

Effect of an authentic leadership educational program for first line nurse managers on nurses' work engagement and organizational citizenship behavior

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Abstract

Background: Authentic leadership is prominent to improve commitments, trust and enhance organizational outcomes. Organizational citizenship and work engagement acts as the outcomes of authentic leadership. As leaders, first-line nurse managers can use an authentic leadership style that positively effects on their nurses.

Aim: To investigate the effect of an authentic leadership educational program for first-line nurse managers on nurses' work engagement and organizational citizenship behavior.

Design: A quasi-experimental research design was utilized.

Setting: The study was carried out at Gynecology, Obstetric and Pediatric Minia University Hospital at Minia City – Egypt.

Subject: All first-line nurse managers worked in the inpatient and outpatient units (n = 27), and all nurses who worked in the same units (n = 175) were included in the study.

Tools: four tools were utilized in this research; tool I: authentic leadership knowledge questionnaire, tool II: authentic leadership self-assessment questionnaire, tool III: work engagement scale, and tool IV: organizational citizenship behavior scale

Results: knowledge level and self-assessment about authentic leadership for first-line nurse managers had low score before an educational program implementation; after implementation and after three months of program implementation they had high score with statistically significant differences; also nurses' work engagement and organizational citizenship behavior score increased after implementing authentic leadership education program for first-line nurse managers.

Conclusions: Authentic leadership educational program positively impacted on first-line nurse managers by improving their knowledge and self-assessment about authentic leadership after educational program implementation during various testing times. Also, nurses' work engagement and organizational citizenship behavior score improved after implementing an authentic educational leadership program.

Recommendations: Periodical workshops, training, seminars, and program for the first-line nurse managers to enhance their authentic leadership competencies that increase work engagement and organizational citizenship behavior for their nurses.

Keywords: authentic leadership, education program, first line nurse managers, work engagement, and organizational citizenship behavior

Introduction

Nurses' work environments play a crucial role in improving the quality of health care services by using authentic leadership style to enhance work engagement that resulted in positive organizational citizenship behavior and helps the organization sustain a healthy workforce (Enwereuzor *et al.*, 2018) [1]. Because of the apparent need for an ethical environment in organizations, authentic leadership and work engagement are currently common among many organizations, academics, and practitioners. Attempts have been made to further develop the construct by performing confirmation studies in various societies. Authentic leadership has attracted a great deal of interest in scholarly studies. The need for a more positive, genuine, and value-based form of leadership. The proponents of authentic

leadership affirm that it's potential in restoring confidence, trust, hope, flexibility, and optimism between stakeholders (Chaudhary & Panda, 2018) [2].

Banks *et al.*, (2016) [3] the most accepted definition of authentic leadership is present as a behavior pattern and environmental influences that foster self-awareness and a relationship of trust in working with followers. An internalized spiritual outlook means living one's beliefs and taking ethics into one's own hands. The greater one's open and sincere participation in knowledge sharing about one's feelings, the more honest one's communication becomes. To strike a balance in processing, the leader considers all the facts available. Authentic leaders give better guidance to their followers (Walumbwa *et al.*, 2008) [4].

An authentic leadership development strategy is needed to create desirable outcomes in today's organizations (Liu, 2017) [5]. Authentic leadership may have an effect on work engagement, employee wellbeing, citizenship behavior, and performance sustaining the workforce. Therefore, work engagement and citizenship behavior are the main interest of many organizations, and many researchers have investigated the possible predecessors and consequences of engagement (Knight *et al.* 2016 & Seada, 2017) [6,7].

Work engagement is a concept that requires professional loyalty and commitment to accomplish objectives, and engaged workers carry personal energy and passion into their work. Employees who are engaged in their jobs will work long hours and demonstrate a higher corporate level in their jobs that enhance citizenship behaviors and improves overall organizational output quality and effectiveness. (Ali *et al.*, 2018) [8].

Moreover, work engagement emphasized strengths rather than weaknesses in working in the field of positive psychology. Also, it is defined as a positive, fulfilling, and state of mind related to work. Also, work engagement includes vigor, dedication, and absorption (Wang *et al.*, 2017 & van Mol, 2018) [9, 10].

Many studies reported that an authentic leadership style that uses a perceived calling motivates nurses to engage in their work even in the burdensome environment and, although possible, implications for nurses' wellbeing. Authentic leader communication behaviors were significantly associated with work engagement among nurses that indicate positive organizational citizenship behavior (Kunie *et al.*, 2017) [11].

Authentic leadership has a vital role in organizations because it enhances work engagement, job performance, satisfaction, mental health, and organizational citizenship behavior for their employees (Liu, 2017) [5]. Organizational citizenship behavior (OCB) is defined as behaviors exceeding the formal role defined and not mentioned in the job description. OCB improves efficiency, participation and generally provides a good ambiance for nurses (Taghinezhad *et al.*, 2015) [12]. Finally, authentic leadership fosters stronger self-awareness, an internalized ethical perspective, consistent knowledge process, and emotional openness on the part of leaders working with followers, promoting meaningful self-development." (Zhou & Ren, 2012) [13].

Significance of the study

First-line nurse managers consider a key for achieving organizational goals in every unit inside the hospitals, and nurses are the backbone of nursing care in any health organization (Infantino, 2016) [14]. Nowadays, nursing leaders' leadership behaviors and the organizational environment have a critical part in enhancing the organization. Inadequacies of seasoned leadership styles and unethical leadership practices have resulted in many negative consequences for individuals and organizations. Authentic leadership is a character-driven leadership model equipped with morality, integrity, and authenticity. Moreover, encouraging organizational citizenship behavior among nurses has a significant development direction for healthcare organizations. (Alilyyani *et al.*, 2019) [15]. Also, nurses' work engagement is an antecedent predictor for

organizational socialization (OS) that leads to positive behavioral changes, which may help improve organizational citizenship behavior (OCB) and organizational performances among nurses. (Kim *et al.*, 2012) [16].

Authentic leadership programs for first-line nurse managers are often necessary. When first-line nurse managers and leaders are good prepared to take on the task of managing a unit or nursing, the results can lead to organizational outcomes such as creativity, innovation, client satisfaction, positive financial results, reduced sickness absenteeism, achieving work engagement, and organizational citizenship behavior (Ali *et al.*, 2019) [17]. So, the researchers felt it necessary to investigate the effect of an authentic leadership educational Program for first-line nurse managers on Nurses' work engagement and organizational citizenship behavior.

Aim of the study

To investigate the effect of an authentic leadership educational program for first-line nurse managers on nurses' work engagement and organizational citizenship behavior.

Research Hypotheses

- **H1:** First-line nurse managers' authentic leadership knowledge and self-assessment will be higher after implementing the educational program than before implementation.
- **H2:** Nurse's work engagement and organizational citizenship behavior will be higher after implementing an authentic leadership educational program for first-line nurse managers.

Subjects and Method

Research design

The current study utilized a quasi-experimental research design to achieve its target.

Setting

This study was conducted at Gynecology, Obstetric and Pediatric Minia University Hospital at Minia City - Egypt.

Subjects

All first-line nurse managers worked in the inpatient and outpatient units (n = 27), and all nurses who worked in the same units (n = 175) were included in the study.

Data collection tools

Data collection by using four tools as following.

Tool I: authentic leadership knowledge questionnaire it included two parts

1st part: demographic data: it used to collect data about first-line nurse managers, encompass items as age, gender, marital status, years of experience, educational qualification, and department.

2nd part: authentic leadership knowledge questionnaire: it was designed by the researchers based on the review of the related works of literature (Dwahan & Mulla, (2012), Semedo *et al.*, 2017, and Walumbwa *et al.*, 2008) [18, 19, 4] to collect data from first-line nurse managers' to assess their knowledge regarding authentic leadership. The questions

were prepared in the form of true & false, multiple choices. It consisted of 30 questions about balance processing, rational transparency, self-awareness, and internalized moral perspective. The questions scored as one for correct answers and zero for incorrect answers. The scoring system divided as follows: low authentic leadership (<60%), moderate (60% = <75%), and high authentic leadership knowledge (=>75%).

Tool II: Authentic Leadership Self-Assessment scale

This tool was developed by Walumbwa *et al.* (2008) [4] to assess first-line nurse managers, authentic leadership. It consisted of 16 items that were divided into four dimensions as Self-awareness (4 items), internalized moral perspective (4 items), balanced processing (4 items), and relational transparency (4 items). Each item was measured by five-Likert scale ranged as (1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree). So, the scoring system is classified as follows low authentic leadership (< 38), moderate authentic leadership (38 = < 60), and high authentic leadership (=> 61).

Tool II: Work Engagement Scale: The tool consisted of two parts as follows

1st part: demographic data: It used to collect data about nurses, encompass items as age, gender, marital status, years of experience, educational qualification, and department.

2nd part: Work Engagement Scale: This tool was developed by Schaufeli *et al.* (2002) [20] to assess nurse work engagement. It contained 17 items were classified into three subscales as following: vigor (6items), dedication (5 items), and absorption (6 items). Seven points scored each item. The Likert scale ranged as (never=0, almost never=1, rarely=2, sometimes=3, often=4, very often=5 and always=6). according to how often the participants experienced the feeling described. The scoring system will range from (0 to 102), and it divided into three levels as follow: low work engagement (from 0 to 33), moderate work engagement (from 34 to 68), and high work engagement (from 69 to 102).

Tool III: Organizational citizenship behavior scale

This tool was developed by Organ *et al.* (1995) & Mary (2012) [21, 22] to assess nurses, organizational citizenship behavior. It consisted of 24 items with five-point Likert scale ranged as(1= never, 2= seldom; 3= some times, 4=often and 5= always) the instrument includes five subscale conscientiousness (5items); sportsmanship(5items); civic virtue (4 items); courtesy(4 items) and altruism(6 items). The scoring system ranged from (24 to 120), and it divided into three levels as follows: low organizational citizenship behavior from 24 to 55, moderate organizational citizenship behavior from 56 to 88, and high organizational citizenship behavior from 89 to 120.

Validity and reliability

Tools were examined for their Content validity by five experts in the field of study. Tools content validity was done to assess items sequences, simplicity, importance, applicability, phrasing, term, form, and overall look. Based

on experts` comments and instructions. The tools' reliability was checked and statistically measured. Cronbach's Alpha test was used to determine the tool's internal accuracy. Cronbach's Alpha complete authentic leadership knowledge questionnaire had a value of (0.90), authentic leadership self-assessment questionnaire had a value of (0.92), work engagement scale had a value of (0.951), and organizational citizenship scale had a value of (0.89).

A Pilot study

It was performed on 10% of the study subjects that included (3 first-line nurse managers and 17 nurses) before starting the actual data collection to assure the clarity and applicability of the study tools and feasibility of the research process. It also needed to estimate the time necessary to fill the tools of data collection. The pilot study data were included in the main study sample during data collection.

Procedure

The study was implemented through the following stages: Assessment and planning, implementation, and evaluation stage.

1. Assessment and planning stage

- Official confirmation from the authoritative personnel to conduct the study was obtained before starting the study took.
- Oral agreement of participations from first-line nurse managers and nurses was taken.
- Before the educational program started to appraise the first-line nurse managers concerning authentic leadership style, the knowledge questionnaire was taken from 25 to 30 minutes, and the time needed to respond to the sheet of self-assessment about authentic leadership style was nearly 30 minutes, data collected in one month from the beginning of December to the end of December 2019.
- Assess nurses' work engagement and organizational citizenship behavior before starting the first-line nurse managers' educational program. The work engagement and organizational citizenship behavior scale were given to the nurses by the researchers. The time required to answer this sheet was 30-40 min, data obtained in one month from the beginning of January to the end of January 2020.
- The researchers were designed the timetable for the educational program.
- The researchers prepared the learning climate and necessary resources (seminar rooms and data show equipment) that needed in this study.

2. Implementation stage

- According to the assessment and planning stage results, the educational program was designed on literature review, teaching sessions, and planned time schedules. The program discussed authentic leadership's definition, components, the importance for nursing staff, effective qualities for authentic leaders, authentic leadership skills, and theories.
- First-line nurse managers were divided into three subgroups, every one comprised of nine first-line nurse managers' and the researchers implemented the

educational program for each subgroup at a separate time.

- Sessions were carried out according to the participants' work time, and it was done in the teaching rooms of the hospital's education building.
- The researchers explained the objectives of the educational program to the first-line nurse managers' timetable and content.
- When beginning each session, the learning objectives were told and took feedback before each session about the earlier session, and after each session, there was a review of the current session.
- The educational program was performed for first-line nurse managers at the Gynecology, Obstetric, and Pediatric Hospital. The teaching methods were utilized: lecture, discussion, brainstorming, assignment, case study, and small group work activities.
- The teaching materials were used: PowerPoint presentation and video.
- The educational program was done in two months, from the beginning of February 2020 to the end of March 2020.

3. Evaluation phase

- Evaluating the immediate effect of an authentic leadership education program for first-line nurse managers on nurses' work engagement and organizational citizenship behavior was collected using the four tools authentic leadership knowledge questionnaire, authentic leadership self-assessment – nurses' work engagement, and organizational citizenship behavior scale.
- The follow-up was conducted after three months of the program implementation to assess the effect of an authentic leadership education program for first-line nurse managers on nurses' work engagement, and

organizational citizenship behavior was done by using the four tools as authentic leadership knowledge questionnaire, Authentic Leadership Self-Assessment scale, nurses' work engagement, and organizational citizenship scale. It was completed in a period from the beginning of July to the end of July 2020.

Ethical considerations

- The ethical committee approved this study of the Faculty of Nursing, Minia University.
- The researchers clarified the study's aim to first-line nurse managers and nurses who participated in the study.
- Oral consent was obtained from all the participants following explaining the nature and advantages of the study.
- First-line nurse managers and nurses were known that their participation was voluntary, and they can withdraw from the study at any time if they wanted that.
- Confidentiality of data, privacy, identity, willing participation, and the right to decline to participate in the study was emphasized to subjects.

Statistical Analysis

Statistical analysis of data implemented by using an excel program and SPSS (IBM 24). The data description is done in the form of mean ± standard deviation for quantitative data and frequency & proportion for qualitative data. The interpretation of the data was done to test the statistically significant difference between groups, (P) is significant if < or = "0.05" at confidence interval 95%. The qualitative data chi-square test was used.

Results

Table 1: Demographic characteristics of the study subjects (First line nurse managers and nurses)

Demographic characteristics	First-line nurse managers (n= 27)		Nurses (n = 175)	
	No.	%	No.	%
1. Age				
▪ 30	7	26.0	25	14.3
▪ 30-40	18	66.6	126	72.0
▪ < 40	2	7.4	24	13.7
Mean ± SD	32 ±3.6		37.76 ± 6.38	
2. Sex				
▪ Male	6	22.2	43	24.5
▪ Female	21	77.8	132	75.5
3.Marital status				
▪ Single	3	11.1	33	18.8
▪ Married	21	77.8	121	69.0
▪ Divorce	2	7.4	11	6.5
▪ Widowed	1	3.7	10	5.7
4.Qualifications				
▪ Diploma	0	0.0	71	40.5
▪ Institute	0	0.0	79	45.2
▪ Baccalaureate	25	92.6	25	14.3
▪ other	2	7.4	0	0.0
5.Years of experience				
▪ <5	10	37.0	47	26.9
▪ 15-5	15	55.6	85	48.6
▪ 15<	2	7.4	43	24.5
Mean ± SD	9.3 ± 4.7		16.63 ± 6.74	
6. Department				

▪ General	20	74.0	127	72.5
▪ Critical	7	26.0	48	27.5

Table (1). shows that more than two-thirds of first-line nurse managers (66.6%) are in the age group between 30-40 years with mean age 32 ±3.6 years, more than three-quarters of the first-line nurse managers (77.8%) are females, the majority of them (77.8%) married, more than half of the study sample (55.6%) have 5-15 years of experience in the nursing field with mean 9. 3 ±4.7 years, the majority of them (92.6%) have a baccalaureate degree and less than three-quarters of them (74%) work in general areas.

Regarding demographic data of nurses, table (1) indicates that more than two-thirds (72%) of nurses are in the age group between 30-40 years with mean age 37.76 ± 6.38, more than three-quarters of them (75.5%) are females, less than three-quarters of them (69%) married, less than half of them (45.2%) have nursing institute degree, more than half of them (48.6%) have 5-15 years of experience in the nursing field with mean 16.63 ± 6.74 years, and less three-quarters of them (72.5%) work in general areas.

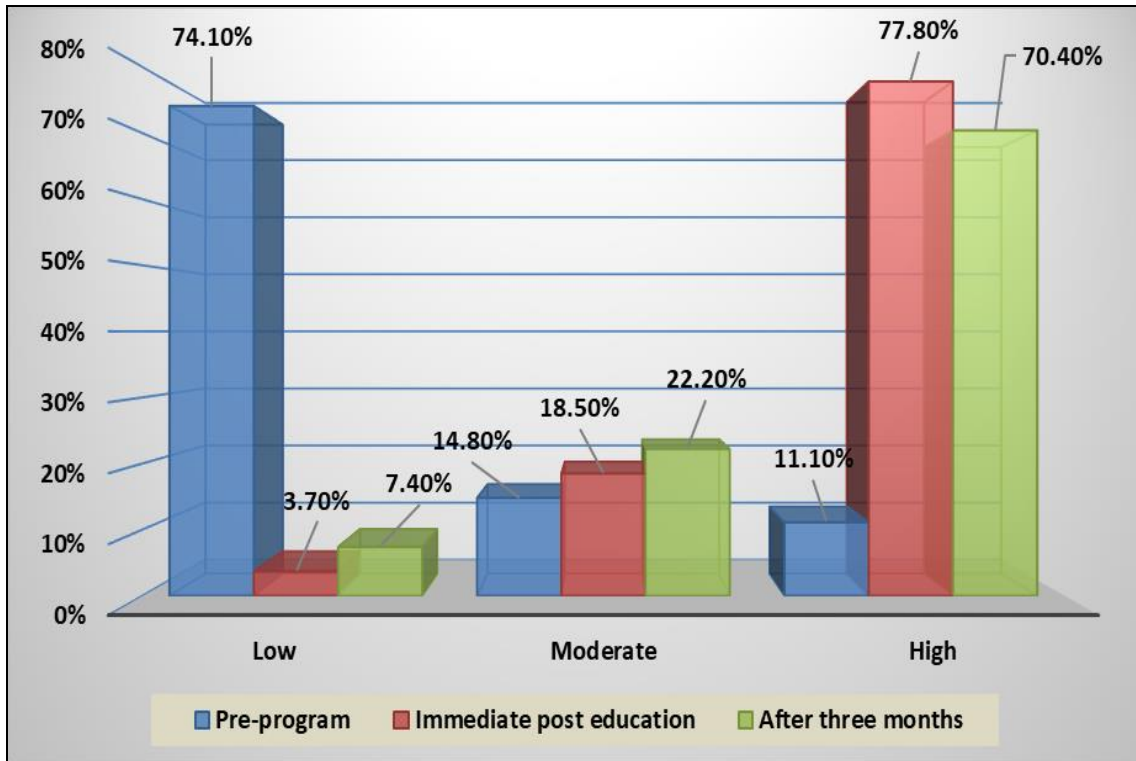


Fig 1: Distribution first-line nurse managers' total authentic leadership knowledge during different times of testing (No =27)

Figure (1): illustrates that (11.1%) of the first-line nurse managers have a high level of knowledge in pre-program implementation, increased to (77.8%) of them immediately

post educational program implementation, and (70.4%) of them after three months (follow up).

Table 2: Distribution of first-line nurse managers 'total self-assessment authentic leadership and its components during different times of testing (No =27)

Items	Preprogram implementation		Immediate Post-test		Follow up after three months		P-value
	No	%	No	%	No	%	
Self-awareness							
Low	7	24.0	0	0.0	5	16.0	P ₁ =0.001* P ₂ =0.001*
Moderate	20	76.0	20	76.0	19	72.0	
High	0	0.0	7	24.0	3	12.0	
Internalized moral perspective							
Low	5	20.0	1	4.0	1	4.0	P ₁ =0.001* P ₂ =0.001*
Moderate	21	80.0	20	72.0	23	88.0	
High	1	0.0	6	24.0	3	8.0	
Balanced processing							
Low	4	12.0	0	0.0	3	12.0	P ₁ =0.001* P ₂ =0.001*
Moderate	23	88.0	17	52.0	18	68.0	
High	0	0.0	10	48.0	6	20.0	
Relational transparency							
Low	1	4.0	0	0.0	1	4.0	P ₁ =0.001* P ₂ =0.001*
Moderate	23	92.0	14	56.0	19	76.0	

High	1	4.0	11	44.0	5	20.0	P ₁ =0.001* P ₂ =0.001*
Total authentic leadership style							
Low	7	25.9	0	0.0	0	0.0	
Moderate	18	66.7	6	22.2	10	37.0	
High	2	7.4	21	77.8	17	63.0	

Table (2) summarizes that 7.4% of the first-line nurse managers have a high authentic leadership style before program implementation, increased to 77.8% of them immediately post educational program implementation, as

well as 63% of them after three months of program implementation, with statistically significant differences ($P = < 0.001$).

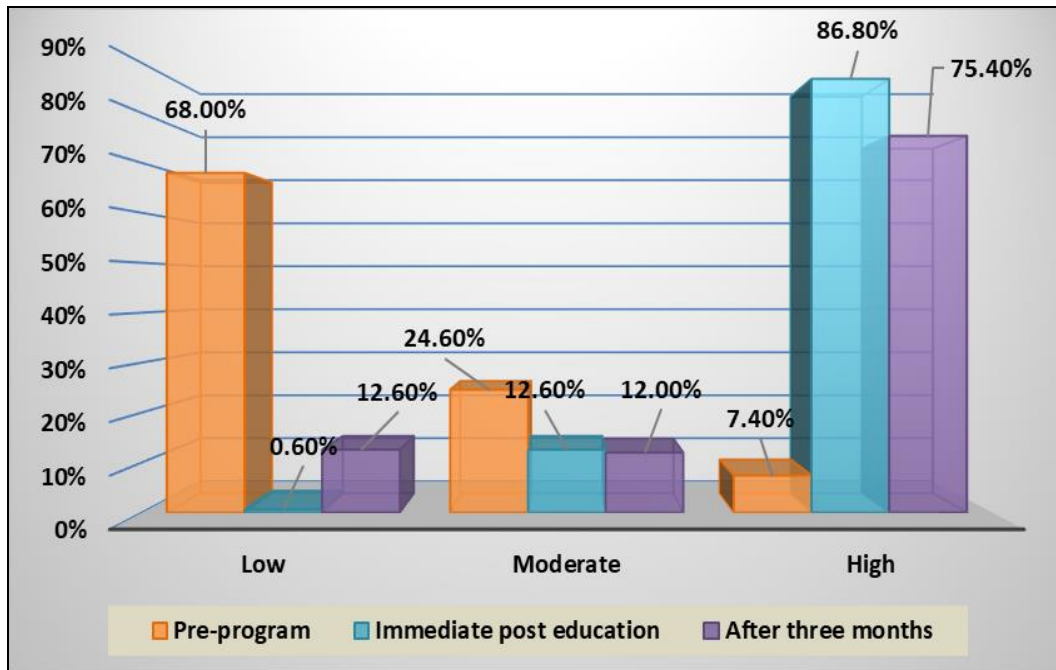


Fig 2: Distribution of the studied nurses’ work engagement during different testing times (No = 175).

Figure (2): illustrates that 7.4% of the studied nurses’ have a high level of work engagement in pre-program implementation, which increased to 86.8% of them

immediately post educational program implementation, and 75.4% of them after three months (follow up).

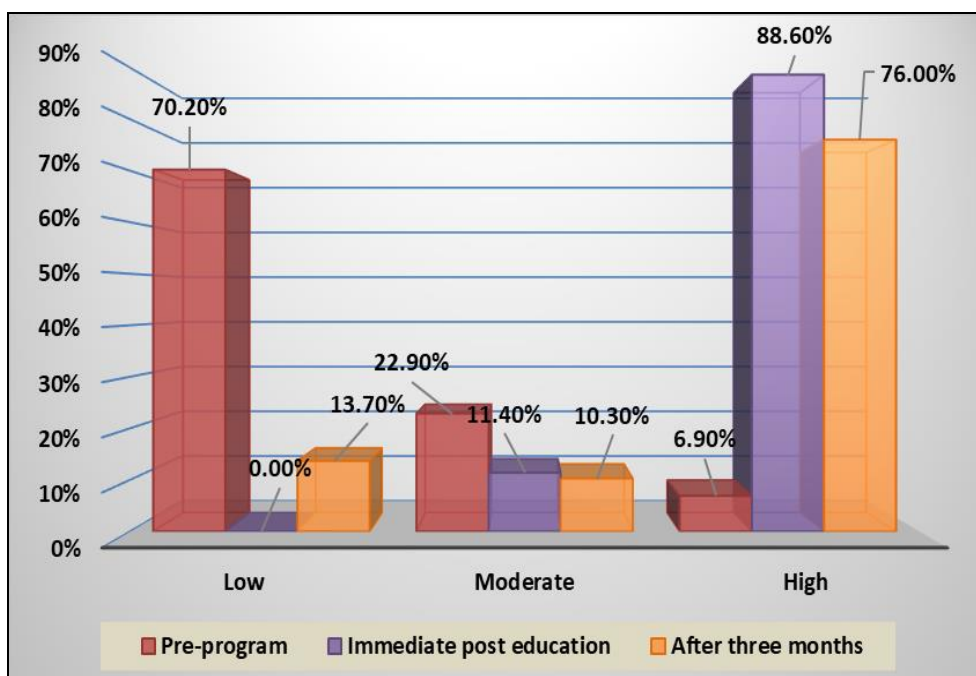


Fig 3: Distribution of the studied nurses’ organizational citizenship behavior during different times of testing (No =175)

Figure (3): illustrates that 6.9% of the studied nurses' have a high level of organizational citizenship behavior in pre-program implementation, increased to 88.6% of them

immediately post educational program and 76.0% of them after three months (follow up).

Table 3: Correlation matrix between first-line nurse managers' total knowledge, total self-assessment authentic leadership, nurses' organizational citizenship, and work engagement during different times of testing

Items	Knowledge of the first-line nurse managers."		authentic of the First-line nurse managers'		organizational citizenship behavior of the studied nurses	
	r	p	r	p	r	p
Pre-program implementation						
First-line nurse managers" total authentic leadership knowledge						
First-line nurse managers' total self-assessment authentic leadership	0.241	0.001**				
Nurses' organizational citizenship behavior	0.325	0.001**	0.189	0.001**		
Nurses' work engagement	0.213	0.001**	0.273	0.001**	0.167	0.001**
immediate post implementation						
First-line nurse managers' total authentic leadership knowledge						
First-line nurse managers' total self-assessment authentic leadership	0.123	0.001**				
Nurses' organizational citizenship	0.138	0.001**	0.11	0.001**		
Nurses' work engagement	0.215	0.001**	0.215	0.001**	0.178	0.001**
Follow up after three months.						
First-line nurse managers" total authentic leadership knowledge						
First-line nurse managers" total self-assessment authentic leadership	0.410	0.001**				
Nurses' organizational citizenship	0.115	0.001**	0.259	0.001**		
Nurses' work engagement	0.276	0.001**	0.523	0.001**	0.239	0.0001**

Table (3) summarizes that there are a positive, statistically significant association between total first-line nurse managers' authentic leadership (knowledge, self-assessment) and nurses' organizational citizenship behavior and work engagement during different times of testing.

Discussion

The finding of the existing study revealed that a highly statistically significant gain in level knowledge among first-line nurse managers about authentic leadership style at the Preprogram implementation and different times of measures after the program implementation (immediately and after three months of the educational program implementation). First-line nurse managers had a low level of knowledge in pre-program implementation, and significantly knowledge level improved to high immediately post and after three months of the program implementation. This outcome from the researchers' point of view might be assigned to the fact that first-line nurse managers, before program implementation, don't know the meaning and importance of authentic leadership. Also, they had low knowledge about authentic leadership because they were studying leadership styles from many years ago, and there is no update or renew of their knowledge; in addition to in-service training and education is little or absent in their workplace about the new styles of leadership that can use in their working. Moreover, after an educational program was implemented, first-line nurse managers refresh their authentic leadership style knowledge. Also, the program provides reinforcement and relevant information for first-line nurse managers; it also improved their understanding of new styles of authentic leadership that encompass the definition of authentic

leadership style, the importance for them and their nurses, effective qualities for authentic leaders, etc.

This finding is consistent with Mubarak & Noor (2018) [23], who found that most first-line nurse managers had unacceptable knowledge levels and application before educational training. While knowledge level had improved after educational training and had become satisfactory. Furthermore, this result reflected the positive effect of the authentic leadership educational program.

Also, Miao *et al.* (2018) [29] reported that managers could maximize authentic leadership effectiveness through an educational program, which has important practical values to managers and policymakers. This could be attributed to the changes in first-line managers' knowledge about authentic leadership, affecting their performance on work engagement and organizational citizenship behavior after implementing the educational program. As first-line nurse managers learned and gained knowledge and skills from all topics of the authentic style of the leader and its' elements and the essential skills and how to implement. While the slight decrease in the quality of an authentic leadership style could be attributed to forgetting, this was compensated by giving the first-line nurse managers handouts about the program contents.

The current study result illustrated that staff nurses' work engagement and organizational citizenship behavior increased immediately after program implementation and after three months of program implementation when compare with pre-programming implementation with highly statistically significant differences during different testing times.

The present study indicated that nurses' work engagement increased from a low level before the program implementation to a high level immediately after implementation and after three months of the program implementation with a statistically significant difference. This could be attributed to the changes in first-line nurse managers' knowledge and practice about authentic leadership styles that lead to improving work engagement to their nurses.

The current study finding was agreed with Liu *et al.* (2017)^[5] demonstrate that authentic leadership is positively related to supervisor identification, psychological safety, and work engagement.

The present study indicated that nurses' organizational citizenship behavior level increased from a low level before the educational program implementation to a high level immediately after implementation and after three months of the program implementation with a statistically significant difference. From the researchers' point of view, this result due to changes in first-line nurse managers' knowledge and practice about an authentic leadership style leads managers to empowering their staff and enhanced organizational citizenship behavior.

The current study finding is in accordance with a study done by Daniel *et al.*, (2013)^[25] who indicated a strong positive relationship between job satisfaction, performance as an indicator for work engagement, organizational citizenship behaviors, and though conceptualized criteria, so that it should better understanding of the importance of satisfaction for organizational citizenship and outcomes

Moreover, maintain a positive work climate within which employees do not fear negative consequences to their self-image, status, or career, that can be achieved through using authentic leader style by first-line manager enhancing positive behaviors as high work engagement and citizenship behaviors among their staff nurses as reported by (Sekoere, 2015)^[26].

The current study result summarized that there is a positive, statistically significant association between the total first-line nurse managers' authentic leadership (knowledge, self-assessment) and nurses' organizational citizenship behavior and work engagement during different times of measurements.

The current study finding is in the same line Liu *et al.* (2017)^[5] concluded that authentic leadership is positively statistically significant related to subordinates' proactive behavior, Engaged employees are proactive, feel more challenged, and have a stronger drive than their satisfied colleagues, who are reactive, feel less challenged and more satiated. So, work engagement is a high activation and related to work performance (Christian *et al.*, 2011)^[27].

Although job satisfaction and work engagement are both positive states of mind, they differ in activation levels to keep committed and highly citizens' behavior (Salanova *et al.*, 2014)^[28]. This result was confirmed by Walumbwa *et al.* (2010)^[29], who found that authentic leadership positively affects employees' work outcomes, such as organizational citizenship behavior (OCB), commitment, organizational trust, socialization, and work engagement. Chaudhary & Panda, 2018)^[2].

Conclusion

The current study concluded that there were statistically significant differences in knowledge level and the level of authentic leadership self-assessment for first-line nurse managers during the different times of measurements. Also, there were statistically significant differences in work engagement and organizational citizenship behavior among nurses during the different times of measurements. Moreover, there was a positive, statistically significant association between total first-line nurse managers' authentic leadership (knowledge, self-assessment) and nurses' organizational citizenship behavior and work engagement during different testing times.

Recommendations

The current study recommended that

- Authentic leadership educational programs should be periodically implemented for first-line nurse managers.
- Recognize when planning educational program; the first-line nurse managers' workload, patient demand during the day, and which time per day is better to attend the training sessions to gain maximum attention and satisfaction from the participants.
- First-line nurse managers should periodically be meeting for their nurses to verbalized, vitalize and support peer and social interaction
- First-line nurse managers should improve a supportive working environment and positive relationship with their nurses to encourage trust, empathy, work engagement, organizational citizenship, and mutual regard.
- Nursing education should emphasize the need for strong leadership competencies. Achieving this need can enhance nurses' capacity to voice their concerns, increase their impetus to fight for their personal and professional rights, and strategize measures to elevate organizations' apprehensions.
- Improve first-line nurse managers' recognition of authentic leadership style's significance and importance and its advantages on their nurses.

References

1. Enwereuzor IK, Ugwu L, Iand Eze OA. How Transformational Leadership Influences Work Engagement Among Nurses: Does Person-Job Fit Matter? *Western Journal of Nursing Research* 2018;40(3):346-366. © Available at DOI: 10.1177/0193945916682449journals.sagepub.com/home/wjn. Research Report.
2. Chaudhary R, Panda C. Authentic leadership and creativity the intervening role of psychological meaningfulness, safety and work engagement. The current issue and full-text archive of this journal 2018 is available on Emerald Insight at: www.emeraldinsight.com/1741-0401.htm
3. Banks GC, McCauley KD, Gardner WL, Guler CE. A meta-analytic review of authentic and transformational leadership: A test for redundancy, *Leadership Quarterly* 2016;27(4):634-652.
4. Walumbwa FO, Avolio BJ, Gardner WL, Wernsing TS, Peterson SJ. Authentic leadership: development and validation of a theory-based measure, *Journal of*

- Management 2008;34(1):89-126.
5. Liu Y, Fuller B, Hester K, Bennett RJ, Dickerson MS. Linking authentic leadership to subordinate behaviors, the current issue and full-text archive, (2017): This journal is available on Emerald Insight 2017. at:www.emeraldinsight.com/0143-7739.htm.
 6. Knight C, Patterson M, Dawson JF. Building work engagement: A systematic review and meta-analysis of the effectiveness of work engagement interventions, *Journal of Organizational Behavior* 2016, 38(6). DOI: 10.1002/job.2167
 7. Seada AM. Organizational role stress and work engagement among nurses in a selected hospital in Cairo. *American Journal of Nursing Science* 2017;6(1):53-62.
 8. Ali FH, Rizavi SS, Ahmed I, Rasheed M. Effects of perceived organizational support on organizational citizenship behavior–Sequential mediation by wellbeing and work engagement. *Journal of the Punjab University Historical Society* 2018;31(1):111-131.
 9. Wang X, Liu L, Zou F, Hao J, Wu H. Organizational Support, and Psychological Capital with Work Engagement among Chinese Female Nurses Hindawi BioMed Research International Volume 2017, Article ID 5284628, 11 pages
 10. Van Mol MM, Nijkamp MD, Bakker J, Schaufeli WB, Kompanje EJ. Counterbalancing work-related stress? Work engagement among intensive care professionals, *Australian critical care* 2018;31(4):234-239.
 11. Kunie K, Kawakami N, Shimazu A, Yonekura Y, Miyamoto Y. The relationship between work engagement and psychological distress of hospital nurses and the perceived communication behaviors of their nurse managers: A cross-sectional survey. *International journal of nursing studies* 2017;71:115-124.
 12. Taghinezhad F, Safavi M, Raiesifar A, Yahyavi SH. Antecedents of organizational citizenship behavior among Iranian nurses: a multicenter study *BMC Research Notes* volume 8, Article number 2015, 547.
 13. Zhou J, Ren R. Striving for creativity: building positive contexts in the workplace, in Cameron, K.S. and Spreitzer, G. (Eds), *The Oxford Handbook of Positive Organizational Scholarship*, Oxford University Press, Oxford 2012, 97-109.
 14. Infantino J. Why your nurse managers may be planning to quit - and how to fix that. Retrieved from Advisory Board 2016: <http://www.advisory.com>
 15. Alilyyani B, Wong CA, Cummings G. Antecedents, mediators, and outcomes of authentic leadership in healthcare: A systematic review. *International journal of nursing studies* 2018;83:34-64.
 16. Kim J, Park HJ, Lee SH. The relationship between organizational socialization and organizational citizenship behavior among nurses in general hospitals. *Journal of Korean Clinical Nursing Research* 2012;18(3):413-423. Online) 2287-3694 <https://doi.org/10.22650/JKCNr.2012.18.3.413>
 17. Ali Aziza ZF, Ehsan SS Saad, Fadhah T. Alshammari. Effect of Authentic Leadership Educational Program for Head Nurses on Staff Nurses Organizational Commitment. *Evidence-Based Nursing Research* 1.2, 2019, 12-12.
 18. Dwahan V, Mulla ZR. The role of pay and leadership in developing organizational commitment. *South Asian Journal of Management* 2012;18(2):60-75.
 19. Semedo A, Coelho A, Ribeiro N. Authentic leadership and creativity: The mediating role of happiness. *International Journal of Organizational Analysis* 2017.
 20. Schaufeli WB, Bakker AB. Job demands, job resources and their relationship with burnout and engagement A multi-sample study. *Journal of Organizational Behavior* 2002;25:293-315. <http://dx.doi.org/10.1002/job.248>
 21. Organ, Dennis W, Andreas Lingl. Personality, satisfaction, and organizational citizenship behavior. *The journal of social psychology* 1995;135.3:339-350.
 22. Mary. A comprehensive study of organizational citizenship behavior (OCB): Introducing the term, clarifying its consequences and identifying its antecedents. *Journal of Economics and Management* 2012;1(2):73-85.
 23. Mubarak F, Noor A. Effect of authentic leadership on employee creativity in project-based organizations with the mediating roles of work engagement and psychological empowerment, *Journal Cogent & Business Management* 2018;5(1):1-14.
 24. Miao C, Humphrey RH, Qian S. A cross-cultural meta-analysis of how leader emotional intelligence influences subordinate task performance and organizational citizenship behavior, *Journal of World Business* 2018;53(4):463-474.
 25. Daniels K, Beesley N, Wimalasiri V, Cheyne A. Problem solving & wellbeing exploring the instrumental role of job control and social support. Study of satisfaction, citizenship behaviors, and performance in work units: a meta-analysis of collective construct relations. *Journal of Management* 2013;39(4):1016-1043.1.0.
 26. Sekoere IM. The effect of authentic leadership and psychological capital on work engagement amongst employees in leadership positions at Standard Lesotho Bank (Doctoral dissertation, University of the Free State 2015.
 27. Christian MS, Garza AS, Slaughter JE. Work Engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology* 2011;64:89-136.
 28. Salanova M, del Libano M, Llorens S, Schaufeli WB. Engaged, workaholic, burned-out or just 9-to-5? Toward a typology of employee wellbeing. *Stress & Health* 2014;30:71-81.
 29. Walumbwa FO, Peterson SJ, Avolio BJ, Hartnell CA. An investigation of the relationships among leader and follower psychological capital, service climate, and job performance, *Personnel Psychology* 2010;63(4):937-963.