

# Self Assessment of Leadership Behaviors among Baccalaureate Nursing Students with Different Clinical Training Experience and Nurses

Amany Ahmed Abdrbo<sup>+</sup>

Nursing Administration Department, College of Nursing, Cairo University, Egypt  
College of Nursing-Al Ahsa, King Saud Bin Abdul Aziz University for Health Sciences, SA

**Abstract.** With the increasing concern for patient's safety and quality of patient's care, and taking into consideration the ever changing environment of health care and the challenges facing the nursing profession such as the problem of nursing shortage and nurses aging, quality graduates are needed to fulfill the role of clinical leadership in today's nurses. The aim of this study is twofold: first, to assess the nursing students' leadership behaviors throughout their education, second, to compare self assessment of leadership behaviors amongst students groups on the other hand, and nurses working in hospitals. Descriptive cross sectional design is utilized to collect data from a convenient sample of different groups of students with varied clinical experience at college of nursing and staff nurses to fill the Self Assessment Leadership Instrument (SALI). There were significant differences among the study groups' self assessment leadership behaviors  $F(3, 130) = 17.44, p < .001$ . Assessment of leadership behaviors is a need in nursing education.

**Keywords:** Nursing Students, Leadership, Leadership Behaviors

## 1. Introduction and Background

The Institute of Medicine [1, 2] has issued a comprehensive report on medical errors entitled, *To Err is Human: Building a Safer Health System*. This report focuses on the effect of medical errors and patient safety, in general, and on the fragmented nature of the health care delivery system and the context in which health care is exposed to high error rates, in particular. This growing concern over health care outcomes such as patient's safety and quality of care will be affected by the severe nursing shortage [3]. In addition to the nursing shortage that is now globally experienced, there is also shortage in nursing leaders [4]. This is evidenced in vacancies in leadership positions and in non-nurse leaders holding those positions [5] as well as in the challenge of developing future nurse leaders [6]. To meet the growing demand for health care and to fulfill the shortage in nursing leaders, an increase in the number of nurses enrolled in the baccalaureate program becomes a necessity [7]. Moreover, the preparation of the new generation of nurses is another challenge to develop the necessary leadership abilities the nursing management [5].

Leadership is listed as one of the American Nurses Association standards of professional nursing practice and considered the professional responsibility of all registered nurses [8]. The American Association of Colleges of Nursing [5] recommends that nursing students should be assessed for their leadership behaviors to provide high quality care from the time of their entry into the college until their graduation as this assessment qualifies them to be future nurse leaders and is needed throughout their nursing career [9]. Many university nurse preparation programs realize the importance of leadership at the undergraduate level and integrate it throughout the curriculum to enhance the students' knowledge and skills throughout their clinical training [10, 11]. Clinical experience equips the student nurses with critical thinking skills needed for problem solving [12]. In addition, clinical supervision is documented to be an opportunity for nursing students to develop clinical leadership through working closely with the health care team and nurses leaders

---

<sup>+</sup> Amany Abdrbo Tel.: +966-3-564533704  
E-mail address: aamanyahmed@hotmail.com

on site [13]. The aim of this study is twofold: first, to assess the nursing students' leadership behaviors throughout their educational program, and second to compare self assessment of leadership behaviors amongst different groups of students with varied clinical experience and nurses working in hospitals.

Leadership has been defined differently in literature. However, there is some commonality in most of the leadership definitions such as that leadership is a "process", it entails the leaders' influence, it occurs in a group to attain a goal [9, 11, p. 306]. Leadership is defined as "using interpersonal skills to influence others toward goal achievement" [14]. Others believe that leadership is actually not only a group of skills that nurses must learn during their nursing education, it is also an "attitude" that enlightens certain behaviors [15]. Nurses need a variety of leadership behaviors to work effectively in the health care's ever changing environment [16, 17]. They also need to collaborate with the health care team, facilitate change, and think critically, make decisions, act with integrity, and be aware of others' feelings and competent in handling cultural diversity.

Leadership theories are constantly evolving. They continue to be researched in order to enhance the understanding of nursing leadership starting from the theory of Great Man to the Transformational Theory. The Great Man theory is based on the assumption that some people are born to be leaders while others have to be led [18]. This assumption indicates that leadership cannot be taught and assumes that some people have certain innate characteristics or traits that make them better leaders than others [18]. The Trait theory just lists abundantly some qualities associated with leadership such as intelligence, personality, abilities, social traits and physical characteristics that work as benchmarks by which the leader is judged [14, 19].

Contemporary theories were divided in their approaches toward leadership assessment. One approach, behaviorists, explained leadership through assessing leader behaviors and believed that what makes leaders is a combination of education, training and life experiences [14]; another approach studied the relationship between the leader and the subordinates (transactional) and the relationships between the leader and, his/her behaviors and the situation; contingency theories [11]. We believe that the most recommended theory is the Transformational Theory which assumed that the role of leaders is to envision and implement the transformation of the organizational performance [14, 20, 21]. The leaders motivate and inspire their employees to plan, lead, control, and organize their work activities [22] hence transformational leadership becomes favorite in health-related literature [21]. Most of the studies in nursing management literature investigated leadership among nurses either from their perspective as leaders [23, 24] or as nurses or as subordinates [25, 26], and/or the effect of nursing leaders leadership behaviors on staff nurses outcomes in the hospital setting such as nurses' satisfaction [27, 28], commitment [29], nurses' professional practice behaviors [30], and staff nurse retention [25]. However, a few studies investigated nursing students' leadership behaviors [10, 31, 32].

Students in nursing master program in Australia reported that a clinical leadership component was important to support theory [33]. They also reported that after receiving course work, their clinical leadership preparation and the leadership component assessment was not clear. A few studies investigated leadership as an indicator of nursing education such as the study conducted on Korean nursing students where differences are evaluated throughout academic years [31, 32]. These studies indicated that leadership behaviors significantly increased as students progressed through the nursing program. In a recent study a leadership course was implemented on a three year undergraduate nursing degree in Australia in the extracurricular time. Results showed a statistically significant change in leadership behaviors after the completion of the course [10]. Another study [16] showed that self assessment of leadership behavior among Canadian nursing students was lower compared to American physical therapy students. However, there was no significant difference between both samples.

It is difficult to link a specific educational activity with its clinical application especially in a concept such as leadership as this latter need time to be comprehended, practiced and to excel in it. To understand how students develop leadership behaviors, studies are needed to compare the students with one another from different levels on the one hand, and with nurses on the other hand, and to describe their characteristics. This description can form the basis for finding out ways to help instructors emphasize and/or reinforce leadership behaviors across the educational process.

## 2. Methods

The study used a descriptive cross-sectional design to assess nursing students' leadership behaviors at the College of Nursing.

The College of Nursing has two different streams that were launched in 2009. The first stream (regular) is designed for high school graduates with no previous university experience. The second stream is Stream II (accelerated program), designed for students with bachelor degree in Science. The program consists of 4 years. The first two years, pre-professional program, focuses on the English language and the basic sciences whereas the last two years, the professional program, focuses on the nursing sciences. Convenient sample technique is used to collect data from 3 groups of students at the college and a group of nurses working at the hospital affiliated with the college. Students are from both regular stream I program and the accelerated stream II program in each group. Students have their clinical training at the same hospital. The study groups consist of the following: the first group is the freshers in nursing courses; the second group is those students who had clinical training at hospital; the third group is those students who took nursing management course associated with clinical experience; and the fourth group consists of experienced nurses.

Self Assessment Leadership Instrument (SALI) [34]: The SALI was developed to measure leadership behavior and characteristics in baccalaureate nursing students. The 40-item instrument relies on self assessment of critical thinking and decision making skills, interpersonal relationships, group relations, and job relations. Each item is scored on a five-point response format ranging from 0 "Usually Not" to 4 "Almost Always". The range of scores is from 40-160, with higher scores indicating increased occurrence of leadership behavior. The reliability of the instrument was assessed recently [31] and reported Cronbach's alpha of 0.94.

The study was reviewed and approved by the Nursing College Research Committee and the College of Nursing Council. The study questionnaire was distributed to the students and nurses to be filled out in their convenient time after detailed explanation of the study purpose and the way the questionnaire should be filled. Data were collected at the beginning of spring 2012 (January /February). Returning the questionnaire means the students' consent to be included in the study. The study data was analyzed using the Statistical Package for Social Sciences (SPSS), Version 17.0 [35]. Descriptive statistics, ANOVA test, and Cronbach's alpha coefficient were utilized to analyze data.

## 3. Results

Participants were total of 134; 107 of them were students and 27 were staff nurses. Of the 107 students, 49 were stream I students whereas 58 students were Stream II from different levels. Students' average age was 23.13 ( $\pm 3.27$ ). Their reported GPA was 3.75 ( $\pm 0.61$ ) out of 5. Most of them reported that they are single (N=67, 63.2%), do not have children (N= 73, 71.6%), rated their level of experience in nursing as 3.84 ( $\pm 1.55$ ) on a scale from 1 to 7 and their leadership behaviors sum score as 112.53 ( $\pm 21.36$ ) (with the theoretical sum ranging from 40-160 as described in the self assessment leadership instrument).

Nurses' average age was 27.56 ( $\pm 2.98$ ), Most of them reported that they are married (N=19, 76.0%), have children (N= 14, 53.8%), rated their level of experience in nursing as 4.6 ( $\pm 1.19$ ) on a scale from 1 to 7 and their leadership behaviors sum score as 131.44 ( $\pm 13.77$ ). They also reported that they have been working in nursing for an average of 2.33 ( $\pm 1.73$ ) years. All nurses reported that they did not have any managerial role in the hospital.

The one-way analysis of variance analysis (ANOVA) compared the self assessment leadership behaviors mean scores among the study groups: freshers in nursing courses (104.39 $\pm$ 21.54); students who had clinical training at hospital (123.87 $\pm$ 15.32); students who took the nursing management course associated with clinical experience (123.50 $\pm$ 15.77); and experienced nurses (131.44 $\pm$ 13.77). Levene test revealed that the assumption that the variances are equaled (homogeneous) amongst the groups  $p=.07$ . There was a statistically significant difference amongst the groups  $F(3, 130) = 17.42, p < .001$ . This indicated that there is relationship between the study groups' clinical experience and their self assessment leadership behaviors. Multiple Comparisons using Scheffee indicated that there was a significantly lower mean score of the self assessment leadership behaviors for freshers than other groups (students with experience of clinical

training, graduates with nursing management course experience, and nurses;  $p < .001$ ,  $= .005$ ,  $< .001$  respectively). The self assessment leadership instrument' Cronbach's alpha coefficient was .94, which was acceptable and exceeded the recommended criterion level of .70 for new instruments [36, 37].

#### **4. Discussion**

The study results revealed that there were significant statistical differences across the study groups in their perceived leadership behaviors. The mean score of nurses was the highest as 131.44, while the score for students who had clinical training at hospital was a little higher (123.87), almost the same, than the score for students who took nursing management course (123.50) and the freshers group was the lowest in rating themselves (104.38). This result was similar to another study among students whereas the senior students were the highest as 155.3 on the same leadership instrument, while the score for freshmen was higher than the scores for sophomores and juniors [31].

It was unexpected to find that the students (the nursing management course group) sum score of self assessment leadership behaviors was less than the students who only have clinical training in nursing or almost the same. A plausible explanation could be that the students who only have experience in nursing training and no nursing management course training overrated their leadership assessment. They might have gained some self confidence from their clinical training which made them perceive themselves as leaders. However, graduate students understood the meaning of leadership behaviors and got training through shadowing the team leader/nurse manager for almost 12 morning shifts.

All nurses reported that they did not have any managerial role in the hospital though the nurse managers constantly allow the staff nurses to alternatively practice and assume the team leader role. This explains the high rating of their leadership behaviors.

The most significant limitation to this study was the number of the participants. This was particularly evident in the graduates' students, 14 of whom were respondents and graduated from the program. The sample technique was devised to overcome the limited number of nursing graduates students. This number was due to the fact that the college is new and the number of enrolled students is limited. Moreover, participation in this study was voluntary and so was self report, a fact that may induce biased results. The study was methodologically limited by the use of one institution that was purposefully selected because the students got their training in that institution, and the nurses also work in that same environment. The goal was then to diminish the effect of the different environment effect on leadership clinical training. Moreover, the sample size may not represent the general population of Saudi nursing students or nurses and this limits the possibility of generalization of the results.

The results of the study can only be generalized to students and nurses trained and employed in this hospital. Further studies are required to confirm or refute the findings. This study may serve as a foundation for future studies in different nursing education settings and on a larger scale. However, future studies should also include exploring other factors that might affect the leadership behaviors rather than clinical training such as personality traits.

#### **5. Conclusion**

Assessment of leadership behaviors is a need in nursing education. Factors associated with leadership development among nursing students need more elaboration and exploration. This descriptive study may serve as a basis for further studies that recommend the inclusion of other factors such as nursing students' personality traits. It is also recommended that leadership education should be consistently provided. It is preferable to integrate the concept of leadership throughout the nursing education curricula of the program. It is also suggested to integrate it in the extracurricular, in the trainers' training time (clinical instructors) and to provide leadership continuing education courses for nurses.

#### **6. References**

- [1] Institute of Medicine, *To Err is Human: Building a safer health system*. L. Corrigan & M. Donaldson (Eds.). Washington, DC: National Academy Press, 1999.

- [2] Institute of Medicine, *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, D.C: The National Academic Press, 2004.
- [3] P. I. Buerhaus, D. O. Staiger, and D. I. Auerbach, "Implications of an aging registered nurse workforce," *JAMA: the journal of the American Medical Association*, vol. 283, pp. 2948, 2000.
- [4] Clark & Heather, "Fact or fiction? Nursing shortage plagues global health care. Sigma Theta Tau International Honor Society of Nursing Post Convention Wrap-Up," *Excellence*, vol. 1, pp. 1-6, 2000.
- [5] American Association of Colleges of Nursing, "White Paper on the Education and Role of the Clinical Nurse Leader," vol. 2012, 2007.
- [6] J. Mahoney, "Leadership skills for the 21st century," *Journal of Nursing Management*, vol. 9, pp. 269-271, 2001.
- [7] H. S. Berliner and E. Ginzberg, "Why this hospital nursing shortage is different," *JAMA: the journal of the American Medical Association*, vol. 288, pp. 2742, 2002.
- [8] B. Kozier, *Fundamentals of nursing: concepts, process and practice*: Prentice Hall, 2008.
- [9] J. Faugier and H. Woolnough, "National nursing leadership programme," *Mental Health Practice*, vol. 6, pp. 28-34, 2002.
- [10] J. M. Hendricks, V. C. Cope, and M. Harris, "A leadership program in an undergraduate nursing course in Western Australia: Building leaders in our midst," *Nurse education today*, vol. 30, pp. 252-257, 2010.
- [11] E. A. Curtis, J. de Vries, and F. K. Sheerin, "Developing leadership in nursing: exploring core factors," *British Journal of Nursing*, vol. 20, pp. 307, 2011.
- [12] S. V. Dunn, "The development of a clinical learning environment scale," *Journal of Advanced Nursing*, vol. 22, pp. 1166-1173, 1995.
- [13] C. Johns, "Clinical supervision as a model for clinical leadership," *Journal of Nursing Management*, vol. 11, pp. 25-35, 2003.
- [14] E. J. Sullivan and P. J. Decker, *Effective leadership and management in nursing*: Pearson/Prentice Hall, 2005.
- [15] M. Cook, "The renaissance of clinical leadership," *International nursing review*, vol. 48, pp. 38-46, 2001.
- [16] J. Wessel, H. Larin, G. Benson, B. Brown, J. Ploeg, R. Williams, and L. Martin, "Emotional-social intelligence in health science students and its relation to leadership, caring and moral judgment," *The Internet Journal of Allied Health Sciences and Practice*, vol. 6, pp. 1-9, 2008.
- [17] D. S. Contino, "Leadership competencies: Knowledge, skills, and aptitudes nurses need to lead organizations effectively," *Critical Care Nurse*, vol. 24, pp. 52-64, 2004.
- [18] D. W. Organ, "Leadership: The great man theory revisited," *Business Horizons*, vol. 39, pp. 1-4, 1996.
- [19] A. M. Barker, *Transformational nursing leadership: A vision for the future*: National League for Nursing Practice, 1992.
- [20] A. Bowles and N. Bowles, "A comparative study of transformational leadership in nursing development units and conventional clinical settings," *Journal of Nursing Management*, vol. 8, pp. 69-76, 2000.
- [21] D. Stanley, "Congruent leadership: values in action," *Journal of nursing management*, vol. 16, pp. 519-524, 2008.
- [22] K. Jooste, "Leadership: a new perspective," *Journal of Nursing Management*, vol. 12, pp. 217-223, 2004.
- [23] V. Upenieks, "Nurse leaders' perceptions of what compromises successful leadership in today's acute inpatient environment," *Nursing Administration Quarterly*, vol. 27, pp. 140, 2003.
- [24] K. A. Mathena, "Nursing manager leadership skills," *Journal of Nursing Administration*, vol. 32, pp. 136, 2002.
- [25] C. Kleinman, "The relationship between managerial leadership behaviors and staff nurse retention," *Hospital Topics*, vol. 82, pp. 2-9, 2004.
- [26] M. V. O. Force, "The relationship between effective nurse managers and nursing retention," *Journal of nursing administration*, vol. 35, pp. 336, 2005.
- [27] M. Bratt, M. Broome, S. Kelber, and L. Lostocco, "Influence of stress and nursing leadership on job satisfaction of pediatric intensive care unit nurses," *American Journal of Critical Care*, vol. 9, pp. 307-317, 2000.
- [28] R. S. Morrison, L. D. Jones, and B. Fuller, "The relation between leadership style and empowerment on job

satisfaction of nurses," *Journal of Nursing Administration*, vol. 27, pp. 27, 1997.

- [29] J. Chiok Foong Loke, "Leadership behaviours: effects on job satisfaction, productivity and organizational commitment," *Journal of Nursing Management*, vol. 9, pp. 191-204, 2001.
- [30] M. Manojlovich, "The effect of nursing leadership on hospital nurses' professional practice behaviors," *Journal of nursing administration*, vol. 35, pp. 366, 2005.
- [31] K. Oh, Y. H. Ahn, H. Y. Lee, S. J. Lee, I. J. Kim, K. S. Choi, and M. S. Ko, "A study on Korean nursing students' educational outcomes," *Journal of Educational Evaluation for Health Professions*, vol. 8, 2011.
- [32] H.-Y. Lee, Y. Kim, H. Kang, X. Fan, M. Ling, Q. Yuan, and J. Lee, "An international comparison of Korean and Chinese nursing students with nursing curricula and educational outcomes," *Nurse education today*, vol. 31, pp. 450-455, 2011.
- [33] G. Gardner, J. Carryer, A. Gardner, and S. Dunn, "Nurse practitioner competency standards: findings from collaborative Australian and New Zealand research," *International journal of nursing studies*, vol. 43, pp. 601-610, 2006.
- [34] B. Smola, "Refinement and validation of a tool measuring leadership characteristics of a baccalaureate students," *Strickland OL, Waltz CF Measurement of nursing outcomes*, vol. 2, pp. 314-336, 1988.
- [35] SPSS Inc., *SPSS Base 17.0 for Windows User's Guide*: SPSS Inc., Chicago IL, 2010.
- [36] T. Knapp and J. Brown, "Ten Measurements That Often Should Be Taken," *Research in Nursing & Health*, pp. 465-469, 1995.
- [37] J. C. Nunnally and I. H. Bernstein, *Psychometric theory*, 3rd ed. New York: McGraw-Hill, 1994.