

CRITICAL THINKING IN NURSING

PENSAMIENTO CRÍTICO EN ENFERMERÍA

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ABSTRACT

*All nursing education programs were mandated by the National League of Nursing to include critical thinking as a major component in curriculums. Although the term is widely used, there is no clear definition of the usages of the concept in nursing. The aim of this analysis was to explore the concept of critical thinking, as it relates to nursing using the Walker and Avant method. The analysis revealed: a) different meanings and uses of the concept, including; b) attributes (assessment, evaluation, and open-mind); c) antecedents (problem, questioning attitude, and need for answers); d) consequences (safer practice and confidence in nurse's decision making); and e) empirical referents. A systematic approach is needed to guide nurses and nursing students in the path of cultivating critical thinking. It is essential that nursing students learn about critical thinking from the beginning of their nursing education. As a result, nursing decision will be more accurate and the clients' outcomes will be improved. **Key terms:** Critical thinking, nursing, concept analysis.*

RESUMEN

*La Liga Nacional de Enfermería exigió que todos los programas de enfermería incluyeran el pensamiento crítico como parte importante de sus programas de estudio. Aunque el concepto es ampliamente utilizado no hay una clara definición de sus usos en enfermería. El objetivo de este análisis fue explorar el concepto de pensamiento crítico en enfermería utilizando el método de Walker y Avant. El análisis de concepto reveló: a) diferentes significados y usos del concepto; b) atributos (valoración, evaluación, y mentalidad abierta); c) antecedentes (problema, actitud inquisitiva, y necesidad de respuestas); d) consecuencias (práctica segura, confianza en las decisiones de enfermería); e) referentes empíricos. Una aproximación sistemática es necesaria para guiar a las enfermeras y a los estudiantes de enfermería para que desarrollen pensamiento crítico. Es esencial que los estudiantes de enfermería aprendan sobre pensamiento crítico desde el inicio de su educación en enfermería. Como resultado las decisiones de enfermería serán aún más precisas y los pacientes tendrán mejores resultados. **Palabras clave:** Pensamiento crítico, enfermería, análisis de concepto.*

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INTRODUCTION

Concepts are the building blocks of nursing theories, however, some concepts lack of clarity, are ambiguous, and are difficult to operationalize. Walker and Avant¹ developed a concept analysis method to examine the basic elements of a concept providing clarity to abstract and concrete concepts². The Walker and Avant's method was selected because of its structure, systematic approach to the concept, and its extensive use in nursing.

Critical thinking is a concept that can be traced back to approximately 2,500 years ago by Socrates, who encouraged individuals to ask and approach questions in an amateur way while keeping an open mind³. In today's twenty first century, the term critical thinking is widely used in nursing as well as in other professions⁴. Critical thinking is a term used by many disciplines, each with their own definition of the concept; this disconnection caused even further misunderstanding⁴. In 1991, all nursing education programs were mandated by the National League of Nursing⁵ to include critical thinking as a major component in curriculums. Although the term is widely used, there is no clear definition of the usage of the concept in nursing⁶.

Aim of the analysis

The aim of this analysis is to explore the concept of critical thinking related to nursing. To conduct the analysis Walker and Avant's¹ method was selected. Eight steps are described by Walker and Avant¹: (1) select a concept, (2) determine the aims of the analysis, (3) identify the uses of the concept, (4) determine the defining attributes, (5) identify a model case, (6) identify borderline, related, contrary, invented, and illegitimate cases, (7) identify antecedents and consequences, and (8) define empirical referents. In this article steps 5 and 6 were not included.

Definition and uses of concept

According to the Walker and Avant's method¹, when defining a concept, it is

important to identify as many uses of the concept as possible to achieve a complete understanding of its extents or limitations. The sources used to retrieve information about critical thinking included: 1) data bases (e.g., CINAHL, Medline, Ovid; 2) dictionaries; 3) books; and 4) journals that have articles related to the concept.

The word critical has its origin in two Greek words: a) *kriticos* which means discerning judgment and b) *criterion* which means standards⁷. The Webster's Dictionary⁸ defined critical as an adjective, "tending to find fault" or "marked by careful analysis" and thinking as an adjective or noun, which is defined as "intellectually active" and "one's opinion or bias". Oxford Learner's Dictionary⁹ defines critical as, "making fair, careful judgement about good and bad". The inferred definition of critical thinking would be "a careful analysis using one's opinion or bias". The Oxford Dictionaries¹⁰ defines critical thinking as "the objective analysis and evaluation of an issue in order to form a judgment." Other dictionaries define critical thinking as "The mental process of actively and skillfully conceptualizing, applying, analyzing, synthesizing and evaluating information to reach an answer or conclusion"¹¹.

According to Faccione¹², the concept of critical thinking was originated in the field of philosophy and was defined as a type of thinking that is purposeful, self-regulated and based on evidence. In business and communication, Mahin¹³ described critical thinking as a purposeful reflective process that moves from the status quo to uncertainty and from uncertainty to formulating a decision. Weinstein¹⁴ defines critical thinking, from a religious perspective, as an assessment and evaluation of tradition, using tools and information provided by that same tradition. The majority of the literature found on critical thinking belongs to the education field. The National Commission of Excellence in Education¹⁵

defines critical thinking as an active and cautious consideration of a belief form of knowledge in light of evidence that supports it. In nursing, the use of the term critical thinking refers to nurses making decisions and taking action which is based on a multi-dimensional process of assessing, interpreting, analyzing, and formulating conclusions that are factual and reliable¹⁶.

Attributes

According to Walker and Avant¹, attributes are clusters of characteristics that are most frequently closely linked to the concept. Using terms common to nursing, three defining attributes were identified: assessment, evaluation, and open-mind^{4, 17-19}. Assessment is the first and most vital phase in the nursing process, performed by nurses in their everyday practice. It is defined by the American Nurses Association²⁰ as a systematic way to collect and analyze data about a client's physical, spiritual, socio-economical, and psychological wellbeing. If data collection is inadequate or incorrect nursing care can adversely affect the clients²¹. Evaluation is the fifth step in the nursing process and is used to determine if the client goals have been met completely, partially, or not met. Based on this evaluation, the nurse will decide whether nursing activities will continue or if a reassessment is needed²⁰. There are a number of possible reasons that goals are not met or are only partially met. It is essential, when nurses are making judgments, to have an "open-mind" meaning to be receptive to arguments or ideas. Nurses should evaluate all possible solutions before making a decision^{21, 22}.

Antecedents

Antecedents are actions that must be present before critical thinking in nursing can occur¹. Three antecedents have been identified in the literature: problem, questioning attitude, and the

need for answers^{8, 11, 15}. Problem is defined as a situation, tangible or non-tangible, and is viewed as uninvited or unwanted which can result in harm and require an intervention to overcome²³; this phenomenon occurs regularly to nurses in their everyday practice. A questioning attitude is vital to the process for critical thinking and refers to an individual with a curious and an inquiring personality³. Questioning attitude is a critical factor for nurses who desire to cultivate critical thinking skills²⁴. The need for answers is an important aspect of nursing to find a solution to a problem⁹. This is clear in the nursing process in which the assessment is the first step to find answers to deliver nursing care.

Consequences

Walker & Avant¹ describe the consequences as events or incidents that occur as a result of a concept. Two consequences of critical thinking have been identified, safer practice and confidence in nurse's decision making. According to Buerhaus, Donelan, & Norman²⁵, clients' safety is directly influenced by the nurses' ability to critically think, and nurses who utilized critical thinking skills and see the positive outcome, are more likely to gain confidence in their decision making abilities. When critical thinking is utilized, competent nursing practice is achieved¹⁸.

Empirical referents

Walker and Avant¹, describe empirical referents as classes or categories of actual phenomena that demonstrate the occurrence of the concept itself. Empirical referents provide nurses and other individuals with recognizable method by which to identify levels of critical thinking and to measure nurses or nursing students with critical thinking skills abilities¹. Various tools have been used in order to measure critical thinking. The most commonly used within the nursing

context are the California Critical Thinking Skills Test (CCTST) and the Watson-Glaser Critical Thinking Appraisal (WGCTA).

The California Critical Thinking Skills Test is designed to permit test-takers the opportunity to demonstrate the critical thinking skills required to succeed in educational or workplace settings where solving problems and making decisions by forming reasoned judgments are important. This test was developed in 1990, following a two year project to articulate an international expert consensus definition of critical thinking, including its core cognitive skills. The experts identify the characteristics of an ideal critical thinker, and present specific recommendations relating to critical thinking instruction and assessment²⁶.

The Watson-Glaser Critical Thinking Appraisal evaluates critical thinking by measuring the following abilities: inference, recognition of assumptions, deduction, interpretation and evaluation of arguments. It's the most widely used tool for selecting managers and future leaders. It was developed in 1925 by Watson-Glaser²⁷.

CONCLUSION

The concept of critical thinking will continue to be widely used in nursing education and practice. The abstractness of the concept makes it difficult for educators to teach and for nurses and nursing students to understand and apply. Therefore, a systematic approach is needed to aid educators, in instructional activities, to guide nurses and nursing students in the path of cultivating critical thinking skills. It is essential that nursing students learn and practice skills that model suitable critical thinking qualities from the beginning of their education. As a result, nursing decision will be more accurate and client's outcome will be improved. This concept analysis brings to light the need for further studies that facilitate research activities within the nursing discipline.

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