

## ORIGINAL RESEARCH

# Roles and Skills for Effective Academic Nurse Leaders

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## Abstract

**Background:** The extant nursing literature reveals limited information about specific aspects of the academic nurse leader role. To fully prepare academic nurse leaders for actualizing their roles, a deeper understanding of the knowledge and skills within these roles is needed. **Objectives:** This study assessed the extent to which academic nurse leaders are prepared for the challenges they face by measuring their perception of the importance of select leadership activities and their associated self-assessed level of competence with those activities. This study sought to answer the following research questions: What are the characteristics of the current New York state academic nurse leadership group? What are leaders' beliefs about the importance of specific components of the leadership role? What are leaders' beliefs about their competence in activities necessary for effective leadership and management? **Methodology:** Using a descriptive study method, academic nurse leaders in New York state (n=69) were queried using the Academic Nurse Leader Survey©. An email, using SurveyMonkey, was sent to academic nurse leaders for all NY state pre-and post-licensure nursing programs asking for their participation in the research study and asking them to forward the study to qualified individuals on their leadership team. **Results:** Fifty-two percent of the sample had worked 40 years or more in nursing; 54% worked 20 or more years in a faculty position. The majority of the respondents (58%) reported holding their current leadership position for 5 years or fewer. Activities were grouped into role dimensions. Findings demonstrate that competence was rated consistently lower than importance on all role dimensions with the largest gaps (15-24%) for the monitor, resource allocator/financial control, and strategic assessment dimensions, (p < .0005). **Limitations:** Sample size, sample geographic distribution, survey fatigue, format bias and response bias may be possible limitations. The format change from paper to electronic survey format may have contributed to the limited sample size since it is likely the time to complete the survey lengthened. The survey was restricted to academic nurse leaders in New York state. Response bias could have been a factor since the research team members may have been known to the respondents. **Conclusions and recommendations:** Future study of academic nurse leader role is warranted. Mixed method studies can be useful in extracting information about the lived experience of the academic nurse leader in relation to the activities and dimensions studied using the Academic Nurse Leader Survey©. It is suggested that the results may be used to further develop academic leaders both in formal and continuing education settings. Instruction in the areas of the largest gaps, monitor, resource allocator/financial control, and strategic assessment dimensions would be useful. Establishing academic nurse leader competencies across program types is also suggested, as well as strengthening accreditation standards around the development of academic nurse leaders.

**Key words:** leadership; schools, nursing; surveys and questionnaires; organization and administration

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## Roles and Skills for Effective Academic Nurse Leaders

### Background

The scope and delivery of educational and healthcare services nationwide is changing rapidly and it is anticipated that economic and political forces will have an even greater impact throughout the next 10 years. At the center of these changes will be the academic nurse leaders, who control resources that directly affect learning outcomes. These individuals need a variety of skills and abilities to plan for the effective delivery of education to students of all ages and at all levels of higher education. Nursing leadership in academia is critical to the future of nursing in the healthcare system.

Academic nurse leaders are those frontline people who set the stage for achieving excellence in nursing education through intricate juggling of a multitude of roles, initiatives, and competencies. Well-prepared leaders need knowledge of the academic environment, budgeting, and resource management skills, the ability to establish internal and external collaborative relationships, and to co-create effective work environments with faculty, as well as personnel management and political skills. Persuasive communication is an essential building block and interpersonal skills must be finely tuned; organizational assessment and analysis and strategic planning skills are essential.

It is necessary that academic nurse leaders are equipped to engage in the challenges of managing academic enterprises that produce graduates who are ready to join the changing healthcare system. The literature contains some examples of best practices and research that address the role and impact of the academic nurse leader in higher education. To fully prepare academic nurse leaders for actualizing their roles, a deeper understanding of the knowledge and skills within these roles is needed.

In 2020, a team with extensive experience in nursing education and academic administration came together to discuss the need to better understand the beliefs of academic nurse leaders about their roles. Specifically, the team wanted to examine the activities necessary for effective leadership and management, and determine the leaders' beliefs about the importance of specific components of the role and their competence in those areas.

### Literature Review

Much of the literature exploring nursing leadership in academia, going back decades, points to the need for quality preparation for academic nurse leaders. In fact, in 1974 the United States Health Resources Administration, Division of Nursing, "concerned with the quality of the ... preparation of nurses for leadership in nursing education" (p. iii), convened a conference for the purpose of discussing the role of the dean in baccalaureate and higher colleges of nursing. In 1976, Arminger published a paper exploring all aspects of the nursing deanship titled *The Educational Crisis in the Preparation of Deans*. Most recently, Apen et al. (2021) published a paper titled *Nursing Academic Leadership: An Urgent Workforce Shortage in Nursing Education*. In the decades between 1976 and 2021, several other papers were published reflective of this theme (Adams, 2007; Bouws, 2018;

Green & Ridenour, 2004; Princeton & Gaspar, 1991; Starck et al., 1999).

But what are the competencies that an academic nurse leader must possess? The gray literature offers two comprehensive sources that articulate necessary competencies. These are the Nurse Executive Competencies promulgated by the American Organization of Nurse Executives (AONE, 2015) and the *Scope of Practice for Academic Nurse Educators* put forth by the National League for Nursing (NLN, 2012). The AONE identifies five areas of competency, with detailed activity statements providing specificity to each competency. The NLN identifies eight competencies for nurse educators, and in a similar manner, provides what they call 'task statements' to elucidate the competencies. Taken together, these two resources could provide a comprehensive structure for the preparation of an academic nurse leader. Interestingly, with one exception (Patterson & Krouse, 2015), there is no mention in the literature reviewed for this paper of these resources.

The peer-reviewed literature does offer insights into competencies. The literature includes thought pieces by academic nurse leaders in the form of personal accounts or syntheses of current thinking on leadership (Fischer, 2017; Giddens & Morton, 2018; Green & Ridenour, 2004; Mundt, 2018; Redman, 2001; Thompson & Miller, 2018), integrative reviews (Bouws, 2018), and reports of qualitative studies (Patterson & Krouse, 2015; Starck, 1999; Wilkes et al., 2015). There is an additional body of work that discusses the urgent need for succession planning for leadership in nursing education (Glasgow et al., 2009; Phillips, 2019; Tucker, 2020). However, there are few reports of quantitative research related to competencies of academic nurse leaders.

Princeton and Gaspar (1991) explored competencies necessary for first-line nursing education administrators. Theirs is a mixed methods study in which they first conducted telephone interviews with 56 academic nurse leaders. They then asked the study subjects to rate the importance of 14 administrative competencies. They found that the respondents ranked character/integrity as most important and fundraising as least important. They also found that while respondents "reported [in their telephone interviews] that their second greatest responsibility was developing and managing the departmental budget in the form of allocating and monitoring financial and material resources" (p. 85), the respondents ranked this competency as next to last in a ranking of the importance of administrative competencies. The researchers did not ask the subjects to rate their estimation of their abilities (i.e., competence) with regard to the competencies.

Broome (2013) conducted a mixed methods study comprised of the administration of the Multifactor Leadership Questionnaire (MLQ) with a follow-up interview, investigating the self-reported leadership styles of 344 deans of baccalaureate and higher nursing education programs in the United States. Broome found that the deans of nursing ranked in the 80th percentile for self-reported transformative behaviors and outcomes effectiveness, as compared with the findings on the MLQ for over 3000 other leaders. Broome comments that all deans face constant, relentless changes in education and practice, and notes that "when interacting with

external constituencies, knowledge and skills related to financial acumen, resource acquisition, interdisciplinary collaboration, and development and advancement are critical” (p. 324).

With respect to barriers to assuming a leadership role, Delgado et al. (2016) surveyed 52 nurse educators from 12 of the 15 highest-ranked United States university nursing education programs (ranking done by *U.S. News & World Report* in 2013). In addition to identifying barriers, they also explored respondents’ formal and informal educational preparation for leadership versus on-the-job learning, whether or not the respondent had been mentored, and respondents’ opinions as to whether leadership can be learned. Furthermore, the survey asked 27 questions focusing on academic leadership qualities and required the respondents to rank the importance of the qualities. The respondents ranked a research track record as being the least important quality and integrity as being the most important quality, followed by clear communication and skills in problem resolution. They also ranked challenges facing academic nurse leaders in order of importance. Legal issues were ranked as the least important and finding faculty was ranked as the most important.

A recent study of academic nurse leaders in California identifies several critical knowledge competencies and several critical skills that an academic nurse leader must possess (Apen et al., 2021). These researchers distributed a survey to the leaders of all 145 pre-licensure programs in the state. Eighty-nine responded. The respondents ranked communication strategies and conflict resolution competencies as very important (74%), being knowledgeable about regulatory requirements and reporting as very important (69%), and fiscal management as being very important (58%).

It is noteworthy that leaders of associate degree nursing education programs have rarely been included in the research on academic nurse leaders. According to the NLN, in 2012 (the most recent year for which these statistics are available) there were 1084 associate degree nursing education programs in the United States. These represent 31% of all nursing education programs (AD, BS, BSRN, MS, and doctoral), and 61% of all licensure-qualifying nursing education programs in the United States. Thus, understanding the leadership profile of academic nurse leaders of associate degree nursing education programs is critical.

Broome (2013) and Bouws (2018) both note that there is a need for empirical data shedding light on the role and competencies of successful academic nurse leaders. None of the studies discussed above asked participants to estimate their competence with respect to the qualities, attributes, characteristics, and challenges. The research reported here helps to finely tune our understanding of where to focus leadership development, both in formal academic leadership preparatory courses and in ongoing professional development.

### **Academic Nurse Leader Survey Development**

A study by Roemer (1996) of middle managers in acute care hospitals, sought to develop a profile of their personal characteristics, determine their work roles and skills, and measure their perception of the importance of and competence in performing specific activities. Mintzberg’s (1973) work on management activities provided the basis for this research.

Roemer’s study questionnaire contained 75 work activities that were rated based on respondents’ perceptions of the importance of their work and their perceived competence. These were divided into 11 role groups and 5 skill groups. Additionally, when the roles and skills were grouped according to their importance ratings, they seemed to divide into the following: those most closely related to the management of the individual unit, those involving the relationship between the unit and the larger organization, and those involved in the relationship of the unit and organization to the external environment.

Edwards and Roemer (1996) studied nurse managers at four teaching hospitals to test the extent to which they were prepared for the changes that challenged them. The research was also designed to confirm the results of Roemer’s (1996) study on middle managers. Edwards and Roemer used the previous 75 work activities with minor wording changes in their questionnaire. Nurse managers were asked about their perception of the importance of the work activities and their perceived competence. Based on the previous study, the statements were divided into the same role and skill groups and also grouped in regard to the relationship of the unit to the organization and external environment.

Edwards (1999) studied middle managers in rehabilitation facilities utilizing a questionnaire that contained the 75 activity statements from the previous studies. As part of the study, factor analysis was used to identify those statements that went together as unified concepts. An examination of the statements yielded 12 groupings, named dimensions, each containing five statements that were used to analyze both importance and competence ratings. To provide evidence of the reliability of the measure, Cronbach’s alpha was applied to the statements in the dimensions. The alpha for importance was 0.94 and for competence was 0.95. In this study, the dimensions were grouped as behaviors related to the unit, the organization, and the external environment.

A pilot study by Edwards (2011) built on the previous research to determine the beliefs of academic nurse leaders about the importance of specific components of their role and their competence in the activities necessary for effective leadership and management. The study survey contained 69 activity statements (58 adapted from the previous research and 11 new statements) rated for importance and competence. The new activities were elicited from the literature and the statements created were reviewed by a panel of academic nurse leaders. The activity statements from the previous research were grouped into the dimensions as previously noted for comparison purposes and incorporated all of the previous roles and skills. No attempt was made to incorporate the new activity statements into the dimensions. Also in the pilot study, the groupings of behaviors in relation to the unit, the organization, and the external environment were analyzed.

### **Study Aims**

Based on the demonstrated paucity of knowledge in the role components and specific skills believed to be important for nursing educators in leadership positions in academia, this study sought to answer the following research questions:

- What are the characteristics of the current New York state nursing academic leadership group?

- What are leaders’ beliefs about the importance of specific components of the leadership role?
- What are leaders’ beliefs about their competence in activities necessary for effective leadership and management?

**Methodology**

This quantitative, survey method study used a cross-sectional approach to examine academic nurse leaders’ beliefs about their role components. A convenience sample from the leaders of professional nursing education programs of all levels across New York state was used for this study. IRB approval from SUNY Empire State College was obtained prior to survey distribution.

An email address mailing list was generated from public information available on the website of the NY State Office of the Professions. An email was sent to academic nurse leaders for all NY state pre-and post-licensure nursing programs asking for their participation in the research study. It explained this was a one-time inquiry of leaders to identify demographic characteristics and examine beliefs about leadership activities and competence in specific activities necessary for effective leadership and management. The deans and directors were also asked to identify other appropriate nurses in leadership positions in their schools (associate dean, program coordinator, program director, etc.) and to share this request with them so they could also participate in the research study. Completion of the survey indicated informed consent. A copy of the survey instrument may be obtained from the corresponding author.

The reliability of the original survey items (Edwards,1999; Edwards & Roemer, 1996; Roemer, 1996) was demonstrated in the previous research conducted with healthcare managers. The final survey instrument titled “Academic Nurse Leader Survey” included 42 activity statements generated from the nurse manager research, 23 activity statements modified for the academic nurse leaders, and 12 new activity statements specific to the academic nurse leader role, for a total of 77 activity statements. Examples of these new statements are, “Implementing processes to achieve established program outcomes” and “Leading programmatic accreditation activities”. Respondents were asked to first rate the importance of the activity and then rate their competence related to the same activity using a 5-point Likert scale for both ratings. The activity statements were followed by 10 demographic questions. The survey was distributed via SurveyMonkey®.

Descriptive and inferential statistics, including McNemar’s test, were used to analyze the results. McNemar’s test is a nonparametric method appropriate for comparing dichotomous outcomes for matched pairs (Rosner, 2015). The data were analyzed with JMP and SPSS statistical software. Consistent with the approach of previous studies (Roemer, 1996; Edwards & Roemer, 1996; Edwards, 1999), the survey results were analyzed first by combining the responses for all of the activity statements within each dimension and then further aggregated into three groupings based on organizational proximity to the academic nurse leader.

**Table 1**

*Sociodemographic Characteristics of Participants*

| Characteristic   | n  | % of total |
|--|----|------------|
| <b>Years as a nurse</b>                                      |    |            |
| 1 - 19 years   | 3  | 6          |
| 20 - 29 years  | 9  | 18         |
| 30 - 39 years  | 12 | 24         |
| 40 years and above   | 26 | 52         |
| <b>Years in faculty position</b>                             |    |            |
| 1 - 9 years  | 7  | 14         |
| 10 - 19 years  | 16 | 32         |
| 20 - 29 years  | 18 | 36         |
| 30 years and above   | 9  | 18         |
| <b>Years in current leadership position</b>                  |    |            |
| 1 - 5 years  | 29 | 58         |
| 6 - 10 years   | 9  | 18         |
| 11 -15 years   | 8  | 16         |
| 16 years and above   | 4  | 8          |
| <b>Current position</b>                                      |    |            |
| Associate Dean   | 1  | 2          |
| Dean   | 17 | 34         |
| Department Chair   | 18 | 36         |
| Program Coordinator/Director                                 | 11 | 22         |
| Other  | 3  | 6          |
| Dual teaching & administrative responsibilities <sup>a</sup> | 35 | 70         |
| <b>Education (all graduate degrees obtained)</b>             |    |            |
| Master's degree in nursing                                   | 30 | 60         |
| Master's degree in another field                             | 7  | 14         |
| Doctorate in nursing   | 24 | 48         |
| Doctorate in another field                                   | 15 | 30         |
| <b>Programs for which respondent provided leadership</b>     |    |            |
| Associate's degree   | 20 | 40         |
| RN to bachelor's degree                                      | 25 | 50         |
| Bachelor's degree  | 26 | 52         |
| RN to master's degree  | 2  | 4          |
| Master's degree  | 21 | 42         |
| Doctoral degree  | 9  | 18         |
| <b>Age</b>   |    |            |
| 20 - 49 years  | 4  | 8          |
| 50 - 59 years  | 14 | 28         |
| 60 - 69 years  | 25 | 50         |
| 70 years and above   | 7  | 14         |
| <b>Gender</b>  |    |            |
| Female   | 49 | 98         |
| Male   | 1  | 2          |
| <b>Race/Ethnicity</b>  |    |            |
| Asian or Asian American                                      | 2  | 4          |
| Black or African American                                    | 2  | 4          |
| White or Caucasian   | 42 | 84         |
| Hispanic or Latino   | 1  | 2          |
| Prefer not to answer   | 3  | 4          |

<sup>a</sup>Reflects the number and percentage of participants answering “yes” to this question.

**Results**

A total of 69 responses were received of which 19 (27.5%) did not provide demographic information. Table 1 shows the characteristics of the survey respondents. Note that for the title of current position, dean, associate dean, department chair, and program coordinator/director, represent 94% of the sample. These titles are comparable and reflect individuals in the role of chief nurse administrator.

For the activity statements, the 5-point Likert response scale was dichotomized for analysis, with ratings of 4 and 5 categorized as important or competent, respectively. Similarly, ratings from 1 to 3 were categorized as not important or not competent. The activity statements were analyzed by dimension, as in the previous study. Table 2 shows the responses for each dimension where the activity statement was rated as important and the percentage where the respondents rated themselves as competent. Also shown for each dimension are the number of activity statements in the dimension, the number of responses in the dimension, the difference in the percentage between important and competent (calculated as important minus competent), and the p-value associated with a McNemar’s test.

**Table 2**

*Summary of Percentage Importance and Competence Ratings by Dimension*

| Dimension                            | No. of activity statements | No. of re-sponses | Im-portant % | Com-petent % | Dif-ference | p      |
|--------------------------------------|----------------------------|-------------------|--------------|--------------|-------------|--------|
| Communi-cation                       | 8                          | 418               | 98.3         | 94.0         | -4.3        | .001   |
| Distur-bance Handler/Negotiator      | 5                          | 251               | 93.1         | 82.8         | -10.3       | <.0005 |
| Entrepre-neur                        | 4                          | 212               | 95.8         | 91.5         | -4.2        | .049   |
| Leader                               | 10                         | 519               | 95.4         | 90.0         | -5.4        | <.0005 |
| Inter-personal Relations             | 7                          | 359               | 93.6         | 85.2         | -8.4        | <.0005 |
| Liaison/Dissemi-nator                | 4                          | 213               | 81.7         | 79.3         | -2.3        | .499   |
| Operations                           | 6                          | 319               | 95.0         | 88.4         | -6.6        | .001   |
| Resource Allocator Financial Control | 8                          | 415               | 82.9         | 58.3         | -24.6       | <.0005 |
| Figure-head/Spokesper-son            | 5                          | 266               | 84.2         | 81.2         | -3.0        | .35    |

All dimensions have relatively high importance, ranging from 84.2% to 98.3%. Competence ratings are lower, ranging from 58.3% to 94%. For all dimensions, the competence percentage is lower than the corresponding importance percent. The smallest gap (2.3%) is observed in the liaison/dissemiator dimension; the largest gap (24.6%) is found in the resource allocator/financial control dimension. The differences between importance and competence are significant for all dimensions except for liaison/dissemiator and figurehead/spokesperson.

**Table 3**

*Importance and Competence Ratings by Groupings*

| Grouping                               | No. of ac-tivity state-ments | No. of Re-spons-es | Impor-tant % | Com-petent % | Dif-ference | p      |
|--|------------------------------|--------------------|--------------|--------------|-------------|--------|
| Relation-ship to unit                  | 27                           | 1410               | 95.9         | 90.1         | -5.8        | <.0005 |
| Relation-ship to organiza-tion         | 25                           | 1306               | 88.6         | 76.5         | -12.1       | <.0005 |
| Relation-ship to external environ-ment | 25                           | 1308               | 89.1         | 77.1         | -12.0       | <.0005 |

The 12 dimensions were aggregated into three groupings based on organizational proximity to the academic nurse leader. The results are shown in Table 3. Relationship to unit has the highest importance and competence, and the smallest difference.

Relationship to organization and relationship to external environment are similar, showing lower levels of importance and competence and a relatively larger difference. These findings are consistent with findings in the Edwards and Roemer (1996) study with nurse managers, as are the results of the importance and competence percentages by the three groupings of dimensions.

When considering the activity statements, nine were unanimously rated as important with four of them from the communication dimension (Table 4). The same four activity statements were also highly rated in terms of competence (Table 5).

**Table 4**  
*Highest Percentage Activity Statements Rated by Importance*

| Activity statement  | Dimension                          | Important percent |
|---|------------------------------------|-------------------|
| Keeping administration and students informed about the program                                | Communication                      | 100               |
| Keeping faculty and staff informed  | Communication                      | 100               |
| Communicating effectively orally  | Communication                      | 100               |
| Communicating effectively in writing  | Communication                      | 100               |
| Handling formal grievances  | Disturbance handler/<br>Negotiator | 100               |
| Managing or supporting students with complaints and concerns                                  | Disturbance handler/<br>Negotiator | 100               |
| Modeling professional behavior  | Leader                             | 100               |
| Demonstrating behaviors that value cultural, ethnic, gender, and other individual differences | Leader                             | 100               |
| Identifying and solving complex problems  | Technical expert                   | 100               |

**Table 5**  
*Highest Percentage Activity Statements Rated by Competence*

| Activity statement   | Dimension               | Important percent |
|--|-------------------------|-------------------|
| Keeping administration and students informed about the program | Communication           | 100               |
| Keeping faculty and staff informed                             | Communication           | 100               |
| Modeling professional behavior                                 | Leader                  | 100               |
| Communicating effectively orally                               | Communication           | 96                |
| Coaching, mentoring, and challenging the faculty and staff     | Interpersonal relations | 96                |
| Communicating effectively in writing                           | Communication           | 96                |

The largest gap between importance and competence, 24.6%, was found for the resource allocator/financial control dimension. Table 6 shows the comparison of importance and competence for the eight individual activity statements in this dimension. The activity statement “Understanding financial aid processes” shows the lowest levels of importance and competence for this dimension but has the largest gap of 62%.

**Table 6**  
*Importance and Competence Percentage for Activity Statements in Resource Allocator/Financial Control Dimension*

| Activity Statement   | No. of re-sponses | Important % | Competent % | Difference | p      |
|--|-------------------|-------------|-------------|------------|--------|
| Allocating resources (personnel, money, materials)                         | 55                | 98.2        | 80.0        | -18.2      | .006   |
| Projecting how anticipated revenues will impact the program or institution | 55                | 90.9        | 58.2        | -32.7      | <.0005 |
| Preparing financial reports  | 53                | 73.6        | 54.7        | -18.9      | .021   |
| Formulating budgets  | 52                | 80.8        | 57.7        | -23.1      | .004   |
| Managing effective cost reduction strategies                               | 50                | 86.0        | 70.0        | -16.0      | .021   |
| Analyzing and using financial reports                                      | 50                | 82.0        | 68.0        | -14.0      | .001   |
| Understanding financial aid processes                                      | 50                | 68.0        | 36.0        | -62.0      | <.0005 |
| Understanding enrollment management processes                              | 50                | 82.0        | 56.0        | -26.0      | .001   |

**Discussion**

**Research Question 1: What are the characteristics of the current New York state nursing academic leadership group?**

The demographics reported in this study revealed a homogenous group of nurse educators who reflect the characteristics of the nurse educator population as a whole, in particular, related to age, gender, and ethnicity. The NLN 2017 Faculty Census Survey shows that 46 percent of the leadership of nursing education programs were between the ages of 46 and 60 years old and that almost half (45 percent) of the administrators were 61 years of age or older. According to the American Association of Colleges of Nursing (AACN) 2021 *Annual State of the School Report*, the median age of nursing faculty is 54 years old, 92.8% are female and only 7.2% are male, 81.2% are white while only 18.8% are from racially diverse groups. The nursing faculty workforce is rapidly aging, and it is expected that a third of this workforce will retire by 2025. This trend is confirmed by the current study with 92% of the respondents reporting an age of 50 years or above, and 94% reporting to have been in the nursing profession for twenty-plus years.

Fifty-two percent of the sample had worked 40 years or more in nursing; 54% worked 20 or more years in a faculty position. The majority of the respondents (58%) reported holding their current leadership position for 5 years or fewer. Of note, 70% indicated they work in a dual teaching and administrative position. Sixty-four percent of respondents were aged 60 or above. Not surprisingly, 84% indicated they are white or Caucasian. The demographic findings from this study reveal the extensive experience in nursing and the years in academic roles in this group, consistent with the literature, these findings are reflective of the larger population of academic nurse leaders.

The sample for the pilot study (Edwards, 2011) was composed of academic nurse leaders from across the U.S. (n=93). Demographic characteristics for the two studies are shown in Table 7 and are within 10%, with the exception of Age, Title – Department Chair, and Education – doctorate nursing.

Over two-thirds of the pilot study respondents indicated they had formal education in the last five years in leadership (81%) and around one-half in organizational theory and planning (48%), strategic assessment (46%), and quality management (44%). This question was not included in the current study but could be used to obtain useful information in the future. Of note in the current study, 70% indicated they work in a dual teaching and administrative position. Since academic nurse leaders are already burdened by extensive responsibilities, such as faculty workload assignments, student advisement, leading accreditation activities, budgeting, and representing the nursing program to multiple stakeholders, the addition of a teaching assignment may create undue demands and lead to greater burnout. This phenomenon was exacerbated due to the pandemic when academic nurse leaders had to take on didactic and clinical teaching roles to cover for faculty and staff illness or family losses.

Green and Ridenour (2004) note that while all academic leaders have three customers: the college administration, the

faculty, and the students, academic nurse leaders have a fourth customer – the public for whom nurses provide care. Glasgow et al. (2009) suggest that academic nurse leaders have additional responsibilities related to “clinical placement legalities, patient care issues, clinical and laboratory budget issues, state board and accreditation requirements, and a critical nursing faculty shortage” (p. 205).

**Table 7**

*Demographic Characteristics of Pilot and Current Studies*

| Demographics  | Pilot study<br>(n = 93) |    | Current study<br>(n = 69) |    |
|---|-------------------------|----|---------------------------|----|
|   | n                       | %  | n                         | %  |
| Years in nursing – 30 years or greater                    | 75                      | 81 | 52                        | 76 |
| Years in a faculty position – 20 years or greater         | 55                      | 59 | 37                        | 54 |
| Years in current leadership position – five years or less | 49                      | 53 | 40                        | 58 |
| Title - Dean  | 39                      | 42 | 23                        | 34 |
| Title – Department Chair                                  | 16                      | 17 | 25                        | 36 |
| Title – Program Coordinator/<br>Director                  | 16                      | 17 | 15                        | 22 |
| Education – doctorate nursing                             | 33                      | 36 | 33                        | 48 |
| Education – doctorate in another field*                   | 36                      | 39 | 21                        | 30 |
| Gender - female   | 86                      | 92 | 68                        | 98 |
| Age – greater than 55/60 years**                          | 66                      | 71 | 44                        | 64 |

\*Doctorate in another field included EdD in higher education/leadership and PhD in higher education.

\*\*Pilot study reported age as 55 and above; current research study reported age as 60 and above.

**Research Questions 2 & 3: What are leaders’ beliefs about the importance of specific components of the leadership role? What are leaders’ beliefs about their competence in activities necessary for effective leadership and management?**

The academic nurse leaders rated their competence significantly lower than importance for the majority of the dimensions. Both importance and competence ratings were highest for the groupings related to the management of the individual unit. The activity statements with the highest importance (4 of 7) and competence (4 of 6) ratings were primarily in the communication dimension. The activity statements with the lowest importance ratings were scattered across the following dimensions: resource allocator/financial control (2), liaison/disseminator (2), disturbance handler/negotiator (1), and figurehead/spokesperson (1). The lowest competence ratings were primarily in the resource allocator/financial control dimension (5 of 8).

Seven of the dimensions were rated on the importance scale receiving a score of 90% or higher. These included communication, disturbance handler/negotiator, entrepreneur, leader, interpersonal relations, operations, and technical expert. Five of the dimensions were rated less than 90% on the importance scale and these included liaison/disseminator, resource allocator/financial control, figurehead/spokesperson, monitor, and strategic assessment. The range of rating for importance was 81.7% to 98.3% which suggests that the respondents believe all of the dimensions with their related activities are important to the academic nurse leader role.

All dimensions were rated as being important aspects of an academic nurse leader's role by 80% or more of the respondents. But there was much more variation in the percentage of respondents who rated themselves as competent (58% to 94%). This variation may be due, in part, to the formal educational preparation of the academic nurse leader which typically has less content/emphasis on dimensions such as budgeting and financial oversight, and strategic planning.

The 12 dimensions were aggregated into three groupings based on organizational proximity to the academic nurse leader. Another finding which is consistent with the previous study of nurse managers (Edwards, 1999) is the results of the importance and competence percentages by the three groupings of dimensions (Table 3). Relationship to unit has the highest importance and competence and the smallest difference. Relationship to organization and relationship to external environment are similar showing lower levels of importance and competence and a relatively larger difference. This is likely due to the greater comfort level of the academic nurse leader operating within his or her unit. There are numerous recommendations in the literature that the academic nurse leader must develop a keen understanding of the relationship of the nursing education program to the college or university as a whole, as well as to the larger societal environment (Broome et al., 2013; Giddens & Morton, 2018; Glasgow et al., 2009; Green & Ridenour, 2004; Huston, 2008; Patterson & Krouse, 2015; Starck, 1999; Thompson & Miller, 2018).

The results presented in Table 2 confirm that communication is most important to academic nurse leaders. A gap, -10.3% ( $p < .0005$ ), between the rating of competence and importance, exists in the disturbance handler/negotiator role, one implication of this is that conflict management may be avoided by many nurse educators who feel less confident to manage conflict, predisposing faculty to avoid assuming the academic leadership role. This is consistent with the findings of Adams (2007) who found that apprehension about conflict, with both faculty and administration, was a major barrier for nurse educators in considering taking on a leadership role. There is potential utility in faculty development in conflict resolution and management of work based on work styles.

The largest gap between importance and competence is in the area of resource allocation and financial control, -24.6% ( $p < .0005$ ). This finding is also consistent with other reports or recommendations in the literature commenting on the necessity of financial acumen and budgetary skills (Adams, 2007; Apen et al., 2021; Broome, 2013; Giddens & Morton, 2017; Glasgow et al., 2009; Worthy et al., 2020). Identification of the important activities

in which academic nurse leaders do not feel competent facilitates the planning for interventions and activities to ameliorate this and provides the necessary information to improve formal educational curricula. The graduate and continuing education that academic nurse leaders receive should be examined relative to the needs of the institution and the changes that are taking place in the educational environment. Ongoing educational efforts to increase competence are crucial in areas such as finance and strategy with an emphasis on decision-making and problem-solving skills.

Finally, it is noteworthy that 40% of the respondents in this study were leaders of associate degree nursing education programs. This is important because our literature review suggests that leaders at this level have been largely omitted in previous research on leadership in nursing education.

### Limitations

We recognize this study has several limitations. The following factors should be considered when developing future studies or interpreting the results reported herein. The large number of survey questions and survey length (77 items each for importance and competence rating) as well as the survey format used may have contributed to the lower than desired response. A formatting issue arose when using the SurveyMonkey platform for the delivery of the instrument; it created an inadvertent limitation in that it separated the ratings of importance and competence items that were delivered side by side via paper format in previous studies. This likely contributed to extending the survey completion time. Although it was anticipated that it would take 10-15 minutes to complete the survey, the length of the survey could have been prohibitive for some, resulting in incomplete surveys. Of the 69 valid responses, 19 (27.5%) respondents did not rate all 77 of the activity statements. It is unknown to what extent survey fatigue contributed to a decreased item response rate and lower survey completion rate. Fass-Holmes (2022) suggests survey fatigue can contribute to measurement error.

The researchers believe that the final sample size was acceptable for a study launched in the midst of the COVID-19 pandemic. However, participation may have been impacted because of the pandemic. In response to the pandemic, academic nurse leaders have coped with many issues: interruptions in clinical schedules, rescheduling of clinical placements, managing didactic learning experiences from a distance, and reconfiguring psychomotor skill-building using altered methods and schedules. The rapid adoption of innovations including new distance learning software, with all its implications, added to the host of adaptations needed (Ard et al., 2021). Nonetheless, a larger sample size would contribute to the external validity of future study findings.

Since the sample was drawn from New York state, the academic nurse leaders in this study may not be representative of the academic nurse leader population as a whole. However, it should be considered that New York state is large and populous. In 2011, the most recent date for which these data are available, New York state had the most professional nursing education programs of any state in the country (206), followed closely by California, which had 205 (NLN, 2012). While there has been a proliferation of nursing education programs, it is unlikely that the geographic



distribution of such programs has changed significantly in the past decade. Therefore, while this limitation must be considered, the findings of this study may be applicable in other locales.

There are several potential sources of bias that may have influenced the survey results. Self-selection bias should be considered as a limitation of this study as respondents were obtained through a convenience sample and participation was voluntary. Format bias may exist due to the formatting limitations associated with the third-party survey platform (Choi & Pak, 2005). Social desirability bias occurs when survey participants' responses are chosen to align more closely with accepted social norms (Larson, 2019) and may be present in this study. Participants in this study may have been acquainted with the leaders of this research project, which could have introduced response bias.

### Recommendations for Future Study

Since the survey instrument contained new items, repetition of the study with a larger sample size would facilitate conducting a factor analysis. Factor analysis of the activities would determine if the new activity statements fell into the existing dimensions, thus adding to the construct validity of the instrument. A subsequent revision, based on factor analysis of the instrument, could result in a reduction in the number of activity statements (Polit, 2009). A shorter survey may increase the number of surveys returned and increase the likelihood that all activity statements are rated. The generalizability of study findings would be enhanced with the use of a larger sample size.

Since only nurse leaders' self-ratings of importance and competence were used in this study, the study did not address the relationship between self-beliefs about competence, and competence as evaluated by others. To address this issue, it is suggested leadership competence be studied using mixed methods to corroborate findings. A mixed methods study might mitigate the effect of social-desirability bias.

In one study, California academic nurse leaders reported 14 various titles for the same role (Mintz-Binder & Fitzpatrick, 2009). With multiple roles and titles, future studies can examine the role responsibilities for the variety of academic leader/manager roles and compare them to the activities and dimensions within the Academic Nurse Leader Survey©.

In the pilot study conducted by Edwards (2011), respondents were asked if they had formal education on a variety of management and leadership topics; however, this question was not included in the current study. This information would be useful to uncover issues surrounding the sufficiency of the preparation of future academic nurse leaders who seek professional growth in graduate nursing education programs. Tucker (2020), in a discussion of succession planning for leadership in academic nursing, suggests future investigations focus on novice academic nurse leaders' perceptions of which learning activities are valuable for development in the leadership role, once in the role. Evidence about continuing professional development needs of academic leaders could inform the development of not only graduate education but also continuing education programs.

The activities within the dimensions in the Academic Nurse Leader Survey© do not contain aspects of the academic leader role reflecting the cognitive and affective domains, e.g., valuing

the change agent role or understanding the impact of changes within the educational system. Future instrument development might consider the cognitive and affective role of the manager/leader, and how to best measure these constructs for ratings of importance and competence.

Since the lived experience of academic nurse leaders might impact the rating of importance and competence of activities within their role, consideration should be given to uncovering the structure and processes within which academic nurse leaders operate and the potential impact on how academic nurse leaders rate activities. The perspective of the academic nurse leader at an associate degree program at a community college may be very different than that of, as Broome (2013) suggests, a leader at "schools of nursing housed in health science centers within universities with strong clinical research missions [who] have additional demands for expertise and knowledge about obtaining and sustaining considerable resources for support of research-intensive faculty" (p. 324).

The current study framed this work based on previous studies by Roemer (1996), Edwards and Roemer (1996), and Edwards (1999) who cited Mintzberg (1973) as the conceptual model framing their work. In future work, consideration of aspects of the manager role vs. leader role within other conceptual models would be useful. In addition, a comparison of the activities in the Academic Nurse Leader Survey©, in relation to the AONE Nurse Executive Competencies (2015) and the NLN *Scope of Practice for Academic Nurse Educators* (2012) could potentially uncover role activities that can be considered for addition into the Academic Nurse Leader Survey©. Investigation into a common set of competencies is necessary within a conversation containing representation from all program types, in light of the lack of clearly defined, commonly accepted academic nurse leader competencies. There is interest expressed in the literature in the further development of academic nurse leader competencies (Morse & Warshawsky, 2021). This creates an opportunity to also consider core academic nurse leader competencies in relation to existing and future nurse leader competencies.

Recognizing the needs of nurse academic leaders, the NLN, the AACN, and the Organization for Associate Degree Nursing have implemented leadership development programs for academic nurse leaders. A recommendation from study findings is to review these programs to address program gaps with a focus on competence related to managing finances for example. It is also suggested that nursing education program accrediting bodies consider strengthening the standards and criteria surrounding the expectations for the orientation and development of the chief nurse administrator.

In addition, specialized accreditation bodies such as Accreditation Commission for Education in Nursing and Commission on Collegiate Nursing Education have also developed standards related to the qualifications of the chief nurse administrator for nursing programs and related supports such as a formal orientation program and mentoring. This is further recognition of the critical role played by academic nurse leaders in higher education.

## Conclusions

This study provides convincing evidence from many academic nurse leaders in New York state, who rated work activity competence below the importance of those activities for many aspects of their work. Academic nurse leaders rated activities within their unit as most important, indicating that relationships and interactions with faculty are major components of the work. Relationships with the organization and the external environment were rated as secondary in importance to the operation of the unit. Implications indicate that as faculty advance into academic leadership roles, they must focus attention on increasing their knowledge and skills in the areas of resource allocation, financial control, strategic assessment, and monitoring of the internal and external environment.

In a rapidly changing educational landscape in which the external environment can be a significant factor, educational leaders must be able to assess these challenges and implement strategies that enable success. They must be skilled in scanning the external educational and healthcare environments, monitoring trends and forecasting their direction, and assessing how to respond to the opportunities and challenges presented. This has implications for graduate nursing education and the development of future academic nurse leaders. It may also be beneficial for current leaders to examine their existing roles and skills as they relate to their own professional development needs, in light of changing responsibilities and emerging developments in higher education.

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