



## ORIGINAL RESEARCH

# The Impact of the Organizational Commitment of Nurses in Health Units in Greece: Cross-Sectional Study

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## Abstract

**Introduction:** A stable workforce with a sufficiently committed aggregate mass can create a very effective safety factor for an organization.

**Purpose:** To evaluate the relationship between organizational commitment and job satisfaction, as well as to examine the effect of nurses' demographic factors on these two variables.

**Materials and methods:** Data were collected from 152 nurses working in Greece using a random sampling method. Data were collected with a questionnaire that included three parts: demographic data, organizational commitment scale, job satisfaction. Data were analyzed with SPSS version 24.0 using descriptive statistics, Pearson correlation, analysis of variance and t-test.

**Results:** A statistically significant positive correlation was found between the continuance commitment scale and the normative commitment scale ( $r = 0.53$ ,  $p < 0.001$ ). A statistically significant negative correlation was also found between the continuance commitment scale and the satisfaction scale ( $r = -0.65$ ,  $p < 0.001$ ), as well as between the normative commitment scale and the satisfaction scale ( $r = -0.43$ ,  $p < 0.001$ ). Finally, a statistically significant relationship emerged between the scale of satisfaction by educational level ( $F = 3.27$ ,  $p = 0.023 < \alpha = 0.05$ ).

**Conclusions:** Organizations can improve interpersonal relationships in the workplace and the organizational engagement of their employees. It seems that improved employee organizational engagement will lead to a happier, more productive workforce overall.

**Keywords:** Job satisfaction, Nurses, Organizational commitment, Organizational culture

## Introduction

The twenty-first century has been defined, and not without reason, as the era of rapid changes in the workplace. In the face of these conditions, organizations are modified and involve staff and management. This, in turn, leads to a workforce that is, or is becoming, mobile and changeable. Training these individuals is a painstaking, expensive process, yet retention can prove quite taxing on the organization. As a result, it is painful for businesses to endure the process of retaining staff.

An organization recognizes the important contribution of human resources and strengthens those factors that will lead to commitment. Affective commitment represents a combination of specific characteristics that, when present at the same time, favor the retention of nurses in the institution in which they work. These characteristics are passion, idealization, cognitive realization, continuity, and sacrifices for the health unit and commitment [1]. Although the study regarding organizational commitment in previous years has been explored in depth in the field of management, in a nursing context it is still rare [2] and little has been researched in Greece. In this sense, the aim of this study was to test the role of organizational commitment in a sample of nursing staff from Greece. The purpose of conducting this research is to add to what has been previously researched by others in the field of organizational commitment, job satisfaction among nurses in public and private health

units in Greece. Most of the studies conducted have focused on how organizational commitment and job satisfaction have interacted and influenced turnover intention through techniques such as correlations and various regression techniques. The specificity of this research is that it aimed to include the inspection of demographic variables in organizational commitment.

### Research questions

The questions to which the research attempts to provide answers are the following:

- I. What are the levels of work commitment of nurses?
- II. Are demographic characteristics (age, gender, race, education, years as a nurse/supervisor) predictors of development and progression of commitment to a work environment?
- III. How critical can nurses' commitment is to the success of a health facility given its relationship to job satisfaction?

### Clarification of Terms

#### Organizational commitment

Internationally, there is a demand for qualified nurses. As retention and tenure of staff is a vital issue, managers of organizations are looking for staff with many years of clinical experience. In addition, low drop-out and turnover rates allow cost savings resulting from new procedures for the selection, recruitment and training of new nurses for health care organizations. The permanence, turnover and/or departure of nursing staff depend on both personal and organizational elements, among which organizational commitment stands out [3]. Organizational commitment functionally involves employees' loyalty to the organization, their willingness to make every effort for their organization, the level and value of the goal relevant to the organization, and their desire to maintain cooperation. Essentially it is the extent to which they identify with the organization and wish to remain [4].

The types of organizational commitment are continuance commitment (high cost of leaving, risk of not finding a job), emotional/affective commitment (identification with the organization's goals and values) and normative commitment (peer pressure). The benefits to the organization are a reduced willingness to leave the organization and a willingness to give and make individual sacrifices. The ways to develop organizational commitment are job enrichment (participation in the decision-making process, strengthening control responsibilities), aligning the goals and interests of the organization and employees (giving employees a share of the profits), and selecting new employees with values that identify with those of the organization [5].

Commitment is one of the important elements in

nurses' engagement with quality services and care, no matter how stressful and challenging the work environment. Nurses can only perform their work well and successfully if they are committed to their tasks and priorities [2,6].

The social aspect of work engagement refers to the organizational behaviors employees engage in to satisfy emotional and social needs. The cognitive aspect refers to how employees think about doing their jobs. The physical aspect refers to the physical actions employees take to engage in organizational behaviors as a result of the behaviors necessary to satisfy their emotional and social needs. Finally, the cognitive aspect of work engagement addresses employee attentiveness, vigilance and attention to job roles [7,8]. Thus, work engagement is best described as a motivational concept that reflects the simultaneous and holistic expression of an employee's physical, emotional and cognitive energy in a job role [9].

Based on Porter's argument [10] we argue that from the perspective of contemporary desired job performance, such as customer responsiveness, innovative behavior, efficiency and work commitment can provide employers with this kind of advantage. Moreover, emotionally engaged employees experience positive emotions such as joy, interest, passion and inspiration, which according to the theory of broaden-and-build [11] create long-term psychological resources that are important for future well-being.

From an organizational perspective, changing the way employees receive performance feedback could be the tip they need to reach "peak performance". Several studies suggest that promoting employee engagement could be increased by providing more opportunities for employees to practice and receive feedback on their work. Researchers argue that focusing on strengths rather than weaknesses can help improve employee performance. These findings suggest that the majority have a positive psychological approach to management that focuses on developing employees' strengths [12].

When dedicated nursing professionals realize that the work they do is meaningful, they perform their duties effectively and this gives them a sense of happiness and pleasure. As a result, they develop and maintain a bond with the organization and this contributes to the development and maintenance of commitment to the organization [13,14].

Another important trend in the literature is the link between leadership and commitment. Although much is known about the correlation between transformational leadership and commitment, leaders of modern organizations are increasingly aware of the importance of organizational cultures characterized by flexibility and responsiveness. Consequently, researchers are beginning to look beyond defined, formal, and role-based sources of leadership to instead consider a range

of more inclusive leadership styles, such as distributive, shared, collaborative, and adaptive leadership styles. Such leadership styles can potentially complement the known benefits associated with transformational leadership, particularly in explaining the emergence and maintenance of commitment in dynamic team-based work environments [15].

Some qualitative studies have highlighted the influence of job characteristics such as workload, control, reward, fairness, community and values, on work engagement in nursing [16].

Clarity of expectations, feelings of contribution to the organization, a sense of belonging, and opportunities for advancement and growth are required for workplace engagement. Individual commitment has been studied mainly in nurse managers [17,18].

The close association between quality of work life and social relationships could explain why support from supervisor and colleagues loses influence on commitment when job satisfaction is included. Thus, the effects of social support on commitment may be indirect through quality of work life, which could help explain why, when this variable is entered into the equation, the others become redundant [19].

### **Job satisfaction**

Especially in the field of health services, internal service quality is based on the concept that health is a social good and that in itself increases the demands and expectations for services provided by the system for both citizens and health professionals.

Job satisfaction (a person's mental or emotional state about the nature of their work) is affected by a number of factors, such as salary and the cost of working (for example, people who work from home can control how much they earn and enjoy working in the home office compared to those who choose to remain in the respective organization), but is primarily related to the quality of life offered by work [20].

According to Cumbey and Alexander [21] verified the relationships between nurses' job satisfaction and effective supervision. Their results confirm that effective supervision has a positive effect on the employee. Bradley, Petrescu and Simmons [22] investigate the impact of human resource management practices related to job satisfaction. The goal is for employees to feel happy and satisfied with their role in the organization. Researchers confirm that employees prefer to have "closed" supervision of their work. Employees enjoy the idea that their work can be evaluated through observation.

With increasing globalization and international competition, the importance of recruiting, retaining and managing resources that can help increase the competitiveness of organizations has become a critical factor in the success of organizations. Among these

resources, human resources require special attention. Human resources play a central role in the service sector. In this context, increasing employee job satisfaction, organizational commitment, and motivation will not only increase employees' extra-role behavior through organizational citizenship behavior, but will also contribute to increasing organizations' competitiveness and lead to better future performance. Especially in the service industry, evidence suggests a strong link between job satisfaction and performance. Researchers found a significant positive relationship between employee job satisfaction and customer perceptions of service quality performance [23]. It is expected that employees who are satisfied with their working conditions will engage in better service delivery and thus contribute to positive word-of-mouth communication, as well as achieving customer trust and organic customer loyalty [24].

## **Materials and Methods**

### **Study design**

This study is a cross-sectional survey. The motivation for choosing the quantitative methodology was that it is characterized by rigor in terms of the process, which will allow the researcher to adequately plan and plan the stages of her research, consequently limiting the possible obstacles that she would encounter during conducting the research. The present study used simple random sampling through an online platform, given that broadband connections have become widespread in developed countries.

### **Study population**

The population of the study was nurses who work in the public and private sector. The research tool for collecting the data of the quantitative methodology used is the questionnaire. The collection of the sample was conducted from 12/11/2022 to 30/12/2022 electronically. The selection criteria for the participants were to have at least two years of previous service, without age limit, willing to participate. And the exclusion criteria those who did not have time to participate, those who did not have access to the internet.

### **Sample size**

152 nurses participated in the survey. Participants were informed upon entering the platform that the survey is anonymous and that the information they will provide with their answers is confidential and that anyone who wished to do so could leave the survey. Each questionnaire took on average approximately 8-10 minutes for each participant.

### **Instruments**

For the implementation of the quantitative research, a closed questionnaire of four sections was constructed. The first section of the questionnaire includes the demographic and professional data of the research participants and more specifically, gender, age,

education level, work status, employment agency, years of experience as nurses.

In the second part, the degree of organizational commitment of the respondents is determined through the Greek version of the Organizational Commitment Scale (OCS) upon request and approval. Meyer & Allen's (1990) scale was designed as a 5-point Likert scale. 1: Strongly disagree', 2: Disagree, 3: Undecided, 4: Agree and 5: Strongly agree'. And four elements are negative. These negative items should be reverse graded. The overall level of organizational commitment of the respondents is determined through the average score of the responses which receives a range of scores from 1 to 5 and the higher the mean values of the overall factor, the higher the organizational commitment of the respondents.

The third part of the research tool attempts to capture the level of professional satisfaction of the respondents using the Minnesota Satisfaction Questionnaire-MSQ (short form) by Weiss, et al. (1967). The specific questionnaire includes 20 items in which the respondents are asked to express by means of a 5-point Likert scale the extent to which they are satisfied with their work in the 20 items under study, with the questionnaire yielding 2 subscales and an aggregate scale of job satisfaction. The tools have occasionally been used in studies of the Greek population.

### Ethical consideration

Ethics committee approval was unnecessary because electronic informed consent (eConsent) was used to assess understanding of the information presented. The first step was to inform the participants of the exact nature, purpose and procedures of the research. It was made clear that the anonymity of the participants would be respected, that all information would be strictly confidential, and that possibly the results found might be published for reasons of expanding the body of scientific knowledge in nursing. No financial incentives were offered or provided for participation in this study.

### Statistical analysis

Data are presented as numbers and percentages for categorical variables. Regarding internal consistency reliability, which was examined for each scale, Cronbach's alpha was used. Regarding the statistical analysis that follows, quantitative variables are reported in terms of mean  $\pm$  standard deviation (mean  $\pm$  SD) as well as median and interquartile range (IQR). In case the assumption of normality is not satisfied for quantitative variables, based on appropriate statistical and/or graphical tests, then it is recommended to use the median and interquartile range (median, IQR) as representative descriptive measures. In the inductive method in order to highlight correlations, the parametric t-test and the Chi-Square test were used. In addition, cross tabulation analysis between variables was performed using the

Pearson r correlation coefficient. Analysis of variance by one factor (One Way ANOVA) was then used. Statistical analysis involved Levene's Test of Equality of Variances. All tests with p-value  $<$  0.05 were considered significant. Statistical analysis was performed using the SPSS version 24.0 application.

## Results

Our sample consisted of 152 participants, 24 (15.8%) men and 128 (84.2%) women. Regarding the age of the survey participants, 23 (15.1%) participants are aged 18-30, 103 (67.8%) are aged 31-51 and 26 (17.1%) are aged 52-67. Regarding the educational level of the participants, 29 (19.1%) people have a nursing assistant degree, 73 (48%) people are TEI graduates, 46 (30.3%) people have a postgraduate degree and 4 (2.6%) hold a Ph.D. For years of service, 39 (25.7%) people have 0-5 years of service, 21 (13.8%) people 6-10 years, 22 (14.5%) people 11-15 years, 27 (17, 8%) persons 16-20 years and 43 (28.3%) persons over 20 years. In addition, 42 (27.6%) people are part-time employees and 110 (72.4%) are permanent employees. Regarding the employment agency, 141 (92.8%) people are employed in a public agency while 11 (7.2%) people are employed in a private agency. The general illustration is shown in [Table 1](#).

**Table 1:** Demographic characteristics of participants.

Sex	n (%)
Man	15.8%
Woman	84.2%
Age	n (%)
18-30	15.1%
31-51	67.8%
52-67	17.1%
Education level	n (%)
Nursing assistant degree	19.1%
TEI graduates	48%
Masters degree holders	30.3%
Holders of a Ph.D	2.6%
Years of Senior Service	n (%)
0-5 years of experience	25.7%
6-10 years	13.8%
11-15 years	14.5%
16-20 years	17.8%
> 20 years	28.3%
Working condition	n (%)
Fixed-term employees	27.6%
Permanent employees	72.4%
Employment agency	n (%)
People are employed in a public body	92.8%
People are employed by a private entity	7.2%



## Descriptive statistics

In the affective commitment scale, the greatest agreement is found in the answer "I would be very happy to spend the rest of my career in this organization" (mean = 4.34, SD = 1.89) and in the answer "This organization has a lot of personal meaning for me" (mean = 4.18, SD = 1.70) (Table 2).

In the continuance commitment scale, the greatest degree of agreement is found in the answer "Right now, staying in my organization is a matter of need as well as desire" (mean = 5.23, SD = 1.54) and the answer "It would be very difficult for me to leave my organization right now, even if I wanted to" (mean = 4.97, SD = 1.78). On the contrary, the lowest degree of agreement is found in the answer "If I had not already put so much of myself into this organization, maybe I would consider working elsewhere" (mean = 3.88, SD = 1.73) (Table 3).

In the scale of normative commitment (Table 4), the greatest agreement is found in the answer "I feel no obligation to stay with my current employer" (mean = 4.52, SD = 1.82) and in the answer "This organization deserves my faith" (mean = 3.72, SD = 1.83).

In the satisfaction scale, the greatest satisfaction is found in the answer "In my job I have the opportunity to do things for other people" (mean = 1.83, SD = 0.72) and in the answer "In my job I have the opportunity to have stable employment" (mean = 2.02, SD = 0.84) (Table 5).

## Reliability

For the emotional commitment scale, the Cronbach's

alpha was calculated at 0.84. For the scale of ongoing commitment the Cronbach's alpha was calculated to be 0.67. For the normative commitment scale, the Cronbach's alpha was calculated to be 0.82. Finally, for the satisfaction scale, the Cronbach's alpha was calculated at 0.93 (Table 6).

## Correlations-inductive statistics

Pearson's parametric correlation coefficient was used to study the correlation between them. A statistically significant positive correlation was found between the continuance commitment scale and the normative commitment scale. This means that the greater the degree of agreement we have on the scale of continuance commitment, the greater the degree of agreement we have on the scale of normative commitment.

A statistically significant negative correlation was also found between the continuance commitment scale and the satisfaction scale as well as between the normative commitment scale and the satisfaction scale. This implies that the greater degree of agreement we have on the scales of continuance and normative commitment, the less degree of agreement we have on the scale of satisfaction.

Then using the parametric control of the t test, it was studied if there is any statistically significant difference in the three scales of the questionnaire in relation to the gender of the participants. The hypothesis of equality of population variances is not rejected for all three scales (Levene's test) and no statistically significant

**Table 2:** Descriptive statistics for the affective commitment scale.

Items	Min-Max	Mean ± SD	Median (Q1, Q3)
I would be very happy to spend the rest of my career with this organization.	1-7	4.34 ± 1.89	5 (3-6)
I really feel like this organization's problems are mine.	1-7	3.20 ± 1.84	3 (2-5)
I do not feel a strong sense of "belonging" to the organization.	1-7	3.52 ± 1.75	3 (2-5)
I don't feel "emotionally attached" to my body.	1-7	3.62 ± 1.84	3 (2-5.75)
I don't feel like "part of the family" in my organization.	1-7	3.53 ± 1.80	3 (2-5.75)
This organization means a lot to me personally.	1-7	4.18 ± 1.70	4.50 (2-6)

**Table 3:** Descriptive statistics for the continuance commitment scale.

Items	Min-Max	Mean ± SD	Median (Q1, Q3)
Right now, staying in my organization is a matter of necessity as much as desire.	1-7	5.23 ± 1.54	6 (5-6)
It would be very difficult for me to leave my organization right now, even if I wanted to.	1-7	4.97 ± 1.78	6 (4-6)
Too much of my life would be disrupted if I decided I wanted to leave my organization now.	1-7	4.74 ± 1.86	6 (3-6)
I feel I have very few options to consider leaving this organization.	1-7	4.50 ± 1.83	5 (3-6)
If I hadn't already put so much of myself into this organization, I might consider working elsewhere.	1-7	3.88 ± 1.73	4 (2-5.75)
One of the few negative consequences of leaving this organization would be the lack of available alternatives.	1-7	4.35 ± 1.85	5 (2.25-6)

**Table 4:** Descriptive statistics for the normative commitment scale.

Items	Min-Max	Mean $\pm$ SD	Median (Q1, Q3)
I feel no obligation to remain with my current employer.	1-7	4.52 $\pm$ 1.82	5 (3-6)
Even if it were to my advantage, I don't think it would be right to leave my organization now.	1-7	3.57 $\pm$ 1.90	3 (2-6)
I would feel guilty if I left my organization now.	1-7	3.09 $\pm$ 1.83	2 (2-5)
This organization deserves my trust.	1-7	3.72 $\pm$ 1.83	4 (2-5)
I would not leave my organization at this time because I have a sense of obligation to the people in it.	1-7	3.38 $\pm$ 1.90	3 (2-5)
I owe a lot to my organization.	1-7	3.49 $\pm$ 1.82	3 (2-5)

**Table 5:** Descriptive statistics for the satisfaction scale.

Items	Min-Max	Mean $\pm$ SD	Median (Q1, Q3)
At work I feel...	1-5	2.80 $\pm$ 0.97	3 (2-4)
The possibility of not being unemployed	1-5	2.20 $\pm$ 0.95	2 (2-3)
The ability to be independent	1-5	2.20 $\pm$ 0.83	2 (2-3)
The opportunity to have a variety of activities	1-5	2.73 $\pm$ 0.94	3 (2-3)
The opportunity to be "someone" in my field	1-5	2.76 $\pm$ 0.91	3 (2-3)
The way my superiors treat me	1-5	2.60 $\pm$ 1.09	2 (2-3)
My boss's ability to make decisions	1-5	2.84 $\pm$ 1.15	3 (2-4)
The ability to do things according to my conscience	1-5	2.32 $\pm$ 0.93	2 (2-3)
The possibility of having stable employment	1-5	2.02 $\pm$ 0.84	2 (1-2)
The opportunity to do things for other people	1-5	1.83 $\pm$ 0.72	2 (1-2)
The opportunity to mentor other people	1-5	2.26 $\pm$ 0.77	2 (2-3)
The opportunity to use my qualifications	1-5	2.39 $\pm$ 0.96	2 (2-3)
The way in which the health unit practices its policy	1-5	3.32 $\pm$ 1.07	3 (2-4)
My salary is proportional to the work I do	1-5	3.92 $\pm$ 1.10	4 (3-5)
The opportunities for politics or advancement	1-5	3.38 $\pm$ 0.95	3 (3-4)
The opportunity to use my own judgment	1-5	2.78 $\pm$ 1.00	3 (2-3.25)
The opportunity to apply my own methods/ideas	1-5	2.88 $\pm$ 1.00	3 (2-4)
The working conditions	1-5	3.39 $\pm$ 1.11	4 (2-4)
The relationships of colleagues with each other	1-5	2.84 $\pm$ 1.18	2.50 (2-4)
The recognition they give me	1-5	2.82 $\pm$ 1.16	3 (2-4)
The sense of accomplishment I get	1-5	2.82 $\pm$ 1.10	3 (2-4)

**Table 6:** Cronbach's alpha

Cronbach's Alpha	N of Items
<b>emotional commitment scale</b>	
0.84	6
<b>continuance commitment scale</b>	
0.67	6
<b>normative commitment scale</b>	
0.82	5
<b>satisfaction scale</b>	
0.93	21

relationship emerged between the three scales of the questionnaire in relation to gender.

One Way ANOVA was then used to examine whether there was any statistically significant relationship between the questionnaire scales and the age groups

of the participants. The hypothesis of homogeneity of variances is not rejected for all three questionnaire scales by Levene's test. From the multiple comparisons for the continuance commitment scale, it was found that there is a difference between the age groups 18-30 and 52-67 as well as 31-51 and 52-67. The greatest degree of agreement on the continuance commitment scale is found at ages 52-67 (mean = 4.94). From the same table for the Normative Commitment scale, the same conclusion is also obtained (mean = 4.19). Then a statistically significant relationship emerged between the continuance commitment scale by age group ( $F = 5.98$ ) as well as between the normative commitment scale by age group ( $F = 4.33$ , [Table 7](#)).

It was examined whether there is any statistically significant relationship between the scales of the questionnaire and the educational level of the participants. The hypothesis of homogeneity of

**Table 7:** Analysis of variance by one factor.

<b>Levene test of scales by educational level</b>		<b>Levene Statistics</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>	
Continuing commitment		1.33	3	148	0.26	
Regulatory commitment		0.99	3	148	0.39	
Satisfaction		2.52	3	148	0.06	
<b>ANOVA of scales by age group</b>						
		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Continuing Commitment	Between Groups	20.50	2	10.25	5.98	0.00
	Within Groups	255.14	149	1.71		
	<b>Total</b>	275.65	151			
Regulatory commitment	Between Groups	10.38	2	5.19	4.33	0.01
	Within Groups	178.69	149	1.19		
	<b>Total</b>	189.08	151			
Satisfaction	Between Groups	1.29	2	0.64	1.45	0.23
	Within Groups	66.43	149	0.44		
	<b>Total</b>	67.73	151			
<b>ANOVA of the scales by educational level</b>						
		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Continuing Commitment	Between Groups	9.41	3	3.14	1.74	0.16
	Within Groups	266.23	148	1.79		
	<b>Total</b>	275.65	151			
Normative commitment	Between Groups	3.62	3	1.20	0.96	0.41
	Within Groups	185.45	148	1.25		
	<b>Total</b>	189.08	151			
Satisfaction	Between Groups	4.22	3	1.40	3.27	0.02
	Within Groups	63.51	148	0.42		
	<b>Total</b>	67.73	151			

variances is not rejected for all three questionnaire scales by Levene's test (Table 7). Then a statistically significant relationship emerged between the scale of satisfaction by educational level ( $F = 3.27$ ). The scale of satisfaction it emerged that there is a difference between the graduate nursing assistants and the PhD holders ( $p = 0.04$ ). Also between TEI (Technological Educational Institutions)/HEI (Institutions of Higher Education) graduates and master's degree ( $p = 0.04$ ) and doctorate degree holders ( $p = 0.04$ ). Doctoral degree holders have the highest degree of satisfaction (mean = 1.98) and nursing assistant graduates have the lowest (mean = 2.71).

Finally, a hierarchical linear regression analysis was performed, with an initial model including the satisfaction scale as the dependent variable and continuance commitment as the independent variable. The specific model emerged as statistically significant ( $F = 114.71$ ) with  $R^2$  value = 0.43.

Then we added the Normative commitment variable as another independent and the model was found to be statistically significant ( $F = 58.95$ ) with an  $R^2 = 0.44$  value. However, here the Normative commitment variable was not found to be statistically significant ( $t = -1.5$ ,  $p = 0.13$ ).

Finally, in a third model we added the categorical variables Age, Years of service and Gender. The model emerged as statistically significant ( $F = 21.67$ ) with an  $R^2$  value = 0.47 but the variables we added did not emerge statistically significant. Consequently, the last model is considered preferable, because it has a larger adjusted coefficient of determination .

## Discussion

Emotional organizational commitment by nursing staff is vital to the delivery of quality care and excellence in health organizations and units.

Affective organizational commitment showed the lowest mean score of all study variables, suggesting that participants do not show a particularly strong emotional bond with their organizations, although it is not rejected that other types (continuous, normative) may be present with greater frequency. At the individual level, our findings were consistent with previous studies showing the importance of nurses' emotional commitment. This means that staff were committed to the organization either because of an emotional contribution or because of no better job opportunities outside the organization and showed that staff is not willing to leave for a better job or better conditions [25,26].

Organizational commitment and job satisfaction were expected to have a statistically linear relationship with each other. Previously, the two variables had been found to be statistically related to each other. This finding is consistent with the finding of a study that showed that nurses who report higher perceived job impact, emotional commitment to “clients” and perceived social value also have greater work engagement [27]. This boosts nurses’ enthusiasm and energy for work. Thus, nurses who see their work as making a positive and valuable difference in the lives of their patients and who are emotionally committed to them report feeling more energized, engaged, and engaged in their work, which contributes to their well-being.

The hypothesis, regarding the relationship between job satisfaction, and the correlation with work engagement, was partially confirmed. Consistent with previous findings [28-30] this study showed that job satisfaction and work engagement were positively correlated, so when one of these variables increases, the others also increase. This result is understandable since all these dimensions play an important role in nurses’ occupational health and performance [31,32].

In addition, nursing process performance can be improved by indirectly influencing nurses’ job satisfaction and organizational commitment. It has been found that nurses with high competence make consistent efforts and maintain passion, further increasing job satisfaction and organizational commitment through a sense of self-fulfillment and improved performance in nursing everyday life [33,34]. Overall, therefore, it appears that the degree of fit between sectoral and societal values and practices is related to the individual outcomes of commitment and intrinsic satisfaction [35].

The literature review found several demographic variables related to either organizational commitment or job satisfaction and in some cases both variables. For the continuing commitment scale, it was found that there is a difference between the age groups 18-30 and 52-67 as well as 31-51 and 52-67. The greatest degree of agreement on the continuance commitment scale is found at ages 52-67 (mean = 4.9423). For the normative commitment scale the same conclusion is also obtained (mean = 4.1923). Furthermore, these traits may contribute to making them feel better about their current workplace or imply that they are well adapted to their organization. In addition, the experience of turnover in the past probably made them stay in their current organizations for many years, although we are not sure that the long-term stay was due to either good adaptation or habitual work behavior which is consistent with the study of Kim, et al. [36].

More specifically, the study by Kim, et al. [36], showed differences in organizational commitment according to demographics and career characteristics: Nurses who were over 50 years of age, married, working

in a hospital, had worked in their current department for more than 10 years, and had at least one experience change more likely to report higher job satisfaction compared to other nurses.

Categorical variables such as age, years of service and gender had a larger adjusted coefficient of determination ( $R_{adj}^2 = 0.451$ ). Similar findings were reported in another study [37]. Older age, marital status, and longer nursing experience are thought to be related. More specifically, an increase in total years of service is associated with an increase in the organizational commitment score. Thus, increasing total years of service is associated with decreased commitment to the organization. This result is consistent with previous studies [38-40] where they reach the same conclusions.

Although there is an abundance of research on job satisfaction, there is still a dearth of studies that have focused on job satisfaction and level of education. The results of the present study revealed that there was a positive correlation between the dependent variable, job satisfaction and the independent variables: Organizational commitment, organizational support, level of education. According to other research findings [41] on nurses’ job satisfaction also revealed a positive correlation between job satisfaction and nurses’ level of education. This finding is supported by the strength of the bivariate correlation between organizational commitment, level of education and the dependent variable, job satisfaction, which are consistent with these results.

## Conclusion

The findings of the study agree with relevant studies that have been conducted in the past both in Greece and abroad. Public health care services in Greece are considered among the most important and most demanded services by people in the country, especially considering that most of the population belongs to the low and middle income groups.

To date, we do not have enough data on how the job satisfaction of nurses in Greece differs according to their demographic profiles and educational characteristics. Therefore, the findings of this study provide the foundation for future studies that examine the relationships between public and private sector employees on both intrinsic and extrinsic measures of satisfaction. The wage structure of the Greek public sector may be a counterweight to this proposition, however further research is needed to confirm this.

In conclusion, this study showed that job satisfaction is directly related to organizational commitment. Therefore, this relationship could be the subject of more thorough research in health care systems. It also provides further evidence that the more satisfied employees are the more engaged, productive and effective they will be in their organizations. This



gives a clear message to all managers in health care organizations to pay close attention to the issue of job satisfaction and organizational commitment for nurses and other workers in their institutions.

Organizational commitment is a concept that classifies the type of bond that employees form in relation to their commitment to various organizations. This attachment is considered to consist of a cognitive and emotional component. The employee intends to stay with the organization, identify with the organization, its values and goals, and work hard to become better at his/her job.

As diversity in the workforce has increased in recent years, managers need to adapt to changes in gender, ethnic and age demographics in the workplace.

Every employee has different ideas about how to achieve their goals. By working in groups, we get more knowledge about innovations. Similarly, the competitiveness of organizations requires that they find ways to innovate. Giving employees specific and personalized recognition is a way to see how well they are doing and excelling within the company. This makes employees feel important, valued and appreciated. It also shows that the company cares. This also shows employees that the company cares about them and that they feel a strong sense of the company's value. Rewarding employees by investing in their future, especially in their professional and personal development, can be very beneficial for the organization.

In addition to the proposed benefits for the organization, promoting employee engagement in their work can also have a positive effect on their effectiveness and well-being. We argue that work engagement is an important attitude that is mutually beneficial for both organizations and employees. Therefore, work engagement also leads to desirable outcomes in their personal lives. Contribution to HR professionals can therefore be leveraged from an organizational perspective on how well-being for organizations and employees can be pursued simultaneously.

We therefore conclude that organizational commitment plays an extremely important role in reducing work-related consequences and maintaining patient health. It is also vital when seeking a more favorable situation for nurses. The commitment they have developed in an environment regarding both nurses' performance and the benefits they receive in a workplace help to reduce potential negative work outcomes.

### Limitation of Study

An important limitation of the present study was the fact that women constituted the vast majority of the study population and this is due to the fact that the majority of nursing staff are women in Greece. Also, correlational

paths should be taken with caution; no causal inference is sure in cross sectional's studies like this.

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### Conflict of Interest

The authors report no conflict of interest.

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