WORKPLACE EMPOWERMENT AND JOB SATISFACTION IN PORTUGUESE NURSING STAFF: AN EXPLORATORY STUDY

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Abstract

Aim: The aim was to examine to what extent structural empowerment (access to opportunities, support, information, and resources), and global empowerment predict job satisfaction in a sample of nursing staff from the south of Portugal. Design: A cross-sectional correlational study was made. Methods: Of 205 professional nursing surveyed, a final sample of 151 participants was selected from two public hospitals. To measure structural and global empowerment and work satisfaction, Portuguese versions of the Conditions for Work Effectiveness Questionnaire (CWEQ-II) and Job Satisfaction Scale were used. We used STATA software and an alpha level of 0.05 for all statistical levels to analyse the common variance method (CMV). Results: All dimensions of structural empowerment (access to opportunities, information, resources, and support) and global empowerment were positively and significantly (level of significance 95%) related to job satisfaction. Regression models showed that job satisfaction was significantly predicted by access to opportunities and global empowerment. Conclusion: Working conditions characterized by empowerment and opportunities for growth and development are important determinants of job satisfaction among nurses. Managers should make an effort to provide opportunities to learn and put into practice new knowledge and skills in the workplace, increasing empowerment levels and job satisfaction in nursing staff.

Keywords: global empowerment, nurses, predict, structural empowerment, work satisfaction.

Introduction

At present, one of the main concerns of the administrations of hospitals and health units relates to the quality of working life of nursing professionals. Nursing staff are key to the efficient functioning of any health institution, so aspects such as job satisfaction and empowerment are particularly important in this context as they predispose professionals to provide care in an efficient way, improve the quality of care provided, and enhance relationships with patients (e.g., Gilbert, Laschinger, Leiter, 2010). Furthermore, several studies link high levels of job satisfaction to lower intention to quit and lower rates of turnover in nursing staff (Gutierrez, Candela, Carver, 2012; Laschinger, 2012; Yücel, 2012), making it imperative for organizations to maintain a climate of job satisfaction.

Spector (1985) defines the job satisfaction of nurses as their affective response to their job and work environment. The conceptualized definition of nurses’ job satisfaction is the nurses’ feelings in response to the work conditions that meet their desired needs as the result of their evaluation of the value or equity of their work experience (Liu, Aungsturoch, Yunibhand, 2016). The presence of high levels of job satisfaction is related to workplace empowerment (Spreitzer, 1995; Laschinger et al., 2004; Lautizi, Laschinger, Ravazzolo, 2009; Li et al., 2013; Hayes, Douglas, Bonner, 2014), suggesting the need to create globally empowered environments in institutions. Furthermore, Walker and Avant (2010) made a meta-analysis of articles that studied the predictors of job satisfaction in nurses, identifying four groups of variables: demographic, emotional, work characteristics, and environmental, considered prerequisites for work satisfaction. In the last group, of environmental variables, empowerment was considered an important determinant of nurses’ job satisfaction (Casey, Saunders, O’Harra, 2010). Global Empowerment is defined as a motivational construct that reflects a positive and active attitude towards work, characterized by a sense of meaning, self-
Among the determinants of global empowerment in organizations, Laschinger (2004) building on Kanter’s Theory of Empowerment in organizations (1993), highlights access to opportunities, information, resources, and support – Structural Empowerment. In this respect, Kanter’s Theory of Structural Empowerment (Kanter, 1993) is an important tool for health institutions, allowing the optimization of personal and professional skills, increasing job satisfaction, and reducing stress in nursing staff (Lautizi, Laschinger, Ravazzolo, 2009). This model offers an opportunity for managers of health units to focus on important prerequisites for job satisfaction, with a view to defining plans and designing interventions that best fit the environments evaluated, with the intention of fostering positive reactions, feelings and attitudes at work, and encouraging superior performance of the services provided.

Structural Empowerment is nurses’ access to opportunities (for growth and promotion in the organization), access to information (the technological knowledge and expertise required to perform tasks and make good decisions), access to resources (the capacity of nurses to acquire the economic and material resources and available time they require), access to support (feedback and guidance from subordinates, peers, and superiors). When professionals perceive high levels of access to resources, information, opportunities and support, they experience high levels of global empowerment in the workplace (Kanter, 1993; Laschinger et al., 2004; Laschinger, 2012), and, consequently, greater job satisfaction. The possibility of acquiring new skills and knowledge, having the support of supervisors and colleagues, access to material resources, time to perform tasks, and the necessary information regarding tasks foster a positive evaluation of the work context, generating positive feelings and emotions, and increasing perceptions of job satisfaction (Spreitzer, 1995; Laschinger et al., 2004; Lautizi, Laschinger, Ravazzolo, 2009).

Empowered health professionals, in addition to showing high levels of job satisfaction, demonstrate superior professional performance and experience lower levels of stress at work (Laschinger et al., 2004; Lautizi, Laschinger, Ravazzolo, 2009). Research has shown that the perception of high levels of structural empowerment is associated with higher levels of job satisfaction in work in nursing samples from different countries (Laschinger et al., 2004; Lautizi, Laschinger, Ravazzolo, 2009; Laschinger, 2012; Li et al., 2013; Hayes, Douglas, Bonner, 2014), suggesting that this significant association holds regardless of the context.

Given the characteristics of the work performed by nursing professionals, the study of job satisfaction becomes more important in the context of healthcare and, more specifically, among nursing professionals. Job satisfaction is a sign of workers’ quality of work life, but also an indirect indicator of the quality of care and assistance offered by healthcare institutions (Gutierrez, Candela, Carver, 2012; Laschinger, 2012; Yücel, 2012). While studies on the relationship between structural empowerment and job satisfaction are still very scarce in the context of healthcare in Portugal, it is necessary to deepen the aspects of structural empowerment most linked to professional satisfaction.

**Aim**

In this sense, the objective of this study is to verify the predictive role of structural empowerment (access to opportunities, information, resources, and support) and global empowerment on job satisfaction in a sample of nurses in southern Portugal.

**Methods**

**Design**

A cross-sectional, descriptive, and correlational study using questionnaires was carried out.

**Sample**

205 nursing professional from two public hospitals in the south of Portugal were surveyed, resulting in a final sample of 151 participants (73.66% response rate; 87.4% women). The criteria for inclusion in the study sample were: nurses working in the same ward in public hospitals, for at least six months. The average age of the sample was 44.04 years (SD = 8.13), and 87.4% of the participants were women (n = 132). All the participants reported that they had a full time job and 96.03% (n = 145) stated that they had had more than a year of professional experience in their hospital. The collection of data from participants was conducted from January 2016 to March 2016. In response to our request for authorization, both ethics committees of the two hospitals approved the study. The research team was displaced in the units of the hospitals, and requested the participation of the nursing staff who met the inclusion criteria previously indicated. The participants were asked to complete the questionnaires anonymously and to return them in sealed envelopes. Confidentiality and anonymity of all information were guaranteed at all times.
Data collection

The questionnaire included demographic questions about the participants’ age, gender, duration of professional experience, and type of contract.

Structural empowerment was measured using a Portuguese version (Orgambidez-Ramos et al., 2015) of the Conditions for Work Effectiveness Questionnaire (CWEQ-II) (Laschinger et al., 2004). The 12 items of the questionnaire were divided into four dimensions of structural empowerment, namely: access to information (three items); opportunities (three items); resources (three items); and support (three items). The answers were given through a Likert-type scale, varying from 1 = never to 5 = always. High scores indicated high levels of structural empowerment, as perceived by the participants. The Cronbach’s alpha reliability coefficients obtained in this study were 0.93, 0.77, 0.72, and 0.92 for access to information, opportunities, resources, and support, respectively. The CWEQ-II questionnaire included a measurement of global empowerment for validity (Laschinger et al., 2004). This variable was evaluated using two items, answered with a Likert-type scale ranging from 1 = never to 5 = always. High scores indicated high levels of global empowerment at work. Cronbach’s alpha reliability coefficient was 0.86 in this study. Confirmatory factor analysis (CFA) was used to examine the construct validity of the CWEQ-II. The CFA result revealed an adequate fit according to Hu and Bentler (1999): $x^2(67) = 149.60; p < 0.001$; CFI = 0.95; TLI = 0.93; SRMR = 0.07; RMSEA = 0.09 [90% CI = 0.07–0.11].

The Job Satisfaction Scale (Lima, Vala, Monteiro, 1994) was used in order to measure job satisfaction. This scale contains eight items that evaluate satisfaction with aspects of the work context (i.e., relationships with co-workers and supervisors). Higher scores indicate a higher level of job satisfaction in the workplace. The participants responded to each item using a Likert-type scale, which ranged from 1 (totally disagree) to 7 (totally agree). Reliability (Cronbach’s alpha) in the current study was 0.81. A CFA of the Job Satisfaction Scale was conducted to check the construct validity. The result revealed an adequate fit (Hu, Bentler, 1999): $x^2(19) = 48.62; p < 0.001$; CFI = 0.93; TLI = 0.91; SRMR = 0.06; RMSEA = 0.10 [90% CI = 0.06–0.14].

Data analysis

The STATA statistical software package v.13 was used for the analysis of data. We used an alpha level of 0.05 for all statistical tests. Firstly, Harman’s test was carried out with all the items of the scales to assess the possible impact of Common Method Variance (CMV) (Podsakoff, MacKenzie, Podsakoff, 2012). Secondly, we calculated the descriptive statistics of the variables (mean, standard deviation, skewness, and kurtosis), the correlations between them, and the internal consistency coefficients (Cronbach’s alpha). Finally, hierarchical multiple regressions were calculated to assess the ability of structural empowerment and global empowerment to predict levels of job satisfaction.

Results

Preliminary analysis

Before testing the regression models, Harman’s one-factor test was conducted to verify the presence of the CMV. Several researchers have noted that measuring two or more constructs by the same method (i.e., self-report questionnaires) may produce biasing effects (Podsakoff et al., 2003; Podsakoff et al., 2012). The method bias can overestimate, or underestimate the relationships between two or more variables (Podsakoff et al., 2012). All the items of the scales used in this study were subjected to exploratory factor analysis, using principal components analysis with varimax rotation and forcing to extract a single factor. If the extracted factor explained more than 50% of the variance, there might be a problem with the CMV. The factor, when merged, accounted for less than 50% of the variance (38.41%), which means that the CMV did not seem to significantly affect the relations between the variables (Podsakoff et al., 2003; Podsakoff et al., 2012). See Table 1.

Table 1 The characteristics of the participants (n = 151)

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>SD</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of clinical</td>
<td>4.92</td>
<td>2.47</td>
<td></td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>44.04</td>
<td>8.13</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>132</td>
<td>(96,03)</td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>19</td>
<td>(3,97)</td>
<td></td>
</tr>
<tr>
<td>Full time job</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>151</td>
<td>(100,00)</td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>0</td>
<td>(0,00)</td>
<td></td>
</tr>
</tbody>
</table>

SD – standard deviation

Descriptive statistics and correlations

Table 2 shows the descriptive statistics (mean, standard deviation, skewness, kurtosis), the correlations of the variables, and the Cronbach’s alpha reliability coefficients of the scale. The means of structural empowerment ranged from 3.67 (access to opportunities) to 2.92 (access to resources), with an average global empowerment value of 3.43. With respect to job satisfaction, nursing professionals did
not exhibit high levels of job satisfaction (mean = 4.31; SD = 0.86). Analysis of the data revealed that all structural empowerment dimensions and global empowerment were positively related to job satisfaction (p < 0.001): access to opportunities (r = 0.55), access to information (r = 0.41), access to support (r = 0.43), access to resources (r = 0.37), and global empowerment (r = 0.52). The higher the levels of structural and global empowerment, the higher the levels of job satisfaction, as perceived by the participants.

First, Model 1 (M1) tested the ability of access to opportunities, information, support, and resources to predict job satisfaction. The total variance explained by Model 1 as a whole was 35.05% [F(4; 146) = 19.70, p < 0.001]. In this model, access to opportunities and access to resources were significant, with access to opportunities recording a higher beta value (β = 0.40; p < 0.001) than access to resources (β = 0.19; p = 0.013). Next, hierarchical multiple regression was used to assess the ability of global empowerment to predict job satisfaction, after checking for the influence of structural empowerment. After the inclusion of global empowerment, in Model 2 (M2), the total variance explained by the final model as a whole was 37.06%, F(5; 145) = 17.07, p < 0.001. Global empowerment explained an additional 2.01% of the variance on job satisfaction, after checking for the influence of access to opportunities, information, support, and resources, R squared change = 0.021, F(1; 145) = 4.62, p = 0.033. In the final model, only access to opportunities, and global empowerment appeared as significant predictors of job satisfaction; β = 0.32 (p < 0.001) for access to opportunities, and β = 0.21 (p = 0.033) for global empowerment.

Regression models
Multiple and hierarchical linear regression models were performed to assess the ability of structural empowerment (access to opportunities, information, support, and resources) and global empowerment to predict levels of job satisfaction (Table 3). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity (Cohen, 1988).

### Table 2 Descriptive statistics and correlations of all study scales

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access to opportunities</td>
<td>(0.77)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Access to information</td>
<td>0.51 (0.93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Access to support</td>
<td>0.45</td>
<td>0.66 (0.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Access to resources</td>
<td>0.26</td>
<td>0.46</td>
<td>0.44 (0.72)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Global empowerment</td>
<td>0.56</td>
<td>0.50</td>
<td>0.53</td>
<td>0.57 (0.86)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Job satisfaction</td>
<td>0.55</td>
<td>0.41</td>
<td>0.43</td>
<td>0.37</td>
<td>0.52 (0.81)</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.67</td>
<td>3.13</td>
<td>3.15</td>
<td>2.92</td>
<td>3.43</td>
<td>4.31</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.70</td>
<td>0.98</td>
<td>0.94</td>
<td>0.84</td>
<td>0.90</td>
<td>0.86</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.79</td>
<td>-0.37</td>
<td>-0.59</td>
<td>0.05</td>
<td>-0.58</td>
<td>0.43</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.80</td>
<td>-0.28</td>
<td>-0.24</td>
<td>-0.82</td>
<td>-0.30</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Alpha reliabilities coefficients are shown in parentheses on the diagonal. All correlations coefficients significant at p ≤ 0.01

### Table 3 Hierarchical regression results for job satisfaction

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to resources</td>
<td>0.20</td>
<td>0.08</td>
<td>0.19</td>
<td>2.50</td>
<td>0.013</td>
<td>0.04</td>
</tr>
<tr>
<td>Access to support</td>
<td>0.14</td>
<td>0.08</td>
<td>0.15</td>
<td>1.63</td>
<td>0.106</td>
<td>-0.03</td>
</tr>
<tr>
<td>Access to information</td>
<td>0.02</td>
<td>0.08</td>
<td>0.02</td>
<td>0.20</td>
<td>0.843</td>
<td>-0.15</td>
</tr>
<tr>
<td>Access to opportunities</td>
<td>0.49</td>
<td>0.10</td>
<td>0.40</td>
<td>5.02</td>
<td>0.000</td>
<td>0.29</td>
</tr>
<tr>
<td>Cte</td>
<td>1.47</td>
<td>0.33</td>
<td>---</td>
<td>4.45</td>
<td>0.000</td>
<td>0.82</td>
</tr>
<tr>
<td>M2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to resources</td>
<td>0.11</td>
<td>0.09</td>
<td>0.11</td>
<td>1.31</td>
<td>0.191</td>
<td>-0.06</td>
</tr>
<tr>
<td>Access to support</td>
<td>0.10</td>
<td>0.08</td>
<td>0.11</td>
<td>1.22</td>
<td>0.223</td>
<td>-0.06</td>
</tr>
<tr>
<td>Access to information</td>
<td>0.01</td>
<td>0.08</td>
<td>0.02</td>
<td>0.17</td>
<td>0.864</td>
<td>-0.15</td>
</tr>
<tr>
<td>Access to opportunities</td>
<td>0.39</td>
<td>0.11</td>
<td>0.32</td>
<td>3.72</td>
<td>0.000</td>
<td>0.18</td>
</tr>
<tr>
<td>Global empowerment</td>
<td>0.20</td>
<td>0.09</td>
<td>0.21</td>
<td>2.15</td>
<td>0.033</td>
<td>0.02</td>
</tr>
<tr>
<td>Constant</td>
<td>1.50</td>
<td>0.33</td>
<td>---</td>
<td>4.58</td>
<td>0.000</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Beta (B); Standard Error (SE) – Unstandardized Coefficient; Beta (β) – Standardized Coefficient; Teste (t) – Test t of Student; Sigma (Sig.) – Level of significance; (95% CI) – 95% Confidence Interval.
Discussion

Satisfaction in work is considered one of the most important aspects of the quality of working life of nursing professionals, as well as the quality of care and the professional-patient relationship of social-health institutions (Gutierrez, Candela, Carver, 2012; Yücel, 2012).

High professional satisfaction is characteristic of nurses empowered in their work, this premise being supported by the Model of Structural Empowerment (Kanter, 1993; Laschinger et al., 2004), one of the most important theoretical models explaining the experience of empowerment at work, since it focuses on the structural and social conditions that organizations must provide for their workers, which will only be guaranteed if they have easy access to opportunities, information, support and resources (Kanter, 1993). These structural working conditions have important implications for both workers and managers: workers because in this way they can work with greater autonomy, effectiveness and greater latitude in decision-making, in order to carry out their work in a more significant and prominent way; managers because, in this way, they have more free time to think strategically and innovatively about the best way to improve organizational results (Spreitzer, 2008).

In this sense, the objective of this research is to verify the predictive role of structural empowerment (access to opportunities, information, resources and support) and global empowerment on job satisfaction in a sample of nursing professionals from southern Portugal.

The results showed the positive and significant relationship between access to opportunities, resources, information, and support, and satisfaction with work. The results obtained are corroborated by other studies carried out with samples from other countries (Laschinger et al., 2004; Lautizi, Laschinger, Ravazzolo, 2009; Laschinger, 2012; Li et al., 2013; Hayes et al., 2014), providing support for the assertion that the more empowered the professionals feel the work environment to be, the greater the satisfaction they perceive at work. It is thus possible to conclude that a highly empowered organizational environment becomes an ideal ground for the emergence of positive affective reactions and attitudes toward work, such as job satisfaction, which in turn leads to more effective performance.

Regression models showed that access to opportunities and global empowerment were positive and significant predictors of job satisfaction, access to opportunities being the most powerful predictor. These results are corroborated by other studies (e.g., Laschinger, Finegan, Shamian, Wilk, 2004), which argue that opportunity and power are critical elements of working conditions, which should be made available to all employees in order to maximize success and organizational effectiveness.

Access to opportunities in particular seems to be an element in the job satisfaction of nursing professionals. The opportunity to learn, grow and develop professionally is a key element of professional achievement, which generates positive feelings towards work, with consequent professional satisfaction (Lautizi, Laschinger, Ravazzolo, 2009). In practice, this means that the work itself must offer the employee opportunities to learn how to use their skills and competences to realize not only the needs of the organization, but also their own aspirations. A nurse may be satisfied with the basic work they perform, but might become frustrated and dissatisfied if there is no possibility of job development and/or opportunities to learn new skills and abilities.

On the other hand, the experience of global empowerment, probably induced by a general sense of access to resources, information and support, allows the development of a sense of control and autonomy at work, which is also an important source of job satisfaction (Hayes, Bonner, Pryor, 2010; Lu et al., 2012). An important implication for nursing professionals who perceive their environment as empowering is that they demonstrate greater levels of control and autonomy at work, feel greater appreciation for the work they perform, and express higher levels of satisfaction at work, an affective reaction that predisposes nurses to a more effective performance.

The results of this research should be interpreted with the following aspects in mind. First, the cross-sectional and correlational design does not allow the establishment of causal relations between the study variables. This study proposes the existence of independent variables and dependent variables. However, empirical evidence on the structural empowerment model (Kanter, 1993; Laschinger et al., 2004) makes it possible to establish these relationships between the variables measured.

Secondly, although the variance associated with the common method of measurement does not seem to have affected analysis of the relationships, its lack of influence cannot be completely ruled out (Podsakoff, MacKenzie, Podsakoff, 2012).

Finally, survey design is especially sensitive to certain traits, such as the bias of desirability in questionnaire responses, or the bias in the
responses of those who voluntarily collaborated in this research (Navas Ara, 2002).

Conclusion
The structural empowerment model (Kanter, 1993; Laschinger et al., 2004) is presented as an essential tool for the enhancement of professional satisfaction among nursing staff. It allows the design of intervention plans that focus especially on the fundamental prerequisites for satisfaction, and provides instruments for the evaluation of the levels of empowerment experienced by nursing professionals.

On the other hand, managers of health care and organizations should consider, in the management of their human resources, the role of access to opportunities as a precedent of satisfaction. Training and professional development plans tailored to the needs and interests of nurses would improve their perception of greater opportunities to acquire the new knowledge and skills necessary to provide quality care. Likewise, greater access to resources, information, and support encourages the empowerment of employees, increasing their perception of control and autonomy in work, and, in the same way, increasing their levels of job satisfaction.

Finally, future research should explore the relationships between the dimensions of structural empowerment and job satisfaction, employing a longitudinal type design, allowing us to verify the evolution of the relationships between these variables. New studies with samples from different regions of Portugal would allow a more complete view of the process of structural empowerment in nursing staff. Finally, the inclusion of other variables in research, such as passion for work or autonomy in work, could contribute to a better understanding of the relationships and processes involved in empowerment and satisfaction in social-health organizations.

Ethical aspects and conflict of interest
All authors (Maria Helena de Almeida, Alejandro Orgambidez-Ramos and Paula Batista) contributed to the manuscript, and have read and approved the submitted manuscript “workplace empowerment and job satisfaction in Portuguese nursing staff: an exploratory study”. The ethics committees of the two hospitals approved the study.

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Author contribution
Concept and design (HMA, PB, AO-R), data collection (PB), analysis and interpretation of data (HMA, PB, AO-R), the drafting of the manuscript (PB), a critical revision of the manuscript (AO-R), the final completion of the article (HMA).

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