

The Research Onion as a Teaching Tool in Nursing Education: Enhancing Research Competence among Nursing Students.

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ABSTRACT

Research competence is a critical skill for nursing students, underpinning evidence-based practice and ensuring high-quality patient care. However, the complexity of research methodologies often poses challenges to students in understanding and applying research concepts. The Research Onion, developed by Saunders, Lewis, and Thornhill (2007), offers a structured, progressive framework that simplifies the research process. This article explores the application of Research Onion as a teaching tool in nursing education, demonstrating how it can enhance students' research competence. It examines the structure of the Research Onion, its relevance to nursing education, practical strategies for implementation, and potential benefits and challenges. The paper concludes with recommendations for educators, institutions, and students to integrate the Research Onion into nursing curricula to foster a new generation of competent, confident nurse researchers.

INTRODUCTION

In the evolving landscape of healthcare, the ability of nurses to engage in and apply research is fundamental to ensuring evidence-based practice (Polit & Beck, 2021). Research competence is no longer an optional skill; it is essential for critical thinking, clinical decision-making, and the continuous improvement of patient care outcomes. Nursing as a profession is increasingly emphasizing the integration of scientific knowledge into clinical settings to enhance quality of care, patient safety, and health system efficiency (Melnik & Fineout-Overholt, 2019). The development of strong research competencies among nursing students has thus become a critical educational objective worldwide.

Yet, despite its importance, many nursing students find research challenging and abstract, often struggling with the complexities of methodological design, philosophical underpinnings, and data analysis (Caldwell, Henshaw, & Taylor, 2011). Several studies have noted that nursing students frequently perceive research as a distant, academic exercise, disconnected from their future clinical roles (Segrott, McIvor, & Green, 2006). This perception often leads to anxiety, decreased motivation, and limited engagement with research modules during training. Consequently, educational institutions are increasingly called upon to find innovative and effective teaching strategies that demystify research, making it accessible, relatable, and integral to nursing identity.

Traditional methods of teaching research in nursing education have primarily relied on didactic lectures and textbook-based instruction, which often fail to engage students meaningfully or develop deep understanding (Moule, Aveyard, & Goodman, 2017). Although these traditional approaches provide foundational knowledge, they may not sufficiently cater to the diverse learning styles of nursing students, many of whom benefit from more active, visual, and applied learning strategies (Schoofs, 2020). As healthcare becomes more complex and interprofessional, there is an urgent need for educational models that foster deeper comprehension, analytical skills, and the practical application of research principles.

The Research Onion, conceptualized by Saunders, Lewis, and Thornhill (2007), offers a visual and layered approach to research design. It breaks down the complex elements of research into manageable stages, progressing from broad philosophical paradigms to specific data collection techniques. This model has gained popularity in business and social sciences education but remains relatively underutilized in nursing education. Nevertheless, its systematic structure and visual simplicity make it an ideal pedagogical tool for teaching research concepts to nursing students. The Research Onion allows learners to visualize how each component of research is interconnected, promoting a holistic understanding of the research process rather than fragmented knowledge of isolated techniques.

This paper explores the use of the Research Onion as a pedagogical framework to enhance research competence among nursing students. It examines its structure, relevance to nursing education, practical implementation strategies, and discusses the potential benefits and limitations. Ultimately, it proposes that structured models like Research Onion can empower nursing students to become proficient, confident researchers capable of contributing meaningfully to the evidence base of nursing practice.

The Importance of Research Competence in Nursing Education

Research competence among nurses is critical for the advancement of the profession and the improvement of patient outcomes. Evidence-based practice (EBP), defined as the conscientious use of current best evidence in making decisions about patient care, is at the heart of modern nursing (Melnyk et al., 2010). Without firm grounding in research, nurses may rely solely on tradition, anecdotal evidence, or outdated practices, which can compromise patient safety and care quality. Furthermore, research competence enables nurses to engage in lifelong learning, adapt to emerging healthcare challenges, and advocate for policy changes based on empirical evidence (Polit & Beck, 2021).

The American Association of Colleges of Nursing (AACN) underscores research literacy as a core competency for undergraduate and graduate nursing education (AACN, 2008). Similarly, the International Council of Nurses (ICN) emphasizes the nurse's role in contributing to the scientific foundation of the profession. Research competence is also pivotal for the development of leadership skills among nurses, allowing them to critically evaluate clinical practices, lead quality improvement initiatives, and contribute to interdisciplinary research teams (Fletcher, 2017).

Despite these imperatives, studies have consistently shown that nursing students often enter clinical practice feeling ill-prepared to engage in research activities. Factors contributing to this gap include insufficient emphasis on research during training, ineffective teaching methods, and students' perceptions of research as irrelevant to clinical practice (Nashwan, Abujaber, Villar, Al-Jabry, & Al-Jabry, 2020). Addressing this gap requires a paradigm shift in how research is taught in nursing programs.

Challenges in Teaching Research to Nursing Students

Teaching research effectively to nursing students poses unique challenges. Many students enter nursing programs with the primary motivation of providing hands-on care and may not initially see the relevance of research to their career aspirations (Schoofs, 2020). Research is often perceived as abstract, complex, and intimidating, particularly when introduced through dense theoretical content without clear practical application.

Moreover, nursing students often have diverse educational backgrounds, learning styles, and levels of comfort with mathematics and statistics, which can affect their engagement with research modules (Halcomb, 2019). Traditional lecture-based teaching methods may not adequately address these variations, resulting in superficial learning and poor retention of research concepts.

There is also the issue of curricular overload. Nursing curricula are notoriously dense, packed with clinical skills training, theoretical knowledge, and professional development components (AACN, 2008). As a result, research education often competes with other subjects for limited instructional time and may be compressed into a few isolated courses rather than integrated throughout the program.

Another significant challenge is the lack of experiential learning opportunities. Research is best understood when students can engage in hands-on projects, critically appraise published studies, and witness the impact of evidence-based practice in clinical settings (Bianchi, Bressan, Bagnasco, Barisone, & Timmins, 2018). However, many nursing programs lack the resources, faculty expertise, or partnerships necessary to offer such experiences.

These challenges necessitate innovative, learner-centered approaches to teaching research — methods that demystify the research process, highlight its clinical relevance, and foster active engagement. The Research Onion offers a promising solution to these pedagogical needs.

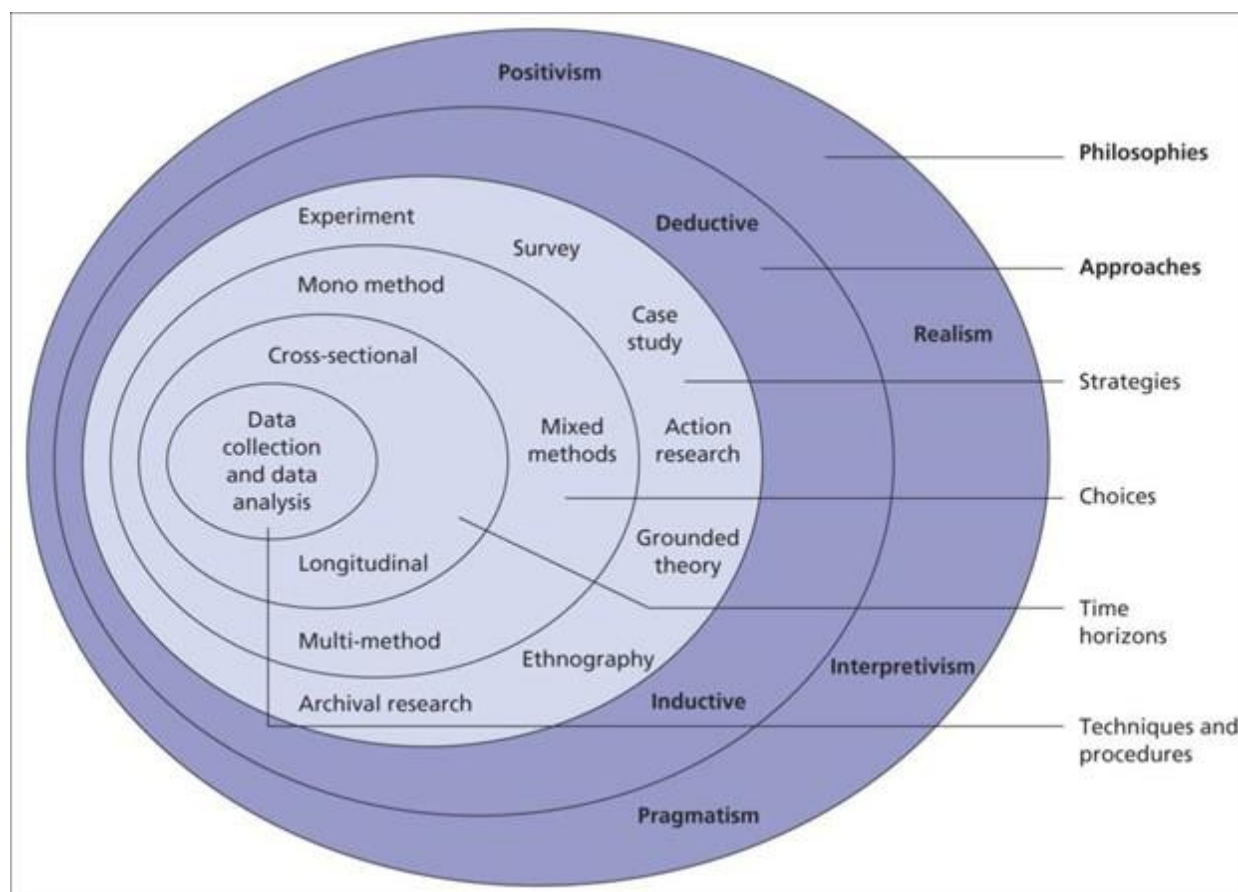
The Research Onion: Conceptual Overview

The Research Onion was first introduced by Saunders, Lewis, and Thornhill (2007) in their book "Research Methods for Business Students." It presents research methodology as a series of concentric layers, each representing a crucial decision-making point in the research design process. The model consists of the following layers:

1. **Research Philosophies** (e.g., positivism, interpretivism, pragmatism)
2. **Research Approaches** (e.g., inductive, deductive)
3. **Methodological Choices** (e.g., qualitative, quantitative, mixed methods)
4. **Research Strategies** (e.g., survey, case study, ethnography)
5. **Time Horizons** (e.g., cross-sectional, longitudinal)
6. **Techniques and Procedures** (e.g., sampling, data collection, data analysis).

Research Onion Layers

Research Philosophies.



Sources: Google Search 2025.

Research philosophy refers to the set of beliefs concerning the nature of reality (ontology) and the nature of knowledge (epistemology) that guide how research should be conducted (Saunders, Lewis, & Thornhill, 2019). It shapes the researcher's perception of the world and influences every stage of the research process.

- **Positivism** is grounded in the belief that reality is objective and can be observed and described from an external standpoint without interfering with the phenomena being studied. Positivist researchers favor quantitative methods and seek to test hypotheses through measurable, empirical data (Polit & Beck, 2021). In nursing research, positivism is often used to examine clinical interventions and patient outcomes using randomized controlled trials.
- **Interpretivism**, on the other hand, assumes that reality is socially constructed and subjective. Interpretivists argue that understanding the meanings individuals assign to phenomena requires deep immersion into the context (Creswell & Creswell, 2018). Interpretive research is typically qualitative, focusing on patient experiences, healthcare culture, and nurse-patient interactions.
- **Pragmatism** bridges the divide between positivism and interpretivism by prioritizing the research question above philosophical purity. Pragmatists argue that the choice of methods should be driven by practical outcomes and the usefulness of research rather than adherence to a specific philosophical stance (Morgan, 2014). In nursing, pragmatism allows for flexibility—researchers may combine surveys, interviews, and clinical audits to address complex health questions.

Thus, choosing a philosophy is a foundational step that profoundly influences research design and methods.

Research Approaches

Research approaches define how researchers move from general ideas to specific conclusions or vice versa. It describes the reasoning processes that underpin the inquiry.

- **Deductive Approach** involves developing a hypothesis based on existing theory and then designing a research strategy to test it (Saunders et al., 2019). It starts from the general to the specific, embodying a logical progression. Deductive research is often associated with positivism and quantitative methods. For example, a nursing researcher may hypothesize that "increased hand hygiene compliance reduces hospital-acquired infections" and design a survey or experiment to test this.
- **Inductive Approach** is the process where researchers collect data first and then develop theories or patterns based on the observations. It moves from specific observations to broader generalizations (Creswell & Creswell, 2018). Inductive reasoning aligns more with interpretivist philosophy and qualitative methods. A study exploring how newly graduated nurses adapt to clinical practice without a pre-existing theory would be an inductive inquiry.

Many nursing studies, particularly exploratory research on patient experiences or newly emerging healthcare issues, rely heavily on inductive reasoning to generate theories that inform practice.

Methodological Choices

Methodological choices determine the nature of the data collected and analyzed. In research, three main methodological options exist: qualitative, quantitative, and mixed methods.

- **Qualitative Methods** focus on understanding complex human behaviors and experiences by collecting non-numerical data, such as interviews, focus groups, and observations. These methods are particularly valuable in nursing when exploring patient experiences, emotional responses to illness, and the meaning individuals attribute to health (Moule, Aveyard, & Goodman, 2017). Qualitative research often generates rich, in-depth insights but can lack generalizability.
- **Quantitative Methods** involve the collection and analysis of numerical data to identify patterns, test theories, and predict outcomes (Polit & Beck, 2021). Quantitative research in nursing includes surveys measuring patient satisfaction, experimental studies assessing the efficacy of interventions, and cohort

studies examining disease progression. It emphasizes objectivity, replicability, and statistical validation.

- **Mixed Methods** combine qualitative and quantitative approaches within a single study. This allows researchers to explore a phenomenon comprehensively by integrating numerical measurement with in-depth contextual understanding (Creswell & Plano Clark, 2018). In nursing, mixed methods might involve using surveys to measure stress levels among nurses quantitatively, complemented by interviews that explore personal coping mechanisms qualitatively.

Choosing the appropriate methodology is crucial, as it directly influences the research outcomes' reliability, validity, and applicability.

Research Strategies

Research strategies specify how researchers intend to collect and analyze data to answer their research questions effectively.

- **Survey** is a strategy often associated with quantitative research where data is collected through questionnaires or structured interviews from a sample population (Saunders et al., 2019). Surveys are useful for assessing attitudes, opinions, behaviors, and characteristics at a specific point in time. In nursing education, surveys may be used to evaluate students' perceptions of research courses or attitudes toward evidence-based practice.
- **Case Study** involves an in-depth exploration of a single case or a small number of cases within their real-life context (Yin, 2018). It is particularly useful in nursing for examining complex patient cases, clinical decision-making processes, or organizational practices within hospitals. Case studies provide detailed insights but may limit the generalizability of findings.
- **Ethnography** originates from anthropology and involves studying people and cultures in their natural environments over extended periods (Holloway & Galvin, 2017). Ethnographic research is valuable in nursing for exploring ward cultures, interprofessional relationships, or patient journeys in palliative care. It provides profound contextual understanding but demands significant time and immersion.

The choice of strategy should align with the research objectives, questions, and the philosophical stance of the researcher.

Time Horizons

The time horizon refers to the time frame over which the research is conducted. It affects the types of questions researchers can ask and the nature of data they can collect.

- **Cross-sectional Studies** involve collecting data at a single point in time. They are often used to describe a population or examine relationships between variables without determining causality (Polit & Beck, 2021). In nursing research, a cross-sectional study could survey the stress levels among nurses during a particular pandemic wave. Although faster and cheaper, they may not reveal long-term trends or cause-and-effect relationships.
- **Longitudinal Studies** collect data from the same subjects over an extended period (Saunders et al., 2019). These studies are excellent for examining changes over time, such as the career progression of nurses after graduation or the long-term outcomes of a nursing intervention program. Longitudinal designs provide stronger evidence for causality but are time-consuming, expensive, and prone to participant attrition.

Selecting a time horizon depends on the research aims, available resources, and the nature of the phenomena being investigated.

Techniques and Procedures

The final layer of the Research Onion involves selecting specific techniques and procedures for data collection, sampling, and analysis.

- **Sampling** refers to the process of selecting participants from a population for study. Probability sampling (e.g., random sampling) ensures each member has an equal chance of being selected, enhancing generalizability (Creswell & Creswell, 2018). Non-probability sampling (e.g., purposive sampling) is used when studying specific subgroups and is common in qualitative nursing research, such as exploring the experiences of oncology nurses.
- **Data Collection** methods vary according to methodological choice and research strategy. Quantitative studies often use structured surveys, standardized tests, or physiological measurements. Qualitative studies typically rely on interviews, focus groups, observations, and document reviews (Moule et al., 2017). In nursing, effective data collection requires sensitivity, confidentiality, and cultural competence.
- **Data Analysis** techniques also differ. Quantitative analysis involves statistical methods ranging from descriptive statistics to complex inferential models (Polit & Beck, 2021). Software like SPSS or R is commonly used. Qualitative analysis, on the other hand, focuses on thematic coding, narrative analysis, and grounded theory development, often aided by software such as NVivo.

The choice and application of appropriate techniques and procedures are essential for ensuring that research findings are credible, valid, and relevant to practice. Each layer represents a decision that a researcher must make, with choices at each stage influencing and constraining subsequent stages. The onion metaphor emphasizes that these decisions must be peeled back systematically to reveal the core of sound research design.

The model's strength lies in its clarity, flexibility, and comprehensiveness. It encourages novice researchers to think systematically about the entire research process, understanding how philosophical foundations influence methodological choices, which in turn shape data collection and analysis strategies (Saunders, Lewis, & Thornhill, 2019).

Relevance of the Research Onion to Nursing Education

Adopting Research Onion as a teaching tool in nursing education addresses many of the challenges outlined earlier. First, its visual and sequential structure aligns with active learning principles, helping students to grasp complex ideas through visual aids and step-by-step guidance (Prince, 2004). Second, the model connects abstract theoretical concepts (like research philosophy) to tangible decisions about study design and data collection, thereby making research more relevant and accessible.

By following the layers of the Research Onion, nursing students can appreciate the importance of aligning their research questions with appropriate philosophical assumptions, methodologies, and techniques — a skill crucial for conducting rigorous and ethical research in clinical settings (Polit & Beck, 2021). Furthermore, the model supports critical thinking and reflective learning, encouraging students to justify their methodological choices and consider their implications for validity, reliability, and ethical practice.

Several scholars have advocated for the integration of structured models like the Research Onion into nursing curricula to enhance research literacy and competence (Halcomb, 2019; Moule et al., 2017). Such models not only facilitate cognitive understanding but also empower students to engage confidently in research activities, bridging the gap between theory and practice.

Cultivating research competence among nursing students is indispensable for the advancement of evidence-based practice and the broader nursing profession. Traditional didactic methods of research education, while foundational, are insufficient for addressing the complex, multifaceted nature of contemporary healthcare

research demands. Students often struggle with the abstraction of research concepts, necessitating the incorporation of innovative, accessible, and structured teaching tools. The Research Onion model offers a promising solution by systematically guiding students through the intricacies of research design in a clear and logical sequence. Its integration into nursing education could transform research from an intimidating theoretical requirement into a practical, empowering skill that supports clinical excellence and professional growth. The following sections of this paper will delve deeper into the practical implementation of the Research Onion in nursing education, its benefits and limitations, and future recommendations for nursing curricula reform.

Background and Literature Review

The Research Onion was introduced by Saunders, Lewis, and Thornhill (2007) as a model to guide researchers through the complex process of designing a research project. The model is visualized as a layered onion, with each layer representing a stage of decision-making, from philosophical assumptions to specific data collection techniques.

The six layers of the Research Onion include:

1. **Research Philosophy** – underlying beliefs about knowledge and reality.
2. **Research Approach** – strategies for developing theory (deductive or inductive).
3. **Research Strategy** – methodologies such as case studies, surveys, or experiments.
4. **Research Choice** – mono-method, mixed-method, or multi-method approaches.
5. **Time Horizon** – cross-sectional or longitudinal designs.
6. **Techniques and Procedures** – data collection and analysis methods (Saunders et al., 2009).

Research competence in nursing is crucial for implementing evidence-based practice, advancing the profession, and improving patient outcomes (LoBiondo-Wood & Haber, 2021). It encompasses the ability to critically appraise literature, design and conduct research studies, and apply findings in clinical settings.

However, numerous studies have highlighted the difficulties nursing students face in acquiring research skills. Caldwell et al. (2011) reported that students often view research as irrelevant to clinical practice, primarily due to poor understanding of research methods and processes. Traditional approaches to teaching research, emphasizing theoretical knowledge over practical application, contribute to this problem (Moule et al., 2017).

Recent pedagogical innovations advocate for more interactive, student-centered teaching methods. For example, Cantrell (2017) emphasizes the use of clinical simulations and experiential learning to enhance research understanding. The Research Onion offers a promising addition to these innovations by providing a structured, visual, and practical framework that aligns with adult learning principles and the needs of nursing students.

Understanding the Research Onion Framework

The Research Onion's layered structure mirrors the natural progression of research decision-making, making it an effective cognitive map for students.

Research Philosophy

The outermost layer of the Research Onion addresses research philosophy — the beliefs underpinning the nature of knowledge (ontology) and how knowledge is acquired (epistemology). Key philosophies include positivism, interpretivism, realism, and pragmatism. In nursing, positivism often guides quantitative studies seeking objective truths (e.g., clinical trials), while interpretivism underpins qualitative research exploring patient experiences (Saunders et al., 2009).

Research Approach

The second layer concerns the research approach: deductive (testing existing theories) versus inductive (developing new theories from data). For instance, a study testing the effectiveness of a new wound care protocol would use a deductive approach, while exploring patients' experiences of chronic pain would be inductive (Polit & Beck, 2021).

Research Strategy

This layer involves choosing an overarching strategy such as surveys, case studies, experiments, or grounded theory. In nursing, surveys are common for assessing health behaviors, while case studies provide deep insights into complex clinical phenomena (Creswell & Creswell, 2018).

Research Choice

Researchers must select between mono-method (one method), mixed-method (quantitative and qualitative), or multi-method (several methods) approaches. Mixed methods are increasingly popular in nursing research for their ability to provide comprehensive insights (LoBiondo-Wood & Haber, 2021).

Time Horizon

Time considerations affect research design: cross-sectional studies collect data at one point in time, suitable for needs assessments; longitudinal studies track changes over time, useful for studying disease progression (Saunders et al., 2009).

Techniques and Procedures

Finally, techniques for data collection (e.g., interviews, questionnaires) and analysis (e.g., thematic analysis, statistical tests) must be chosen based on the research questions and strategy.

The Research Onion provides a coherent, logical roadmap, allowing students to understand how each decision influences subsequent steps, fostering critical and strategic thinking.

The Research Onion as a Teaching Tool in Nursing Education

Nursing education requires innovative strategies to foster research competence. The Research Onion provides a structured approach that can transform how research is taught to nursing students.

Teaching research using the Research Onion involves guiding students' layer-by-layer through the research process, encouraging reflective decision-making at each stage. For example, students might first discuss their philosophical assumptions about nursing knowledge before deciding on appropriate methodologies and methods.

Implementing the Research Onion promotes deep learning by:

- Encouraging students to critically examine research foundations (McKenna, Cutcliffe, & McKenna, 2016).
- Providing a visual scaffold that simplifies complex concepts.
- Helping students appreciate the interconnectedness of research decisions.
- Fostering confidence by reducing cognitive overload.

Example classroom activities might include case studies where students design small-scale research projects using the Research Onion. Each group could focus on a different healthcare issue, navigating through the layers and presenting their research design.

Evidence from educational research supports the effectiveness of structured frameworks. Cantrell (2017) found that nursing students taught through scaffolding methods demonstrated superior understanding and confidence in applying research skills compared to those taught through traditional lectures.

Moreover, the Research Onion aligns well with competency-based education models that emphasize the development of critical thinking, problem-solving, and lifelong learning skills — core competencies for future nurses.

Practical Implementation Strategies

The successful use of the Research Onion as a teaching tool requires thoughtful integration into nursing curricula.

Curriculum Integration

Nursing programs can incorporate the Research Onion into Research Methods courses, Capstone projects, or even clinical practice modules where students must engage in quality improvement initiatives. A progressive model could be employed where early courses introduce the Onion's layers conceptually, and later courses apply it practically.

Teaching Methods

- **Workshops:** Students work in groups to design studies based on different layers.
- **Simulation exercises:** Role-play different research scenarios.
- **Case discussions:** Analyze published nursing studies using the Research Onion framework.

Interactive teaching promotes engagement and better retention of complex research concepts (Cantrell, 2017).

Assessment Strategies

Assessments could involve:

- Layer-by-layer research design assignments.
- Critical reflections on decision-making at each stage.
- Mini-projects using the Research Onion to address real clinical problems.

Challenges and Solutions

Some challenges may include:

- Students' initial unfamiliarity with philosophical concepts.
- Time constraints within nursing programs.

These can be addressed by:

- Simplifying explanations of philosophical paradigms.
- Using nursing-specific examples to illustrate abstract concepts.
- Providing supplementary resources such as video tutorials.

Faculty development is critical; instructors should be trained not only in research methods but also in using the Research Onion pedagogically.

DISCUSSION

The application of the Research Onion in nursing education offers multiple advantages. It provides a logical, sequential pathway that demystifies research, making it accessible and manageable for students. Structured frameworks like Research Onion support critical thinking, a skill vital for both research and clinical practice.

Compared to other teaching strategies such as concept maps or modularized research courses, the Research Onion's layered approach better mirrors the actual decision-making process researchers undertake (McKenna et al., 2016). It facilitates a deeper understanding of how methodological choices affect research outcomes.

However, limitations exist. Understanding research philosophy may be challenging for undergraduate students without prior exposure to epistemological debates. Additionally, implementing the Research Onion requires time, both for teaching and for students to engage meaningfully with each layer.

Despite these challenges, the benefits of adopting structured, scaffolded teaching methods outweigh the limitations. Future research could explore comparative studies measuring outcomes between students taught research with and without the Research Onion to provide empirical support for its use in nursing education.

CONCLUSION

Research competence is integral to the professional development of nursing students and the advancement of nursing practice. However, traditional methods of teaching research often fall short in fostering deep understanding and application.

The Research Onion offers a valuable pedagogical framework that simplifies the complexities of research design, guiding students through the research process logically and progressively. By enhancing students' critical thinking, confidence, and practical research skills, the Research Onion prepares them not only for academic success but for professional excellence in evidence-based practice.

Nursing educators and institutions must embrace innovative strategies like the Research Onion to cultivate a new generation of nurse researchers equipped to lead healthcare into the future.

RECOMMENDATIONS

For Educators

To enhance research competence among nursing students, educators should integrate the Research Onion framework systematically into nursing research curricula. Embedding the Research Onion as a foundational structure can help demystify complex research concepts, enabling students to visualize and sequentially understand the stages of research design (Saunders, Lewis, & Thornhill, 2019). Educators should adopt interactive and student-centered teaching strategies—such as case-based learning, group discussions, and research simulation projects—to actively engage learners and foster deeper understanding (Prince, 2004). Simplifying abstract philosophical and methodological concepts with nursing-relevant examples, such as patient care studies or public health surveys, can make research more relatable and less intimidating for students (Moule, Aveyard, & Goodman, 2017).

For Institutions

Institutions have a critical role in supporting research education reform. Faculty development programs should be offered to train educators in using structured models like the Research Onion effectively, ensuring that instructors themselves are confident and competent in research methodology pedagogy (Fletcher, 2017). Moreover, nursing programs should allocate sufficient instructional time within already dense curricula to allow students to meaningfully engage with research content rather than treating it as a peripheral or rushed

topic. Dedicated research modules and longitudinal integration across clinical training could reinforce the importance and relevance of research skills (Melnik & Fineout-Overholt, 2019).

For Researchers

Further empirical studies are needed to evaluate the effectiveness of the Research Onion framework in improving nursing students' research competence. Such studies could employ mixed methods approaches to assess both cognitive understanding and practical application skills among students (Polit & Beck, 2021). Additionally, researchers should explore adaptations of the Research Onion tailored to different educational levels, cultural contexts, and learner needs, ensuring its applicability and relevance across diverse nursing education environments.

For Students

Students must also adopt an active approach to learning research, recognizing its integral role in professional practice. By critically engaging with each layer of the Research Onion, students can develop a strong foundation in research design and methodological decision-making (Saunders et al., 2019). Using Research Onion as a personal planning and evaluation tool will not only aid academic projects but also foster lifelong skills necessary for evidence-based clinical practice and quality improvement initiatives.

By adopting structured, scaffolded approaches such as the Research Onion, nursing education can move beyond rote memorization toward fostering critical inquiry, reflective practice, and innovation. Ultimately, this shift will enhance the quality of nursing care and contribute to the global advancement of nursing research and evidence-based healthcare delivery.

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