Drivers for seeking the doctor of nursing practice degree and competencies acquired as reported by nurses in practice

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ABSTRACT

Background: The American Association of Colleges of Nursing introduced the Doctor of Nursing Practice (DNP) degree in 2004. To date, few publications examine the competencies and impact of nurses with practice doctorates.

Purpose: The purpose of this study was to examine reasons for seeking a DNP degree, assess knowledge and competencies acquired from DNP programs, and to inform stakeholders about the skills acquired by nurses with practice doctorates.

Methods: A cross-sectional design was used to administer a self-report survey to a convenience sample of DNPprepared nurses in practice, recruited from a national membership organization. The electronic survey was designed using constructs developed from the literature, national organization position statements, and standards of doctoral nursing education.

Results: A total of 306 participants responded to the survey, 270 were used after data review. The majority of respondents did not seek a DNP degree because it was required for a job, to gain additional supervised practice, or to receive additional training with a specialty population. The majority strongly agreed that they gained competency in translating and synthesizing research evidence into practice, designing and implementing quality improvement, and identifying, measuring, and evaluating outcomes.

Conclusions: Primary reasons for seeking a DNP degree were seeking knowledge, skills, competencies, confidence, and job opportunities.

Implications for practice: Doctor of Nursing Practice–prepared nurses hold unique, advanced knowledge, competencies and skills to affect health care across multiple settings. Study results suggest that highly skilled DNP-prepared nurses are equipped to lead quality improvement, engage in practice scholarship, and improve clinical outcomes.

Keywords: Clinical nursing scholarship; competencies; DNP; Doctor of Nursing Practice; nursing practice scholarship.

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The importance of evaluating the impact of scholarship on health outcomes for society continues to evolve. As links between research and practice continue to

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strengthen, so does the understanding of knowledge development in both arenas (American Association of Colleges of Nursing [AACN], 2018). With the introduction and innovative disruption of the practice doctorate in nursing in 2004, came the opportunity to explore new approaches to achieve impact through implementation, evaluation, and dissemination of evidence into nursing practice (AACN, 2004). However, numerous degrees and roles, including advanced practice registered nurse (APRN) and executive leader, contribute to nursing practice scholarship, and the outcomes may take many forms across these fields. There is relatively little research that has systematically

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examined the scholarship outcomes of nursing practice doctorates currently engaged in practice.

This study aimed to examine: 1) reasons for seeking a Doctor of Nursing Practice (DNP) degree; and 2) practice scholarship knowledge and competencies acquired in DNP programs.

The findings from this study provide the foundation for further research to determine the outcomes of nursing practice scholarship on patients, systems, populations, and the profession of nursing; quality and safety; and policy implications. This study served as a first step to survey graduates from DNP programs, providing data that will inform consumers of health care and employers about the reasons for entering a DNP program, as well as the knowledge, competencies, and skills of the nurses holding the degree. This study informs educators and health care decision makers about the additional skill set acquired and used by nurses with practice doctorates.

Background

In 2004, the DNP degree was adopted by the AACN membership as the terminal degree for nursing practice (AACN, 2004). This changed how the profession prepares nurses for the highest level of practice. Nurses seeking doctoral degrees were able to choose a terminal research or practice doctorate. The Institute of Medicine published a landmark study, *The Future of Nursing*: Leading Change, Advancing Health (IOM, 2010), recommending that nurses: 1) should practice to the full extent of their education and training; 2) should achieve higher levels of education and training through an improved education system that promotes seamless academic progression; 3) be full partners, with physicians and other health care professionals, in redesigning health care in the United States; and 4) engage in effective workforce planning and policymaking that requires better data collection and improved information infrastructure. Currently, the National Academy of Medicine (NAM) (formerly the IOM) is conducting a consensus study with similar goals and considerations to update and extend this sentinel report to The Future of Nursing 2020-2030 (NAM, 2020), leading the profession into the next decade.

Since 2004, there has been a rapid proliferation of DNP degree programs (AACN, 2019). The AACN national survey enrollment and graduation data indicate that there are 354 DNP programs in the United States (AACN, 2019). As the recommendations for higher levels of education were transitioned to action and policy, the number of nurses pursuing a practice doctoral degree has been rising. Currently, there are more than 32,000 nurses holding DNP degrees and 32,678 students enrolled in DNP programs (AACN, 2019). Over the past two years, DNP programs experienced an enrollment increase of 12.3% (3,551 students), and graduations increased by 15.9% (966 graduates).

In 2014, the AACN Board of Directors commissioned a study by the RAND Corporation to determine the barriers and facilitators to evolving APRN education to the doctoral level. Among the study's principal findings was strong "agreement among nursing's academic leaders regarding the value of DNP education" (Auerbach et al., 2014, p. 27). The authors of this report cited the need for studies to assess the influence DNP graduates have on health outcomes and the need to provide more information to employers, showing the benefits of hiring nurses with DNP degree preparation.

Defining and advancing the competencies for scholarship of practice

A review of the literature, professional nursing organization statements, and white papers on defining nursing practice scholarship reveals an evolving definition. In 2018, AACN published Defining Scholarship in Academic Nursing in which the definition of scholarship was broadened to include many examples of the scholarship of application or practice. The AACN (2018) defined nursing scholarship as the generation, synthesis, translation, application, and dissemination of knowledge that aims to improve health and transform health care. This definition of the scholarship of practice was based in part on Boyer's seminal work defining the scholarship of practice as a critical component in shortening the theory to practice gap (Boyer, 1990). The scholarship of practice is directly related to the need to address and resolve specific issues within practice, related to individual patients, organizations, and social problems (Boyer, 1990). The AACN (2018) definition of scholarship of application or practice states:

...the practice scholar applies evidence to practice, incorporating implementation and translation science. Scholarship is guided by a multitude of innovative methods of inquiry that are informed through clinical practice with the aim of improving and transforming health care delivery and patient outcomes. Practice scholars apply and integrate evidence to and from clinical practice and conduct quality improvement using methodologies to improve care processes. (p. 3)

This application of evidence to practice was explored and defined by authors describing translational research as nursing practice scholarship. Scholarly nursing practice involves astute analysis of research to attain currency in best practices, evidence-based practice (EBP), monitoring of nursing care outcomes, and continuous clinical inquiry to improve nursing care to accomplish positive outcomes (Limoges & Acorn, 2016). Practice-based evidence is generated through outcomes management, quality improvement, and EBP projects that translate

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Table 1. Examples of practice scholarship aligned with the AACN DNP essentials AACN DNP Essential Examples Essential I: • Develops unique clinical nursing scientific programs or interventions with underpinnings for documented effectiveness practice Essential II: • Secures competitive funding to organizational support innovations in practice and systems • Establishes and evaluates quality leadership for improvement initiatives quality • Leads in the development, review, and improvement and evaluation of clinical practice models systems thinking to transform health care delivery • Communicates best practices to lay groups to promote translation and implementation of research findings • Consults with health care organizations to build capacity for improving care and implementing evidence-based practice • Serves as an expert in leadership positions, committee membership, health care boards, and other involvement related to practice expertise in regional, national, or international arenas Essential III: • Develops best practices for clinical translating evidence to practice scholarship and based on results of translational and analytical implementation science methods for • Translates research and uses evidence-based evidence to improve health and practice generate practice-based knowledge • Translates research and uses evidence to improve health, affect practice, and effect change in health systems Develops clinical guidelines, innovations, and new program initiatives Assists with or conducts systematic reviews that synthesize summarize research findings to recommend solutions to current clinical problems Essential IV: Analyzes system-wide data to information evaluate practice patterns and/or systems/ uncover new issues related to technology and practice from such data • Analyzes big data or conducts policy patient care technology for the analysis at the community, state, improvement and national, or international level transformation of • Uses secondary data from the health care electronic health record to evaluate health care processes and patient outcomes, disseminating results to

Table 1. Examples of practice scholarship aligned with the AACN DNP essentials, *continued*

AACN DNP Essential	Examples
Essential V: health care policy for advocacy in health care	 Influences policy through leadership activities at the local, national, and international levels and participates in policy think tanks Disseminates policy papers through peer-reviewed media
Essential VI: interprofessional collaboration for improving patient and population health outcomes	 Provides expert review for quality improvement projects, journals, periodical, or textbooks Serves as a clinical practice specialist in partnerships that advance research, clinical improvements, policy development, and/or implementation Engages with stakeholders including patients, coalitions, corporations, and industries to educate the workforce, develop clinical innovations, and/or conduct research and practice transformation Leads interprofessional teams to improve health and transform health care based on expertise
Essential VII: clinical prevention and population health for improving the nation's health	• Evaluates and reports population health, satisfaction, and cost outcomes
Essential VIII: advanced nursing practice	 Publishes to influence practice via peer-reviewed venues Disseminates practice-based findings at regional, national, or international meetings Disseminates clinical programs or quality improvement initiatives in regional, national, or international arenas Consults, reviews, or evaluates clinical nursing programs in other academic institutions Recognized nationally by peers for expertise, excellence, and innovation within an area of practice specialty Receives regional, national, or international awards or recognition of contributions by a peer professional group
of nursing practice.	Association of Colleges of Nursing; $DNP = doctor$

This table was adapted from the AACN (2006) DNP Essentials.

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the external community to improve

quality of care

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evidence into practice and policy to improve care and outcomes (Melnyk, 2013). The implementation of EBPs generates knowledge related to how best to improve health care processes and outcomes for patients that may be transferable as best practices. Examples of scholarship of application include quality improvement initiatives; patient protocols or practices; clinical practice guidelines; practice innovations; design and evaluation of new care delivery models; develop, implement, and evaluate policy; and patient education materials (Limoges et al., 2015). The AACN (2018) definition of the scholarship of practice indicated that practice scholarship could be advanced in numerous ways.

National organizations that set educational standards in advanced practice nursing such as the AACN, the National Organization for Nurse Practitioner Faculties (NONPF), and the Council on Accreditation of Nurse Anesthesia Educational Programs (2019) support the utilization of DNPprepared nurses to provide scholarship outcomes in organizations. The NONPF published a white paper on clinical scholarship for nurse practitioners (NPs) in 2016 stating, "The clinical scholar uses evidence-based practice skills to translate current best evidence to improve health care and health care outcomes, thereby transforming systems of care" (NONPF, 2016, p. 1). National nursing education standards for students enrolled in practice doctorate programs expect students to demonstrate knowledge and competency in eight AACN DNP Essentials, which is further depicted in Table 1 (AACN, 2006, p. 10-11).

Conceptual framework

The Actualized DNP Model, depicted in **Figure 1**, is a framework to characterize the components of the practice doctorate to fully understand the competencies and impact of practice doctorate scholarship (Burson et al., 2016). The model is used to succinctly describe how the unique skill set and advanced nursing knowledge attained through completion of the DNP degree provides the essential supporting structure for the development of innovative advance practice roles, where the practitioner implements evidence-based knowledge across practice settings (that transcends the bedside), and generates practice-based knowledge that ultimately leads to the desired outcomes (Burson et al., 2016).

The DNP-prepared nurse uses competencies that incorporate scientific evidence, organizational knowledge, leadership, business acumen, informatics skill, and policy analysis. However, application of these newly acquired competencies requires practice opportunities in advanced practice roles to achieve the greatest potential for influencing outcomes for patients, populations, systems, and policy. These outcomes then influence the developing advanced nursing knowledge foundation and competencies needed for the profession. Exploring reasons for seeking the DNP degree, attained doctoral level

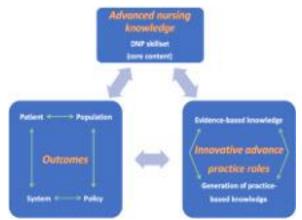


Figure 1. The actualized doctor of nursing practice (DNP) model. Burson, R., Moran, K. J., & Conrad, D. (2016). Why hire a doctor of nursing practice-prepared nurse? The value added impact of the practice doctorate. *Journal of Doctoral Nursing Practice*, *9*(1), 152–157. https://doi.org/10.1891/2380-9418.9.1. 152. Reprinted with permission.

competencies, and application of practice scholarship in advanced practice roles influenced the approach taken by the authors to assess scholarship outcomes of DNPprepared nurses in practice.

Methods Design

A cross-sectional design was used to administer a selfreport survey to DNP graduates in practice to identify reasons for entering a DNP program and practice scholarship competencies acquired from the DNP program of study. Practice scholarship competencies were derived from the literature. An online survey was used to collect data from DNP graduates currently in practice.

Setting/sample

A convenience sample of DNP-prepared nurses was recruited from a national membership organization for nurses holding a DNP degree. The membership organization's mission, "to improve health care outcomes by promoting and enhancing the doctoral prepared nursing professional" serves a population of 3,000 nurses (Doctors of Nursing Practice, 2020, para 6). The membership organization provided a written letter of support and cooperation for this study. A sample size of 150 participants, based on power analysis, was sought; however, 306 participants responded.

Procedures

Data were collected using an electronic survey tool that was built using Research Electronic Data Capture (RED-Cap, n.d.). REDCap is a secure web application designed to assist researchers in the building and managing of surveys and databases (REDCap, n.d., para 1). Five content experts reviewed the survey tool to confirm that all the

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important nursing practice scholarship outcomes as displayed in the **Table 1** titled, *Examples of Practice* Scholarship Aligned with AACN DNP Essentials, were covered to establish content validity. The tool was piloted with 10 DNP alumni from several programs located in the northeastern and central areas of the Unites States to establish face validity and usability of the tool. After tool revision, the survey was distributed via the DNP organization to their membership of nurses holding a DNP degree currently in practice. An electronic link to the survey requesting response from DNP-prepared nurses currently in practice was posted on the organization's member website and social media sites, in one email announcement, and in two newsletters sent out by the organization. Participants were instructed that they could stop and restart the survey if needed. A follow-up announcement was posted at 7 and 30 days after the initial announcement. Survey participants remained anonymous and no names were recorded. Institutional review board at The George Washington University determined the study to be exempt on March 19, 2020.

Instrument

A researcher-designed survey using constructs developed from the literature, national nursing organization position statements, and standards of doctoral nursing education were used to determine 1) reasons for seeking a DNP degree and 2) practice scholarship knowledge and competencies acquired in DNP programs.

Data analysis

Data from online surveys was transferred to SPSS 26 software, cleaned, and then analyzed in consultation with a statistician (IBM Corp., 2019). Data were verified to ensure accuracy by the principal investigator. Descriptive statistics were used to describe the practice and scholarship characteristics of the participants. For each continuous variable, the mean, SD, minimum, and maximum were calculated and reported. For categorical variables, frequency and percentage were reported.

Results

Demographics

A total of 306 participants responded to the survey; however, after cleaning the data, 270 completed surveys were used in this study. Demographic data are reported in **Table 2**. Respondents to the survey were primarily White or Caucasian (77.2%) and female (92.2%) with a mean age of 55 years. Most respondents were working full time (74%), with the highest percentage of respondents in an academic setting (32.7%) or working as a NP (37.0%), with a mean 4.6 years of experience since their DNP graduation. The aggregate number of APRNs comprised 47% of respondents. The demographic results mirror the national AACN 2018–2019 enrollment and graduation data demographics for current DNP graduates (AACN, 2019).

Reasons for seeking doctor of nursing practice degree

Reasons for seeking a DNP degree ranged from seeking knowledge, skills, competencies, confidence, and opportunities for better job opportunities. Reasons for seeking a DNP degree are captured in **Table 3**. An openended follow-up question on reasons for seeking a DNP degree indicated the majority of respondents sought the DNP degree to gain knowledge, and as an individual goal for personal and professional development, achievement, and advancement. Comments that respondents provided as their reason for seeking a DNP degree are as follows:

- Personal satisfaction from achieving the highest level of nursing scholarship.
- Desire to achieve terminal degree and see nursing and health care through a broader lens.
- I wanted more competence in health policy, statistics, and quality improvement processes.
- For potential management qualifications in the future.
- I wanted to learn how to develop, implement, and measure a quality improvement project to change practice for better patient outcomes and changing the healthcare system.
- Looking for intellectual challenges, to advance knowledge about clinical problems, acquire skills to search, appraise, and apply evidence, and in programmatic development/evaluation.
- As a nursing administrator, I sought my DNP degree to be rightfully recognized at the c-suite decision table along with physician and administrative executives.
- To have the credibility of a doctorate among my peers when interacting in an academic or specialty practice environment.
- Terminal degree needed for teaching at college/university level.

Knowledge and competencies acquired from doctor of nursing practice program

Survey participants responded using a 4-point Likert scale, if they agreed or disagreed with gaining 18 well-delineated competencies in the DNP program; competency descriptors were based on the literature review of practice scholarship competencies. Responses to the knowledge and competency acquisition question are featured in **Table 4**.

Discussion

The purpose of this study was to identify the reasons for seeking a DNP degree and the practice scholarship knowledge and competencies acquired in DNP programs. In this study, the majority of respondents pursued a DNP degree to gain additional knowledge (97.4%), for better job opportunities (78.8%), and to gain additional

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Table 2. Demographic and frequency statistics of sample (*N* = 270)

Characteristic	n	Valid %
	п	vallu %
Gender Female	248	92.2
	-	
Male	20	7.4
Prefer not to describe	1	0.4
Age at DNP graduation, years		
≤30	14	5.3
31–40	55	20.9
41–50	78	29.7
51–60	100	37.0
>60	16	6.1
Race/ethnicity		
White or Caucasian	207	77.2
Black or African American	33	12.3
Hispanic or Latino	8	3.0
Asian	7	2.6
American Indian or Alaska Native	2	0.7
Native Hawaiian or other Pacific Islander	1	0.4
Two or more races	5	1.9
Other	1	0.4
Prefer not to share	4	1.5
Practice region		
New England	13	4.8
Mideast	60	22.2
Great Lakes	37	13.7
Plains	15	5.6
Southeast	65	24.1
Southwest	35	13.0
Rocky Mountain	7	2.6
Far West	33	12.2
International	5	1.9
Years of DNP experience		
≤1 year	56	20.8
2–5 years	126	46.8
>5 years	87	32.3
Degrees held		
Bachelor of science in nursing	232	85.9

Table 2. Demographic and frequency statistics of sample (*N* = 270), *continued*

of sample (N = 270), continued					
Characteristic	n	Valid %			
Bachelor's degree—other	46	17.0			
Master's degree	232	85.9			
Doctor of education	0	0.0			
DNP	270	100.0			
Doctor of philosophy	2	0.7			
Other	33	12.2			
Primary work role					
Nurse practitioner	100	37.0			
Academic faculty	70	25.9			
Nurse leader or health systems leader	35	13.0			
Other	19	7.0			
Clinical nurse specialist	13	4.8			
Professional development or nurse educator	12	4.4			
Certified nurse midwife	10	3.7			
Public health or community health	7	2.6			
Certified nurse anesthetist	3	1.1			
Health care policy	1	0.4			
Current work status					
Full time—1 job	199	74.0			
Part time—1 job	16	5.9			
Combination of multiple jobs	54	20.1			
Current work setting					
Academia	88	32.7			
Hospital or health system	84	31.2			
Ambulatory or community health	66	24.6			
Other	18	6.7			
Federal or state agency	10	3.7			
Insurance or private industry	3	1.1			
Note: DNP = doctor of nursing practice.					

competencies/clinical skills (72.6%). These findings reflect consistent themes of seeking the degree for personal goals, knowledge, opportunities for advancement, parity, and credibility as evidenced by quotes from participants. Respondents did not seek a DNP degree because it was required for a job (14.7%), to gain additional supervised

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	Not at All/Sor	Not at All/Somewhat Important		Very Important/Profoundly Important		
	n	Valid %	n	Valid %		
To gain additional knowledge	7	2.6	262	97.4		
For better job opportunities	57	21.2	212	78.8		
To gain additional competencies/ clinical skills	74	27.4	196	72.6		
To gain confidence	103	39.2	160	60.8		
Not required for job but anticipate it may be required in the future	139	52.3	127	47.7		
To gain additional income	147	54.9	121	45.1		
To receive additional training with specialty population	177	66.8	88	33.2		
To gain additional supervised practice	213	79.8	54	20.2		
Required for job	226	85.3	39	14.7		

practice (20.2%), or to receive additional training with a specialty population (33.2%). This speaks to the need to ensure DNP education continues to incorporate the DNP Essential competencies that graduates value.

The majority of respondents agreed, or strongly agreed, they gained knowledge and competencies in translating research evidence into practice (98.1%); in synthesizing the literature to identify a solution for a practice issue (97.8%); in identifying, measuring, and/or evaluating outcomes (97.8%); in designing and implementing quality improvement (95.4%); and designing and implementing EBP and research (97.0%). These findings are important because these practice scholarship skills and competencies are needed for nurses to serve as full partners in health care redesign and improvement efforts, as indicated in the IOM's (2010) *Future of Nursing* report.

There were a majority of respondents who agreed that they had gained knowledge and competencies leading interprofessional teams in scholarship (93.3%), developing and implementing health care policy (86.9%), disseminating outcomes of practice scholarship (94.0%), and sustaining practice change (92.9%). However, based on these survey results, respondents only moderately agreed that they had gained the needed knowledge and competencies in business and finance (56.8%). This finding indicates there is an opportunity for DNP programs to strengthen business and finance requisite knowledge, so that graduates are equipped to manage the economic challenges they will undoubtedly face in practice, regardless of their role.

Limitations

The homogeneity of the sample population (NPs and health care leaders working in academia and acute care settings) limits the overall generalizability of the study. Future studies should strive to capture additional DNPprepared APRN perspectives. Further, the study results were based on self-report, which introduces the potential for social desirability bias. Although all the respondents held a DNP degree, 86% of respondents held a bachelor of science in nursing (BSN) and 86% held a master of science in nursing (MSN) degree; the survey did not differentiate post-BSN-DNP pathway from post-MSN-DNP pathway. Therefore, although the information gleaned from this study was relevant, due to these limitations, the findings should be interpreted with caution. Finally, due to the lack of previous research on this topic, there is a need for additional studies with a broader reach to better understand the implications and impact of practice scholarship in nursing.

Conclusion

This study explores the drivers for nurses to invest the time, effort, and financial commitment to obtain a practice doctorate and unveils the value the DNPprepared nurse can contribute to health care. It is essential for health care leaders to appreciate and use the significant knowledge, skills, and competencies that the DNP-prepared practice scholar can provide to their organizations. Gaining the perspective of those who have obtained the DNP degree and applied those added competencies in practice is an important step to

	Strongly Disagree/Disagree		Agree/Strongly Agree	
	n	Valid %	n	Valid %
Translating research evidence into practice	5	1.9	262	98.1
Synthesizing the literature to identify a solution for a practice issue	6	2.2	262	97.8
Identifying measuring and/or evaluating outcomes	6	2.2	263	97.8
Designing and implementing EBP and research	8	3.0	259	97.0
Conducting a systematic review of literature	10	3.7	258	96.3
Collaboration and communication in teamwork	21	4.1	248	95.9
Designing and implementing quality improvement	8	4.6	259	95.4
Engaging stakeholders in project implementation	13	4.9	254	95.1
Disseminating outcomes of practice scholarship	16	6.0	252	94.0
Leading interprofessional teams in scholarship	18	6.7	249	93.3
Sustaining practice change	19	7.1	247	92.9
Collecting data and data analysis	21	19	248	92.2
Developing and implementing health care policy	35	7.8	233	86.9
Using informatics to affect health and health care delivery	44	16.4	224	83.6
Managing population health	50	18.7	218	81.3
Managing large data sets using informatics	59	22.1	208	77.9
Developing and implementing health care policies local, regional, or national level	64	24.2	201	75.8
Using business and finance skills	115	43.2	151	56.8

appreciating and using the value of practice scholarship in action.

The US health care system is changing rapidly, and the nursing profession has developed new and innovative ways of evolving to continue to respond to these changes. The emergence of nurse-led and nurse-informed new care delivery models, and accelerated growth in the number of DNP-prepared nurses with an expanded skill set create an opportunity for practice scholars to meet health care needs for high-risk patients and populations. Highly skilled, DNP-prepared nurses can translate current best evidence into practice, improve clinical outcomes, and provide scholarly evaluation of metrics of quality care delivery. In response, employers and educators are raising important questions about how best to identify and evaluate nursing practice scholarship and how best

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to support DNP-prepared nurses to deliver optimal care. Additionally, support for innovative nursing roles that encourage DNP graduates to use newly acquired competencies is essential to achieving the full potential for the health care outcomes for patients, systems, populations, and policy.

Continued research and dissemination of information regarding practice scholarship are essential to support the advancement of the nursing profession. The nursing profession is evolving, and patients and communities will benefit from the practice scholarship competencies of DNP-prepared nurses and the widespread recognition of their impact.

Recommendations

This study is a first step to demonstrate outcomes of practice scholarship in nursing. This study will lay the foundation for future research that aims to examine the frequency and satisfaction with engagement in practice scholarship as well as examine the outcomes and impact of practice scholarship. The results from the survey will inform large-scale studies that will be conducted with DNP-prepared nurses to determine acquired competencies and outcomes from the programs. There is a need for studies to assess the influence DNP graduates have on health outcomes and the need to provide more information to employers, showing the benefits of hiring nurses with DNP preparation.

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References

- American Association of Colleges of Nursing. (2019). 2018–2019 enrollment and graduations in baccalaureate and graduate programs in nursing. American Association of Colleges of Nursing.
- American Association of Colleges of Nursing. (2004). AACN position statement on the practice doctorate in nursing. http://www. aacnnursing.org/News-Information/Position-Statements-White-Papers/Practice-Doctorate.
- American Association of Colleges of Nursing. (2018, March 26). Defining scholarship in academic nursing task force consensus position statement. https://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Defining-Scholarship-Nursing.
- American Association of Colleges of Nursing. (2006). The essentials of doctoral education for advanced nursing practice. https://www. aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf.

Auerbach, D. I., Martsolf, G., Pearson, M. L., Taylor, E. A., Zaydman, A., Muchow, A., Spetz, J., & Dower, C. (2014). The DNP by 2015: A study of the institutional, political, and professional issues that facilitate or impede establishing a postbaccalaureate Doctor of Nursing practice program. American Association of Colleges of Nursing. https://www.aacnnursing.org/Portals/42/DNP/DNP-Study.pdf.

- Boyer, E. (1990). Scholarship reconsidered: Priorities for the professoriate. The Carnegie Foundation for the Advancement of Teaching.
- Burson, R., Moran, K. J., & Conrad, D. (2016). Why hire a doctor of nursing practice-prepared nurse? The value added impact of the practice doctorate. *Journal of Doctoral Nursing Practice*, 9, 152–157. https://doi.org/10.1891/2380-9418.9.1.152.
- Council on Accreditation of Nurse Anesthesia Educational Programs. (2019). White paper scholarly work for practice doctorate nurse anesthesia programs: Current state and guidance report from the white paper on scholarly work special interest group. https://www.coacrna.org/wpcontent/uploads/2020/01/White-Paper-on-Scholarly-Work-Final.pdf.
- Doctors of Nursing Practice. (2020). About us. Doctors of Nursing Practice. Retrieved September 28, 2020, from https://www.doctorsofnursingpractice.org/about-us/.
- IBM Corp. (2019). IBM SPSS Statistics for Macintosh (26.0). IBM Corp. Institute of Medicine. (2010). The future of nursing: Leading change,
- advancing health. The National Academies Press. Limoges, J., Acorn, S., & Osborne, M. (2015). The scholarship of application: Recognizing and promoting nurses' contribution to knowledge development. The Journal of Continuing Education in
- Nursing, 46, 77–82. https://doi.org/10.3928/00220124-20151217-02. Limoges, J. & Acorn, S. (2016) Transforming practice into clinical scholarship. *Journal of Advanced Nursing*, 72, 747–753. https://doi. org/10.1111/jan.12881.
- Nelnyk, B. M. (2013). Distinguishing the preparation and roles of doctor of philosophy and doctor of nursing practice graduates: National implications for academic curricula and health care systems. *Journal of Nursing Education*, 52, 442–443. https://doi. org/10.3928/01484834-20130719-01.
- National Academy of Medicine. (2020). *The future of nursing 2020–2030*. Retrieved September 28, 2020, from https://nam.edu/publications/the-future-of-nursing-2020-2030/.
- National Organization of Nurse Practitioner Faculties. (2016). White paper: The Doctor of Nursing Practice nurse practitioner clinical scholar. https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/docs/ClinicalScholarFINAL2016.pdf.
- Research Electronic Data Capture. (n.d.). *REDCap: Research Electronic Data Capture.* Retrieved September 28, 2020, from https://www.project-redcap.org/.