

Clinical Research for the Doctor of Nursing Practice, Third Edition

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Test Bank

Chapter 1 – The Importance of Research in the Doctor of Nursing Practice Degree

1. The DNP degree emphasizes the development of nurse leaders who demonstrate expertise in which area?
 - a. Evaluating care delivery models
 - b. Initiating clinical research studies
 - c. Developing research methodology
 - d. Examining theoretical underpinnings

Answer: a

Rationale: The DNP degree emphasizes advanced clinical practice, research utilization, and evaluation of practice and care delivery models. For the practice-focused DNP program, less emphasis is placed on theoretical underpinnings and initiation of research than in research-based doctoral programs.

2. Which aspect of research is a central focus of the DNP degree?

- a. Applying research findings
- b. Formulating research questions
- c. Generating original research data
- d. Implementing the research process

Answer: a

Rationale: While research-focused nursing doctoral programs emphasize research methodology and research implementation, including the generation of research data, the practice-focused DNP emphasizes the evaluation and application of research.

3. The DNP degree was originally focused on which population?

- a. Nurse–midwives
- b. Nurse practitioners
- c. Clinical nurse specialists
- d. Certified registered nurse anesthetists

Answer: b

Rationale: Initially, the DNP degree was focused on nurse practitioners. However, since its inception, the focus of the DNP degree has expanded to include preparation of nurse leaders in a variety of nursing specialties.

4. Explain the DNP capstone project's relevance to clinical practice.

Answer: Most DNP programs require the student to develop and implement a capstone project in that is grounded in clinical practice and designed to solve problems in practice or to add new information to practice.

5. For any capstone project, what underlying theme should serve as the project's foundation?

Answer: The underlying theme in any project should be the use of evidence to improve practice through either healthcare delivery or patient outcomes (AACN, 2006).

6. Which consideration represents a realistic motivation for the nurse practitioner to enroll in a DNP program?

- a. Nurse practitioner eligibility requirements for certification include a DNP degree.
- b. Regulatory bodies require practicing nurse practitioners to complete a DNP degree.
- c. Completion of a DNP degree may contribute to the improvement of patient outcomes.
- d. Nurse practitioners who earn a DNP degree will be guaranteed tenure in academic settings.

Answer: c

Rationale: Research suggests higher levels of nursing education correlate with improved patient outcomes. Traditionally, eligibility requirements for academic tenure have included completion of a PhD program; the DNP credential may or may not qualify an individual to apply for a tenure-track position in academia. At present, completion of a DNP degree by the nurse practitioner is neither required by any certification agency nor mandated by any regulatory body. The American Association of Colleges of Nursing (AACN) has recommended that the DNP degree be the standard for entry into advanced practice for nurse practitioners, nurse-midwives, nurse anesthetists, and clinical nurse specialists by 2015.

7. Describe the seven primary areas of content that are ideal for inclusion in practice-focused doctoral nursing programs as recommended by the American Association of Colleges of Nursing (AACN) task force.

Answer: The American Association of Colleges of Nursing (AACN) task force recommends including seven primary areas of content in practice-focused doctoral nursing programs. Per the AACN, recommended content categories include the following: (a) the scientific basis for practice; (b) advanced nursing practice; (c) organization and system leadership/management and quality improvement; (d) analytic methodologies related to practice evaluation and the application of evidence for nursing practice; (e) utilization of both technology and information for the improvement and transformation of health care; (f) development, implementation, and evaluation of health policy; and (g) interdisciplinary collaboration for improving patient healthcare outcomes as well as healthcare outcomes for the greater population.

8. Unlike DNP programs, research-focused nursing doctoral programs emphasize which aspect of scholarship?

- a. Evaluating clinical practice
- b. Discovering new knowledge
- c. Translating research into practice
- d. Participating in collaborative research

Answer: b

Rationale: Research-focused nursing doctoral programs emphasize the development of research skills for use in the discovery of new knowledge in nursing. By contrast, rather than focusing on the discovery of new knowledge, DNP programs emphasize applying new science and evaluating new knowledge, which are components of evidence-based practice. DNP programs focus on preparing nurse leaders to translate research into practice, evaluate practice, improve the reliability of healthcare practices and outcomes, and participate in collaborative research.

9. Explain how the DNP graduate's unique knowledge and skill set contribute to the use of research evidence for the purpose of evidence-based decision making.

Answer: During evidence-based decision making, the DNP graduate combines knowledge derived from clinical practice, awareness of patient preferences, and research evidence that is evaluated based on its internal and external validity. The research evidence is accessed, critically appraised, and incorporated into the development of an evidence-based action strategy.

10. When synthesizing the best evidence for the purpose of translating evidence into clinical practice, which step serves to enhance the efficiency of the evidence retrieval process?

- a. Expanding the search to include multiple countries
- b. Using unlimited databases when searching for articles
- c. Reducing the search time frame to within the past 5 years
- d. Formulating general clinical questions for use in the search

Answer: c

Rationale: Limiting the search time frame to evidence published within the past 5 years decreases the number of search results and promotes efficiency. Rather than formulating general clinical questions, the clinical questions should be focused in order to make the search more precise. Likewise, narrowing the focus of the search to target a limited number of countries and using a limited number of databases also decreases the volume of results and promotes efficiency.

Chapter 2 – Developing the Researchable Problem

1. Relate the importance of selecting the research problem to the overall success of the research process.

Answer: Of all steps in the research process, selection of the research problem is most likely to impact the overall success of the research process. Unless the problem is viable and testable, the research process may be implemented in vain.

2. When developing a research problem, which consideration is most important to the DNP clinician?

- a. Relating to some area of practice
- b. Contributing to theory development
- c. Integrating results from an auditing process
- d. Incorporating quantitative research methods

Answer: a

Rationale: Most importantly, the DNP clinician's research problem must relate to an area of practice. The basis for the idea may be derived directly from patients or colleagues. As an alternative, if the clinician serves in quality management or nursing administration, the idea's basis may be more indirectly derived from the auditing process. The DNP clinician's research problem should contribute to evidence-based practice and to the development of either a hypothesis or a research question. A variety of research methods, including quantitative and qualitative, are appropriate for use.

3. Explain the five primary PICOT components that are integrated into the research question.

Answer: P = the specified patient or target population; I = the issue or intervention being investigated; C = the comparison being made; O = the outcome that may be the result; T = time frame required to achieve the outcome.

4. The DNP clinician is interested in exploring the issue of patient adherence to NPO guidelines during the 8-hour period prior to surgery. In particular, the DNP clinician suspects educating patients preoperatively about the life-threatening consequences of pulmonary aspiration may increase adherence to NPO guidelines. Formulate an acceptable evidence-based research question for this project that incorporates the five primary PICOT components.

Answer: Does education about consequences of pulmonary aspiration increase patient adherence to NPO guidelines during the 8-hour preoperative period? P = Patient is undergoing a surgical procedure; I = Patient is educated about consequences of pulmonary aspiration; C = Patient adherence to NPO guidelines without education about consequences of pulmonary aspiration is compared to patient adherence to NPO guidelines when relevant education is provided; O = The patient demonstrates adherence to NPO guidelines; T = The time frame is the 8-hour preoperative period.

5. On which basis is the DNP researcher's use of a hypothesis most appropriate?

- a. To guide a descriptive research project

- b. To guide an exploratory research project
- c. When making a prediction that helps the researcher seek a solution
- d. When little to no literature exists relevant to the researcher's area of interest

Answer: c

Rationale: A hypothesis represents a prediction that helps the researcher seek a solution to the research problem. When implementing an exploratory or descriptive research design, research questions, not hypotheses, are typically used. Exploratory and descriptive research designs, which are qualitative in nature, may be chosen when a little to no literature exists relevant to the researcher's area of interest. In general, with the exception of exploratory and descriptive research, hypotheses should be developed for all other types of research projects.

6. Which perspective demonstrates correct understanding regarding independent and dependent research variables?
- a. A causal relationship exists between the independent and dependent variables.
 - b. The independent variable leads to the effect produced in the dependent variable.
 - c. Variability in the independent variable depends on changes in the dependent variable.
 - d. The independent variable is of greater interest to the researcher than the dependent variable.

Answer: b

Rationale: The independent variable is understood to lead to the effect produced in the dependent variable. Variability in the dependent variable is assumed to depend on changes in the independent variable; however, there is no implication that a causal relationship exists. The dependent variable, not the independent variable, is of most interest to the researcher.

7. The DNP student is studying the effects of peppermint essential oil on students' sense of alertness in the classroom setting. Identify the independent and dependent variables relevant to this project.

Answer: When studying the effect of peppermint essential oil on students' sense of alertness, exposure to peppermint essential oil represents the independent variable. The independent variable is understood to lead to the effect produced in the dependent variable which, in this case, is the students' sense of alertness.

8. Explain key factors that influence the testability of a hypothesis.

Answer: To achieve testability, the researcher must predict the anticipated outcome, use measurable or observable variables, and use objective phrases when formulating the hypothesis.

9. Selection of a theoretical framework that will be used to guide a research project requires the DNP researcher to understand which principle?

- a. A microrange theory may be synonymous with a hypothesis.
- b. A conceptual framework is made up of interrelated concepts.
- c. Midrange theories are the most abstract level of theory that establishes a nursing knowledge base.
- d. Grand theories integrate nursing practice and research into ideas that are integral to the discipline.

Answer: a

Rationale: A low-level microrange theory may be synonymous with a hypothesis. Although the terms *conceptual framework* and *theoretical framework* are often used interchangeably, a concept is a mental image of an idea, while theories are made up of interrelated concepts. Grand theories are the most abstract level of theory that establishes a knowledge base for nursing. Midrange theories integrate nursing practice and research into ideas that are integral to the discipline.

10. Discuss four potential sources of information from which an appropriate conceptual framework may be chosen for use in guiding the DNP project.

Answer: The conceptual framework for the DNP project may come from four sources of information, including (1) the DNP student's own experience; (2) existing theories and published research studies; (3) the DNP student's pilot study (if one was conducted); and (4) the DNP student's own plausible explanation for the issue under study.