# Human resources practices and engagement of disability care front-line support workers

Ana Rosa Del-Aguila-Obra, Rosa María Benítez-Saña and Antonio Padilla-Meléndez
*Universidad de Málaga, Málaga, Spain*

Received 23 July 2024
Revised 14 January 2025
18 February 2025
Accepted 27 February 2025

## Abstract

**Purpose** – The topic of disability care non-profit organisations (NPOs) and human resource management (HRM) is relatively unexplored. From the job demand and resources theory, this research aims to study the impact of a high-performance work system (HPWS) on work engagement (WE) and determine which human resource (HR) practices have the most significant impact on WE in the case of disability care front-line support workers, named disability care workers onwards.

**Design/methodology/approach** – An empirical study with 264 participants from 145 Spanish disability care NPOs was conducted. Disability care workers' perceptions about organisational HR practices and their impact on engagement were analysed using the partial least squares structural equation modelling method. The importance-performance matrix analysis (IPMA) was used to identify which HR practices were crucial in predicting engagement in this sector.

**Findings** – HPWS positively impacts engagement in the case of disability care workers. It was found that selection, teamwork and training are the most relevant HR practices in analysing engagement performance.

**Originality/value** – This paper contributes to the scarce literature about how people are managed in disability care NPOs. It provides theoretical insight and relevant managerial implications in an under-represented context. It is the first study showing the relationship between HR practices as antecedents of engagement in the case of disability care workers and identifying which practices are the most valuable. It provides disability care NPO HR managers with relevant practical keys.

**Keywords** Disability care front-line workers, Human resources management practices, Work engagement, Non-profit organisations

**Paper type** Research paper

## Introduction

According to the World Health Organisation, 16% of the global population experience a significant disability, and this number is growing (WHO, 2024). Several social services are provided to improve the quality of life and enable people with disabilities to live independently as the rest of the population, considering a social model for disability (Oliver, 2013, 2023). In Europe, the disability service system combines public, private and non-profit organisations (NPOs) to promote equal opportunities for people with disabilities through effective and high-quality service systems (EASPD, 2024).

Disability care sector organisations, mainly NPOs (van Toorn and Cortis, 2023), as service providers, face significant challenges, firstly attracting and retaining the most qualified professionals to provide their services and, secondly, transforming their service process in order to obtain individual and collective well-being (Lincoln *et al.*, 2014; NDS, 2022).

In this vein, research about human resource management (HRM) in the disability care sector is scarce, and disability care NPOs HRM is a relatively unexplored topic. There is previous literature about workers with disabilities (Emidy *et al.*, 2024; Kruse *et al.*, 2018; Pérez *et al.*, 2015), but the specific case of employees working in disability services NPOs is uncovered by literature (Vassos *et al.*, 2013, 2019).

Personnel Review
Vol. 54 No. 4, 2025
pp. 1012-1028
Emerald Publishing Limited
e-ISSN: 1758-6933
p-ISSN: 0048-3486
DOI 10.1108/PR-07-2024-0690

Work engagement (WE) is a "core process" in people management strategy. In the case of NPOs, there is a call for further research about engagement and perceptions of human resource (HR) practices in these organisations (Akingbola *et al.*, 2023a, b). Consequently, disability care NPOs must develop HRM strategies based on effective HR practices to increase work engagement. In this vein, several studies link a high-level use of high-performance work systems (HPWS) with higher levels of WE, a construct connected with satisfaction, commitment involvement and a sense of belonging, which has been identified as a generator of competitive advantage in organisations. These factors positively influence the quality of service, customer loyalty, and, finally, higher levels of performance and competitiveness of the organisation (Cao *et al.*, 2024; Das, 2024; Lertxundi and Landeta, 2011). Consequently, managers need to learn how it is possible to improve the engagement of their employees.

This research aims to demonstrate the relationship between HR practices and WE of disability care front-line support workers, named disability care workers onwards and determine which practices impact engagement levels most, contributing to the theory and practical knowledge. An empirical study with a sample of 264 participants, disability care workers, from 145 Spanish disability care NPOs was conducted. Using the partial least squares structural equation modelling (PLS-SEM) method, the disability care workers' perceptions about HR practices and their impact on engagement were analysed. As a result, the analysis of performance-importance indicators found a particular order of importance for the practices: selection, teamwork and training were the most relevant HR practices as latent exogenous variables, predicting WE as the outcome variable. This paper contributes to the scarce literature on HR management in disability care NPOs, particularly regarding disability care workers. Specifically, this work contributes to the job demands-resources theory in an under-represented service context. It provides empirical insight into the perceptions of disability care workers about HR practices and how these impact their engagement. In addition, relevant implications for HR managers are included.

## Theoretical framework

### *HR practices: job demands and resources in disability services*

The job demands and resources theory (JD-R model) assumes that every occupation may have specific risk factors associated with job stress (Bakker, 2013; Demerouti *et al.*, 2001). These factors can be classified into two general categories: job demands and job resources. The JD-R model also explains the confluence of two health processes in employees: a health impairment process, characterised by burnout (with negative consequences; absenteeism and psychosomatic complaints) that underlies the demands of the task and another motivating process, characterised by WE (with positive consequences; motivation and job satisfaction), which relates to resources available to the employee and how to deal with job demands (Bakker and Demerouti, 2007, 2008). Job demands are those physical, social or organisational aspects of the job that require sustained physical or mental effort and incur psychological costs; job resources are those physical, psychological, social or organisational aspects of the job that reduce job demands and psychological costs while encouraging personal growth and development (Demerouti *et al.*, 2001). Personal resources later added to the JD-R model (Bakker and Demerouti, 2008) are defined as those characteristics or traits engaged employees possess. Engaged employees frequently experience positive emotions (happiness, joy and enthusiasm); "they have better health; they create their own job and personal resources; and they transfer their engagement to others" (Bakker and Demerouti, 2008, p. 215). Job and personal resources can be considered backgrounds/predictors of WE and moderators of the adverse effects of job demands (Bakker and Demerouti, 2008; Schaufeli and Taris, 2014).

In this research, the primary assumption is that human capital is crucial in disability care NPOs. These organisations, in general, and HR managers, in particular, must pay special attention to HR practices as job resources that positively impact WE, following the JD-R framework (Akingbola *et al.*, 2023b). Job demands in this sector are singular; disability care NPOs are change agents with particular values and missions. Disability care workers have an

intrinsic and public service motivation; they are highly specialised and require particular skills to work with the users, as they often face unique challenges. They are required to possess and practice emotional and behavioural components that promote work and organisational performance, and, additionally, they are also required to exemplify the organisation's values in interaction with stakeholders, including users and funders (Akingbola *et al.*, 2023a).

According to prior research, HR managers perform HR practices as systems, HPWS as practical HRM tools, to raise a proactive, creative, innovative and achievement-oriented human capital whose levels of professional performance contribute to achieving high levels of competitiveness and excellent organisational results (Appelbaum *et al.*, 2000; Cao *et al.*, 2024; Das, 2024). HPWS systems are based on organisational HR practices and consist of the systematised implementation of innovative people management policies and practices designed to increase resources and capabilities in the organisation, thus increasing the competitiveness of the workforce and their improved performance as well as the productivity and efficiency of organisations. HPWS systems have been considered a background of the WE because of their ability to foster it, adding value to organisations, their employees and their clients or users.

In this regard, the ability, motivation and opportunity (AMO) theoretical approach (Appelbaum *et al.*, 2000) can be used as a base that makes it possible to define and structure the set of practices, HR bundles that make up an HPWS (Cooper *et al.*, 2020; Lertxundi and Landeta, 2011). This theoretical model analyses the three dimensions of HPWS, AMO, with organisational interventions in several HR areas. *Ability* refers to selection policies (exhaustive selection processes, objective criteria and suitability for candidates' positions) and training (investment in these activities, formal programs of various kinds). Motivation is related to communication (channels to properly coordinate employees and managers, suggestion boxes, a bank of ideas, bulletin boards, complaints and contributions in general). Opportunity is linked to teamwork (systematisation of formal autonomous working groups for problem-solving, quality or projects) and participation (autonomy and involvement of employees in decisions, stimulating initiative, creativity and relationships of trust and cooperation) (Camps and Lunas-Arocas, 2009; Lertxundi and Landeta, 2011).

*Engagement and disability care front-line workers*

Service front-line workers can play various roles in different industries, such as healthcare, emergency services, education, hospitality and vulnerable care services. Furthermore, they perform critical functions, providing essential services. Therefore, it is crucial to recruit and retain employees who have relevant skills for the front-line jobs (Yavas *et al.*, 2010). Disability care NPOs offer services to people with disabilities and play a fundamental role in improving their quality of life and promoting their inclusion in society (Plena Inclusión, 2024). Professionals work in this sector in a variety of settings and perform a wide range of roles, from healthcare professionals who provide medical care and therapy to direct support staff who assist with activities of daily living, such as feeding, grooming, mobility or participation in daily activities, and even those professionals who seek their socio-labour inclusion.

Engaged employees are physically, cognitively, and emotionally connected to their work roles (Kahn, 1990). As a multidimensional concept, WE refers to a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption (Mazzetti *et al.*, 2023). Elevated levels of WE are associated with several benefits for organisations: less absenteeism, increased motivation and improved employee performance (Xanthopoulou *et al.*, 2009). To achieve WE, organisations should create and sustain work environments characterised by well-designed, appropriate and high-quality jobs that provide opportunities for career development, supportive leaders, cultures, policies and practices, quality relationships and access to decent work (Lysova *et al.*, 2019).

WE can also be a way to improve the competitiveness of NPOs (Gardner *et al.*, 2011; Johansen and Sowa, 2019). In this vein, Selander (2015) found that third-sector employees report higher WE than employees working in for-profit organisations, and Schepers *et al.*

(2005) found that these employees prioritise common objectives. Subsequently, Johansen and Sowa (2019) found that employee engagement positively influences managerial and stakeholder perceptions of organisational performance. Other topics have been related to the mediation effect of WE between perceived participation in the decision-making, the predictors or antecedents, such as job resources (Sarti, 2014), the links between WE and job autonomy and transformational leadership (Gözükara and Şimşek, 2015), the relationships between work practices and performance (Park *et al.*, 2018) or the outcomes or benefits, for example, in the organisational sphere, like citizen behaviour or commitment (Akingbola and van den Berg, 2019), reduction of the intention to quit or increasing innovative work behaviour (Akingbola *et al.*, 2023b) and the relationships between meaningful work and all the dimensions of job burnout (Tan and Yeap, 2022). However, little previous research about engagement and disability care workers exists (Akingbola *et al.*, 2023a; Outar and Rose, 2017; Vassos *et al.*, 2013, 2019).

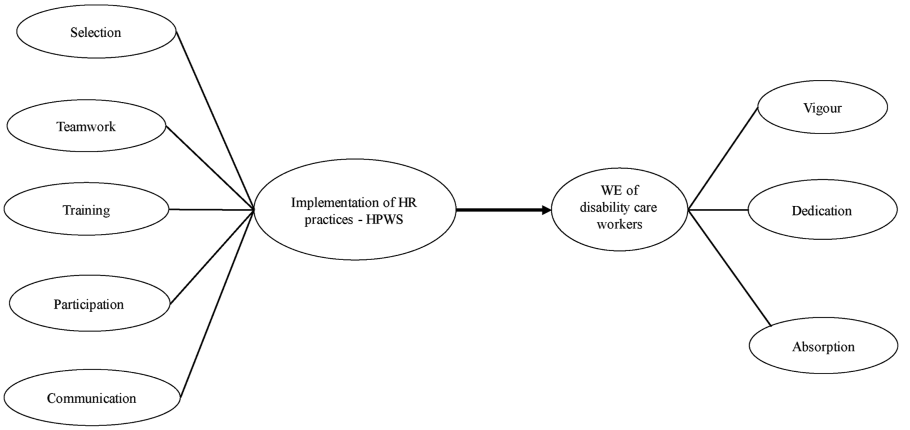
Vassos *et al.* (2013) explored the relationship between WE and job burnout, finding that the workplace demand for role ambiguity and the workplace resource of job feedback were consistently associated with both WE and burnout. Subsequently, Outar and Rose (2017) studied the relationship between work demands and burnout and the different variables that mediate this relationship. Later, Vassos *et al.* (2019) examined whether the job demand-control-(support) model validly explains disability care workers' burnout and WE. Significant three-way interactions between workload, control and colleague support were found for emotional exhaustion, personal accomplishment (burnout) and vigour (WE). High workload, low job control and low colleague support were related to higher burnout and lower WE.

Consequently, a relatively unexplored topic in NPOs, particularly in disability care NPOs, is the relationship between HPWS and engagement, except Vassos *et al.* (2013, 2019). More academic work is needed to evaluate employee perceptions, particularly disability care workers, about the HPWS and their impact on engagement as job resources in disability care NPOs.

As a consequence of the conducted review, the following hypotheses have been proposed (see Figure 1):

*H1*. Implementing HPWS impacts the WE of disability care workers positively.

*H2*. HPWS practices impact unequally on WE of disability care workers.




**Source(s):** Authors' own creation

**Figure 1.** Conceptual model

## Methods

### *Data and procedures*

A questionnaire was used to assess the proposed model, collecting self-reported information. It is considered a valuable resource for researching the employees' perceptions about the degree of implementation of HPWS and their level of WE. Participants using a multi-strategy approach were recruited, considering the difficulty in capturing this relevant information from individuals. One of the researchers has experience working in the disability sector for three decades in the HR department of one disability care NPO. With this background, different campaigns to have participants were developed, using a snowball sampling procedure that facilitated the survey distribution among the target population and invited them to voluntary and non-incentivised participation. This participation included person-to-person meetings (pretest), postal mailing (with the assistance of NPO managers), electronic mailing and LinkedIn-based mailings sent only to employees working in disability sector NPOs. About 264 valid surveys were collected from 145 different Spanish NPOs, members of the European Association of Service Providers for Persons with Disabilities (EASPD).

The participants develop activities such as personal care, caregiving, social inclusion and labour insertion (preparation for life, social preparation for working life). Most of them were female (78.03%). On average, participants were 37 years old and had a permanent organisational position (68.93%).

*T*-test, equality of means and Levene's test, equality of variances, were developed between the top 30 and bottom 30 respondents, early and late respondents and no significant difference was observed (Armstrong and Overton, 1977). In order to prevent common method bias (CMB), different strategies were used: (1) A pretest of the questionnaire with 33 front-line workers from six NPOs. The purpose was to evaluate the validity, reliability and acceptance level of the proposed scales and the adequacy of the questionnaire's structure and item comprehension, verifying the clarity and controlling the associated cognitive effort. No issues were identified during this stage; (2) Condensed versions of measurement scales were used, with established psychometric properties to minimise the length; (3) Participant's anonymity was guaranteed, and it was assured that the data would be used in an aggregated manner; (4) The language matched the respondents' skills; (5) The population was interested in the study and (6) The questionnaire was completed voluntarily (MacKenzie and Podsakoff, 2012; Podsakoff *et al.*, 2024). Also, applying the recommendations of Podsakoff *et al.* (2003), the survey items were presented in random order, and some items were included in reverse order to reduce possible response bias. Also, a collinearity test based on variance inflation factors (VIFs) was carried out.

### *Measures*

This research measured HPWS perceptions with a scale adapted from different previous works (Cafferkey and Dundon, 2015; Gould-Williams and Davies, 2005; Lertxundi and Landeta, 2011). As a result, the HPWS measure was developed, comprising five dimensions: selection, training, participation, teamwork and communication. The items were rated on a seven-point Likert scale, ranging from 0 (never) to 6 (always).

The measurement of WE was conducted using the Utrecht Work Engagement Scale (UWES-9), based on three dimensions (Schaufeli *et al.*, 2003, 2006). The scale comprised nine items scored on a seven-point Likert scale (0 = never/6 = always). Control variables, including gender, organisational size, age, tenure and contract type, were included following prior studies (de Oliveira and da Silva, 2015; Park *et al.*, 2018; Selander, 2015). Survey questions are available in the Appendix.

### *Data analysis*

Firstly, SPSS version 28.0 was used for data entry and demographic analysis. Secondly, the data was analysed using PLS-SEM with the Smart PLS software. It is widely acknowledged by

the scholarly community, authors, reviewers and editors that PLS-SEM is an effective tool for predictive and explanatory research (Hair *et al.*, 2019; Ringle *et al.*, 2022). Furthermore, PLS-SEM is a highly effective tool for both exploratory and confirmatory studies, mainly when dealing with theoretical models that involve new measures or novel relationships between latent variables that require testing (Chin, 2010). Given the novelty of some of the constructs and the scarcity of studies analysing them together, PLS-SEM is particularly suitable for testing the hypothetical model proposed. Subsequently, the importance-performance map analysis (IPMA) was used to extend the result of the PLS-SEM analysis, providing a hierarchy of latent exogenous variables that predicted the endogenous variable.

## Results

Descriptive statistics and a correlation matrix for the outcome and predictor variables are shown in Table 1. Variables are correlated consistently with the proposed theoretical framework. For example, HPWS is positively associated with WE ($r = 0.474$, $p < 0.001$) and contract type with tenure ($r = 0.577$**, $p < 0.001$).

Hypotheses I was tested using the PLS-SEM method, considering the disability care workers' perceptions about HPWS as latent exogenous variables and their level of engagement as endogenous ones in the model. First, regarding the goodness of fit, the standardized root mean square residual (SRMR) index was satisfactory at 0.078 (see Table 2) because this value was lower than the threshold of 0.08, as Hu and Bentler (1998) suggested. In addition, Dijkstra and Henseler (2015) proposed that d_ULS (the squared Euclidean distance) and d_G (the geodesic distance) are the two different methods used to compute discrepancies. In this case, the d_ULS and d_G indices were below the bootstrap thresholds based on 5,000 replacements at 95% (below Hi95 and Hi99), indicating that the discrepancy between the empirical matrix and the model correlation matrix was insignificant. These indices suggest that the model has a good fit, and the data does not contain more information than the model (Henseler *et al.*, 2016).

Second, Table 3 presents the psychometric properties of the measures to test the measurement model. The individual reliability of each item was evaluated by factor loadings (λ). Values above 0.708 are considered integrative of the construct they represent, indicating that the shared variance between the item and its construct is greater than the error variance. All items exceed this index except for communication (0.618). It was decided to maintain this construct, following the recommendations of Hair *et al.* (2014, 2021). They suggest prioritising the validity of the contents and retaining items with values between 0.4 and 0.7, provided that the composite reliability (CR), extracted mean-variance (AVE) and discriminating validity meet the recommended acceptance criteria, as was the case in the conducted analysis.

Table 3 also shows the internal consistency of each construct by the Cronbach's alpha index (α) (Cronbach, 1951), CR (Nunnally and Bernstein, 1994) and the *rho_A* indicator (Dijkstra and Henseler, 2015). The constructs presented values above the recommended minimum of 0.7, demonstrating the internal consistency of the indicators of each construct and that observable variables are measuring the latent variable. Convergent validity was also guaranteed as all the latent variables had an AVE higher than the recommended minimum value of 0.5, as indicated by the acceptance criteria of Fornell and Larcker (1981). Therefore, the convergent validity of the items and the fact that each item represented a single underlying construct were noted (Henseler *et al.*, 2009).

Third, related to the structural model's evaluation, the VIF values of the structural model were analysed, checking that its values were less than <3. However, an exception can be made for one of them with a value of 3.208, as it is close enough to 3 and does not compromise the structural model, according to the criteria of acceptance of the prominent authors (Hair *et al.*, 2019, 2022; Henseler *et al.*, 2015).

**Table 1.** Descriptives and correlation matrix

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Organisational size | 2.52 | 0.822 | 1 | | | | | | | | | | | | | | |
| 2. Gender | 1.22 | 0.42 | 0.021 | 1 | | | | | | | | | | | | | |
| 3. Age | 2.70 | 0.93 | 0.087 | 0.090 | 1 | | | | | | | | | | | | |
| 4. Tenure | 2.50 | 1.10 | 0.109 | 0.065 | 0.649** | 1 | | | | | | | | | | | |
| 5. Contract type | 1.69 | 0.46 | 0.095 | 0.060 | 0.378** | 0.577** | 1 | | | | | | | | | | |
| 6. Vigour | 4.34 | 0.92 | −0.009 | 0.027 | 0.014 | −0.076 | −0.170** | 1 | | | | | | | | | |
| 7. Dedication | 4.80 | 0.96 | −0.013 | 0.001 | −0.033 | −0.137* | −0.157* | 0.727** | 1 | | | | | | | | |
| 8. Absorption | 4.37 | 0.96 | −0.091 | 0.006 | −0.002 | −0.099 | −0.184** | 0.612** | 0.625** | 1 | | | | | | | |
| 9. WE | 4.50 | 0.83 | −0.043 | 0.013 | −0.008 | −0.119 | −0.194** | 0.885** | 0.895** | 0.852** | 1 | | | | | | |
| 10. Selection | 3.73 | 1.13 | −0.070 | −0.033 | 0.008 | −0.094 | −0.166** | 0.409** | 0.386** | 0.421** | 0.462** | 1 | | | | | |
| 11. Training | 3.03 | 1.61 | 0.060 | 0.020 | 0.023 | −0.057 | −0.071 | 0.394** | 0.339** | 0.310** | 0.396** | 0.497** | 1 | | | | |
| 12. Teamwork | 3.62 | 1.43 | −0.089 | −0.009 | −0.134* | −0.168** | −0.195** | 0.369** | 0.437** | 0.328** | 0.431** | 0.556** | 0.646** | 1 | | | |
| 13. Communication | 3.46 | 1.24 | −0.215** | 0.014 | −0.023 | −0.090 | −0.070 | 0.287** | 0.333** | 0.212** | 0.316** | 0.471** | 0.502** | 0.661** | 1 | | |
| 14. Participation | 3.40 | 1.46 | −0.093 | −0.044 | −0.041 | −0.090 | −0.060 | 0.321** | 0.354** | 0.288** | 0.366** | 0.554** | 0.686** | 0.756** | 0.680** | 1 | |
| 15. HPWS | 3.45 | 1.14 | −0.090 | −0.012 | −0.041 | −0.119 | −0.132* | 0.430** | 0.445** | 0.373** | 0.474** | 0.722** | 0.828** | 0.881** | 0.793** | 0.897** | 1 |

**Note(s):** $N = 264$ Organizational size (number of employees): 1 = 1–10; 2 = 11–49; 3 = 50–249; 4= >250; Gender: 1 = female. 2 = male; Tenure: 1=<1 year; 2 = 1–5 years; 3 = 6–15 years and 4 = 16–24 years and 5=>25 years; Contract Type: 1 = non-permanent and 2 = permanent

*. Significative correlation at 0.05 level

**. Significative correlation at 0.01 level

**Source(s):** Authors' own creation

**Table 2.** Model goodness of fit

| Model fit | Estimated model | Hi95 | Hi99 | Saturated model | Hi95 | Hi99 |
|---|---|---|---|---|---|---|
| SRMR | 0.078 | 0.056 | 0.068 | 0.078 | 0.056 | 0.068 |
| d_ULS | 0.221 | 0.113 | 0.166 | 0.221 | 0.113 | 0.166 |
| d_G | 0.149 | 0.095 | 0.151 | 0.149 | 0.095 | 0.151 |

**Source(s):** Authors' own creation

**Table 3.** Psychometric properties of the measures

| Constructs/items | Loadings | VIF |
|---|---|---|
| *HPWS: α: 0.883; CR: 0.879; rho_A: 0.890; AVE: 0.595* | | |
| Selection | 0.892 | 1.584 |
| Training | 0.769 | 2.073 |
| Participation | 0.711 | 3.208 |
| Teamwork | 0.838 | 2.856 |
| Communication | 0.618 | 2.073 |
| *WE: α: 0.851; CR: 0.853; rho_A: 0.857; AVE: 0.660* | | |
| Vigour | 0.833 | 2.324 |
| Dedication | 0.860 | 2.385 |
| Absorption | 0.738 | 1.797 |

**Source(s):** Authors' own creation

**Table 4.** Discriminant validity: Fornell–Larcker criterion and HTMT ratio

| | Fornell–Larcker criterion | | Heterotrait-monotrait (HTMT) |
|---|---|---|---|
| Construct | 1 | 2 | 1 |
| 1. High-performance work systems | *0.772** | | |
| 2. Work engagement | 0.558 | *0.812** | 0.551 |

**Note(s):** *AVE Square Root
**Source(s):** Authors' own creation

Fourth, to assess discriminant validity, Table 4 shows that the square root of the AVE is greater than the correlation of the construct with the rest of the constructs, according to the criteria of Fornell and Larcker (1981). Additionally, the heterotrait-monotrait (HTMT) ratio (Henseler *et al.*, 2015) value of the variables is below the threshold of 0.9. Both criteria were met, confirming the discriminant validity of the measurement model.

Fifth, the relationships between variables, i.e. the structural model, were then established and are shown by the algebraic sign $\beta$, indicating the magnitude and significance of the path coefficients. The nonparametric resampling technique bootstrapping on 5,000 samples for statisticians t, significance and confidence intervals was used to assess the significance of these coefficients. The coefficient paths, which are positive and with $p$-values <0.001 and $p$-values <0.05, are indicators of significance, and according to the criteria of Hair *et al.* (2021), the expected effect was established. In addition, to complement the evaluation of the structural model, the sizes of the $f^2$ effects were analysed in $R^2$, which turned out to be significant (Cohen, 1998: 0.02, 0.15 and 0.35 – small, medium and large) to consider the predictive validity of the model. In this case, HPWS has considerable effects on WE. Hypothesis I has a

VIF of 1.000, $\beta$ 0.558, t-value (bootstrap) 9.735**, $R^2$ adjusted 0.309 and $f^2$ 0.452*, and the hypothesis was consequently confirmed.

Sixth, the model's predictive capacity, which referred to its ability to predict future observations, was estimated using the PLS prediction algorithm to obtain the $Q^2$ test (Geisser, 1975; Nguyen and Tsang, 2023; Stone, 1974). As can be seen in Table 5, all the $Q^2$ are above zero, indicating predictive accuracy.

The IPMA tool was also used; see Table 6 (performance–importance indicators) and Figure 2 (performance and importance map). Conclusions supporting Hypothesis II can be drawn about two dimensions: importance and performance (del-Castillo-Feito *et al.*, 2022; Martilla and James, 1977). These results are significant for prioritising management and directing actions (Husnain *et al.*, 2024; Ringle and Sarstedt, 2016). Therefore, it is advisable to focus primarily on improving the performance of fundamental constructs that explain a particular objective construct and have relatively high performance (Q1). In this case, it is found that selection and teamwork have a total effect of 0.138 and 0.129, respectively, and a performance of 58.643 and 60.322, respectively. These variables are the most crucial in explaining WE. According to IPMA, training has a total effect of 0.119; it is essential in explaining WE but has a relatively low performance (Q2). Participation and communication, with a total effect of 0.110 and 0.095, respectively, are less relevant in predicting WE (Q3 and Q4).

## Discussion

This research considers HPWS as job resources (JD-R model) and shows how the implementation of these HR practices positively impacts the WE of disability care workers, confirming previous findings in the case of NPOs (Akingbola *et al.*, 2023a; de Oliveira and da Silva, 2015), and specifically in disability care NPOs (Vassos *et al.*, 2013, 2019). Thus, Hypothesis I is confirmed. In addition, as a novelty, it was found that HR practices have an unequal impact on front-line workers' WE. Selection, teamwork and training are the key HR practices antecedents of WE. Thus, Hypothesis II is confirmed too.

**Table 5.** Predictive capacity of the model

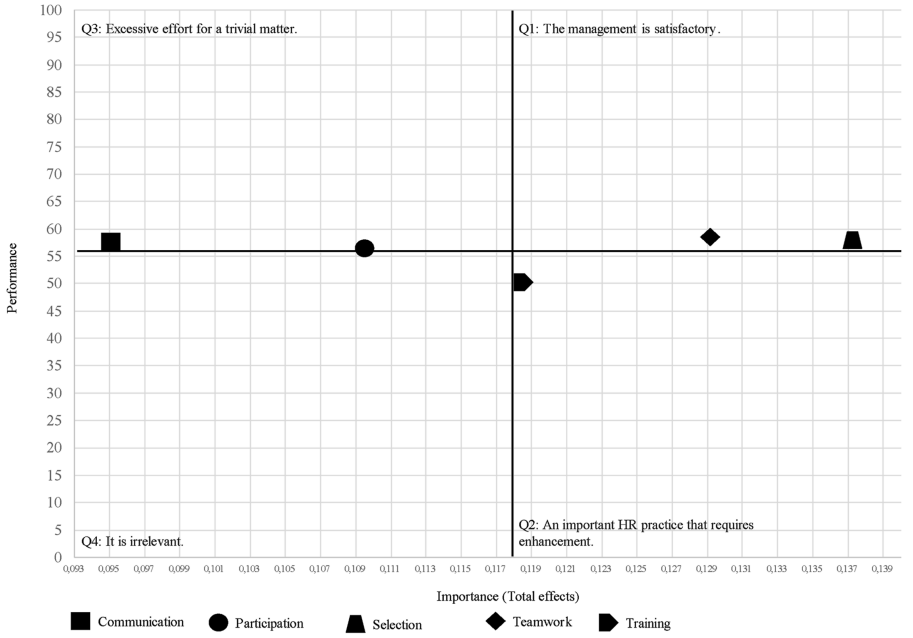
| | $Q^2$predict | PLS-SEM_RMSE | PLS-SEM_MAE | LM_RMSE | LM_MAE |
|---|---|---|---|---|---|
| Absorption | 0.144 | 0.888 | 0.697 | 0.875 | 0.691 |
| Dedication | 0.197 | 0.865 | 0.659 | 0.867 | 0.659 |
| Vigour | 0.186 | 0.833 | 0.658 | 0.831 | 0.652 |

**Source(s):** Authors' own creation

**Table 6.** Importance-performance analysis

| Factors | Importance | Performance |
|---|---|---|
| Selection | 0.138 | 58.643 |
| Teamwork | 0.129 | 60.322 |
| Training | 0.119 | 50.521 |
| Participation | 0.110 | 56.771 |
| Communication | 0.095 | 57.718 |
| *Average value* | *0.118* | *56.775* |

**Source(s):** Authors' own creation




**Source(s):** Authors' own creation

**Figure 2.** Importance–performance map

*Theoretical implications*

As a theoretical first contribution, this research expands HRM theory in the subsector of disability care NPOs, answering the call for more research in the field of these organisations with particular specificity, such as high job demands and altruistic or intrinsic motivation in their workforce. This research contributes to the JD-R theory in this specific sector (Vassos *et al.*, 2013, 2019), confirming that HPWS impacts positively on WE (Bakker and Demerouti, 2008; Schaufeli and Taris, 2014). Also, some novelty is found related to WE dimensions. Dedication level (4,8) is higher than vigour (4,34) and absorption (4,37). However, contrary to Vassos *et al.* (2013), in the same sector, and to Schaufeli *et al.* (2003), in the case of the general working population, absorption presents high values, increasing the average WE. More research is needed in order to confirm this difference.

Second, through the analysis of the disability care workers' perception, the HR practices that are the most valuable for them emerge. Specifically, the IPMA analysis reveals that selection, teamwork and training are the HR practices that have the most significant impact on WE levels. Little is known about HRM in this sector, but enhancing a coworker support climate, thus giving relevance to an adequate selection of future colleagues to reduce job demands, is crucial for these workers. This research contributes to covering the gap in the research of selection in NPOs, as this is still an unexplored core aspect of HRM (Cooper *et al.*, 2020). As teamwork, these care workers value the systematisation of formal autonomous working groups and participation or autonomy and involvement in decisions (Camps and Lunas-Arocas, 2009; Lertxundi and Landeta, 2011). In terms of training, previous researchers also found it important to promote WE and to support front-line workers in the service sector (Chen and Peng, 2021; Mathias *et al.*, 2021).

Third, regarding communication and participation as HR practices, NPO HR literature shows contradictory findings about their impact on WE. For example, Collins-Camargo *et al.* (2020) found that HR practices (such as day-to-day reporting and participation in decision-making) facilitate front-line worker engagement. On the contrary, Philip and Arrowsmith (2021) found that in some cases, more participation does not necessarily deliver more WE. Maybe these results, in the specific case of disability care NPOs, suggest that workers can have particular expectations about how the organisations must be managed and communication and participation policies must be an intrinsic part of the management system (Schepers *et al.*, 2005).

*Practical implications*

In general, in line with Akingbola *et al.* (2023b), WE is a "core process" that helps workers face the adverse effects of day-to-day basis job demands and disability care NPOs need to develop strategic HR management to increase WE levels.

For HR managers of disability care NPOs, the results show that HPWS positively impact WE, so as job resources, they can be managed to enhance WE. In addition, the research helps practitioners understand which HR practices have the most significant impact on work engagement.

The IPMA analysis evidences a gap between the implementation or effort from the HR managers and the perception of the employees. In this case, selection and teamwork, as HR practices, are managed well by disability care workers. However, in the case of training, which is also extremely important from the perspective of developing WE, employees consider that it requires improvement; they seem to be asking for changes in this particular HR practice, according to the findings. Communication and participation arise as HR practices that contribute relatively to the development of WE.

*Limitations and future directions*

The research shows some limitations. Firstly, the definition of the theoretical model could be the main limitation. From the antecedent's side of WE, to consider HPWS as the only exogenous variable, other relevant inputs, such as personal resources (Chen and Peng, 2021; Xanthopoulou *et al.*, 2009), were omitted. Secondly, WE outcomes, such as the level of satisfaction of users or other stakeholders, service quality and disability care workers' performance or motivation, were not included in the model (Akingbola *et al.*, 2023b; Mathias *et al.*, 2021). Future research lines could try to enrich the model, expanding the antecedents and the outcomes. Thirdly, the scarcity of studies about disability care NPO limits further contrast in findings.

## Conclusion

In conclusion, in the case of disability care workers, HPWS has been revealed as a relevant HR practice that positively influences WE. Specifically, selection, training and teamwork are critical HR practices in people management in the disability care NPO sector. Accordingly, the organisational and individual outcomes of WE (higher employee motivation, personal resources generation, reduced damaging impact of job demands, among others) will be expected when implementing HPWS in disability care NPOs. Therefore, given the social impact of these entities, the results will undoubtedly have a high social impact on achieving a more just, inclusive and sustainable society.

## References

Akingbola, K. and van den Berg, H.A. (2019), "Antecedents, consequences, and context of employee engagement in nonprofit organizations", *Review of Public Personnel Administration*, Vol. 39 No. 1, pp. 46-74, doi: 10.1177/0734371x16684910.

Akingbola, K., Kerekou, S. and Tohon, A. (2023a), "Employee engagement in nonprofit organizations: the role of perception of HR and organizational culture", *Journal of Management Development*, Vol. 42 No. 3, pp. 215-233, doi: 10.1108/jmd-09-2022-0232.

Akingbola, K., Rogers, S.E. and Intindola, M. (2023b), "Nonprofit organizations: the land of engagement", in Akingbola, K., Rogers, S.E. and Intindola, M. (Eds), *Employee Engagement in Nonprofit Organizations. Theory and Practice*, Palgrave Macmillan, Cham, pp. 37-75.

Appelbaum, E., Bailey, T., Berg, P.B. and Kalleberg, A.L. (2000), *Manufacturing Advantage: Why High-Performance Work Systems Pay off*, Cornell University Press, New York.

Armstrong, J.S. and Overton, T.S. (1977), "Estimating nonresponse bias in mail surveys", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402, doi: 10.1177/002224377701400320.

Bakker, A.B. and Demerouti, E. (2007), "The job demands-resources model: state of the art", *Journal of Managerial Psychology*, Vol. 22 No. 3, pp. 309-328, doi: 10.1108/02683940710733115.

Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13 No. 3, pp. 209-223, doi: 10.1108/13620430810870476.

Bakker, A.B. and Demerouti, E. (2013), "Job demands-resources model", *Journal of Work and Organizational Psychology*, Vol. 29 No. 3, pp. 107-115, doi: 10.5093/tr2013a16.

Cafferkey, K. and Dundon, T. (2015), "Explaining the black box: HPWS and organisational climate", *Personnel Review*, Vol. 44 No. 5, pp. 666-688, doi: 10.1108/PR-12-2012-0209.

Camps, J. and Luna-Arocas, R. (2009), "High involvement work practices and firm performance", *The International Journal of Human Resource Management*, Vol. 20 No. 5, pp. 1056-1077, doi: 10.1080/09585190902850273.

Cao, M., Zhao, S., Chen, J. and Lv, H. (2024), "Employees' HR attributions count: the effects of high-performance work systems on employees' thriving at work and emotional exhaustion", *Personnel Review*, Vol. 3 No. 4, pp. 835-856, doi: 10.1108/PR-09-2021-0632.

Chen, S.W. and Peng, J.C. (2021), "Determinants of frontline employee engagement and their influence on service performance", *International Journal of Human Resource Management*, Vol. 32 No. 5, pp. 1062-1085, doi: 10.1080/09585192.2018.1505764.

Chin, W.W. (2010), "How to write up and report PLS analyses", in Esposito Vinzi, V., Chin, W., Henseler, J. and Wang, H. (Eds), *Handbook of Partial Least Squares*, Springer, Berlin, pp. 655-690, doi: 10.1007/978-3-540-32827-8_29.

Cohen, J. (1998), *Statistical Power Analysis for the Behavioral Sciences*, Laurence Erlbaum Associates, New York, doi: 10.4324/9780203771587.

Collins-Camargo, C., Chuang, E., Lauzus, N., Bonilla, A. and McBeath, B. (2020), "Frontline worker perceptions of organizational supports to promote evidence use in private child welfare agencies", *Child Welfare*, Vol. 98 No. 3, pp. 55-96, doi: 10.1016/j.childyouth.2023.107186.

Cooper, E.A., Phelps, A.D. and Rogers, S.E. (2020), "Research in nonprofit human resource management from 2015 to 2018: trends, insights, and opportunities", *Employee Relations: The International Journal*, Vol. 42 No. 5, pp. 1055-1100, doi: 10.1108/ER-04-2019-0166.

Cronbach, L.J. (1951), "Coefficient alpha and the internal structure of tests", *Psychometrika*, Vol. 22 No. 3, pp. 297-334, doi: 10.1007/bf02310555.

Das, R. (2024), "What do we know about High Performance Work Systems? A bibliometric summary of 30 years of research", *Management Review Quarterly*, Vol. 74 No. 1, pp. 415-438, doi: 10.1007/s11301-022-00305-5.

de Oliveira, L.B. and da Silva, F.F.R.A. (2015), "The effects of high performance work systems and leader-member exchange quality on employee engagement: evidence from a Brazilian non-profit organization", *Procedia Computer Science*, Vol. 55, pp. 1023-1030, doi: 10.1016/j.procs.2015.07.092.

del-Castillo-Feito, C., Blanco-González, A. and Hernández-Perlines, F. (2022), "The impacts of socially responsible human resources management on organizational legitimacy", *Technological Forecasting and Social Change*, Vol. 174, pp. 1-10, doi: 10.1016/j.techfore.2021.121274.

Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2001), "The job demands-resources model of burnout", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 499-512, doi: 10.1037/0021-9010.86.3.499.

Dijkstra, T.K. and Henseler, J. (2015), "Consistent partial least squares path modelling", *MIS Quarterly*, Vol. 39 No. 2, pp. 297-316, doi: 10.25300/misq/2015/39.2.02.

EASPD (2024), *Study on Service Provider's Implementation of Quality Approaches*, European Association of Service providers for Persons with Disabilities, available at: https://easpd.eu/ (accessed 13 January 2025).

Emidy, M.B., Lewis, G.B. and Pizarro-Bore, X. (2024), "US federal employees with disabilities: how perceptions of diversity, equity, inclusion, and accessibility affect differences in job satisfaction, organizational commitment, and job involvement", *Public Personnel Management*, Vol. 53 No. 4, pp. 649-679, doi: 10.1177/00910260241253577.

Fornell, C.G. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, doi: 10.1177/002224378101800104.

Gardner, T.M., Wright, P.M. and Moynihan, L.M. (2011), "The impact of motivation, empowerment, and skill-enhancing practices on aggregate voluntary turnover: the mediating effect of collective affective commitment", *Personnel Psychology*, Vol. 64 No. 2, pp. 315-350, doi: 10.1111/j.1744-6570.2011.01212.x.

Geisser, S. (1975), "The predictive sample reuse method with applications", *Journal of the American Statistical Association*, Vol. 70 No. 350, pp. 320-328, doi: 10.1080/01621459.1975.10479865.

Gould-Williams, J. and Davies, F. (2005), "Using social exchange theory to predict the effects of HRM practice on employee outcomes", *Public Management Review*, Vol. 7 No. 1, pp. 1-24, doi: 10.1080/1471903042000339392.

Gözükara, İ. and Şimşek, O.F. (2015), "Linking transformational leadership to work engagement and the mediator effect of job autonomy: a study in a Turkish private non-profit university", *Procedia-Social and Behavioral Sciences*, Vol. 195, pp. 963-971, doi: 10.1016/j.sbspro.2015.06.274.

Hair, J.F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V.G. (2014), "Partial least squares structural equation modeling (PLS-SEM) an emerging tool in business research", *European Business Review*, Vol. 26 No. 2, pp. 106-121, doi: 10.1108/ebr-10-2013-0128.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24, doi: 10.1108/ebr-11-2018-0203.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P. and Ray, S. (2021), "Evaluation of reflective measurement models", in Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P. and Ray, S. (Eds), *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*, Springer, Cham, pp. 75-90, doi: 10.1007/978-3-030-80519-7_4.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2022), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage, Los Angeles.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modelling in international marketing", in Sinkovics, R.R. and Ghauri, P.N. (Eds), *New Challenges to International Marketing*, Emerald, Leeds, pp. 277-319, doi: 10.1108/S1474-7979(2009)0000020014.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modelling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: 10.1007/s11747-014-0403-8.

Henseler, J., Hubona, G. and Ray, P.A. (2016), "Using PLS path modeling in new technology research: updated guidelines", *Industrial Management and Data Systems*, Vol. 116 No. 1, pp. 2-20, doi: 10.1108/imds-09-2015-0382.

Hu, L.T. and Bentler, P.M. (1998), "Fit indices in covariance structure modeling: sensitivity to underparameterized model misspecification", *Psychological Methods*, Vol. 3 No. 4, pp. 424-453, doi: 10.1037//1082-989x.3.4.424.

Husnain, M., Zhang, Q., Akhtar, M.W., Usman, M., Tariq, A., Huo, C. and Akhtar, M.S. (2024), "Cultivating green creativity through training and development in hospitality organizations", *The Service Industries Journal*, pp. 1-26, doi: 10.1080/02642069.2024.2375359.

Johansen, M. and Sowa, J. (2019), "Human resource management, employee engagement, and nonprofit hospital performance", *Nonprofit Management and Leadership*, Vol. 29 No. 4, pp. 549-567, doi: 10.1002/nml.21352.

Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724, doi: 10.5465/256287.

Kruse, D., Schur, L., Rogers, S.E. and Ameri, M. (2018), "Why do workers with disabilities earn less? Occupational job requirements and disability discrimination", *British Journal of Industrial Relations*, Vol. 56 No. 4, pp. 798-834, doi: 10.1111/bjir.12257.

Lertxundi, A. and Landeta, J. (2011), "The moderating effect of cultural context in the relation between HPWS and performance: an exploratory study in Spanish multinational companies", *The International Journal of Human Resource Management*, Vol. 22 No. 18, pp. 3949-3967, doi: 10.1080/09585192.2011.610942.

Lincoln, M., Gallego, G., Dew, A., Bulkeley, K., Veitch, C., Bundy, A., Brentnall, J., Chedid, R.J. and Griffiths, S. (2014), "Recruitment and retention of allied health professionals in the disability sector in rural and remote New South Wales, Australia", *Journal of Intellectual and Developmental Disability*, Vol. 39 No. 1, pp. 86-97, doi: 10.3109/13668250.2013.861393.

Lysova, E.I., Allan, B.A., Dik, B.J., Duffy, R.D. and Steger, M.F. (2019), "Fostering meaningful work in organizations: a multi-level review and integration", *Journal of Vocational Behavior*, Vol. 110, pp. 374-389, doi: 10.1016/j.jvb.2018.07.004.

MacKenzie, S.B. and Podsakoff, P.M. (2012), "Common method bias in marketing: causes, mechanisms, and procedural remedies", *Journal of Retailing*, Vol. 88 No. 4, pp. 542-555, doi: 10.1016/j.jretai.2012.08.001.

Martilla, J.A. and James, J.C. (1977), "Importance-performance analysis", *The Journal of Marketing*, Vol. 41 No. 1, pp. 77-79, doi: 10.1177/002224297704100112.

Mathias, M.A.S., Fu, N. and Oliveira, O.J. (2021), "Structuring a training-oriented high performance work system: a systematic review on frontline employees in the service sector", *Human Resource Development Review*, Vol. 20 No. 4, pp. 399-435, doi: 10.1177/15344843211024028.

Mazzetti, G., Robledo, E., Vignoli, M., Topa, G., Guglielmi, D. and Schaufeli, W.B. (2023), "Work engagement: a meta-analysis using the job demands-resources model", *Psychological Reports*, Vol. 126 No. 3, pp. 1069-1107, doi: 10.1177/00332941211051988.

NDS (2022), "Factors affecting disability support worker retention within the disability sector", available at: https://www.nds.org.au/images/resources/ (accessed 19 September 2022).

Nguyen, T.V.T. and Tsang, S.S. (2023), "Inclusive leadership and work-from-home engagement during the COVID-19 pandemic: a moderated mediation model", *International Journal of Manpower*, Vol. 45 No. 22, pp. 299-318, doi: 10.1108/IJM-12-2022-0619.

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, McGraw-Hill, New York.

Oliver, M. (2013), "The social model of disability: thirty years on", *Disability and Society*, Vol. 28 No. 7, pp. 1024-1026, doi: 10.1080/09687599.2013.818773.

Oliver, M. (2023), "The social model of disability", in Cree, V.E. and McCulloch, T. (Eds), *Social Work*, Routledge, London, pp. 137-140, doi: 10.4324/9781003178699.

Outar, C. and Rose, J. (2017), "Is there a relationship between role identity, work demands, and burnout in direct care staff working with individuals with intellectual disability?", *Journal of Intellectual and Developmental Disability*, Vol. 42 No. 22, pp. 123-130, doi: 10.3109/13668250.2016.1211257.

Park, S., Kim, J., Park, J. and Lim, D.H. (2018), "Work engagement in nonprofit organizations: a conceptual model", *Human Resource Development Review*, Vol. 17 No. 11, pp. 5-33, doi: 10.1177/1534484317750993.

Pérez, V., Alcover, C.M. and Chambel, M.J. (2015), "Job attitudes among workers with disabilities: the importance of family support in addition to organizational support", *Work*, Vol. 51 No. 4, pp. 817-826, doi: 10.3233/WOR-141905.

Philip, K. and Arrowsmith, J. (2021), "The limits to employee involvement? Employee participation without HRM in a small not-for-profit organisation", *Personnel Review*, Vol. 50 No. 2, pp. 401-419, doi: 10.1108/PR-08-2019-0457.

Plena Inclusión (2024), "Conocenos/Así nos organizamos", Plena Inclusión, available at: https://www.plenainclusion.org/conocenos/asi-nos-organizamos/ (accessed 13 January 2025).

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: 10.1037/0021-9010.88.5.879.

Podsakoff, P.M., Podsakoff, N.P., Williams, L.J., Huang, C. and Yang, J. (2024), "Common method bias: it's bad, it's complex, it's widespread, and it's not easy to fix", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 11 No. 1, pp. 17-61, doi: 10.1146/annurev-orgpsych-110721-040030.

Ringle, C.M. and Sarstedt, M. (2016), "Gain more insight from your PLS-SEM results: the importance-performance map analysis", *Industrial Management and Data Systems*, Vol. 116 No. 99, pp. 1865-1886, doi: 10.1108/IMDS-10-2015-0449.

Ringle, C.M., Wende, S. and Becker, J.M. (2022), *SmartPLS 4*, SmartPLS, GmbH, Oststeinbek.

Sarti, D. (2014), "Job resources as antecedents of engagement at work: evidence from a long-term care setting", *Human Resource Development Quarterly*, Vol. 25 No. 25, pp. 213-237, doi: 10.1002/hrdq.21189.

Schaufeli, W.B. and Taris, T.W. (2014), "A critical review of the job demands-resources model: implications for improving work and health", in Bauer, G.F. and Hämmig, O. (Eds), *Bridging Occupational, Organizational and Public Health*, Springer, Dordrecht, pp. 43-68.

Schaufeli, W.B., Bakker, A.B. and Salanova, M. (2003), "Utrecht work engagement scale-9", *Educational and Psychological Measurement*, Vol. 66 No. 4, doi: 10.1037/t05561-000.

Schaufeli, W.B., Bakker, A.B. and Salanova, M. (2006), "The measurement of work engagement with a short questionnaire: a cross-national study", *Educational and Psychological Measurement*, Vol. 66 No. 4, pp. 701-716, doi: 10.1177/0013164405282471.

Schepers, C., De Gieter, S., Pepermans, R., Du Bois, C., Caers, R. and Jegers, M. (2005), "How are people of the nonprofit sector motivated? A research need", *Nonprofit Management and Leadership*, Vol. 16 No. 2, pp. 191-208, doi: 10.1002/nml.100.

Selander, K. (2015), "Work engagement in the third sector", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 26 No. 4, pp. 1391-1411, doi: 10.1007/s11266-014-9465-y.

Stone, M. (1974), "Cross-validatory choice and assessment of statistical predictions", *Journal of the Royal Statistical Society: Series B*, Vol. 36 No. 2, pp. 111-147, doi: 10.1111/j.2517-6161.1974.tb00994.x.

Tan, K.L. and Yeap, P.F. (2022), "The impact of work engagement and meaningful work to alleviate job burnout among social workers in New Zealand", *Management Decision*, Vol. 60 No. 11, pp. 3042-3065, doi: 10.1108/MD-05-2021-0689.

van Toorn, G. and Cortis, N. (2023), "Marketisation and regulatory labour in frontline disability work", *Work, Employment and Society*, Vol. 37 No. 4, pp. 916-933, doi: 10.1177/09500170211058024.

Vassos, M., Nankervis, K., Skerry, T. and Lante, K. (2013), "Work engagement and job burnout within the disability support worker population", *Research in Developmental Disabilities*, Vol. 34 No. 11, pp. 3884-3895, doi: 10.1016/j.ridd.2013.08.005.

Vassos, M., Nankervis, K., Skerry, T. and Lante, K. (2019), "Can the job demand-control-(support) model predict disability support worker burnout and work engagement?", *Journal of Intellectual and Developmental Disability*, Vol. 44 No. 2, pp. 139-149, doi: 10.3109/13668250.2017.1310818.

WHO (2024), *Disability*, World Health Organization, available at: https://www.who.int/news-room/fact-sheets/detail/disability-and-health (accessed 13 January 2025).

Xanthopoulou, D., Bakker, A.B., Demerouti, E. and Schaufeli, W.B. (2009), "Reciprocal relationships between job resources, personal resources, and work engagement", *Journal of Vocational Behavior*, Vol. 74 No. 3, pp. 235-244, doi: 10.1016/j.jvb.2008.11.003.

Yavas, U., Karatepe, O.M. and Babakus, E. (2010), "Relative efficacy of organizational support and personality traits in predicting service recovery and job performances: a study of frontline employees in Turkey", *Tourism Review*, Vol. 65 No. 3, pp. 70-83, doi: 10.1108/16605371011083530.

## Appendix
## Survey

### Utrecht Work Engagement Scale (UWES-9)

Adapted from Schaufeli *et al.* (2006)

*Vigor*

At my work, I feel bursting with energy

At my job, I feel strong and vigorous.

When I get up in the morning, I feel like going to work.

*Dedication*

I am enthusiastic about my job

My job inspires me

I am proud of the work that I do.

*Absorption*

I feel happy when I am working intensely

I am immersed in my work.

I get carried away when I am working.

### High-performance work systems (HPWS)

Adapted from Cafferkey and Dundon (2015), Gould-Williams and Davies (2005), Lertxundi and Landeta (2011)

*Selection*

Personnel selection processes are given great importance

In selection, personal references such as the "family tie" type are just as important as the candidate's knowledge and skills

Selection processes are adapted to each position

Only candidates who have the necessary qualifications for the job are selected

*Training*

The organisation's investment in training is considerable

Different types of training are offered (problem-solving, technical skills . . .)

Formal training programs are in place for the development of general employee skills

Formal training programs are in place for new employees to equip them with the necessary skills for their jobs

*Teamwork*

Formal working groups work autonomously on quality issues, for the development of new projects, conflict resolution, improvement, etc.

Employees work regularly in teams with a certain degree of autonomy
Teamwork is explicitly encouraged
*Communication*
Employees are generally informed about matters that affect them
There is a distant relationship between people at lower and higher positions in the organizational structure
The relationship between managers and employees is spontaneous and informal
Status differences are high
*Participation*
Employees have mechanisms such as suggestion boxes, contribution banks or other channels to raise their ideas, complaints and contributions in general
Employee initiative and autonomy in their work is encouraged
Surveys or periodic meetings are held with employees to know their degree of satisfaction
Employee participation in decisions and actions is encouraged
A climate of cooperation and trust is perceived

**Corresponding author**
Antonio Padilla-Meléndez can be contacted at: apm@uma.es