

Relationship between Organizational Commitment and Knowledge Sharing among Staff Nurses

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Abstract

Background: In the workplace, knowledge sharing problem is relatively common in which the individual employees with knowledge are less inclined to share their knowledge. Commitment represents something beyond loyalty to an organization. **Aim of the study:** To identify the relationship between organizational commitment and knowledge sharing among staff nurses. **Design:** A descriptive comparative study design was utilized to meet the aim of this study. **Setting:** This study was conducted at Ain Shams University Hospital and Dar El-Shefa Hospital, the study sample consisted of 126 staff nurses who are working in the two hospitals. **Tools of data collection:** two types of tools. 1) Organizational commitment questionnaire 2) knowledge sharing questionnaire. **Results:** Nurses' age ranged between 20 and 57 years sixty nine percent females, and seventy three and eight percent having diploma degree, fifty five and six percent were working in Ain-Shams Hospital. The highest percentage of staff nurses sixty one and one percent had high level of continuance commitment, and seventy one and four percent of them had low level of affective commitment. Eighty six and five percent of the staff nurses had high level of total knowledge sharing. **Conclusion:** staff nurses in the study setting have low affective commitment, with better continuance commitment, majority of the staff nurses had high level of total knowledge sharing, the work hospital has significant influences on nurses' commitment and knowledge sharing. **Recommendations:** The study recommends provide all facilities needed to improve knowledge sharing through a reward system. Further research is suggested to assess the effects of organizational, individual, and environmental factors separately on knowledge sharing.

Keywords: Organizational Commitment, Knowledge sharing, Staff nurse.

Introduction

In the workplace, knowledge sharing problem is relatively common in which the individual employees with knowledge are less inclined to share their knowledge (Ho et al., 2009). Knowledge sharing will not happen if one does not intend to share knowledge (Siemens et al., 2008). Furthermore, knowledge sharing behaviors are generally unnatural because individuals perceive their knowledge as valuable assets, and open sharing of knowledge with others is limited by their natural tendency to keep information to themselves (Han, and Anantatmula, 2007). Therefore, the unwillingness of employees to share knowledge

with other colleagues has created problems for organizational survival (Lin, 2007).

People are more willing to share their knowledge if they are convinced that doing so is useful; if they have the feeling that they share their knowledge in an environment where doing so is appreciated and where their knowledge will actually be use. One of motivational factors affecting knowledge sharing is the relationship between the individual and the organization, and has more trust in both management and coworkers, is more likely to be willing to share their knowledge. Greater commitment may engender beliefs that the organization has rights

to the information and knowledge one has created or acquired (Naghneh et al., 2017).

In several studies, the effective factors on knowledge sharing include communication, team working strategy, confidence, affective commitment, human resource management and knowledge (Faraji et al., 2015). Participative environment will cause more organizational commitment and more involvement in knowledge sharing process; consequently high level of organizational commitment is a positive and dynamic attitude in knowledge sharing (Ching and Hae, 2009).

Commitment has been recognized as an important variable in explaining knowledge sharing (Van der Vegt and Bunderson, 2005). A majority of the literature on commitment examines commitment to an organization, and the typology that has received the most research attention is the three-component model of organizational commitment. They identified three different forms of commitment: affective (emotional attachment, a desire to remain), normative (the felt obligation to remain), and continuance (the need to remain because of loss of investments or lack of alternatives). When commitment to the organization is affective in nature, members experience strong emotional attachment to, and personal identification with, the goals and values of the organization (Wang and Noe, 2010).

Formally, knowledge sharing refers to behavior by which an individual voluntarily provides other social actors (both within and outside an organization) with access to his/her unique knowledge and experiences. Knowledge sharing can occur both at individual level and organizational level. Two aspects of this definition of knowledge sharing immediately stand out. Firstly, knowledge sharing occurs between individuals, and is thus different from knowledge transfer which occurs between larger organizational entities such as departments and organizations themselves. Secondly, knowledge sharing is voluntary (Hansen and Avital, 2005).

Lastly, knowledge sharing is the act of making knowledge available to others within

the organization and that knowledge sharing between individuals is the process by which knowledge is held by an individual and is converted into a form that can be understood, absorbed, and used by other individuals. This implies that the individual who possesses the knowledge will share it in some understandable form as a conscious action and that the sender will not relinquish ownership of the knowledge becomes joint between the sender and the recipient as a result of the process (Chiu and Chen, 2016).

Organizational commitment (OC) is the degree to which employees identify themselves with their organizations.

Organizational commitment is the relative strength of an individual's identification with and involvement in a particular organization that is characterized by three factors. These are a strong belief in and acceptance of the organization's goals and values, a willingness to exert considerable effort on behalf of the organization, and a strong desire to maintain membership in the organization. Organizational commitment from a behavioral perspective describes a person's preoccupation with the organization as evidenced by personal time devoted to organizational activities. More generally an employee displaying less of these attitudinal or behavioral attributes in terms of his/her employing organization may be more likely to leave and be at greater risk of turnover (Price, 2009).

Moreover, organizational commitment is the situation where individuals develop loyalty or commitment towards the literature, organizational commitment is addressed as believing and accepting the goals and values of the organization and exhibiting continuous willingness to maintain one's membership in the organization (Raza and Nawaz, 2011).

Organizational commitment is also defined as involvement in particular organization and beliefs in values and goals of the organization, sense of loyalty to the organization, moral obligations, heartfelt

inclination and sense of need to stay in the organization (**Carman-Tobin, 2011**). In fact, organizational commitment is a type of psychological attachment to an organization in which a person is involved so that committed employees sometimes obtain their own identity from the organization and benefit from their memberships (**Ahmed and Oranye, 2010**).

Organizational commitment is conceptualized as a three-dimensional model, with each dimension describing a core aspect of organizational commitment. Affective commitment involves the emotional or attitudinal attachment of people to the organization. Continuance commitment is related to a balancing of the costs of leaving an organization and the benefits of staying. Normative commitment is related to internalized pressures to act in ways that comport with organizational goals and interests. This component suggest that employees feel a moral need to stay in the organization. This dimensions capture different aspects of the multifaceted construct of organizational commitment and that the gestalt of commitment emerges (**Sikorska-Simmons, 2008**).

Lastly, many researchers agree that organizational identification is established when employees can perceive and identify with the image of their organization (**Van Dick et al., 2007; Chen et al., 2015**). Employees who identify with their organization, I.e., they develop organizational commitment (**Riketta, 2005**).

Significance of the study:

Knowledge sharing is essential for organizations to achieve their goals. It facilitates dissemination of overall awareness among workers, and creates a better work environment. However, knowledge sharing may be influenced by a number of factors, including organizational commitment. Meanwhile, the researcher noticed that the staff nurses' work in the hospital setting has become more dependent on knowledge sharing and less dependent on physical capabilities. Hence, this study is concerned with identifying the relationship between

organizational commitment and knowledge sharing among staff nurses.

Aim of the study

The aim of this study was to identify the influence of organizational commitment on knowledge sharing among staff nurses through:

1. Assessing the level of organizational commitment among staff nurses.
2. Assessing knowledge sharing among staff nurses.
3. Finding out the relationship between organizational commitment and knowledge sharing among staff nurses.

Research questions

1. Is there a relationship between the level of organizational commitment and knowledge sharing at the individual level?
2. Is there a relationship between the level of organizational commitment and knowledge sharing at the organizational level?

Subjects and methods

The aim of the study was to identify the relationship between organizational commitment and knowledge sharing among staff nurses through assessing level of organizational commitment among staff nurses, assessing knowledge sharing among staff nurses, finding out the relationship between organizational commitment and knowledge sharing among staff nurses.

The methodology pursued in conducting the study is presented under: Technical design, Operational design, Administrative design, and Statistical design.

I. Technical design:

The technical design for this study includes a description of the research design, setting of the study, subjects and tools for data collection.

Study design:

An analytic cross-sectional design for this study was used in conducting the study in order to find out the relationship between organizational commitment and knowledge sharing.

Setting:

This study was conducted in two hospitals, namely Ain-Shams University Hospital and Dar El-Shefa Hospital which is accredited

1. Ain Shams University Hospital (medical wards & critical care units). This hospital contains 835 beds which provides general and medical services and its specialties which include endocrinology, immunology and allergic diseases, tropical medicine, chest diseases, geriatric and intensive care services.

2. Dar El-Shefa Hospital which is accredited. This hospital contains 177 beds. It provides all types of care. It includes ICU, CCU, NICU, Surgical, Neuro, dialysis Obstetric and Medical department.

Subjects:

Sample criteria: The study population consisted of all staff nurses working in Ain-Shams University Hospital and Dar El-Shefa Hospital during the time of the study. Their total numbers were 300 and 150 staff nurses respectively. The only inclusion criterion was being a full-time staff nurse in these settings during the time of the study.

Sample size: The sample size was calculated to estimate a correlation coefficient of 0.25 or higher between the scores of commitment and shared knowledge at 95% level of confidence and 80% study power. Using open-Epi software package for a correlation sample size was 126 after accounting for a non-response rate for non-response rate of approximately 5%.

Sampling technique: A convenience sampling method was used to recruit staff nurses from the two settings. Thus, 70 staff nurses were selected from Ain-Shams

University Hospital, and 56 from Dar El-Shefa Hospital.

Tools of data collection

Data were collected using a self-administered questionnaire including two measurement tools, namely organizational commitment questionnaire and knowledge sharing questionnaire in addition to section for staff nurses' demographic characteristics.

1. Organizational Commitment questionnaire:

This tool was used to assess the level of organizational commitment among staff nurses. This tool was developed by (Allen and Mayer, 1990) and adapted from (Cohen, 2007), it consist of two parts:

Part 1: Socio-demographic sheet: this was intended to collect demographic data such as gender, level of education, age, marital status, position, and years of experience, in addition to the hospital and work department.

Part 2: Organizational Commitment questionnaire used to assess level of organizational commitment among staff nurses. It has 24 items with a 5-point Likert scale ranging from "strongly agree" to "strongly disagree" these are categorized into three commitment dimensions as follow.

○ Affective commitment (8 items) such as "I enjoy discussing my organization with people outside it."

○ Normative commitment (8 items) such as "I feel that I have too few options to consider leaving this organization."

○ Continuance commitment (8 items) such as "right now, staying with my organization is a matter of necessity as much as desire."

Scoring system:

The response to each item from "strongly agree" to "strongly disagree" was scored from 1

to 5 respectively. The scores were reversed for negative items so that a higher score indicates more commitment. The score of each dimension were summed up. Then, the sums of scores were converted into percent scores. For categorical analysis, a score of 60% or higher in each dimension was considered as high commitment while a lower score was considered low commitment.

2. Knowledge sharing questionnaire:

This tool used to assess knowledge sharing among staff nurses. It was adapted from (Wang, 2010) & (Holste, 2003). It consist of two parts:

Part 1: Socio-demographic sheet: used to gather socio demographic data such as gender, level of education, age, marital status, position, and years of experience.

Part 2: Knowledge sharing questionnaire used to assess knowledge sharing among staff nurses. The tool has 20 items on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree" these are categorized into two domains of knowledge sharing as follows.

- Individual knowledge sharing: (13 subitems) such as "I am ready to share technical knowledge with other employees in the future," "Sharing knowledge provides me with respect."

- Organizational knowledge sharing: (7 subitems) such as "Sharing knowledge increases hospital productivity," "Sharing knowledge increases cooperation."

Scoring system:

The responses from "strongly agree" to "strongly disagree" were scored from 1 to 5 respectively. The scores are reversed for negative items so that the higher score indicates more knowledge sharing. The score of each dimension were summed up, then the sums of scores were converted into percent scores. For categorical analysis, a score of 60% or higher in each dimension and for the total scale was considered as high knowledge sharing while a

lower score was considered as low knowledge sharing.

Responses of the applicants measured on five points Likert scale ranging from (Strongly disagree=1), (Disagree=2), (Neutral=3), (Agree=4), (Strongly agree=5), (Wang, 2010) & (Holste, 2003).

II. Operational design

The operational design includes preparatory phase, pilot study, and field work.

• Preparatory phase:

The researcher had reviewed current and past, local and international related literature and knowledge aspect of the study using books, articles, journals and internet. This was helpful in processing the data collection tool and in writing up the scientific background of the study.

Tool Validity

The study tools were presented to a panel of experts for face and content validation. The panel consisted of five experts in nursing administration. They were (1) Professor faculty member from Ain Shams University, (2) Assistant Professor faculty members from Tanta University, (1) Assistant Professor Faculty member from Mansoura University and (1) Professor Faculty member from Zagazig University. They reviewed the tools for relevance, comprehensiveness, applicability, and logical sequence. Some modifications were done according to their suggestions in the form of rephrasing some items.

Tools reliability

The study tools were tested for their reliability to test internal consistency using Cronbach Alpha test as follow:

Tool name	N of items	Cronbach's Alpha
Commitment:		
Affective	8	0.92
Continuance	8	0.84
Normative	8	0.62
Knowledge		

sharing:		
Individual	13	0.95
Organizational	9	0.90

• Pilot study:

It was carried out in order to ascertain the clarity and feasibility of the data collection tools. The time needed for filling questionnaire sheets (12:05) minutes for collecting data from staff nurses. 10% of total sample were recruited for pilot study there were selected randomly. Since no modifications were done in the tools, these subjects were included in the main study sample.

• Field work:

The field work started by getting official permission to hospital directors of Ain Shams University Hospital and Dar El-Shefa Hospital. Once official permissions were conducted the study were obtained. The researcher visited the study setting, met the directors of the hospital to explain the aim of the study and get their approval and cooperation. Then, the researcher met nurse managers as well as the staff nurses, explained the aim of the study to them, and invited them to participate.

Those who gave their verbal consent to participate were given the data collection tools and instructed in how to fill them in. Questionnaire forms were distributed to the respondents at their workplace. Then collected by the researcher sometime at the same time and at the other time at the next day. The filled forms were revised by the researcher to ensure their completeness. The return rate was 100%.

The appropriate time of data collection was according to type of work and work load of each department, sometimes it was in the middle of the morning and afternoon shift and othertime before the end of the afternoon shift and in the beginning of night shift. Collection of data took two months from beginning of September 2017 to the end of November 2017.

III. Administrative design:

An official letters requesting permission to conduct the study were directed from the dean of Faculty of Nursing/Ain Shams University to the hospital directors and nursing directors to obtain their approval to carry out this study. These letters included the aim of the study and photocopy from data collection tools in order to get the permission and help for collection of the data.

Ethical considerations:

Prior to the study conduction, approval was obtained from the science research ethical committee in faculty of nursing/ Ain Shams University. In addition, the researcher met the directors of the two hospitals and explained the aim of the study to gain their approval. All subjects were informed that participation in the study is voluntary, the collected data will be treated confidentially and the anonymity of each participant was assured by the allocation of a code number to the questionnaire sheets. Subjects were informed that the content of the tools will be used for the research purpose only. Each participant was also informed that he has right to withdraw from the study at any time without giving any reason.

IV. Statistical design:

Data entry and statistical analysis were done by using SPSS 20.0 statistically software package. Data were presented using descriptive statistics in the form of frequencies and present ages for qualitative variables, mean and standard deviation and medians for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of tools through their internal consistency. Qualitative categorical variable were compared using Chi-square test. Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5 fisher exact test was used instead. In larger than 2x2 cross-tables, no test could be applied whenever the expected value in 10% or more of the cells was less than 5.

Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked once. In order

to identify the independent predictors of WPV scores, multiple linear regression analysis was used, and analysis of variance for the full

Results

Table 1: Indicate that the highest percentage of staff nurses (61.1%) had high level of continuance commitment, while (71.4%) of them had low level of affective commitment.

Table 2: shows that the great majority of the staff nurses had high level of individual knowledge sharing (81.7%) and (84.9%) of them had high level of organizational knowledge sharing.

Table (1): organizational commitment among staff nurses in the study sample (n=126).

Organizational commitment	Frequency	Percent
Affective :		
High	36	28.6
Low	90	71.4
Continuance :		
High	77	61.1
Low	49	38.9
Normative;		
High	57	45.2
Low	69	54.8

Table (2): knowledge sharing among staff nurses in the study sample (n=126)

Knowledge sharing	Frequency	Percent
Individual:		
High	103	81.7
Low	23	18.3
Organizational:		
High	107	84.9
Low	19	15.1

regression models was done. Statistical significance was considered at p-value < 0.05.

Table 3: point to statistically significant differences between the two study hospitals in their staff nurses' affective ($p=0.02$) and normative ($p= <0.001$) organizational commitment. It can be noticed that both types of commitment were higher among the staff nurses working in Dar El-Shefa Hospital. Although these staff nurses were also having higher level of organizational knowledge sharing, the difference did not reach statistical significance ($p=0.08$)

Table (3): comparison of organizational commitment and knowledge sharing among staff nurses in the two study hospitals.

	Hospital				x ² test	p- value
	Ain-shams (n=70)		Dar El-Shefa (n=56)			
	No.	%	No.	%		
Commitment						
Affective:						
High	14	20.0	22	39.3		
Low	56	80.0	34	60.7	5.67	0.02*
Continuance						
High	38	54.3	39	69.6		
Low	32	45.7	17	30.4	3.09	0.08
Normative						
High	22	31.4	35	62.5		
Low	48	68.6	21	37.5	12.12	<0.001*
Knoeledge sharing:						
Individual:						
High	56	80.0	47	83.9		
Low	14	20.0	9	16.1	0.32	0.57
Organizational:						
High	56	80.0	51	91.1		
Low	14	20.0	5	8.9	2.98	0.08
Total:						
High	58	82.9	51	91.1		
Low	12	17.1	5	8.9	1.80	0.18

(*) Statistically significant at $p < 0.05$

Discussion

The study results lead to the conclusion that the staff nurses' in the study settings have low affective organizational commitment, with better continuance commitment. The majority of these staff nurses had high level of all types of knowledge sharing. Affective and normative commitment are positive predictors of organizational knowledge sharing, whereas normative commitment is a negative predictor. The work hospital has significant influences on nurses' organizational commitment and knowledge sharing, in addition to age, gender, higher nursing qualification and experience years.

The factors having a significant influence on staff nurses' organizational continuance commitment in the current study were their nursing qualification and current experience years. Thus, the nurses carrying a bachelor degree and current experience less than five years had higher level of continuance commitment. However, only the effect of higher qualification was confirmed in correlation and

regression analyses. The finding is in agreement with **Faraji et al. (2015)** whose study in Iran reported a significant association between nurses' organizational commitment and the level of their nursing qualification.

At the other extreme, only around one-fourth of the staff nurses in the current study were having a high level of affective commitment. This finding of extremely low level of affective commitment among the staff nurses reflects the lack of their feelings of individual identification and attachment with their workplace, which is often related to the type of leadership and its support. This low level of affective organizational commitment is of great concern since it may predict leaving work as shown by **Gaudenz et al. (2017)** in a study in Switzerland where nurses' low affective organizational commitment was a strong predictor of their intention to leave. Moreover, in agreement with the present study, a study on Portuguese nurses demonstrated a similarly low level of organizational affective commitment, and this had a significant association with the leadership scores (**Nunes and Gaspar, 2017**).

Conclusion

The study results lead to the conclusion that the staff nurses in the study settings have low affective organizational commitment, with better continuance commitment. The majority of these staff nurses had high level of all types of knowledge sharing. Affective and normative commitment are positive predictors of organizational knowledge sharing, whereas normative commitment is a negative predictor. The work hospital has significant influences on nurses' organizational commitment and knowledge sharing. In addition to age, gender, higher nursing qualification, and experience years.

Recommendations

In view of the results, the study recommends the following:

- Increase intellectual capital of staff nurses by converting individual knowledge into organizational knowledge through sharing.
- Provide all facilities needed to improve knowledge sharing, and encourage it through a reward system.
- Nurse managers should encourage the process of knowledge sharing among their subordinates and demonstrate its importance in improving organizational commitment.
- More efforts are needed from nurse managers to improve affective organizational commitment among staff nurses, this may include activities to ameliorate their personal identification with the goals and values of the organization.
- Further research is suggested to assess the effects of organizational, individual, and environmental factors separately on knowledge sharing.

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