ORIGINAL ARTICLE

WILEY

Structural empowerment and burnout among Portuguese nursing staff: An explicative model

Alejandro Orgambídez-Ramos PhD, Assistant Professor[1] (iD) | Yolanda Borrego-Alés PhD, Assistant Professor[2] | Octavio Vázquez-Aguado PhD, Assistant Professor[3] | Jaume March-Amegual PhD, Assistant Professor[4]

[1]Department of Social Psychology, University of Málaga, Málaga, Spain

[2]Department of Social Psychology, University of Huelva, Huelva, Spain

[3]Department of Social Work, University of Huelva, Huelva, Spain

[4]Department of Industrial Organization, University of Vic, Vic, Spain

Correspondence
Alejandro Orgambídez-Ramos, Department of Social Psychology, University of Málaga, Málaga, Spain.
Email: aorgambidez@uma.es

Aims: Kanter's structural empowerment model was used to assess the influence of access to opportunities, resources, information and support on core burnout through global empowerment in a nursing sample in Portugal.

Background: The empowerment experience increases the levels of nursing professionals' satisfaction and performance preventing the emergence of burnout. However, the relationship between structural empowerment and burnout has been scarcely studied in Portugal.

Methods: We conducted a cross-sectional correlational study assessing a final sample of 297 participants (62.13% response rate, 63.64% women). Model fit and mediation test were examined using structural equation modelling (path analysis).

Results: Access to opportunities and access to support had direct impact, through global empowerment, on core burnout, whereas access to resources had both direct and indirect impact on core burnout.

Conclusions: The results validated the structural empowerment model and its application in nursing staff in Portugal.

Implications for Nursing Management: Professional training plans, the development of formal and informal support networks, and the availability of resources increase the levels of empowerment and decrease the likelihood of experiencing burnout in nursing professionals.

KEYWORDS
core burnout, nursing staff, Portugal, structural empowerment

1 | INTRODUCTION

Recently, burnout has been recognized as an important occupational risk, especially in professions that have direct contact with users or patients (i.e., physicians, nurses, teachers, prison officers, etc.) (EU-OSHA, 2014; Figueiredo-Ferraz, Grau-Alberola, Gil-Monte, & Garcia-Juesas, 2012; Nowrouzi et al., 2015). Freudenberger (1974) described this syndrome as 'a feeling of failure and an exhausting experience that results from overload relating to demand of energy, personal resources, or spiritual strength' (p.160). Since then, different

definitions have been proposed for burnout. However, the definition proposed by Maslach and Jackson (1981) has been the one with greater consensus and acceptance among the scientific community. According to Maslach and Jackson (1981, 1986), burnout is a response to chronic job stress, characterized by negative attitudes and feelings toward coworkers and is combined with the experience of feeling emotionally exhausted.

The experience of burnout is characterized by three elements, namely: emotional exhaustion; depersonalization; and reduced personal accomplishment (Maslach & Jackson, 1981). Prolonged exposure

to excessive stress at work causes high emotional exhaustion coupled with low levels of personal fulfilment and is characterized by cognitive and affective deterioration. Subsequently, workers experience depersonalization as a strategy for coping with stress, in which they have negative attitudes towards users of the institution (patients, clients, students, etc.) (Maslach, 2001, 2009).

Burnout has been mainly assessed in professionals of institutions that provide services to the public (health professionals, teachers, social educators, social workers, prison officers, etc.) (Maslach, 2009). Within these professions, nursing staff have been considered one of the main groups particularly affected by burnout, given the specific characteristics of nursing work (Figueiredo-Ferraz et al., 2012; Gil-Monte, Carretero-Dios, & Roldán, 2005; Nowrouzi et al., 2015). Basically, most nursing activities are focused on care and the relationship with patients and family members, in which the direct contact with diseases, pain and death occurs on a daily basis. In addition, nursing professionals have no autonomy or authority to make decisions. Situations of ambiguity and role conflicts relating to the functions and responsibilities arise and there are cases of work overload due to the shortage of personnel and overtime payments (Figueiredo-Ferraz et al., 2012; Gil-Monte et al., 2005).

As a result, the high prevalence of burnout in the nursing staff can become a public health problem, impacting on professionals' health (psychological well-being, job satisfaction), quality care, and the nurse–patient relationship (Borrego-Alés, Mendoza-Sierra, & Orgambídez-Ramos, 2010; Özbas & Tel, 2015). Among the consequences of burnout, the scientific literature has reported over 100 associated symptoms that affect emotions, affection, cognition, psychological well-being, attitudes, and behaviours at work, as well as physical health, such as cardiac pathologies (Maslach & Jackson, 1981; Nowrouzi et al., 2015).

Within this scenario, different researchers have developed models for preventing burnout in nursing professionals (Papathanasiou, 2014). Among these models, it is worth mentioning the structural empowerment model (Spence Laschinger, Finegan, Shamian, & Wilk, 2004; Spence Laschinger, Shamian, & Thomson, 2001) based on Kanter's (1993) theory of structural power in institutions. This model emerges as an organisational tool that allows the optimization of personal and professional skills, increase in well-being levels, and reduction in organisational stress (Lautizi, Spence Laschinger, & Ravazzolo, 2009).

According to Kanter (1993), the characteristics of the working environment predetermine working behaviours and attitudes beyond personal biases or personality traits. This author affirms that when the work environment offers the necessary opportunities for growth and access to "power" to achieve goals and objectives, the individuals experience higher empowerment levels. Power is defined in terms of the capacity to mobilize resources and to achieve objectives (Kanter, 1993), in such a way that, when there are resources and opportunities in the work context, professionals feel power to perform the tasks (Spence Laschinger, Finegan, Shamian, & Wilk, 2001).

Kanter (1993) distinguished two types of power, i.e., formal and informal. The first is associated with the characteristics of the work and the institutions, such as flexibility, adaptability, innovation and autonomous decision making, together with the visibility and the impact on the functioning of the institution. The second type is related to social networks and communication within the institutions, characterized by the relationships with coworkers, managers and other organisational members. In addition, these two types of power predetermine the dimensions of structural empowerment, i.e., access to opportunities, information, support and resources in the work environment (Spence Laschinger, Wong, & Grau, 2013; Spence Laschinger, Finegan et al., 2001, 2004).

Access to opportunities refers to the opportunities for growth and development in the institution, as well as the opportunities to acquire knowledge and skills. Specifically, Kanter (1993) refers to the possibilities for progress in the institution through professional performance and visibility, along with the ability to learn and develop professionally at the workplace. Access to information refers to technical and expert knowledge required to be effective and comply with the work tasks. Access to support consists of receiving feedback, guidance and advice from subordinates, colleagues and managers in order to make decisions in the institution. Finally, access to resources refers to materials, means and the time to carry out the work. When nursing professionals have access to opportunities, information, support and resources, they experience higher empowerment levels at work.

Several studies have shown a strong positive relationship between structural empowerment and work attitudes, such as job satisfaction and organisational commitment (Lautizi et al., 2009; Wong & Spence Laschinger, 2013), and a strong negative relationship between structural empowerment, stress and burnout (Guo et al., 2016; Harwood, Ridley, Wilson, & Laschinger, 2010; Hatcher & Spence Laschinger, 1996; O'Brien, 2011; Özbas & Tel, 2015; Meng et al., 2015; Meng, Jin, & Guo, 2016; Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004; Spence Laschinger, Shamian et al., 2001; Wang, Kunaviktikul, & Wichaikhum, 2013). The possibility of acquiring new skills, having knowledge about the way to carry out work, the possibility of receiving guidance and advice from colleagues and managers, and access to necessary materials and resources allow efficient coping with stressful demands in the workplace. As a result, this fact reduces the possibility of experiencing burnout. Although the structural empowerment model has been tested in several countries (Guo et al., 2016; Lautizi et al., 2009; Meng et al., 2015, 2016; Wang et al., 2013) with samples composed of nursing professionals that provided different health care services (Harwood et al., 2010; Oyeleye, Hanson, & O'Connor, 2013; Wang et al., 2013), studies on the relationship between empowerment and burnout are scarce in the health context of Portugal.

In this study Spence Laschinger, Finegan et al's. (2001, 2004); model was used as a reference to confirm whether structural empowerment was a predictor of core burnout in a sample composed of nursing professionals from the south of Portugal. Global empowerment was regarded as a mediator between two factors, namely (1) access to information, resources, support and opportunities; and (2) core burnout.

2 | METHODS

2.1 | Design and sample

We conducted a cross-sectional correlational study using questionnaires (Montero & León, 2007). A total of 478 nursing professionals of three public hospitals from the south of Portugal were surveyed, obtaining a final sample of 297 participants (62.13% response rate). As for inclusion criteria, all participants were required to have worked for a least 1 year in the same ward in public hospitals.

Of the 297 participants, 189 (63.60%) were women and the average age of the sample was 37.42 years (SD = 6.89). 171 participants (57.58%) were single. The majority of the interviewed participants reported that they were working in shifts (57.89%), with an average professional experience of 13.92 years (SD = 10.33). 219 participants (73.99%) reported to be working between 35 and 42 hr per week (Table 1).

2.2 | Instruments

The questionnaire included demographic questions about the participant's age, duration of clinical experience, gender, marital status, work shifts and working hours.

Core burnout was measured using the Portuguese version (Melo, Gomes, & Cruz, 1999) of Maslach Burnout Inventory (Maslach & Jackson, 1981) considering the means of emotional exhaustion (9 items) and depersonalization (5 items). According to González-Morales, Peiro, Rodriguez, and Bliese (2012), emotional exhaustion and depersonalization are considered as the core aspects of the syndrome or the core burnout. The answers were obtained through a Likert-type scale, ranging from 0 = never to 6 = each day. High scores indicated high levels of core burnout in the participants. Cronbach's alpha reliability coefficient was 0.86.

The Portuguese version (Orgambídez-Ramos, Gonçalves, Santos, Borrego-Alés, & Mendoza-Sierra, 2015) of the Conditions for Work Effectiveness Questionnaire-II (CWEQ-II) created by Spence Laschinger et al. (2004) was used to measure structural empowerment. The 12 items of the scale were grouped in four dimensions of structural empowerment, namely: access to opportunities (3 items); information (3 items); support (3 items); and resources (3 items). The answers were obtained through a Likert-type scale, ranging from 1 = never to 5 = much. High scores indicated high levels of structural empowerment perceived by the participants. The coefficients of reliability (Cronbach's alpha) observed were 0.84, 0.88, 0.86 and 0.77 for access to opportunities, information, support and resources, respectively.

The CWEQ-II questionnaire included a measurement of global empowerment for validity (Spence Laschinger et al., 2004). This variable was assessed with two items answered using a Likert-type scale ranging from 1 = never to 5 = much. High scores indicated high levels of global empowerment at work. The coefficient of reliability (Cronbach's alpha) obtained was 0.81.

2.3 | Data collection

The researchers visited the units of the hospitals and requested the participation of the professionals who met the inclusion criteria previously indicated. Survey packages were distributed to the professionals who agreed to participate, individually or in small groups. The survey package included a cover letter explaining the purpose of the study, an envelope and a survey questionnaire. The participants were asked to complete the questionnaire anonymously and to return it in sealed envelopes. The participants were given all the time they needed. Confidentiality and anonymity of all the data were guaranteed at all times.

TABLE 1 The characteristics of the participants (N= 297)

	Mean	Standard deviation	Frequency	%
Length of clinical experience	13.92	10.33		
Age	37.42	6.89		
Gender				
Female			189	63.64
Male			108	36.46
Marital status				
Married			126	42.42
Single			171	57.58
Work shifts				
Yes			197	66.33
No			100	33.67
Working hours				
<35 hr week^{-1}			14	4.73
35–42 hr week^{-1}			219	73.99
>42 hr week^{-1}			63	21.28

2.4 | Statistical analysis

The STATA statistical software (version 13) was used to check the proposed goal of the present study. The significance level was set at 0.05 (two-tailed).

Firstly, we used Harman's test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) with all the items of the scales to assess the possible impact of the common method variance (CMV) (Podsakoff, MacKenzie, & Podsakoff, 2012). According to Podsakoff et al. (2012), measuring two or more constructs with the same method (e.g., self-report questionnaires) may produce biasing effects: some of the observed covariation between them may be due to the fact that they share the same method of measurement. Several researchers (Podsakoff et al., 2003, 2012) have demonstrated that method bias can overestimate or underestimate the estimates of the relationship between two constructs.

Since the data were collected through self-report questionnaires in the same time period, the common variance associated with the method is an important issue that needs to be controlled (Podsakoff et al., 2012). Harman's single-factor test was used to check the possible effect of the CMV. All items of core burnout, structural empowerment and global empowerment scale were subjected to exploratory factor analysis using the principal component analysis with varimax rotation and forcing the extraction of a single factor. If there was a problem of variance associated with the method, the extracted factor should reflect more than 50% of the variance. The results of factor analysis showed a factor that explained 22.24% of the variance. Although the effect of the common variance could not be completely eliminated, it did not seem to significantly affect the relationship between the variables (Podsakoff et al., 2012).

Subsequently, we performed a descriptive analysis (mean, standard deviation, skewness, kurtosis). Then, we obtained the internal consistency (Cronbach's alpha) and estimated the correlations between the variables (Pearson's coefficients).

The relations shown in Figure 1 were assessed using a system of structural equations based on correlations. We assessed the variables considered observable using the maximum likelihood method. The
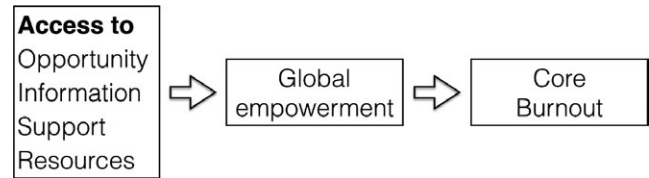

FIGURE 1 Hyphotesized model of structural empowerment (Spence Laschinger, Finegan et al., 2001; Spence Laschinger, Shamian et al., 2001)

variables related in the model were the scores obtained in the test and, therefore, fallible measurements that contained errors (Acock, 2013). The assessment of the mediation was performed following the guidelines proposed by Hayes (2013). Sobel's test was used to determine direct and indirect effects.

3 | RESULTS

3.1 | Descriptives and correlations

Table 2 shows the means, standard deviations, skewness, kurtosis and correlations of the variables assessed, as well as the reliability of the scales. In general, the nursing professionals did not perceive their workplace to be particularly motivating in terms of empowerment. The means of structural empowerment dimensions ranged from 3.86 (access to opportunities) to 2.90 (access to resources), with an average global empowerment value of 3.36. With respect to core burnout, the participants exhibited low levels in this variable (mean 1.71, *SD* 1.00).

As expected, correlation analyses showed that all the dimensions of the structural empowerment featured significant negative correlations ($p < .01$) with respect to core burnout: $r = -.19$ for opportunities; $r = -.13$ for information; $r = -.16$ for support; and $r = -.39$ for resources. Higher scores in the dimensions of structural empowerment were related to lower scores in core burnout. In addition, a significant negative relationship between global empowerment and core burnout was observed ($r = -.46$, $p < .01$).

	1	2	3	4	5	6
1. Core burnout	(0.86)	−0.19**	−0.13**	−0.16**	−0.39**	−0.46**
2. Access to opportunities		(0.84)	0.11	0.21**	0.14*	0.47**
3. Access to information			(0.88)	0.28**	0.15*	0.18**
4. Access to support				(0.86)	0.29**	0.35**
5. Access to resources					(0.77)	0.50**
6. Global empowerment						(0.81)
Mean	1.71	3.86	2.56	3.07	2.90	3.36
Standard deviation	1.00	0.80	0.88	0.89	0.72	0.86
Skewness	1.06	−0.47	0.15	−0.13	0.05	−0.57
Kurtosis	0.91	−0.13	−0.13	0.01	0.07	0.60

TABLE 2 Descriptive statistics, scale reliabilities and correlations of study variables

Note. Alpha reliabilities are shown in parentheses on the diagonal.
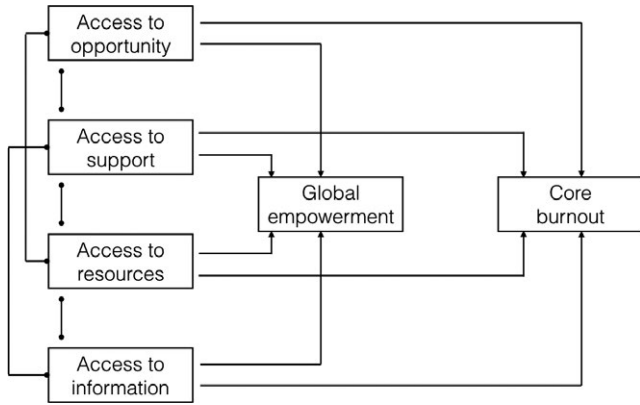*$p < .05$, **$p < .01$.

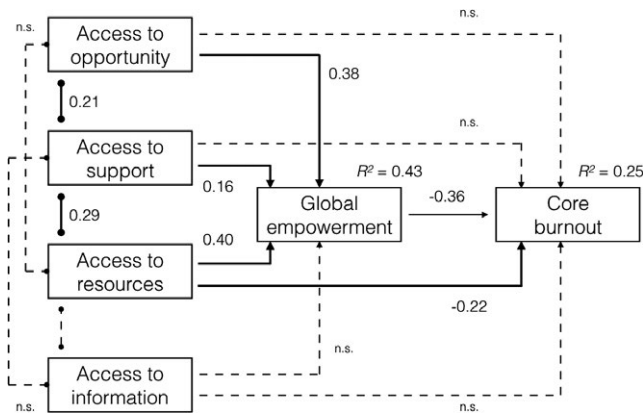**FIGURE 2** Over-identified model of the study

FIGURE 3 Standardized path estimates of the final model
(N = 297)

3.2 | Mediation analysis

In order to obtain a global representation of the relationship between the dimensions of structural empowerment, global empowerment and core burnout, we used a model of relations in which access to opportunities, information, support and resources were the exogenous and predictor variables. Global empowerment was the endogenous mediator variable, and core burnout was the endogenous variable and result. This model was subjected to an empirical test using the analysis of structural equations by means of the path analysis method. According to the guidelines proposed by Acock (2013), the analysis was performed following two steps: (1) designing an over-identified model (Figure 2); and (2) redesigning the model from the significant coefficients found in the previous step (Figure 3).

Figure 3 shows the standardized coefficients and significance levels obtained in the model of structural equations using the maximum likelihood method as a parameter estimation procedure. It also shows the values of the explained variance (R^2) in the global empowerment and core burnout variables. Path analysis revealed that the adjustment was adequate ($X^2(2) = 0.419$, $p = .811$), with Comparative Fit Index (*CFI*) = 1.000 and Tucker-Lewis Index (*TLI*) = 1.000, i.e., over 0.950 as recommended by Hu and Bentler (1999). The value of the Standardized Root Mean Square Residual (*SRMSR*) was 0.007 and the value of the Root Mean Square Error of Approximation (*RMSEA*) was 0.001 (90% CI = 0.001–0.070), i.e., below the value of 0.050 as recommended by Hu and Bentler (1999).

It is worth noting that, except for access to information, the rest of the structural empowerment dimensions positively and significantly predicted global empowerment ($p < .01$). The beta values were 0.38 for opportunities, 0.16 for support and 0.40 for resources. The total of the global empowerment variance, explained by access to opportunities, support, and resources, was 43%. (Table 3)

With regard to the mediator role of global empowerment, this variable completely mediated the influence of access to opportunities and support with respect to core burnout. However, access to resources had a direct and indirect impact on core burnout, in such a way that global empowerment partially mediated the relationship between resources and core burnout. Regarding the total effect of access to resources on core burnout, 61% (−0.22/−0.36) was direct, whereas 39% (−0.14/−0.36) occurred through global empowerment. In other words, after controlling the role of global empowerment, most of the effect of access to resources was direct.

TABLE 3 Standardized effects of structural empowerment on core burnout

	Direct effect	Indirect effect	z	Total effect
Global empowerment				
Access to opportunities →	0.38[a]	–	–	0.38
Access to support →	0.16	–	–	0.16
Access to resources →	0.40	–	–	0.40
Core burnout				
Global empowerment →	−0.36	–	–	−0.36
Access to opportunities →	–	−0.13	−4.95	−0.13
Access to support →	–	−0.06	−2.96	−0.06
Access to resources →	−0.22	−0.14	−5.01	−0.36

[a]The significance levels shown here are for the unstandardized solution.
All coefficients are significant ($p < .01$).

4 | DISCUSSION

The lack of economic resources and personnel in hospitals and the greater demands at work make nurses particularly susceptible to experiencing burnout in the work context. We used the structural empowerment model (Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004) as a reference to achieve the goal of the present study, which was to assess structural empowerment (access to information, resources, support and opportunities) as a predictor of core burnout in a sample composed of Portuguese nursing professionals. The results revealed that access to opportunities and access to support negatively and indirectly affected core burnout through global empowerment, whereas the effect of access to resources was both direct and indirect.

The results are in line with those of studies conducted in other countries with samples of nurses from different health units (Guo et al., 2016; Harwood et al., 2010; Hatcher & Spence Laschinger, 1996; Meng et al., 2015, 2016; O'Brien, 2011; Özbas & Tel, 2015; Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004; Spence Laschinger, Shamian et al., 2001; Wang et al., 2013). Those studies found a strong relationship between the elements of core burnout and the dimensions of structural empowerment, i.e., higher levels of structural empowerment were linked to lower levels of core burnout perceived by nursing professionals. When the work environment limits professionals' power, they feel unable to meet work demands and requirements, and the likelihood of experiencing high levels of stress and burnout at work increases (Wang et al., 2013).

The results of the present study revealed the negative relationship between the dimensions of structural empowerment and core burnout. All the dimensions (access to information, support, resources and opportunities) had negative correlations with core burnout in the participants, as well as with the measurement of global empowerment. Similar results had been observed in the studies conducted by Wang et al. (2013), Harwood et al. (2010), O'Brien (2011) and Spence Laschinger and colleagues (Spence Laschinger, Finegan, & Wilk, 2011; Spence Laschinger et al., 2004). However, similar results were not observed in the study conducted by Oyeleye et al. (2013), who had not found significant relationship between psychological empowerment and burnout. On the other hand, the majority of the studies supported the relationship between the dimensions of structural empowerment, empowerment and burnout. According to those studies, nurses who work in empowered health care context have lower levels of burnout than those who work in contexts with lack of power. In this sense, the perceptions of nurses about their work environment play a relevant role in the experience of burnout (Kanter, 1993).

The results of path analysis showed that access to opportunities and access to support indirectly impacted on the experience of core burnout through global empowerment. These results are in line with the results obtained by Spence Laschinger and colleagues (Spence Laschinger et al., 2004, 2011), but not with the results obtained by O'Brien (2011). The type of sample used (staff of haemodialysis centres) and the measurement of empowerment through Spreitzer's (1995) empowerment scale may explain the absence of mediation. However,

the study conducted by Hochwalder (2007) found that psychological empowerment, assessed using Spreitzer's (1995) empowerment scale, mediated the relationship between the support and control variables of Karasek's model and burnout assessed through Maslach Burnout Inventory in a nursing sample of Sweden.

In this sense, access to opportunities and support increased the levels of global empowerment, characterized by a high perception of control and dominance with respect to the work context, which allowed dealing with the work demands in a proper manner. When nursing professionals perceive that they have enough personal resources to cope with the work, they experience lower levels of stress and the probability of experiencing burnout decreases (Kanter, 1993; Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004).

Access to resources directly and indirectly affected core burnout levels of the participants through global empowerment. The predictor role of access to resources acquires meaning in the context of crisis and economics cuts experienced in health units of Portugal in recent years (Orgambídez-Ramos, Borrego-Alés, & Ruiz-Frutos, 2016). The lack of funding in hospitals and health services causes lack of resources, which prevents performing the work properly and generates stress and burnout. The relationship between access to resources and burnout has also been observed in a study conducted by Harwood et al. (2010) with a sample of nephrology nurses. These authors found that access to resources had been the most important predictor of burnout.

5 | LIMITATIONS

The results of the present study should be interpreted with some considerations. Firstly, the cross-sectional design prevents drawing conclusions regarding causality between structural empowerment and core burnout. However, the empirical evidence concerning the structural empowerment model (Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004; Spence Laschinger, Shamian et al., 2001) allowed the relationship between these variables to be taken into consideration. Another element relating to the cross-sectional design that would be taken into consideration is the presence of third variables that may affect the relationship between the variables of the study, such as self-efficacy or vulnerability to stress.

On the other hand, all the variables in the present study were assessed using self-reports, which increased the risk of common method variance (Podsakoff et al., 2012). The results obtained through Harman's test did not completely eliminate its influence on the relationship between the variables. Finally, the survey design was particularly sensitive to certain biases in the responses, such as social desirability bias or the responses of those who voluntarily wanted to participate in the study.

6 | CONCLUSIONS

The results of the present study validated the structural empowerment model and its application in professional health contexts in Portugal,

specifically in nursing professionals. It is worth noting the need for action with respect to the characteristics of the institutions that promote formal and informal power by facilitating access to opportunities, support and resources. The presence of these dimensions of structural empowerment increases the levels of global empowerment at the same time as reducing stress and burnout experienced by nursing professionals.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

The structural elements and power in health units are important determinants of health and burnout (Kanter, 1993; Spence Laschinger, Finegan et al., 2001; Spence Laschinger et al., 2004) and enable the application of this model in hospitals and health services management. The results indicated that managers in hospitals and health units should make an effort to create a work context that strengthen nursing professionals by facilitating access to opportunities, resources and support.

In this line, structural empowerment represents an essential tool for the prevention of burnout and stress occurring in health services. Training and professional development plans would improve professionals' perception of greater opportunities to learn the necessary skills and abilities to provide quality care. At the same time, these plans would encourage nursing professionals to participate in the decision-making process and work organisation.

Similarly, the creation of informal and formal support networks may increase professionals' feelings of competence and self-efficacy. Through social support, nursing professionals get new information, acquire new skills or improve the ones they already have, obtain social reinforcement and feedback on the execution of the tasks, and obtain emotional support, advice or other types of help. Also, health services managers should make an effort to properly manage available resources. The absence of resources is interpreted as an obstacle to the provision of quality service and perceived as an important stressor associated to burnout.

Therefore, it is important for nurse managers to make sure that empowering structures are in place, and ensure that nurses experience high levels of empowerment to prevent and reduce burnout.

ETHICAL APPROVAL

The institutional review boards of the Regional Health Administration of the Algarve (Portugal) reviewed and approved the study protocol.

REFERENCES

Acock, A. C. (2013). *Discovering structural equation modeling using stata*. Texas, TX: StataCorp LP.

Borrego-Alés, Y., Mendoza-Sierra, M. I., & Orgambídez-Ramos, A. (2010). Burnout in palliative care and nursing care. In E. Pérez & F. J. Medina (Eds.), *Aspectos psicosociales en los cuidados paliativos* (pp. 273–298). Madrid, Spain: FUDEN.

EU-OSHA. (2014). *Healthy workers: Manage stress*. Luxemburg: European Agency of Safety and Health for Work.

Figueiredo-Ferraz, H., Grau-Alberola, E., Gil-Monte, P. R., & Garcia-Juesas, J. A. (2012). Burnout and job satisfaction among nursing professionals. *Psicothema*, *24*, 271–276.

Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, *30*, 159–165.

Gil-Monte, P. R., Carretero-Dios, H., & Roldán, M. D. (2005). Influence of psychosocial processes on burnout in nursing. *Ansiedad y Estrés*, *11*, 281–291.

González-Morales, M. G., Peiro, J. M., Rodriguez, I., & Bliese, P. D. (2012). Perceived collective burnout: A multilevel explanation of burnout. *Anxiety Stress and Coping*, *25*, 43–61.

Guo, J., Chen, J., Fu, J., Ge, X., Chen, M., & Liu, Y. (2016). Structural empowerment, job stress and burnout of nurses in China. *Applied Nursing Research*, *31*, 41–45.

Harwood, L., Ridley, J., Wilson, B., & Spence Laschinger, H. K. (2010). Workplace empowerment and burnout in Canadian nephrology nurses. *Canadian Association of Nephrology Nurses and Technologists*, *20*, 12–17.

Hatcher, S., & Spence Laschinger, H. K. (1996). Staff nurses' perceptions of job empowerment and level of burnout: A test of Kanter's theory of structural power in organizations. *Canadian Journal of Nursing Administration*, *9*, 74–94.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis. A Regression-Based Approach*. London: The Guilford Press.

Hochwalder, J. (2007). The psychosocial work environment and burnout among Swedish registered and assistant nurses: The main, mediating, and moderating role of empowerment. *Nursing and Health Sciences*, *9*, 205–211.

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*, 1–55.

Kanter, R. M. (1993). *Men and women of the corporation*. New York, NY: Basic Books.

Lautizi, M., Spence Laschinger, H. K., & Ravazzolo, S. (2009). Workplace empowerment, job satisfaction, and job stress among Italian mental health nurses: An exploratory study. *Journal of Nursing Management*, *17*, 446–452.

Maslach, C. (2001). What have we learned about burnout and health? *Psychology & Health*, *16*, 607–611.

Maslach, C. (2009). Understanding burnout. *Ciencia & Trabajo*, *32*, 37–43.

Maslach, C., & Jackson, M. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, *2*, 99–113.

Maslach, C., & Jackson, S. E. (1986). *The Maslach burnout inventory manual*. Palo Alto, CA: Consulting Psychology Press.

Melo, B. T., Gomes, A. R., & Cruz, J. F. (1999). Development and Adaptation of a psychological instrument for assessing burnout among psychologists. In A. Soares, S. Araújo & S. Caires (Eds.), *Avaliação Psicológica: Formas e Contextos* (pp. 134–156). Braga, Portugal: APPORT.

Meng, L., Jin, Y., & Guo, J. (2016). Mediating and/or moderating roles of psychological empowerment. *Applied Nursing Research*, *30*, 104–110.

Meng, L., Liu, Y., Liu, H., Hu, Y., Yang, J., & Liu, J. (2015). Relationship among structural empowerment, psychological empowerment, intent to stay and burnout in nursing filed in mainland China. *International Journal of Nursing Practice*, *21*, 303–312.

Montero, I., & León, O. G. (2007). A guide for naming research studies in psychology. *International Journal of Clinical and Health Psychology*, *7*, 847–862.

Nowrouzi, B., Lightfoot, N., Lariviere, M., Carter, L., Rukholm, E., Schinke, R., & Belanger-Gardner, D. (2015). Occupational stress management and burnout interventions in nursing and their implications for healthy work environments: A literature review. *Workplace Health & Safety*, *63*, 308–315.

O'Brien, J. L. (2011). Relationships among structural empowerment, psychological empowerment, and burnout in registered staff nurses working in outpatient dialysis centers. *Nephrology Nursing Journal*, *38*, 475–481.

Orgambídez-Ramos, A., Gonçalves, G., Santos, J., Borrego-Alés, Y., & Mendoza-Sierra, M. I. (2015). Empowering employees: A Portuguese adaptation of the Conditions for Work Effectiveness Questionnaire (CWEQ-II). *Revista da Associação Portuguesa de Psicologia*, *29*(1), 1–10.

Orgambídez-Ramos, A., Borrego-Alés, Y., & Ruiz-Frutos, C. (2016). Empowerment, stress vulnerability and burnout among Portuguese nursing staff. Ciência e Saúde Colectiva, 22. Retrieved from http://www.cienciaesaudecoletiva.com.br/artigos/artigo_int.php?id_artigo=15469.

Oyeleye, O., Hanson, P., & O'Connor, N. (2013). Relationship of workplace incivility, stress, and burnout on nurses' turnover intentions and psychological empowerment. *Journal of Nursing Administration*, *43*, 536–542.

Özbas, A. A., & Tel, H. (2015). The effect of a psychological empowerment program based on psychodrama on empowerment perception and burnout levels in oncology nurses: Psychological empowerment in oncology nurses. *Palliative & Supportive Care*, *15*, 1–19.

Papathanasiou, I. V. (2014). Motivation, leadership, empowerment and confidence: Their relationship with nurses' burnout. *Materia Socio Medica*, *26*, 405–410.

Podsakoff, P., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903.

Podsakoff, P. M., MacKenzie, S., & Podsakoff, N. P. (2012). Source of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539–569.

Spence Laschinger, H. K., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: Expanding Kanter's model. *Journal of Nursing Administration*, *31*, 260–272.

Spence Laschinger, H. K., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior*, *25*, 527–545.

Spence Laschinger, H. K., Finegan, J., & Wilk, P. (2011). Situational and dispositional influences on nurses' workplace well-being: The role of empowering unit leadership. *Nursing Research*, *60*, 124–131.

Spence Laschinger, H. K., Shamian, J., & Thomson, D. (2001). Impact of Magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care, and work satisfaction. *Nursing Economics*, *19*, 209–219.

Spence Laschinger, H. K., Wong, C., & Grau, A. (2013). Authentic leadership, empowerment, and burnout: A comparison in new graduates and experienced nurses. *Journal of Nursing Management*, *21*, 541–552.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*, 1442–1465.

Wang, X., Kunaviktikul, W., & Wichaikhum, O. A. (2013). Work empowerment and burnout among registered nurses in two tertiary general hospitals. *Journal of Clinical Nursing*, *22*, 2896–2903.

Wong, C., & Spence Laschinger, H. K. (2013). Authentic leadership, performance, and job satisfaction: The mediating role of empowerment. *Journal of Advanced Nursing*, *69*, 947–959.