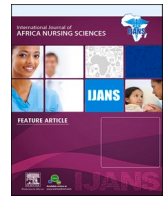


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## Emotional support at work: A key component for nurses' work engagement, their quality of care and their organizational citizenship behaviour

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### ABSTRACT

**Background:** There is growing interest in the relationships between supervisor/co-worker support and nurses' perceived quality of care and organizational citizenship behaviours. However, few studies have investigated the effects of emotional support of supervisors and colleagues on the performance of nurses over time and the psychological mechanisms that underlie the above-mentioned relationships.

**Objective:** The aim of our study was to better understand the process promoting nurses' perceived quality of care and organizational citizenship centred on helping others. To better understand these processes, we focused on the perceived emotional support originating from the supervisor and that from the co-workers and analysed to which extent they were, over time, related to quality of care and organizational citizenship through work engagement.

**Method:** A two-wave design was used to collect the data. Survey data was gathered from 188 nurses from two hospitals in Algeria. Mediation analyses were carried out using structural equation modelling.

**Results:** The results revealed that nurses' work engagement mediates the relationships between quality of care, organizational citizenship behaviour and supervisor and co-workers emotional support.

**Conclusion:** Results underlined the importance of putting in place schedules to improve supervisor emotional support, co-worker emotional support and work engagement in order to improve quality of care.

## 1. Introduction

During their everyday work, nurses deliver constant care to hospitalized patients, helping them in their daily activities to preserve or recover their health. Nurses are expected to accomplish their tasks by delivering a high-quality care service. Indeed, in the context of health care, quality of care and citizenship behaviour centred on helping others are primordial aspects of nurses' performance (Coetzee, Klopper, Ellis, & Aiken, 2013; Keyko, Cummings, Yonge, & Wong, 2016). Organizational citizenship behaviours centred on helping others (OCB-altruism) benefit co-workers and have an indirect impact on the organisation (Pohl, Vonthron, & Closon, 2019). These behaviours might include helping a new worker with a heavy workload or including other employees into certain activities. OCB-altruism helps the medical team to collaborate towards the collective team's objectives (Chahal & Mehta, 2010) and to fulfil the patients' needs and aspirations (Aodton, Warewanich, & Chankoson, 2021). It is therefore important to better understand what

benefits nurses' performance: what aspects of their job increase their quality of care and their citizenship behaviours centred on helping others? Several studies have showed that supervisor support encourages nurses to offer quality care and performances beyond the call of duty (Chen, Wang, Chang, & Hu, 2008). However, the emotional dimension of the support offered by supervisors and colleagues has not often been taken into account.

The aim of this study was to examine whether supervisor and co-worker emotional support have an indirect impact on the performance of nurses over time through their influence on work engagement. First, we will shed light on how supervisor and co-worker emotional support influences the work engagement of nurses. We then discuss work engagement as a potential mediator in the relationship between emotional support and the performance of nurses. Finally, we explain our methodology and results, and discuss some practical implications.

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### 1.1. Emotional supervisor support, emotional co-worker support and work engagement

Managing emotions is a fundamental aspect of nursing (Dal Santo, Pohl, & Battistelli, 2016). Not only are nurses involved in the physical problems of their patients but also in their emotional difficulties. It is important for nurses to express and regulate their own emotions during their interactions with patients (Karimi, Leggat, Donohue, Farrell, & Couper, 2014). The emotional support received from supervisors and colleagues is therefore an important resource. Emotional support behaviours include listening to a nurse's work concerns, allow employees to talk about their emotions, and delivering words of encouragement and guidance to help employees regulate their emotions (Pohl & Galletta, 2017). These behaviours generate emotional resources, such as kindness, acceptance, and esteem from others (Mathieu, Eschleman, & Cheng, 2019).

Work engagement is a 'multidimensional construct defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption' (González-Romá, Schaufeli, Bakker, & Lloret, 2006). Work engagement is characterized by a high level of energy in one's work and is essential because committed employees feel pleasure and enthusiasm (Bakker, Hakanen, Demerouti, & Xanthopoulos, 2007).

The emotional support of a supervisor is one of the most important resources for nursing staff (Pohl & Galletta, 2017) and is directly associated to employees' emotions (Cole, Bruch, & Vogel, 2006). According to Frederickson's broaden-and-build theory (2001), regular experiences of positive emotions expand individuals' thought-action repertoires, empowering them to gain more energy and vitality (Garland, Fredrickson, Kring, Johnson, Meyer, & Penn, 2010). Regular experiences of positive emotions provided by supervisor and co-worker emotional support may lead to work engagement.

Based on this argument, we argue that:

Hypothesis 1: The emotional support of a supervisor has a positive impact on work engagement.

Hypothesis 2: The emotional support of co-workers has a positive impact on work engagement.

### 1.2. Work engagement as a variable explaining the relationship between the emotional support of a supervisor and co-workers, and performance

Work engagement is an affective-motivational construct associated to the persistence and intensity with which employees perform their tasks (Schaufeli et al. 2006; Ugwu & Ike, 2020). Engaged employees will be more attentive and more focused on their tasks, and consequently, engaged employees are more performant (Christian, Garza, & Slaughter, 2011). Work engagement is positively associated with the quality of care provided (Keyko, Cummings, Yonge, & Wong, 2016; García-Sierra, Fernández-Castro, & Martínez-Zaragoza, 2016; Kim, Park, & Headrick, 2018). In this present study, we analysed whether or not work engagement mediates the relationship between supervisor and colleagues emotional support and the quality of care provided by nurses. According to Frederickson's broaden-and-build theory (2001), supervisor and co-workers emotional support develop work engagement thought-action repertoires, allowing them to increase their energy and vitality (Garland, Fredrickson, Kring, Johnson, Meyer, & Penn, 2010) which in turn promotes the quality of care provided. Building on the previous discussion, we argue that the emotional support of a supervisor and that of co-workers generates work engagement which in turn improves the quality of care provided.

Hypothesis 3: The emotional support of a supervisor is related to the quality of care provided through work engagement.

Hypothesis 4: The emotional support of co-workers is related to the quality of care provided through work engagement.

Engaged workers feel positive and feel motivated to take part in behaviours that benefit the organization (Mathieu, Eschleman, & Cheng,

2019). Engaged employees invest themselves personally into their work role and tend to hold a broader conception of that role. Consequently, they are prone to work above and beyond what is expected of them (Christian et al., 2011). This proposition is coherent with empirical research indicating positive relationships between work engagement, and organizational citizenship behaviour (Urbini, Chirumbolo & Callea, 2020; Wei, Li, Zhang, & Liu, 2018).

Based upon the above discussion, we propose that supervisor and co-worker emotional support will lead to an increase in the work engagement of nurses, which in turn improves OCB-altruism.

Hypotheses 5: Through work engagement, the emotional support of a supervisor has a positive indirect relationship with OCB-altruism.

Hypotheses 6: Through work engagement, the emotional support of co-workers has a positive indirect relationship with OCB-altruism.

## 2. Method

### 2.1. Design, participants and procedure

#### 2.1.1. Study design and setting

This survey was conducted in the two largest public university hospitals in Algiers (Algeria) between April 2016 and April 2017. These multidisciplinary hospitals have a bed capacity of 750 beds and 711 beds. Interviews were conducted with the administrative heads of the hospitals to obtain these facts (Fig. 1).

#### 2.1.2. Inclusion and exclusion criteria

Nurses who had over six months experience were considered eligible participants.

This study did not include nurses who were only serving in administrative positions.

Head nurses were excluded.

#### 2.1.3. Data collection

Health care directors of both hospitals were advised about the research and agreed to take part. Nurses were informed about the study via meetings with the researchers. The questionnaire was distributed by a researcher from our team to nurses at their workplace. The nurses filled in the questionnaire at home and then dropped it into one of the locked boxes located at the workplace. Respondents took 15 min to complete the questionnaire. Respondents give their informed consent. Data is collected to ensure no personal information can ever be associated to the respondents who supplied it. The questionnaire was anonymous. The nurses filled in the questionnaire at home and then dropped it into one of the locked boxes located at the workplace (Fig. 2).

All questionnaires were administered in French and Arabic and questionnaires not already available in French and Arabic were translated to French and Arabic using translation-back-translation process (Brislin, 1980). Six months after the first data gathering (T1) we carried out a second wave (T2). The T2 survey was presented to all 522 nurses who had completed the T1 survey. A total of 188 nurses completed the T2 survey, with a 36% response rate. The distribution and completion of the second wave questionnaires were carried out at their workplace.

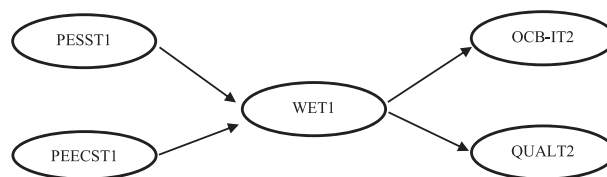


Fig. 1. Hypothetical model of the research. Note: PESST1: Perceived emotional supervisor support T1; PEECST1: Perceived co-worker emotional support; WET1: Work engagement T1; OCB-IT2: OCB-altruism T2; QUALT2: Quality of care provided T2.

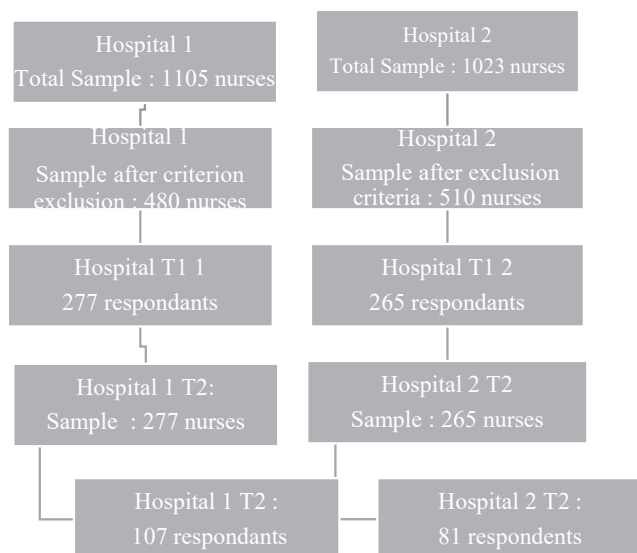


Fig. 2. Description of sampling procedure.

2.2. Data analysis

Data was coded and entered into SPSS 26.0 and Mplus 8. We identified coding errors by verifying the frequency distribution regarding each item in the database. We checked our study tool’s reliability by using Cronbach’s alpha coefficient. Descriptive statistics, correlations between variables and Cronbach’s alphas were analysed using SPSS 26.0. The validation of the measurement model was tested with a confirmatory analysis with Mplus 8. The hypothesized model was also analysed using path analyses with Mplus 8.

2.3. Ethical approval

The approval to carry out the research was obtained from ethical committees at the lead University according to the Code of Ethics of the World Medical Association (Declaration of Helsinki). The code of conduct’s certificate number was 007/2016.

2.4. Measures

The current study used measures with good psychometric properties. *Perceived emotional supervisor support*: the perceived emotional support of a supervisor was measured with the scale developed by Pohl and Galletta (2017). The 9 items were assessed with a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Example item: ‘My supervisor really cares about my emotional being’.

*Perceived co-worker emotional supervisor support*. The perceived emotional support of co-workers was operationalized using an adapted version of the Pohl and Galletta scale (2017) replacing the word supervisor with the term co-worker. The 9 items were assessed with a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Example item: ‘My co-workers are willing to help me when I when I have difficulties in managing my emotions’.

*Work engagement*. Work engagement was assessed by using UWES-9 (WES; Schaufeli et al., 2006). The scale consists of 9 items. Each item was answered on a five-point scale. A sample item is ‘I am enthusiastic about my job’.

*Organizational citizenship behaviours centred on helping others*: Organizational citizenship behaviours centred on helping others were recorded using the 3-items of OCB-altruism developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). A sample item was: ‘I willingly help others who have work-related problems’.

*Quality of care provided*: Four items adapted from Nursing Work

Index-Revised (Aiken & Patrician, 2000) were used. The sample items included ‘Enough time and staff to get the work done’.

*Control variables*: Gender, age and tenure in the hospital were measured.

3. Results

3.1. Personal demographics

The sample is composed of nurses from different socio-professional categories (public health nurses, specialised public health nurses e.g., surgery or anaesthesia). On average, respondents were 39 years old. 70,7 % were female. Respondents had worked in their current jobs for an average of 12 years. 84% were full-time workers and 16% were part-time workers.

3.2. Discriminant validity of the measures

To evaluate the distinctiveness of the five concepts included in our study (the emotional support of a supervisor, the emotional support of a co-worker, work engagement, quality of care provided and organizational citizenship behaviours centred on helping others), we performed confirmatory factor analyses using Mplus 8. We compared three models: the theoretical model with the five concepts; a four-factor model that aggregates emotional support of a supervisor and of co-workers and finally, we aggregated all items from all measures into a single factor. There are several measures of fit that can be used to assess a structural model and provide an indication of the model’s fit adequacy. The measures of fit used were: Comparative Fit Index (CFI), the root-mean square error of approximation (RMSEA) and standardized root mean square residual (SMR). Values of CFI greater than 0.90 revealed that the model had a good fit. Values of RMSEA and SMR < 0.10 are usually considered to be satisfactory (Kline, 2010). Results showed that the hypothesized measurement model yielded a good fit with regards to the data. ( $\chi^2 = 435.63$ ;  $p < 0.00$ ; CFI = 0.96; RMSEA = 0.05; SRMR = 0.07). This model was superior to the 4 factors model ( $\chi^2 = 1346.37$ ;  $p < 0, 00$ ; CFI = 0.74; RMSEA = 0.14; SRMR = 0.14), and a 1-factor model that combined all study variables ( $\chi^2 = 2586.88$ ;  $p < 0.00$ ; CFI = 0.44; RMSEA = 0.33; SRMR = 0.33). The discriminant validity of the tools used in this current study are good.

3.3. Descriptive statistics

Means, standard deviations, internal reliabilities, and intercorrelations among variables at Times 1 and 2 are displayed in Table 1.

As shown above, all variables displayed good internal consistency ( $\alpha$

Table 1  
Means, standard deviations, internal reliabilities.

	M	SD	1	2	3	4	5
Perceived emotional supervisor support T1	3.27	1.36	(0.98)				
Perceived emotional coworker support T1	3.01	1.45	0.60**	(0.97)			
Work engagement T1	3.61	1.19	0.55**	0.60**	(0.97)		
Quality of care provided T2	3.56	0.92	0.12	0.24**	0.20**	(0.77)	
OCB-altruismT2	3.90	1.09	0.27**	0.38**	0.35**	0.61**	(0.86)

Note: M = Means; SD = Standard deviations; \*  $p < 0.05$  (2-tailed), \*\*  $p < 0.01$  (2-tailed); Cronbach Alpha’s are reported between brackets.

> 0.75).

### 3.4. Tested hypotheses

The hypothesized model fitted the data well:  $\chi^2 = 836.06$ ,  $p < 0.000$ ;  $df = 548$ ;  $RMSEA = 0.5$ ;  $CFI = 0.94$ ;  $SRMR = 0.07$ . Table 2 provides the estimated path coefficients, the standard error of the estimates, and the p-value for the indirect effects on each dependent variable. Hypotheses were examined simultaneously by using a structural equation model involving the following regression paths: (i) from perceived emotional support of a supervisor to work engagement, (ii) from perceived emotional support of co-workers to work engagement, (iii) from work engagement to quality care provided and OCB-altruism. The control variables were also regressed on quality care provided and OCB-altruism. Based on Becker's (2005) suggestions, we merely integrated control variables with a statistically significant correlation with the dependent variables in our study.

**Table 2:** Indirect effects of perceived emotional support on the quality of care provided.

Note: B: Estimated path coefficients for the direct and indirect effects; p: p-value for the direct and indirect effects; QUALT2: quality of care provided T2; OCB-I T2: OCB-altruismT2.

Results revealed that the emotional support of a supervisor was positively associated with work engagement ( $\beta = 0.11$ ,  $p < 0.05$ ), which confirmed hypothesis 1. The emotional support of co-workers was positively related to work engagement ( $\beta = 0.37$ ,  $p < 0.01$ ), which supported hypothesis 2. Table 2 showed that the indirect effects of perceived emotional support of a supervisor on the quality of care provided and OCB-altruism through work engagement were significant ( $\beta = 0.34$ ,  $p < 0.01$ ;  $\beta = 0.10$ ;  $p < 0.05$ ). Thus, the emotional support of a supervisor significantly and positively influenced OCB-altruism and quality of care provided via the mediating role of work engagement. So, the empirical data supported hypothesis 3 and hypothesis 4. The indirect path from the emotional support of co-workers to quality of care provided and OCB-altruism via work engagement was also statistically significant ( $\beta = 0.29$ ;  $p < 0.01$ ;  $\beta = 0.32$ ,  $p < 0.01$ ). Moreover, the emotional support of co-workers was very positively linked to OCB-altruism and quality of care provided through the mediating role of work engagement. Hypothesis 5 and hypothesis 6 were also supported.

## 4. Discussion

The aim of the present study was to deepen our understanding of the role of work engagement in the relationship between a supervisor and

**Table 2**  
Model summaries for the mediating role of work engagement on the relationship between emotional support and the quality of care provided and OCB-altruism.

Mediation of Work engagement between Emotional support and Quality of care	
	B
Emotional supervisor support T1 → Quality of care T2 (Direct effect)	-0.13
Emotional supervisor support T1 → WE → Quality of care T2 (Indirect effect)	0,34**
Emotional co-worker support T1 → Quality of care T2 (Direct effect)	0.05
Emotional co-worker support T1 → WE → Quality of care T2 (Indirect effect)	0.29**
Mediation of Work engagement between Emotional support and OCB-altruism	
	B
Emotional supervisor support T1 → Quality of care T2 (Direct effect)	-0.05
Emotional supervisor support T1 → WE → Quality of care T2 (Indirect effect)	0.10*
Emotional co-worker support T1 → Quality of care T2 (Direct effect)	
Emotional co-worker support T1 → WE → Quality of care T2 (Indirect effect)	0.32**

Note: B: Estimated path coefficients for the direct and indirect effects; \*  $p < 0.05$  (2-tailed), \*\*  $p < 0.01$  (2-tailed).

co-workers' emotional support and the performance of nurses in Algeria.

Our findings indicated, as expected, that there exists a significant positive correlation between the emotional support of a supervisor and co-workers and work engagement. The findings of the present study are coherent with previous findings (Blanco-Donoso, Moreno-Jiménez, Pereira, and Garrosa, 2019) that indicate a positive relationship between supervisor and co-worker support and nurses' engagement.

Expressing emotions when interacting with a supervisor and co-workers satisfies needs for affiliation, status, and recognition (Zapf & Holz, 2006). The emotional support of a supervisor and of co-workers give nurses the assurance that they will obtain help in regulating emotions if necessary, which in turn might enhance their confidence that they will accomplish their task. The emotional support of a supervisor and of co-workers create a resourceful work environment that develops a personal disposition to devote one's energy and capacities to accomplish one's tasks. Hence, tasks will be accomplished efficiently, and the work goal achieved (Othman & Nasurdin, 2013). Supervisors who give emotional support boost teamwork and play an important role in boosting the nurses' confidence (Gasparino, Oliveira, dos Santos Alves, & Balsanelli, 2021). The emotional support of a supervisor and of co-workers promotes work engagement as nurses who receive emotional support present more confidence in their emotional capabilities which ultimately enhance work engagement.

The results of our study shows that the emotional support of the supervisor and co-workers enhances the work engagement of employees, which in turn increases their OCB-altruism and the quality of care they provide over time. These results corroborate the findings of several studies that indicate that the work engagement of nurses improves their quality of care (García-Sierra et al., 2016). Work engagement encourages OCB among health care workers (Slåtten et al., 2022; Wei, Li, Zhang, & Liu, 2018; Aodton, Wareewanich, & Chankoson, 2021; Slåtten, Lien, & Mutonyi, 2022). Furthermore, they reveal that work engagement is an important mechanism that explains the relationship between supervisor and co-worker emotional support, quality of care and OCB-altruism. According to the job demand-resources model (Bakker et al., 2007), supervisor and co-worker support are key job resources in the nursing sector (Orgambidez-Ramos & de Almeida, 2017) which promote work engagement. Having the support of one's supervisor and one's co-workers' leads to an enthusiastic involvement in the job (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001). In accordance with the predictions based on the broaden-and-build theory (Fredrickson, 2001), nurses who express their emotions to a supervisor and co-workers, have more vitality and drive to regulate their emotions when interacting with patients. Highly engaged workers provide high quality care and are more altruistic towards their team. Work engagement is a mechanism which explains the relationship between emotionally perceived supervisor support and co-worker support and quality of care provided and OCB-altruism.

In conclusion, the mediation of work engagement between the emotional support of the supervisor and the emotional support of one's co-workers and OCB-altruism and quality of care provided is one of the major contributions of this paper. This study extends the existing relationships between supervisor and co-worker support and the performance of nurses by testing the mediating role of work engagement between supervisor and co-worker emotional support and the performance of Algerian nurses over a period of six months.

### 4.1. Limitations and directions for future research

The current study indicates that increasing the opportunities to experience emotional support from co-workers and from one's supervisor could increase work engagement, quality of care provided and OCB-altruism, yet this study is not without its limitations. Data was based on self-reports, which might have overemphasized some relationships between variables. Coetzee, Klopper, Ellis, and Aiken (2013) note that nurses' self-reports of quality care match independent

information on patient outcomes. Future research could incorporate additional measures, especially regarding quality of care. Nevertheless, the use of a two-wave design diminishes the likelihood that common method bias influenced the results of this study.

Future research could examine other components of supervisor and co-worker emotional support such as appearance support or deep and surface support. It might also be worthwhile to examine a variety of emotional performances in future research.

#### 4.2. Practical implications

Increasing opportunities to experience emotional support from co-workers and from one's supervisor could increase work engagement, quality of care provided and OCB-altruism. The results of the present research indicate that supervisors have a great responsibility with regards to nurses' work engagement because they model the working environment through their daily actions.

Hospitals should organise training sessions to develop supervisors' emotional skills. Health care management should encourage supervisors and co-workers to develop this emotional supportive behaviour. For instance, supervisors could organise regular meetings with their subordinates to listen to their emotional needs. Supervisors should promote teamwork, encourage a supportive attitude in the group, develop team building, cooperation and trust to increase the emotional support of co-workers. Co-workers' emotional support can be fostered through increased and rewarded cooperation in the work environment. Providing regular feedback on nurses' performance is essential to promote a perceived supervisor emotional support.

#### 5. Data availability

The research data is confidential.

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This research did not receive any specific grants.

#### CRediT authorship contribution statement

**Sabine Pohl:** Conceptualization, Methodology, Formal analysis, Writing – original draft. **Adalgisa Battistelli:** Conceptualization, Formal analysis. **Abdel Djediat:** Conceptualization, Investigation. **Marie Andela:** Conceptualization, Methodology, Formal analysis.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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We don't have any acknowledgement

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