally considered its ratio in relation to the degrees of freedom (χ^2/gf) whose appropriate values are between 1 and 3 (Kline, 2005, 2010). The NNFI and CFI indices calculate the relative fit of the observed model by comparing it with a base model, whose values above 0.95 indicate optimal fit and those above 0.90 indicate adequate fit (Bentler, 1990; Hu & Bentler, 1999). The RMSEA is a measure of discrepancy, with results less than 0.05 being considered adequate, but acceptable up to 0.08 (Noronha et al., 2016; Marôco, 2014).

Results

Professionals' Performance Management Questionnaire

Descriptive Statistics and Internal Consistency of the Dimensions of the Professionals' Performance Management Questionnaire.

The perception of professionals' performance management is positive. The most positive dimensions are related to Communication and Establishes/monitors/regulates performance expectations. The least positive dimension of Performance Management is related to Decision Making/Setting Goals. The

internal consistency of the dimensions is high ranging between $\alpha = 0.92$ in the Overall Performance Management Scale and $\alpha = 0.78$ in the Communication dimension (Table 2).

Pearson's Correlations between the Dimensions of the Questionnaire

The dimensions of the Questionnaire are positively correlated in a statistically significant way, except for the non-significant correlation between the dimension Communication and the dimension Decision-making Process/Objective Setting. The highest correlation between Global Performance and the dimensions Feedback, Coaching, Establishes/monitors/ regulates performance expectations and Promote Consequences /Rewards all with correlations greater than 0.70 should be highlighted. Among the dimensions of the Performance Scale, the highest correlation is between the dimension Feedback and Coaching ($R=0.63$) (Table 3).

Table 2

Descriptive Statistics and Internal Consistency of the Dimensions of the Professionals' Performance Management Questionnaire

Performance Management	Mean	DP	Alpha Cronbach
Performance Management	3.60	0.49	0.92
Process of Goal setting	2.90	0.94	0.90
Communication	4.03	0.53	0.78
Feedback	3.56	0.62	0.82
Coaching	3.72	0.67	0.91
Providing Consequences	3.60	0.81	0.87
Establishing/Monitoring Performance Expectations	3.86	0.66	0.87

Table 3

Pearson's correlations between the Dimensions of the Professionals' Performance Management Questionnaire

	Performance Management Global	2	3	4	5	6
Performance Management						
Process of Goal setting	0.64**					
Communication	0.45**	0.01				
Feedback	0.81**	0.39**	0.30**			
Coaching	0.78**	0.30**	0.30**	0.63**		
Providing Consequences	0.72**	0.27**	0.33**	0.53**	0.51**	
Establishing/Monitoring Performance Expectations	0.74**	0.26**	0.31**	0.50**	0.52**	0.52**

Nota. ** $p < 0,001$

Sensitivity analysis of the Professional Performance Management Questionnaire

For the study of psychometric sensitivity, in addition to the mean and standard deviation values previously presented, the absolute values of skewness and kurtosis are shown for the global measure of the Professionals' Performance Management Questionnaire. The asymmetry value is -0.131 and the kurtosis value is 0.836, considered acceptable values and sensitivity indicators.

Confirmatory Factor Analysis of the Performance Management Questionnaire

Regarding the Professionals' Performance Management Questionnaire, the initial model found through the confirmatory factor analysis points to a poorly adjusted model

($\chi^2 = 3482.20$, $gl = 309$), $p = 0.001$, NCFI = 0.53; CFI = 0.58, RMSEA = 0.13, RMSEA confidence interval = 0.12, 0.13 (Table 4).

To improve the model the associations recommended by the Lagrange multiplier test were integrated to improve the model. The model obtained after removing the associations recommended by the Wald test and integrating the associations recommended by the Lagrange multiplier test is considered adjusted ($\chi^2 = 678.22$, $gl = 310$), $p = 0.001$, NCFI = 0.90; CFI = 0.91, RMSEA = 0.05, RMSEA confidence interval = 0.05, 0.06 (Table 4 and Table 5).

Table 4

Confirmatory Factor Analysis - Adequacy indices of the Professional Performance Management Questionnaire

	X2	gl	X2/gl	NNFI	CFI	RMSEA	range
Initial Model	3482,20	309	11,27	0,53	0,58	0,13	0,12-0,13
Final Model	678,22	310	2,19	0,90	0,91	0,05	0,05-0,06

Table 5

Model - Saturation of the indicators in the factors, error and variance explained for the items of the Professional Performance Management Questionnaire

Dimensions	Items	λ (saturação dos indicadores nos fatores)	E (erro residual)	R2 (Variância ex- plicada)
Process of Goal setting	1. Garante que as metas de desempenho estão ligadas aos objetivos estratégicos ou operacionais do Hospital	0.46	0.89	0.22
	2. Participa no estabelecimento de objetivos	0.76	0.66	0.57
	3. Auxilia os outros no estabelecimento de objetivos de desempenho específicos e mensuráveis	0.94	0.34	0.88
	4. Auxilia os outros no desenvolvimento de planos de ação que suportam metas de desempenho	0.97	0.26	0.93
	5. Incentiva os outros a estabelecer metas desafiadoras, mas atingíveis	0.87	0.50	0.75
Communication	6. Tem um estilo de comunicação que faz com que os outros fiquem na defensiva	0.59	0.81	0.35
	7. É um bom ouvinte	0.77	0.64	0.59
	8. É acessível e disponível para conversar com outras pessoas	0.74	0.68	0.55
	9. Fornece um feedback mais positivo do que negativo	0.57	0.82	0.33
Feedback	10. Dá aos outros um feedback oportuno sobre o seu desempenho	0.85	0.53	0.72
	11. Dá aos outros um feedback específico sobre o que é bom e mau relativamente ao desempenho	0.89	0.46	0.79
	12. Auxilia os outros no seu planeamento de carreira	0.63	0.78	0.40
	13. Dá um feedback honesto	0.46	0.89	0.22
	14. Ao fornecer feedback explica como o comportamento de uma pessoa afeta a si própria e ao grupo de trabalho	0.67	0.75	0.45
Coaching	15. Mostra aos outros como completar tarefas difíceis	0.75	0.67	0.56
	16. Fornece os recursos necessários para realizar o trabalho	0.75	0.66	0.57
	17. Ajuda a identificar soluções para superar os obstáculos presentes ao nível do desempenho	0.86	0.51	0.74
	18. Ajuda as pessoas a desenvolverem as suas competências	0.88	0.47	0.78
Providing Consequences	19. Direciona quando é necessário	0.81	0.59	0.66
	20. Reconhece o desempenho excecional	0.72	0.69	0.52

(Continúa)

Dimensions	Items	λ (saturação dos indicadores nos fatores)	E (erro residual)	R ² (Variância ex- plicada)
	21. Recompensa o bom desempenho	0.89	0.45	0.80
	22. Relaciona o reconhecimento e/ou as recompensas pelo desempenho	0.87	0.49	0.76
Establishing/ Monitoring Per- formance Expec- tations	23. Verifica o trabalho quanto à precisão e/ou qualidade	0.72	0.69	0.52
	24. Mantém as pessoas informadas sobre mudanças, prazos ou problemas	0.87	0.49	0.76
	25. Comunica as expectativas relacionadas com a qualidade	0.85	0.52	0.73
	26. Monitoriza o seu próprio desempenho no trabalho	0.64	0.77	0.42
	27. Prioriza tarefas e objetivos	0.57	0.82	0.33

Between-Group Differences - Anovas for the Professionals' Performance Management Questionnaire

There are no statistically significant differences ($p > 0.05$) between male and female participants in relation to the Evaluation of Global Performance Management regarding any of the dimensions of the scale.

Comparing the different age groups, we identified statistically significant differences in the Global Performance Management Assess-

ment ($F=9.83, p<0.001$) and the Decision-Making Process/Goal Setting dimensions ($F=3, 95, p<0.05$), Feedback ($F=14.29, p<0.001$), Coaching ($F=11.54, p<0.001$), Promoting Consequences/Rewards ($F=2.93, p<0.05$) and Establishes/monitors/regulates Performance expectations ($F=5.45, p<0.01$). It is the older professionals (51 years or more) who present higher Global Performance Management Assessment values and the referred dimensions when compared to the younger professionals (Table 6).

Table 6

ANOVA - Age differences between the dimensions of the Professionals' Performance Management Questionnaire

Performance Management Dimensions	Until 35 years old		Between 36 and 50 years old		51 years old or more		F
	M	DP	M	DP	M	DP	
Performance Management	3,51	0,46	3,53	0,48	3,76	0,48	9,83***
Process of Goal setting	2,93	0,89	2,75	0,93	3,07	0,96	3,95*
Communication	4,08	0,47	4,02	0,55	4,02	0,53	0,42(n.s.)
Feedback	3,39	0,64	3,48	0,59	3,81	0,59	14,29***
Coaching	3,52	0,64	3,67	0,71	3,95	0,58	11,54***
Providing Consequences	3,52	0,83	3,53	0,78	3,75	0,81	2,93*
Establishing/Monitoring Performance Expectations	3,73	0,58	3,80	0,72	4,02	0,60	5,45**

Nota. *** $p < 0,001$, ** $p < 0,01$, * $p < 0,05$

Table 7

Overall Pearson Correlation between Performance Management, Job Satisfaction and Psychosocial Work Risks in Study

	1	2
1 - Performance Management	--	
2 – Professionals Satisfaction	0,44**	--
3 – Psychosocial Work Risks	-0,42**	-0,83**

note. ** $p < 0,001$, * $p < 0,01$

The QCGD reveals adequate concurrent validity in relation to relevant indicators, there is a moderate positive correlation between Performance Management and Worker Satisfaction ($R=0.44$) and a moderate negative correlation between Performance Management and Psychosocial Work Risks ($R= - 0.42$) (Table 7).

Discussion

The results allow corresponding to the main objective, more specifically, to study, adapt and validate into Portuguese the Performance Management Behavior Questionnaire (PMBQ) of Kinicki et al., (2013) allowing assessing the Performance Management Behavior in Portuguese health organizations.

The study Performance Management Behaviour Questionnaire (PMBQ) proved to be a psychometrically sound and theoretically valid measure with adequate psychometric properties and proved to be an innovative contribution to assessing and promoting the professionals' participation in the performance management process and monitoring human resource management improvement policies and strategies that promote a better performance of the employee and the organisation as a whole.

The results indicate that, at the level of performance management, professionals report moderate values, less positive performance management values were found in the dimension related to the decision-making process and goal setting and more positive performance management values in the dimension related to communication. The results found in the present study respect the same trend and are like those found in the original study Kinicki et al. (2013).

Health professionals' performance management is strongly associated with their quality of life, conditions and well-being at work and work relationships. The professional can improve his/her performance management if the organisation develops actions that increase the professional's engagement in the performance management process (Aguinis & Pierce, 2008). If professionals are involved in the performance management process, the alignment between competencies, individual objectives and organisational goals increases (Aguinis, 2009), allowing for a better orientation of efforts, monitoring, and optimisation of the professionals' potential (Crispim & Lugoboni, 2012). Greater autonomy and engagement will increase the motivation, the achievement of goals and a better performance of

the professional and the whole organisation (Breevaart et al., 2014; Van Diemen & Belman, 2016).

A relationship was identified between the age of the professionals and Performance Management, it was the older professionals (51 years or more) who presented higher values of Global Performance Management Assessment and of the mentioned dimensions when compared to the younger professionals. Older professionals, in general, tend to have more stable contractual situations, are less exposed to job insecurity, less overload, more autonomy, better stress and burnout management and less harassment (Gaspar et al. 2017; Sharipova et al., 2010). Stress is one of the most frequent psychosocial risks, often associated with work organisation and insecurity, excessive and overloaded work, and harassing behaviour (European Commission, 2011). Health professionals are among those with the most psychosocial problems due to the nature of their work and their permanent contact with patients (EU-OSHA, 2009; 2013; Marchand, 2007; WHO, 2007a, 2007b).

Professionals' performance management is positively correlated with professional satisfaction. HR practices are important for professionals' satisfaction, but they are not enough, professionals evaluate and respond to practices also taking into account their personal and family life. This knowledge allows an opportunity for HRM to focus on the design of objectives/work/tasks, with the direct participation and sharing of information with professionals, with greater gains in terms of professional satisfaction and organisational performance.

Everything depends on the ability to achieve a balance, sharing and a win-win system (Guest & Peccei, 2001; Ogbonnaya & Messersmith, 2018). In order to improve the performance of organisations and professionals, the HRM model should prioritise practices that promote well-being and a positive relationship between the professional and the organisation (Guest, 2017).

There is also a negative correlation between professional performance management and psychosocial risks at work. Eurofund (2011) focuses on the links between social dialogue, working conditions, quality of work, performance management and their impact on the professional's performance and the organisation's overall performance, arguing that there is a clear link between better performance management and quality of work and training, skills and employability. Training emerges as the factor with the greatest impact on performance improvement.

Health, safety and well-being contribute to an increase in performance and productivity of around 20% by reducing sickness, sickness absence and associated costs. An organisation focused on the prevention and effective management of psychosocial risks at work, with flexible, well-developed policies promoting a work-individual balance has a positive impact on performance, as well as leads to greater ease in recruiting and retaining professionals, greater dedication of professionals, when necessary, fewer accidents and errors, and greater job satisfaction (Burton, 2010; Gaspar et al., 2021).

The results obtained in this study point to the need to involve more and promote an active participation of professionals in performance management, especially at the level of the decision-making process and goal setting.

Human resource management strategies and policies that prioritise the professional's involvement and participation in performance management, that value well-being and a healthy work environment are associated with fewer psychosocial risks at work, higher professional satisfaction, and increased individual and organisational performance.

References

- Aguinis, H., Joo, H., & Gottfredson, R. K. (2011). Why we hate performance management—And why we should love it. *Business Horizons*, 54(6), 503–507. <https://doi.org/10.1016/j.bushor.2011.06.001>
- Aguinis, H., & Pierce, C. A. (2008). Enhancing the relevance of organizational behavior by embracing performance management research. *Journal of Organizational Behavior*, 29(1), 139–145. <https://doi.org/10.1002/job.493>
- Alpern, R., Canavan, M. E., Thompson, J. T., McNatt, Z., Tatek, D., Lindfield, T., & Bradley, E. H. (2013). Development of a Brief Instrument for Assessing Healthcare Employee Satisfaction in a Low-Income Setting. *PLoS ONE*, 8(11), e79053. <https://doi.org/10.1371/journal.pone.0079053>
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bititci, U. S., Ackermann, F., Ates, A., Davies, J. D., Gibb, S., MacBryde, J., Mackay, D., Maguire, C., van der Meer, R., & Shafti, F. (2010). Managerial processes: an operations management perspective towards dynamic capabilities. *Production Planning & Control*, 22(2), 157–173. <https://doi.org/10.1080/09537281003738860>
- Boon, C., Hartog, D. N. D., & Lepak, D. P. (2019). A Systematic Review of Human Resource Management Systems and Their Measurement. *Journal of Management*, 45(6), 2498–2537. Sagepub.
- Breevaart, K., Bakker, A. B., & Demerouti, E. (2014). Daily self-management and employee work engagement. *Journal of Vocational Behavior*, 84(1), 31–38. <https://doi.org/10.1016/j.jvb.2013.11.002>
- Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public Value Governance: Moving Beyond Traditional Public Administration and the New Public Management. *Public Administration Review*, 74(4), 445–456. <https://doi.org/10.1111/puar.12238>
- Burton, J. (2010). *WHO healthy Workplaces Framework and Model: Background and Supporting Literature and Practice*. World Health Organization: Geneva, Switzerland
- Crispim, S. F., & Lugoboni, L. F. (2012). Avaliação de desempenho organizacional: análise comparativa dos modelos teóricos e pesquisa de aplicação nas Instituições de Ensino Superior da Região Metropolitana de São Paulo. *Revista Portuguesa E Brasileira de Gestão*, 11(1), 41–54.
- Den Hartog, D. N., Boon, C., Verburg, R. M., & Croon, M. A. (2012). HRM, Communication, Satisfaction, and Perceived Performance. *Journal of Management*, 39(6), 1637–1665. <https://doi.org/10.1177/0149206312440118>
- European Agency for Safety and Health at Work (EU-OSHA) (2012). *Drivers and Barriers for Psychosocial Risk Management: An analysis of findings of the European survey of enterprises on new and emerging risks*. Luxembourg: Publications Office of the European Union. Available at: <https://osha.europa.eu/en/publications/reports/drivers-barriers-psychosocial-risk-management-esener/view>
- European Agency for Safety and Health at Work (EU-OSHA) (2009). *OSH in figures: Stress at work - facts and figures*. Luxembourg: Office

- for Official Publications of the European Communities.
- European Commission (2011). *Report on the implementation of the European social partners' Framework Agreement on Work-related Stress*. Brussels: European Comission.
- European Foundation for the Improvement of Living and Working Conditions (Eurofound) (2011). *Links between quality of work and performance*. European Foundation for the Improvement of Living and Working Conditions.
- Fortes, C. P. D. D., & Araújo, A. P. de Q. C. (2019). Check list para tradução e Adaptação Transcultural de questionários em saúde. *Cadernos Saúde Coletiva*, 27(2), 202–209. <https://doi.org/10.1590/1414-462x201900020002>
- Gaspar, T. (2021) O Futuro da Gestão, Qualidade e Desempenho dos Sistemas de Saúde. In *O Futuro de quase tudo*, Matos, M.G. (Ed.), Ordem dos Psicólogos Portugueses. pp.109-131.
- Gaspar, T., Botelho-Guedes, F., Cerqueira, A., Baban, A., Rus, C., & Gaspar-Matos, M. (2024). Burnout as a multidimensional phenomenon: how can workplaces be healthy environments? *Zeitschrift Für Gesundheitswissenschaften/Journal of Public Health*. <https://doi.org/10.1007/s10389-024-02223-0>
- Gaspar, T., Cabrita, T., Rebelo, A., & Gaspar de Matos, M. (2017). Psychological and Social Factors That Influence Quality of Life: Gender, Age and Professional Status Differences. *Journal of Psychology Research*, 7(9). <https://doi.org/10.17265/2159-5542/2017.09.003>
- Gaspar, T., Gomez-Baya, D., Guedes, F. B., & Correia, M. F. (2023). Health Management: Evaluating the Relationship between Organizational Factors, Psychosocial Risks at Work, Performance Management, and Hospital Outcomes. *Healthcare*, 11(20), 2744. <https://doi.org/10.3390/healthcare11202744>
- Grote, G., & Guest, D. (2016). The case for reinvigorating quality of working life research. *Human Relations*, 70(2), 149–167. <https://doi.org/10.1177/0018726716654746>
- Guest, D. (2002). Human Resource Management, Corporate Performance and Employee Wellbeing: Building the Worker into HRM. *Journal of Industrial Relations*, 44(3), 335–358. <https://doi.org/10.1111/1472-9296.00053>
- Guest, D. E. (2017). Human Resource Management and Employee well-being: Towards a New Analytic Framework. *Human Resource Management Journal*, 27(1), 22–38. Wiley. <https://doi.org/10.1111/1748-8583.12139>
- Guest, D. E., & Peccei, R. (2001). Partnership at Work: Mutuality and the Balance of Advantage. *British Journal of Industrial Relations*, 39(2), 207–236. <https://doi.org/10.1111/1467-8543.00197>
- Guest, D., Paauwe, J., & Wright, P. M. (2013). *HRM and performance : achievements and challenges*. Wiley.
- Houghton, J. D., & Neck, C. P. (2002). The revised self-leadership questionnaire. *Journal of Managerial Psychology*, 17(8), 672–691. <https://doi.org/10.1108/02683940210450484>
- Hu, L., & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kinicki, A. J., Jacobson, K. J. L., Peterson, S. J., & Prussia, G. E. (2013). Development and Validation of the Performance Management Behavior Questionnaire. *Personnel Psychology*, 66(1), 1–45. <https://doi.org/10.1111/peps.12013>
- Kline, R. B. (2005). *Methodology in the social sciences. Principles and practice of structural equation modeling (2nd ed.)*. Guilford Press.
- Kline, R. B. (2010) *Principles and practice of structural equation modelling*. Guilford Press
- Kristensen, T. S. (2002). A new tool for assessing psychosocial factors at work: The Copenhagen Psychosocial Questionnaire. *TUTB Newsletter*, 19(20), 45–47.

- Leka, S., & Jain, A. (2010). Health impact of psychosocial hazards at work: an overview. *World Health Organization*.
- Marchand, A. (2007). Mental health in Canada: Are there any risky occupations and industries? *International Journal of Law and Psychiatry*, 30(4-5), 272–283. <https://doi.org/10.1016/j.ijlp.2007.06.002>
- Marôco, J. (2007). *Análise Estatística: com utilização do SPSS*. Edições Sílabo.
- Marôco, J. (2014). *Análise de Equações Estruturais: Fundamentos teóricos, software e aplicações*. CAFILESA – Soluções Gráficas.
- Martinez & Ferreira. (2007). Data analyses using SPSS. Escolar Editora
- National Institute for Health and Care Excellence (NICE). (2016). *Quality standards, Process guide*. National Institute for Health and Care Excellence, Recoverd from: <https://www.nice.org.uk/Media/Default/Standards-and-indicators/Quality-standards/quality-standards-process-guide.pdf>
- Naser, S. S. A., & Al Shobaki, M. J. (2017). Organizational Excellence and the Extent of Its Clarity in the Palestinian Universities from the Perspective of Academic Staff. *International Journal of Information Technology and Electrical Engineering*, 6(2), 47–59.
- Noronha, A. P., Paula Pinto, L., & Ottati, F. (2016). Análise fatorial confirmatória da Escala de Aconselhamento Profissional. *Arquivos Brasileiros de Psicologia*, 68(1), 62–71.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- O'Donnell, G., Deaton, A., Durand, M., Halpern, D., & Layard, R. (2014). *Wellbeing and Policy*. London: Legatum Institute
- Organisation for Economic Co-operation and Development (OECD) (2017). *Caring for Quality in Health: Lessons learnt from 15 reviews of Health care quality*, OECD Reviews of Health Care Quality, OECD publishing, Paris
- OECD. (2020a). Health at a Glance: Europe 2020. In *Health at a Glance: Europe*. OECD. <https://doi.org/10.1787/82129230-en>
- Organisation for Economics Co-operation and Development (OECD). (2020b). How's Life? 2020. In *How's Life?* Organisation for Economic Co-operation and Development. <https://doi.org/10.1787/9870c393-en>
- Ogbonnaya, C., & Messersmith, J. (2018). Employee performance, well-being, and differential effects of human resource management subdimensions: Mutual gains or conflicting outcomes? *Human Resource Management Journal*, 29(3), 509–526. <https://doi.org/10.1111/1748-8583.12203>
- Proudfoot, J. G., Corr, P. J., Guest, D. E., & Dunn, G. (2009). Cognitive-behavioural training to change attributional style improves employee well-being, job satisfaction, productivity, and turnover. *Personality and Individual Differences*, 46(2), 147–153. <https://doi.org/10.1016/j.paid.2008.09.018>
- Sharipova, M., Hogh, A., & Borg, V. (2010). Individual and organizational risk factors of work-related violence in the Danish elder care. *Scandinavian Journal of Caring Sciences*, 24(2), 332–340. <https://doi.org/10.1111/j.1471-6712.2009.00724.x>
- Silva, C., Amaral, V., Pereira, A., Bem-haja, P., Pereira, A., Rodrigues, V., ... Nossa, P. (2011). *Copenhagen Psychosocial Questionnaire COPSOQ –Versão Portuguesa*. Fundação para a Ciência e Tecnologia.
- Smither, J. W., & London, M. (2009). *Performance management : putting research into action*. Jossey-Bass.
- Sonnentag, S., Niessen, C., & Ohly, S. (2004). Learning at Work: Training and Development. In *International Review of Industrial and Organizational Psychology* (pp. 249–289). John Wiley & Sons.
- World Health Organization (WHO) (2007a). Authored by I. Houtman, A., K. Jettinghoff, & L. Cedillo, Raising awareness of stress at work in developing countries: A modern hazard in a traditional working environment: advice to employers and worker representatives. *Protecting Workers' Health Series*, No. 6. Geneva: World Health Organization.
- World Health Organization (WHO) (2007b). *Building leadership and management capacity in health*. Geneva: World Health Organization.

- World Health Organization (WHO) (2002).
World health report 2002 - Reducing risks,
promoting healthy life. Geneva: World
Health Organization.
- van Diermen, O. G., & Beltman, S. (2016).
Managing working behaviour towards
new ways of working: a case study. *Journal
of Corporate Real Estate*, 18(4), 270–286.
<https://doi.org/10.1108/jcre-11-2015-0039>