The influence of leadership behavior, organizational commitment, organizational support, subjective career success on organizational readiness for change in healthcare organizations

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Abstract

Purpose – The purpose of this study is to investigate the influence of leadership behavior, organizational commitment, organizational support and subjective career success on organizational readiness for change in the healthcare organizations. The authors want to determine if nurses who had higher levels of organizational commitment, organizational support and subjective career success relationships were more open and prepared for change.

Design/methodology/approach – Cross-sectional, descriptive-correlational survey design was conducted using self-reported questionnaires to collect data from registered nurses.

Findings – The subjective career success was the strongest predictors ($\beta = 0.36, p < 0.001$) followed by leadership behavior ($\beta = -0.19, p = 0.03$) and participants' age ($\beta = -0.13, p = 0.049$).

Research limitations/implications – This study highlights the influence of leadership behavior, organizational commitment, organizational support and subjective career success on the organizational readiness for change in healthcare organizations. Therefore, this study forms baseline data for future local and national studies. Moreover, it will strengthen the research findings if future research includes a qualitative approach that explores other healthcare professionals regarding readiness for organizational change.

Practical implications – This study provides information to policymakers and healthcare leaders who seek to improve management and leadership skills and respond to organizational change efforts.

Social implications – It is important to know the extent to which healthcare professionals, especially nurses, understand how the influence of organizational support and organizational commitment on organizational readiness for change, as well as why specific leadership behavior and subjective career success, is important in implementing the change.

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Introduction

Healthcare system in literature is considered to be one of the most complicated interrelated components (Glouberman and Mintzberg, 2001; Reay et al., 2016), especially managing healthcare activities and planning for change. Researchers such as Andersson (2015) and Kannampall et al. (2011) had pointed out the complexity of healthcare and its effect on the quality of patients’ care and the readiness of employees for organizational change.

Healthcare system in Jordan is changing rapidly; nursing care in particular is facing forces such as increasing demands, equity in the face of decreasing resources and demand for more public accountability. Ongoing change has been essential in nursing because of rapid growth, new nursing ventures, exciting opportunities and novel leadership and management approaches (Eliopoulos, 2013). Whatever is the reason, continuous change is required for nursing care success (Khachian et al., 2013). However, to accomplish the change, an organization must be ready for change (Collins and Hewer, 2014). Researchers such as Johansson et al. (2014) and Sterns et al. (2010) stated that subordinates must be prepared and ready for change. Bernerth (2004, p. 36) mentioned in his study; “researchers and practitioners have both found employee readiness to be a critical factor in successful change efforts”. Rowden (2001) emphasized that for a healthcare institution to be moved toward a learning organization, practitioners and the institution must be in constant readiness. For directors of nursing to help nurses prepare for change, they should create readiness for change and overcoming resistance (Cummings and Worley, 2005). Hence, the purpose of this research study is to investigate the influence of leadership behavior, organizational commitment, organizational support and subjective career success on organizational readiness for change in healthcare organizations.

Bernerth (2004, p. 40) mentioned that “Readiness is more than understanding the change, readiness is more than believing in the change, readiness is a collection of thoughts and intentions toward the specific change effort”. Weiner et al. (2008) in their review of literature pointed out that organization readiness for change is a critical precursor to the successful implementation of complex changes in healthcare settings. Susanto (2008, pp. 50-62) stated that:

[...] employees’ readiness for change is involved with once beliefs, attitudes, and intentions regarding the extent to which changes are needed and their perception of individual and organizational capacity to successfully make those changes. Readiness is a state of mind about the need.

Therefore, nurses are ready for change when they understand, believe and intend to change because of the perceived needs.

The readiness for change among nurses is a key aspect of success in healthcare organizations (Rowden, 2001; Armenakis et al., 1993), and it is recognized as a critical factor in the success of organizational change efforts. Indeed, they should be prepared cognitively and emotionally for change (Jones et al., 2005). However, readiness itself has not been well-defined (Findlay and Verhoef, 2004), which has led to considerable vagueness around its
theoretical role in organizational change efforts, as well as the identification of multiple variables that might influence nurses readiness. According to the transtheoretical model of change, nurses proceed through stages of change, beginning with not considering change at all through the final stage of maintenance (Velicer et al., 1998; Armenakis and Bedeian, 1999). The theoretical framework around nurses' readiness for change arises from a combination of personal and organizational characteristics (George and Jones, 2007). Empirical studies have supported this framework (Cunningham et al., 2002; Leiter and Harvie, 1998). On a theoretical level, an examination of the relationships between leadership behavior, organizational commitment, organizational support and subjective career success may help provide a better understanding of how and why organizational change efforts succeed, which suggests that organizational factors significantly impact individual behavior in organizations.

Researchers stated in their work that organizational change was affected by leadership behavior as well as work related behavior, such as organizational commitment, organizational support, and subjective career success. Organizational commitment is employees' attitudes and feelings toward their employing organization (Bishop et al., 2005, p. 157). According to Mathews and Shepherd (2002, p. 369):

> [...] committed employees have a strong belief in and acceptance of the organization’s goals and values, show a willingness to exert considerable effort on behalf of the organization and, have a strong desire to maintain membership with the organization.

Yeh (2014) clarified that organizational commitment has three types, namely, affective (identification), continuance (involvement) and normative (loyalty). Affective is focused on the emotional feeling and the attachment of the employees toward their organization. The continuance construct is the second part that encompasses the realization of the cost of leaving the organization which is extremely high. Moreover, it consists of the willingness of a nurse's effort for the hospital beyond expectation even if it takes extra work. Normative commitment to the organization is determined by feelings of obligation and duty of nurses to their organizations and their intentions to leave. This type of commitment encourages nurses to be optimistic toward readiness for change.

A study directly connecting organizational commitment, leadership behavior, organizational support, subjective career success and readiness for organizational change has not yet been reported in nursing or in healthcare literature. Nordin (2011) indicated that work-related behaviors were positively and fairly linked with organizational readiness for change. Moreover, Devos et al. (2002) stated that the failure of organizational change is often because of the lack of commitment and inspiration of the staff. Hence, organizational change advertisers improve the success of change efforts through generating readiness for change. However, some studies have found indirect correlations between these constructs. Eby et al. (2000) found that employees involved in change activities are expected to have more higher readiness levels. Weber and Weber (2001) explained that employees with high efforts of involvement in their organizations were more ready for organizational change. Researchers such as Nohe et al. (2013), Al-Hussami et al. (2011), Goulet and Singh (2002), and Yoon and Thye (2002) have found relationships between organizational commitment and work-related constructs with a possible correlation with readiness to change. Eby et al. (2000) reported that perceived organizational support was associated to readiness for change. Weber and Weber’s (2001) discovered that workplace improvement is correlated to organizational readiness for change. Cunningham et al. (2002, p. 387) revealed a weak relationship between readiness and social support. The authors mentioned, “These findings suggest that supportive colleagues may play a more important role in employee efforts to
cope with the stress of organizational change”. Mitchell et al. (2012) stated that organizational support might increase organizational readiness for change.

Transformational nurse leaders are often described as effective; indeed, they facilitate positive change by inspiring, motivating nurses and building trust within the group. It has been documented in literature that transformational nurse managers were proven to enhance nurses’ retention, effective job performance and readiness for change (Al-Hussami et al., 2014; O’Neil et al., 2008). Transformational leaders are classified as the full range of leadership, as it is an active process by which nurses inspire, engage and motivate their employees to perform beyond expectation and achieve what they think is not achievable in the interest of the organization (O’Neil, 2013). Schwartz et al. (2011) described the integration of transformational leadership behaviors in nursing leadership as a strategy to achieve excellence in the nursing care. Schwartz et al. explained how transformational leadership behaviors were adopted at all levels of nursing leadership in their organizations and asserted that the nurse leaders’ ability to effect change and inspire the nurses to higher achievement is related to their leadership style. The literature supported the positive effect of transformational leadership on readiness for change including willingness of the nurses to exert extra efforts at work because of leaders’ behaviors (Andrews et al., 2012; Casida and Parker, 2011; Cummings et al., 2010).

Career success in general is the positive work-related outcome and achievement one builds up as a result of work experiences (Zacher, 2014), and it can be conceptualized as objective successes (e.g. pay and hierarchical position) and subjective career success, which is the employees’ evaluation of their career (Chudzikowski, 2012). Subjective career success in particular can be divided into self-referent success and as other referent success. Self-referent subjective career success is considered a career satisfaction (Bozionelos, 2004), whereas the other referent success compares the employees’ career to the national standards. Few research studies have been conducted on the topic of subjective career success. Therefore, little is known about the readiness of change gained as a result of subjective career success.

The relationships between readiness for change and demographic variables have been documented (Guerrero and Kim, 2013; Steinke et al., 2013). Hanpachern (1997) found that readiness for change was correlated to length of stay but not associated to age, gender, education or marital status. Cunningham et al. (2002) stated that there is no relationship between readiness for change, gender and marital status. Weber and Weber (2001) found no relationship between readiness for change, experience and level of education.

The purpose of conducting this survey, regarding the influence of leadership behavior, organizational commitment, organizational support, subjective career success on organizational readiness for change in healthcare organizations, is to provide information to policymakers and healthcare leaders who seek to improve management and leadership skills and respond to organizational change efforts. It is important to know the extent to which healthcare professionals, especially nurses, understand how the influence of organizational support and organizational commitment on organizational readiness for change, as well as why specific leadership behavior and subjective career success, is important in implementing the change.

The purpose of this study is to investigate the influence of leadership behavior, organizational commitment, organizational support and subjective career success on organizational readiness for change in acute healthcare settings. The authors conclude if nurses who had higher levels of organizational commitment, organizational support and subjective career success relationships were more prepared and ready for change. If the author felt that significant findings were obtained, suggestions for types of change
interventions would surface. To carry out this purpose, the following research questions will be explored:

**RQ1.** What is the relationship between the constructs (leadership behavior, organizational commitment, organizational support, subjective career success) and the nurses’ perceived readiness for organizational change?

**RQ2.** What are the relationships between various demographics (gender, employee age, marital status, length of time with employer, level of education and yearly household income) and each of the study variables (readiness for change, leadership behavior, organizational commitment, perceived organizational support and subjective career success relationships)?

**RQ3.** What is the strongest predictor of the nurses’ perceived readiness for organizational change of the leadership behavior, organizational commitment, perceived organizational support or subjective career success?

**RQ4.** To assess whether the association of readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success is similar in men and women.

**RQ5.** To determine the differences among nurses regarding their readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success in relation to practice sector.

**Study design**
A cross-sectional, descriptive-correlational survey design was conducted using self-reported questionnaires to collect data from registered nurses (RNs). This design method used to gather data from a large number of participants, and the use of questionnaire eliminated the effect of a researcher on participants that allowed them more freedom to answer the questions honestly and openly (Polit and Beck, 2014).

**Setting**
The healthcare system in Jordan is divided into public and private institutions. The public sector is divided into the ministry of health, royal medical services and public university hospitals. Ministry of health hospitals operates 30 hospitals which include 3,953 nurses. The royal medical hospitals have 2,619 nurses. The public university hospitals are the Jordan University Hospitals which have 534 nurses and King Abdallah Hospital that has 411 nurses. The private sector has 10,008 nurses. The eligibility criteria for hospitals selection was hospitals having medical, surgical, emergency rooms, critical care units and have specialized department of continuing education. In addition, only hospitals located in Amman are included in the study.

**Sample size**
Based on power analysis, G* power program version 3.0 (Faul et al., 2009) with minimal alpha significance level 0.05, power 0.80 and medium effect size, the minimum sample size is 120 participants. Although this number is needed, more participants were included to produce significant and reliable findings and to compensate for uncompleted questionnaires. However, taking into consideration the response rate and attrition rate (20 per cent), a total of 300 nurses were invited to participate in this study.
Population
Target populations were the RNs who work in healthcare sectors in Amman. The inclusion criteria included the following: working as a full-time nurse, with a minimum of one year experience in the working area and possessing an RN license as a minimal level of certification. Exclusion criteria included: nursing students and part-timers.

Sample and sampling
To obtain the subjects for this study, a multi-stage sampling technique was used. The authors selected hospitals from the two healthcare sectors located in Amman, using simple random technique including two public hospitals and two private hospitals. However, a convenience sample was applied for nurses. Data were collected from nurses whom were voluntarily willingly participated and fit into the inclusion criteria.

Ethical consideration
The research project was peer reviewed by the Scientific Research Committee and Institutional Review Board of the Faculty of Nursing at the University of Jordan. Ethical approval was obtained from the School of Nursing, the University of Jordan. In addition, approvals were gained from the ethical committees at each hospital involved before the data collection begins to gain access to registered nurses. Ethical aspects of the study were undertaken according to the principles of research ethics. Participation in the study was voluntary. Each participant was invited to participate in the study face to face and the purpose of the study was explained. The participant’s rights to withdraw from the study at any time were emphasized. It is anticipated that there are no perceived personal or professional risks associated with participation in this survey. The benefit from the study was raising awareness of organizational change. Remuneration for research inconveniences was offered. The personal identity was kept confidential and anonymous.

Data collection
The data collection occurred using a self-reported questionnaire that consisted of two parts:

1. a background questionnaire; and
2. nurses’ organizational readiness for change.

Instrument was pre-tested by a group of the RNs in one hospital to confirm the content validity and the clarity of the language of the instrument in English. The researcher provides explanations for the aims and the procedure of the study for the directors of nursing and for each department head at the participating hospitals. After taking the permission from them, the researcher invited the participants to a lecture room in each department to distribute questionnaires and asked them to fill out the questionnaires and return them to the researcher when finished.

Instrumentation measurements of variables
The nurses’ organizational readiness for change instrument was used in this study. It is a 95-item survey designed by the researcher. All statements were tested carefully against the purpose of measuring the construct intended. No items were chosen that obviously are similar to other items covering the construct. All statements were closed, with a seven-point Likert scale except for leadership behavior. A Likert scale was chosen because respondents can explicitly understand it and the scale discriminates well between respondents’ perceptions, their degree of agreement or disagreement. The format of the
Likert scale is straightforward and flexible. A note should be made to the fact that some of the measures are negatively worded, whereas others are positively worded. This was done to reduce the likelihood of agreement bias.

The perceived readiness for change served as the dependent variable, whereas leadership behavior, organizational commitment, organizational support and subjective career success served as independent variables, and the intervening demographic variables included gender, age, marital status, educational level, yearly household income and length of time with an organization. The author adapted five existing scales for this research project, namely, readiness for change, leadership behavior, organizational support, organization commitment and subjective career success in the workplace. In addition, the author asked six demographic questions. Hanpachern et al.’s (1998) original 10-item readiness for change scale was used to measure the organizational readiness for change, with slight alterations, based in part on McNabb and Sepic (1995). Participants were asked to circle one of the seven numbers on a Likert scale (1 = very unlikely; 7 = very likely). Hanpachern et al.’s (1998) pilot tested and found the Cronbach’s $\alpha$ of the scale was measured to be 0.82 which indicates good internal consistency.

The independent variable, organizational commitment measured by organizational commitment questionnaire” (Mowday et al., 1982) with an estimated Cronbach’s $\alpha$ 0.70 (Yoon and Thye, 2002). This is a 23-item instrument developed by Mowday et al. which measures the organizational commitment of employees by tapping the three concepts, namely, affective, continuance and normative. In total 16 items from Eisenberger et al.’s (1986) “survey of perceived organizational support” scale were used to measure the perceived organizational support. The Cronbach’s $\alpha$ for these items was found to be reliable at 0.75 (Yoon and Thye, 2002).

To measure employees’ perceptions of their leadership behavior, nurses were asked to respond to 21 descriptive elements of leadership behavior developed by Bass and Avolio (1992). The multifactor leadership questionnaire (MLQ) form 6S (Bass and Avolio, 1992) included 21 items to measure the four factors of transformational leadership, two factors of transactional leadership and one factor of laissez fair. Respondents were requested to answer the MLQ by rating how frequently their current immediate supervisor had displayed the behaviors described by using a five-point scale (1 = not at all; 2 = once in a while; 3 = sometimes; 4 = fairly often; 5 = frequently, if not always). Two scales were used to measure the subjective career. Both measures are on a seven-point Likert scale (1 = completely disagree to 7 = completely agree). The first assessed intrinsic job success (Nabi, 2001). This seven-item measure of subjective success focused on the perceptions of work-role and interpersonal success. The second scale focused on broader career-related aspects of subjective success Greenhaus et al., 1990) and found with high alpha reliability in previous studies (Judge et al., 1995). The internal consistency for the current study was 0.899 for organizational commitment, 0.878 for organizational support, 0.943 for leadership behavior, 0.918 for organizational success and 0.821 for organizational readiness for change.

**Data management plan**

The researcher was responsible for data collection process, data entry, data processing and data analysis. The data from the survey was analyzed using the statistical package for the social sciences (for Windows version 21). Frequencies and percentages computed to determine sample characteristics. Data were analyzed using descriptive and inferential statistical procedures. Pearson’s correlation was used to examine overall relationships between the leadership behavior, organizational commitment, organizational support, subjective career success and organizational readiness for change. Furthermore, multiple
regression and other relevant tests were used to examine effectiveness of demographics and personal characteristics within participant’s readiness for organizational change.

Sample characteristics
A total of 300 nurses were invited to participate in this study; 222 nurses participated with a response rate of 74 per cent. The majority of them were men (56 per cent, \( n = 124 \)), who worked at educational healthcare sectors (63 per cent, \( n = 140 \)) and had a bachelor degree in nursing (93 per cent, \( n = 207 \)) (Table I). Organizational commitment, perceived organizational support, leadership behavior, subjective career success and perceived readiness for change scales were transformed to scales out of 10 to facilitate comparisons among the study variables. As displayed in Table I, the mean scores of these variables are comparable, similar to each other.

Analysis of relationships among study variables
Pearson’s product–moment correlation was carried out to examine the relationship between the study variables. Statistically significant low negative relationship was found between participants’ age and perceived organizational support, \( r (222) = -0.142, p = 0.035 \). Moderate and positive significant relationships were found among: organizational commitment and perceived organizational support \( r (222) = 0.604, p < 0.01 \), organizational commitment and leadership behavior \( r (222) = 0.505, p < 0.01 \), perceived organizational support and leadership behavior \( r (222) = 0.580, p < 0.01 \), perceived organizational support and subjective career success \( r (222) = 0.527, p < 0.01 \) and leadership behavior and subjective career success\( r (222) = 0.589, p < 0.01 \). Finally, low positive relationships were found between organizational commitment and

<table>
<thead>
<tr>
<th>Variable</th>
<th>( n ) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>124 (56)</td>
</tr>
<tr>
<td>female</td>
<td>98 (44)</td>
</tr>
<tr>
<td>Healthcare sectors</td>
<td></td>
</tr>
<tr>
<td>Educational</td>
<td>32 (14.4)</td>
</tr>
<tr>
<td>Governmental</td>
<td>140 (63.1)</td>
</tr>
<tr>
<td>Private</td>
<td>50 (22.5)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>84 (38)</td>
</tr>
<tr>
<td>Married</td>
<td>138 (62)</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>207 (93.2)</td>
</tr>
<tr>
<td>Master</td>
<td>11 (5)</td>
</tr>
<tr>
<td>Diploma</td>
<td>4 (1.8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>Mean (SD) out of 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants age</td>
<td>29 (5.5)</td>
<td>6.03 (0.95)</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>97.2 (15.5)</td>
<td>5.7 (1.02)</td>
</tr>
<tr>
<td>Perceived organizational support</td>
<td>63.3 (11.6)</td>
<td>6.5 (1.8)</td>
</tr>
<tr>
<td>Leadership behavior</td>
<td>68.4 (18.6)</td>
<td>6.1 (1.5)</td>
</tr>
<tr>
<td>Subjective career success</td>
<td>76.6 (18.6)</td>
<td>6.3 (0.95)</td>
</tr>
<tr>
<td>Perceived readiness for change</td>
<td>43.9 (6.7)</td>
<td></td>
</tr>
</tbody>
</table>

Table I. Socio-demographic characteristics, \( N = 222 \)
subjective career success \( r (222) = 0.498, p < 0.01 \), organizational commitment and perceived readiness for change \( r (222) = 0.134, p = 0.04 \) and subjective career success and perceived readiness for change \( r (222) = 0.25, p < 0.01 \) (Table II).

### Predictors of perceived readiness for change

Standard multiple linear regression analysis was applied to examine the predictors of perceived readiness for change. To test the individual contribution of individual predictors, the \( t \)-ratio for the individual regression slope was examined and revealed that out of five variables that were entered, only four predictor variables were found significant predictors of perceived readiness for change. The four predictor variables were subjective career success, leadership behavior, organizational commitment and participants’ age with their respective \( t \) and \( p \) values \( t = 4.268, p = 0.000, t = 2.224, p = 0.027, t = 1.997, p = 0.047, t = 1.982 \) and \( p = 0.046 \). However, the organizational support was excluded because it did not contribute significantly to the variance of organizational readiness for change. The overall regression, including all five predictors, was statistically significant \( F (2, 218) = 5.6, p < 0.001, R^2 = 0.12 \). Moreover, the total amount of variance of the criterion variable that was predictable from the three predictors was 12 per cent. The subjective career success was the strongest predictors \( (\beta = 0.36, p < 0.001) \) followed by leadership behavior \( (\beta = -0.19, p = 0.03) \) and participants’ age \( (\beta = -0.13, p = 0.049) \) (Table III). This indicated that organizational readiness for change could occur in situation where nurses can exert extra efforts at work because of leaders’ behaviors and the relationship between nurses and institution. A further analysis was carried out on the three components of commitment, namely, affective, continuance and normative to examine which of these components could be identified as the significant predictors of organizational readiness of change.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Organizational commitment</td>
<td>-0.020</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perceived organizational support</td>
<td>-0.142*</td>
<td>0.604**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Leadership behavior</td>
<td>-0.056</td>
<td>0.505**</td>
<td>0.580**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Subjective career success</td>
<td>-0.073</td>
<td>0.498**</td>
<td>0.527**</td>
<td>0.589**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. Perceived readiness for change</td>
<td>-0.128</td>
<td>0.134*</td>
<td>0.043</td>
<td>0.014</td>
<td>0.25**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes:** *\( p \leq 0.05 \); **\( p \leq 0.01 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>UnSEβ</th>
<th>( t ) value</th>
<th>( p ) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>42.6</td>
<td>3.8</td>
<td></td>
<td>11.154</td>
<td>0.000</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>0.058</td>
<td>0.029</td>
<td>0.134</td>
<td>1.997</td>
<td>0.047</td>
</tr>
<tr>
<td>Subjective career success</td>
<td>0.129</td>
<td>0.030</td>
<td>0.360</td>
<td>4.268</td>
<td>0.000</td>
</tr>
<tr>
<td>Participants age</td>
<td>-0.155</td>
<td>0.078</td>
<td>-0.129</td>
<td>-1.982</td>
<td>0.046</td>
</tr>
<tr>
<td>Organizational support</td>
<td>-0.076</td>
<td>0.052</td>
<td>-0.131</td>
<td>-1.455</td>
<td>0.147</td>
</tr>
<tr>
<td>Leadership behavior</td>
<td>-0.069</td>
<td>0.031</td>
<td>-0.194</td>
<td>-2.224</td>
<td>0.027</td>
</tr>
</tbody>
</table>

**Notes:** Predictors perceived readiness for change final model produced at \( \alpha = 0.05, F = 5.6, p < 0.001, R^2 = 0.12 \).
Based on the enter method, as shown in Table IV, the finding reveals that only two predictors’ variables were found to be significant. The predictor variables were affective commitment where the \( t \)-value was 2.227, \( p = 0.027 \) and continuance commitment where the \( t \)-value was 1.98 and \( p = 0.04 \). However, normative commitment with \( t = 1.36 \) and \( p = 0.175 \) was excluded because it did not contribute significantly to the variance of nurses organizational readiness for change. In addition, based on the adjusted \( R^2 \) value, the overall regression model was unsuccessful in explaining only 3 per cent of the adjusted variance in organizational readiness for change.

### The difference among male and female nurses in regard to readiness for change

Independent \( t \)-test was used to examine the difference between male and female nurses concerning readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success. The normality of the five variables was tested. The homogeneity of variances of these variables for the two groups (males and females) was examined. The researchers carried out the study through Levene’s test for equality of variances. The results of Levene’s tests were not significant for the readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success (\( p = 0.665; p = 0.564; p = 0.811; p = 0.957; p = 0.186 \), respectively) (\( \alpha = 0.05 \) with a CI of 95 per cent). Thus, the results of the independent \( t \)-test showed no statistically significant differences in scoring of readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success among male and female nurses (Table V).

### Table IV. Multiple regression analysis of organizational readiness for change with the three components of organizational commitment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized coefficient ( \beta )</th>
<th>Standardized coefficient ( \beta )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>40.887</td>
<td></td>
<td>19.570</td>
<td>0.000</td>
</tr>
<tr>
<td>Affective</td>
<td>0.175</td>
<td>0.226</td>
<td>2.227</td>
<td>0.027</td>
</tr>
<tr>
<td>Continuance</td>
<td>0.131</td>
<td>0.139</td>
<td>1.980</td>
<td>0.040</td>
</tr>
<tr>
<td>Normative</td>
<td>0.140</td>
<td>0.138</td>
<td>1.360</td>
<td>0.175</td>
</tr>
</tbody>
</table>

Notes: \( F \)-Statistic = 3.029; significant \( \leq 0.05 \); adjusted \( R^2 = 0.028; R^2 = 0.041 \)

### Table V. The difference between male and female nurses in respect to readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Student ( t )-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Readiness for change</td>
<td>43.64 (7.02)</td>
<td>44.14 (6.10)</td>
</tr>
<tr>
<td>Leadership behavior</td>
<td>68.94 (18.94)</td>
<td>67.87 (18.14)</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>96.51 (15.32)</td>
<td>98.11 (15.37)</td>
</tr>
<tr>
<td>Organizational support</td>
<td>62.79 (11.53)</td>
<td>63.93 (11.53)</td>
</tr>
<tr>
<td>Subjective career success</td>
<td>76.72 (17.92)</td>
<td>76.53 (19.31)</td>
</tr>
</tbody>
</table>

Notes: **Significant at \( p \leq 0.01 \); *significant at \( p \leq 0.05 \)**
Comparison of nurses’ practice sector in relation to readiness for change

Comparison of nurses’ practice sector in relation to readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success was presented in Table V. A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between nurses practice area and the dependent variables. The dependent variables were readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success scores. The independent variable was nurses practice sector: governmental, private and university hospitals. A p value of less than 0.05 was required for significance. The one-way ANOVA was significant for readiness for change $F(2, 219) = 3.30, p = 0.038$, leadership behavior $F(2, 219) = 6.85, p = 0.001$, organizational commitment $F(2, 218) = 10.75, p = 0.000$, organizational support $F(2, 218) = 13.48, p = 0.000$ and subjective career success $F(2, 219) = 7.36, p = 0.001$. Because the overall tests were significant, post hoc tests using the Scheffe test were conducted to compare the means of the three groups with the different dependent variables. The results indicated that nurses in the private sector were more ready for change than nurses in the governmental and educational sectors. In addition, nurses in the governmental sector scored higher in leadership behavior and subjective career success than nurses in private and educational sectors. However, nurses in the educational sector scored higher in organizational support than nurses in governmental and private sectors. However, nurses working in the governmental sector were much committed to their organizations than other sectors (Table VI).

Discussion

Globally speaking, the readiness for change literature agrees with the current study findings that leadership behavior, organizational commitment and subjective career success change (Barr, 2002; Holt et al., 2014). In Jordan, the situation was not clear because there is a lack of published studies regarding nurses’ perceived readiness of change. The current study intends to investigate whether the leadership behavior, organizational commitment, organizational support and subjective career success influence the organizational readiness for change in healthcare organizations. The authors want to determine if nurses who had higher levels of organizational commitment, organizational support and subjective career success relationships were more open and prepared for change. If the authors felt that supportive findings were discovered, implications for types of change interventions would surface. Moreover, this study has explored nurses’ knowledge regarding readiness of change.

Table VI.

Comparison of nurses’ practice sector in relation to readiness for change, leadership behavior, organizational commitment, organizational support and subjective career success

<table>
<thead>
<tr>
<th>Organizational variables</th>
<th>Governmental (n = 140)</th>
<th>Private (n = 49)</th>
<th>Educational (n = 32)</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness for change</td>
<td>43.69 (6.88)</td>
<td>45.62 (6.19)</td>
<td>41.87 (5.54)</td>
<td>2</td>
<td>3.30</td>
<td>0.038*</td>
</tr>
<tr>
<td>Leadership behavior</td>
<td>71.70 (17.48)</td>
<td>60.94 (19.93)</td>
<td>66.09 (17.66)</td>
<td>2</td>
<td>6.85</td>
<td>0.001**</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>100.44 (15.45)</td>
<td>89.30 (13.80)</td>
<td>95.25 (12.38)</td>
<td>2</td>
<td>10.75</td>
<td>0.000***</td>
</tr>
<tr>
<td>Organizational support</td>
<td>66.17 (10.39)</td>
<td>57.56 (11.58)</td>
<td>95.68 (12.08)</td>
<td>2</td>
<td>13.48</td>
<td>0.000***</td>
</tr>
<tr>
<td>Subjective career</td>
<td>79.97 (19.08)</td>
<td>73.00 (15.02)</td>
<td>67.71 (17.27)</td>
<td>2</td>
<td>7.36</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

Notes: **Significant at $p \leq 0.01$; *significant at $p \leq 0.05$
The study results confirmed that the work-related behavior had a moderate influence on the readiness for change, and thus, it is apparent that there is a need to recognize those variables to make the changes in efforts effective. It was also noted that readiness for change played role in explaining four variables by identifying the increased variances: subjective career success, leadership behavior, participants’ age and organizational commitment accounted for 10 per cent of the variance in readiness for change, while subjective career success alone explained 6 per cent of the variance in the readiness for change. The overall regression model was successful in explaining approximately 12 per cent of the adjusted variance in organizational readiness for change. The findings statistically showed that subjective career success had contributed the strongest unique contribution to explain organizational readiness for change.

The result of this study was consistent with the research done by Nordin (2011) that showed the leadership behavior contributed to organization readiness for change. The current result further supported previous findings on significance of nurses’ commitment for successful organizational change intervention (Iverson, 1996). Nonetheless, based on the multiple regression analysis, the results showed that the three components of organizational commitment accounted for low to moderate amount of the variance of organizational readiness for change. However, affective commitment showed the strongest contribution to explain organizational readiness for change. This could indicate the nurses’ relationship with their work places. Therefore, the study findings confirmed the evidence from the nursing literature that affective hospital commitment was among the important factors of successful organizational change (Iverson, 1996; Nordin, 2011). According to Iverson, the more the nurse feels attached to the hospital, the higher is her commitment and the greater is her willingness to accept organizational change.

Previous research has highlighted the influence of leadership behavior on the readiness for change. According to the leadership theory (Northouse, 2015), transformational leadership facilitates positive change by inspiring, motivating nurses and building trust within the group. Also, the findings of this research had linked the leadership behavior to the readiness for change which is similar to what Nohe et al. (2013) found in their study. However, Nordin (2011) suggested otherwise, the results of his study showed that leadership behavior was not a statistically significant predictor of organizational readiness for change. On the other hand, the result of this study indicated that leadership behavior was a strong predictor of readiness for change. Even though the beta value of the leadership behavior was comparatively smaller than the other variables, it still has significant bearing on organizational readiness for change.

This study has some limitations that restrict the interpretation of its findings. First, measures of all concepts were gathered at the same time but through different questionnaires. Thus, common method of discrepancy exists. Owing to the cross-sectional nature of this study, causal inference would be difficult and may provide differing results if another time frame had been chosen. Second, although our study was conducted in the healthcare system, its results are not represented of all healthcare professionals; therefore, caution must be exercised in generalizing our findings. Third, regarding the study tool, the questionnaire was designed in English. It was based on research studies written in English. This may be a limitation to understanding by the nurses. However, nurses working in hospitals had studied in English and it is the second language in the country.

The results can be considered to support evidence-based practice nationally and internationally. Therefore, the study implications for practice can be validly implemented in
the region. Nursing administration should consider aspects of organizational change when planning for in-service or continuing educational programs, to enable nurses attain and maintain their competence in readiness for organizational change and to enhance their knowledge and attitudes. Moreover, the study findings emphasized the importance of the study constructs and their influence on readiness for change. For the successful acceptance of the constructive change, nurse leaders should pay attention to promoting readiness for change in their healthcare institutions.

Also, this study is an addition to the current body of knowledge. In addition, this study highlights the influence of leadership behavior, organizational commitment, organizational support and subjective career success on the organizational readiness for change in healthcare organizations. Therefore, it forms baseline data for future local and national studies. Moreover, it will strengthen the research findings if future research includes a qualitative approach that explores other healthcare professionals regarding readiness for organizational change.

This study was conducted on nurses currently working in healthcare institutions in Jordan, providing care and occupying administrative positions at the time of data collection. Therefore, the study is highly related to present evidence-based practice, which helps to unveil issues that need special attention and proper solutions. In addition, a relatively high response rate (74 per cent, \( n = 222 \)) was achieved, indicating the perceived significance of the studied problem to the participants. In addition, this study has supplemented the body of literature in regard to readiness in healthcare setting. The method to collect data for this study enhanced the strength of the results and the credibility of the analyzed data. The results can serve as baseline data to be used by nurses, nursing administrators, educators and researchers to build upon.

Replication of the study in other healthcare institutions would be highly desirable. In this regard, similar studies on factors affecting readiness for change at other healthcare sectors such as ministry of health or military hospitals would seem appropriate. In addition, the study needs to be carried out not only through questionnaire survey but also through experimental studies and practical expert interviews in the healthcare sector sites, which would be good surface. Therefore, benefits and practical implications would be evident, and the result of this research will deliver useful information for contribution to the implementation of organizational change and the readiness of nurses in the healthcare institutions.

**Conclusion**

Based on the results of this study, the nurses’ responses to the survey questions reflected their relative understanding of the perceived readiness for change. However, the very wide dispersion of the scores reflected considerable variability in organizational support and normative organizational commitment among the participating nurses. The empirical findings showed how readiness for change was influenced by leadership behavior, organizational commitment and subjective career success. The main limitation of this study was that the questionnaire was designed in English and based on research studies written in English. This may be a limitation for understanding of the nurses. However, nurses working in hospitals had studied in English, and it is the second language in the country. Nevertheless, this study has strengths and many implications that may counteract these limitations. Significant implications will benefit nursing practice, administration and education, in addition to identifying potentials future research.
References


Further reading

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