Predictors of Organizational Commitment in Nursing: Results from Portugal

Objective. This work sought to assess the predictor role of work engagement and social support from the supervisor and coworkers on affective commitment with the organization in nursing staff from southern Portugal. Methods. A cross-sectional study was conducted with participation from 215 nursing professionals from three public hospitals in southern Portugal. Results. Of the respondents, 77.21% were women. Statistically significant and positive correlations were observed between affective organizational commitment and the three dimensions of engagement: vigor ($r=0.48$), dedication ($r=0.49$), and absorption ($r=0.48$). Likewise, support from the supervisor and support from coworkers were positively related with affective commitment ($r=0.45$ and $r=0.24$, $p<0.01$). The linear and hierarchical regression model showed the following significant predictors: support from the supervisor (beta=0.28), vigor (beta=0.26), and absorption (beta=0.17). Conclusion. Social support from...
the supervisor and work engagement (vigor and absorption) are important determinants of the affective bond of nursing professionals with their health organizations. Training and formation of the supervisors in leadership and coaching styles, and labor resources at work would permit increasing the levels of affective commitment in the health units.

Descriptors: hospitals, public; motivation; nursing, supervisory; nursing staff, hospital; social support; Portugal.

Predictors of Organizational Commitment in Nursing: Results from Portugal

Objetivo. Evaluar el papel predictor del engagement en el trabajo y el apoyo social del supervisor y de los compañeros sobre el compromiso afectivo con la organización en personal de enfermería del sur de Portugal. Métodos. Se realizó un estudio de corte transversal. Participaron 215 profesionales de enfermería de tres hospitales públicos del sur de Portugal. Resultados. 77.21% de los respondientes fueron mujeres. Se observaron correlaciones estadísticamente significativas y positivas entre el compromiso organizacional afectivo y las tres dimensiones del engagement: vigor ($r=0.48$), dedicación ($r=0.49$) y absorción ($r=0.48$). Igualmente, el apoyo del supervisor y el apoyo de los compañeros se relacionó positivamente con el compromiso afectivo ($r=0.45$ y $r=0.24$, $p<0.01$). El modelo de regresión lineal y jerárquico mostró los siguientes predictores significativos: el apoyo del supervisor ($beta=0.28$), el vigor ($beta=0.26$) y la absorción ($beta=0.17$). Conclusión. El apoyo social del supervisor y el engagement en el trabajo (vigor y absorción) son importantes determinantes del vínculo afectivo de los profesionales de enfermería con sus organizaciones de salud. El entrenamiento y formación de los supervisores en estilos de liderazgo y coaching, y recursos laborales en el trabajo permitirían aumentar los niveles de compromiso afectivo en las unidades de salud.
**Preditores do compromisso organizacional em enfermagem: Resultados desde Portugal**

**Objetivo.** Avaliar o papel preditor do engagement no trabalho e o apoio social do supervisor e dos companheiros sobre o compromisso afetivo com a organização no pessoal da enfermagem do sul de Portugal. **Métodos.** Se realizou um estudo de corte transversal. Participaram 215 profissionais de enfermagem de três hospitais públicos do sul de Portugal. **Resultados.** 77.21% dos respondentes foram mulheres. Se observaram correlações estatisticamente significativas e positivas entre o compromisso organizacional afetivo e as três dimensões do engagement: vigor (r=0.48), dedicação (r=0.49) e absorção (r=0.48). Igualmente, o apoio do supervisor e o apoio dos companheiros se relacionou positivamente com o compromisso afetivo (r=0.45 e r=0.24, p<0.01). O modelo de regressão lineal e hierárquico mostrou os seguintes preditores significativos: o apoio do supervisor (beta=0.28), o vigor (beta=0.26) e a absorção (beta=0.17). **Conclusão.** O apoio social do supervisor e o engagement no trabalho (vigor e absorção) são importantes determinantes do vínculo afetivo dos profissionais de enfermagem com suas organizações de saúde. O treinamento e formação dos supervisores em estilos de liderança e coaching, e recursos laborais no trabalho permitiriam aumentar os níveis de compromisso afetivo nas unidades de saúde.

**Descritores:** hospitais públicos; motivação; supervisão de enfermagem; recursos humanos de enfermagem no hospital; apoio social; Portugal.
Introduction

Organizational commitment is one of the elements that guarantee the commitment of the nursing staff with the quality of service and care, even in high-stress situations and work contexts with few human and organizational resources.\(^1\),\(^2\) Organizational commitment refers to the existence of a desire, a necessity, and an obligation to remain as a member of an organization. These three forms of attachment—desire, necessity, obligation—respond to three dimensions or types: affective commitment, continuous commitment, and normative commitment.\(^3\)

Affective commitment refers to the emotional bond between the individual and the organization, the degree or strength of the person's positive feelings toward the organization. Continuous commitment refers to the bond individuals establish with their organization as a result of the investments (relation of time/effort-wages received) made over time and it is associated to the economic costs for workers if they had to abandon the company. Finally, normative commitment consists in the moral obligation felt by workers to continue ties with the company.\(^2\),\(^3\) Of the three types of commitment, the affective commitment is the most strongly associated to the intention of remaining in the company and to the implication in extra-role tasks in the organization. Furthermore, workers with strong affective commitment are willing to invest greater efforts at work in benefit of the organization, manifest higher work satisfaction, and show higher levels of performance and productivity on the job post.\(^2\)

Strong affective organizational commitment is also a characteristic of nursing professionals with high levels of work engagement.\(^4\),\(^5\) While organizational commitment is a binding force between the individual and the organization, engagement in the work context refers to being committed to the job role or at work per se.\(^6\) Work engagement is defined as a positive mental state, associated to work and characterized by high levels of vigor, dedication and absorption.\(^6\) Vigor refers to the high levels of energy and mental resistance when working, associated to the desire to invest effort and time at work even when obstacles and difficulties arise. Dedication is related to the high job commitment, together with the manifestation of a feeling of significance, pride at work, and inspiration. Finally, absorption emerges when people are totally concentrated at work while time “flies by”, finding difficulties to disconnect from what they are doing.\(^6\),\(^7\)

According to the Job Demands-Resources (JDR) model,\(^7\) work engagement is an important predictor of organizational commitment. Engaged employees feel the work they do is important, showing better professional performance and, thus, experiencing positive feelings and emotions at work. Consequently, they would tend to keep the bond with the organization where they experience said positive emotions and sensations. Diverse studies and research have related high levels of work engagement with strong affective commitment with the organization in
samples from diverse countries. In addition, one of the elements of the work organization most highlighted by the nursing staff is social support. Social support at work refers to the interaction of help available in the workplace, related to relations with coworkers and supervisors. It implies two types of support: socio-emotional and instrumental. The first refers to the degree of social and emotional integration between coworkers and supervisors, while the latter refers to collaboration with job tasks offered between employees and supervisors.

Diverse studies have shown positive relationships between the social support perceived by nursing professionals and the individual’s commitment with the company. When people receive help and advice to adequately perform tasks and be efficient at work, and feel integrated into the group and supported by the supervisor, they enjoy the work they do more and feel more identified and committed with the organization. The study of organizational commitment, especially affective commitment, is quite important within the context of health services and -- above all -- among nursing professionals. The affective bond with the company can be considered an indicator of the quality of care and services in health organizations, as well as an important indicator of the intention of remaining/abandoning by nursing professionals. Although the study of organizational commitment and its antecedents has been conducted in depth in the context of business management, within the nursing context it is still scarce and hardly researched in the health context in Portugal. In this sense, the objective of this study was to test the predictor role of social support and work engagement affective organizational commitment in a sample of nursing personnel from southern Portugal.

**Methods**

A cross-sectional correlational and descriptive study was carried out with 450 nursing professionals from three public hospitals in southern Portugal who were surveyed between February and April of 2015, obtaining a final sample of 215 participants (55.6% response rate). The selection criterion to participate in the study was to have worked for at least one year in the same service in a public hospital.

The study used three instruments: **Social support:** using the adaptation into Portuguese of the social support dimension in the Job Content Questionnaire (JCQ), which has eight items distributed into two subscales: support from the supervisor (4 items) and support from coworkers (4 items). The responses are Likert type (1: Totally disagree to 4: Totally agree). Higher scores indicate high levels of social support from the supervisor and from colleagues, with a maximum score of 16 in each subscale; **Work Engagement:** using the Portuguese version of the Utrecht Work Engagement Scale (UWES) which has nine items distributed into three dimensions: vigor (3 items), dedication (3 items), and absorption (3 items). The response options were also Likert type (0: Never to 6: Every day), with a maximum score of 18 in each subscale; and, **Affective organizational commitment:** to evaluate affective organizational commitment using the adaptation into Portuguese of the organizational Commitment Scale by Meyer, Allen, and Smith, specifically the dimension related to affective commitment comprised of six items with response options ranging from 1: totally disagree to 7: Totally agree. Likewise, higher scores indicate higher levels of affective organizational commitment, with a maximum score of 42.

The information was gathered between February and April 2015. The questionnaires were applied at the start of the work shift, allowing participants all the time necessary to fill them out. The STATA v.13 package was used for data analysis. The work calculated descriptive statistics of the variables (mean, typical deviation, asymmetry, and kurtosis), correlations among them and the internal consistency coefficients (Cronbach’s alpha). Multiple linear and hierarchical regression models were conducted to test the predictor role of social support (V1-supervisor and V2-colleagues) and engagement (V3-vigor, V4-dedication, V5-
absorption) over V6-affective commitment with the organization. The independent variables are introduced progressively (through blocks) into the multiple sequential or hierarchical regression model used to evaluate the contribution made by each new variable to the prediction. The variance inflation factor (VIF) was calculated along with the tolerance measure to verify the multicollinearity assumption, and the Breusch-Pagan test was used to verify the residual homoscedasticity assumption in the regression models.\(^{(18)}\)

The Ethics Committees in the three hospitals approved the research. Participation was at all times voluntary and the confidentiality and anonymity of all the answers was guaranteed.

**Results**

The mean age of the 215 participants in this study was 34.89±9.37 years, with 77.21% of the participants being women (n = 166). In relation to marital status, 46.51% of the sample indicated being single and 34.80% married. Seventy percent of the participants (n = 150) has indefinite work contract, with a mean around 10 years of professional experience (9.4 years). Table 1 shows the means, typical deviations, asymmetry, kurtosis, and correlations of the study variables of the scales and subscales used in the study. The mean for support from the supervisor (2.96) and that of support from coworkers (3.07) were above the mean of the response scale (2 of a maximum of 4 points). In relation to the three dimensions of engagement, the mean values were slightly above the mean of the response scale (3 of a maximum of 6 points), with 4.62, 4.71, and 4.5 for vigor, dedication, and absorption, respectively. Regarding affective organizational commitment, a mean value of 3.97 was obtained from a possible maximum of 7, which indicates that the study participants did not appear specially committed affectively with the organization.

| Variables                              | V1   | V2   | V3   | V4   | V5   | V6   |
|----------------------------------------|------|------|------|------|------|------|
| V1-Social support from the supervisor  | (0.93)* |      |      |      |      |      |
| V2-Social support from coworkers       | 0.41 | (0.86) |      |      |      |      |
| V3-Engagement – Vigor                  | 0.38 | 0.22 | (0.80) |      |      |      |
| V4-Engagement - Dedication             | 0.43 | 0.28 | 0.79 | (0.88) |      |      |
| V5-Engagement - Absorption             | 0.39 | 0.30 | 0.62 | 0.74 | (0.82) |      |
| V6-Affective commitment                | 0.45 | 0.24 | 0.48 | 0.49 | 0.48 | (0.79) |

**Descriptive statistics**

|                        | Mean | Typical deviation | Asymmetry | Kurtosis |
|------------------------|------|-------------------|-----------|----------|
| V1-Social support from the supervisor | 2.96 | 0.88              | -0.65     | -0.53    |
| V2-Social support from coworkers       | 3.07 | 0.62              | -0.40     | 0.28     |
| V3-Engagement – Vigor                  | 4.62 | 1.09              | -1.42     | 2.28     |
| V4-Engagement - Dedication             | 4.71 | 1.18              | -1.40     | 2.10     |
| V5-Engagement - Absorption             | 4.50 | 1.21              | -1.09     | 1.04     |
| V6-Affective commitment                | 3.97 | 1.11              | 0.39      | 0.35     |

(*)Reliability coefficients on the diagonal

As expected, the correlation analyses among the six variables showed that social support and engagement at work were related in statistically significant manner with affective organizational commitment, with all the probability values <0.01. In relation to social support, Pearson's r coefficients were 0.45 for support from the supervisor (moderate correlation) and 0.24 for support from coworkers (low correlation). Regarding engagement, the correlation values were 0.48, 0.49, and 0.48 for vigor, dedication, and absorption, respectively, and indicative of a moderate correlation.
Table 2 illustrates two multiple linear and hierarchical regression models to verify the predictor role of social support (supervisor and coworkers) and engagement (vigor, dedication, absorption) on the participants’ levels of affective organizational commitment. The VIF values of all the independent variables were <5 and the measure of tolerance <0.2, which indicates the absence of multicollinearity problems. The Breusch-Pagan test was not significant: $X^2_{(1)} = 0.14$, $p = 0.15$, which expresses the homoscedasticity of residuals in the regression models calculated. It was found in Model 1 that the total of the variance explained was 20.18% ($F_{(2.190)} = 24.02$, $p <0.01$), and that the only significant predictor of commitment was the social support from the supervisor ($\beta = 0.41$). Second, the three dimensions of engagement, as predictor variables, were added to the second model (M2). The variance explained in Model 2 was 33.01% ($F_{(5.197)} = 23.01$), and inclusion of the three dimensions of engagement explained 12.38% of additional variance, with a change in $R^2 = 0.13$ ($F_{(3.187)} = 11.93$, $p <0.01$), after controlling the effect of social support from the supervisor and from colleagues. In this last model, support from the supervisor ($\beta = 0.28$), vigor ($\beta = 0.26$), and absorption ($\beta = 0.19$) appeared as significant predictors.

**Table 2. Regression model on affective organizational commitment**

| Models                     | Beta  | SE   | t     | $p > |t|$ |
|----------------------------|-------|------|-------|-------|
| **Model 1**                |       |      |       |       |
| V1-Social support from the supervisor | 0.41  | 0.07 | 5.81  | 0.001 |
| V2-Social support from coworkers | 0.08  | 0.07 | 0.77  | 0.240 |
| Cons.                       | -     | 0.07 | 0.24  | 0.733 |
| **Model 2**                |       |      |       |       |
| V1-Social support from the supervisor | 0.28  | 0.07 | 3.98  | 0.001 |
| V2-Social support from coworkers | 0.02  | 0.06 | 0.34  | 0.737 |
| V3-Engagement - Vigor       | 0.26  | 0.09 | 2.76  | 0.006 |
| V4-Engagement - Dedication  | -0.01 | 0.11 | -0.09 | 0.929 |
| V5-Engagement - Absorption  | 0.19  | 0.09 | 2.25  | 0.026 |
| Cons.                       | -     | 0.07 | 0.55  | 0.580 |

**Discussion**

Affective organizational commitment from the nursing staff is crucial in providing quality care and excellence in health organizations and units.\(^2\) In this sense, the objective of this study was to test the predictor role of social support (from the supervisor and from coworkers) and of engagement (vigor, dedication, absorption) on the affective organizational commitment in a sample of nursing personnel from southern Portugal.

Descriptive statistics showed that the participants perceive high levels of social support from the supervisor and from coworkers, with the latter being the highest. The professionals surveyed feel they have good relationships with coworkers and supervisors and that they can receive instrumental and socio-emotional support in the workplace. In keeping with this, the study participants showed moderate levels of work engagement in the form of mental energy and resistance (vigor), work implication and pride at work (dedication), and concentration at work (absorption). Lastly, affective organizational commitment showed the lowest mean score of all the study variables, suggesting that the participants do not show a specially intense emotional bond with their organizations, although it does not discard that other types of links (continuous, normative) may be present with greater force.

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The results showed the positive and significant relationship between both types of social support, from the supervisor and from coworkers, and the affective commitment with the organization. \( ^{13-17} \) Communication with the supervisor and coworkers, the possibility of receiving guidance and advice within the group, or being able to share stressful experiences and situations lead to positive evaluations of the work context and the institution, increasing the levels of affective commitment toward the organization.\(^{(2)}\) Similarly, a positive and significant relationship was observed between work engagement and affective organizational commitment. When people are full of energy at work, they perceive that the job tasks they perform bear significance and feel that their daily work “absorbs” them; they develop positive attitudes and feelings towards the job and the organization and, consequently, manifest higher desires of remaining in the same institution.\(^{(8-10)}\)

The regression models showed that support from the supervisor, vigor, and absorption were positive and significant predictors of affective commitment with the organization. These results are in line with other research conducted with nursing staff from diverse countries.\(^{(8-10,13,14,16)}\) However, it is worth highlighting that support from colleagues did not appear as a significant predictor, as noted in other studies.\(^{(16,17)}\) A possible explanation can be the existence of third variables that relate the support from coworkers and commitment. It is likely that this type of support has a direct effect upon the organizational commitment through work satisfaction.\(^{(19)}\)

This research had a series of limitations that should be considered when interpreting the results. The cross-sectional correlational design does not permit establishing causality relations among the variables, although the regression model carried out proposes the existence of predictor variables and result variables. Nevertheless, the empirical evidence around the DRL model \(^{(6,7)}\) supports the existence of the relations established in this study. In addition, the survey design is particularly sensitive to certain biases, like the social desirability bias in the answers given in the questionnaires.\(^{(20)}\)

Support from the supervisor, vigor, and absorption are elements that increase the levels of affective commitment with the organization. Hence, social support from the supervisor and work engagement emerge as critical elements in the design of interventions that permit increasing the levels of affective organizational commitment in the nursing staff. Among the strategies centered on social support, the supervisors should receive formation in team management skills, leadership styles, and ways of providing adequate feedback at work. Another line of intervention would center on empowering engagement at work, providing labor resources to the nursing professionals, like autonomy at work to make decisions or a higher variety of tasks to perform.

Finally, new research should be conducted to delve into the antecedents of the affective organizational commitment in nursing staff. In this sense, studies should focus on differentiating and verifying the effects of each type of social support (supervisor and coworkers) upon the organizational commitment (e.g., direct or indirect effects through work satisfaction). Likewise, longitudinal research would permit testing the evolution of the commitment over time and verifying which elements affect its evolution.
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