Nurse Educators' Perspectives and Experiences with Clinical Judgment

by

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Dissertation

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REPORT OF FINAL EXAMINATION
NURSING PhD

Date: November 29, 2023

We, the undersigned, as the Supervisory Committee in charge of the work of

Chelsey Rosen, for the Doctor of Philosophy in Nursing Degree, report that we have examined this student on his/her dissertation, the general field of the dissertation, and the following other parts of his/her program.

The student named above has:

1. completed the work assigned by the Committee.
   ☑ Yes ☐ No
2. passed all examinations required by the program, including the final oral defense of the dissertation.
   ☑ Yes ☐ No
3. selected option 1: ☑ a traditional dissertation
   OR
4. selected option 2: ☐ 3 manuscript(s) suitable for publication in peer-reviewed journals which meet the approval of the Committee.
5. completed either dissertation option 1 or 2 satisfactorily, which gives evidence of ability to do independent investigation in the major field, and itself constitutes a contribution to knowledge.
   ☑ Yes ☐ No
6. The student's dissertation is accepted by the committee
   As Is ☑ With minor revisions ☐ Not Accepted ☐

We recommend that this student be granted the Doctor of Philosophy in Nursing Degree.

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DEDICATION

This is dedicated to my wonderful husband, Jon, our son, Oliver, and our beloved daughter, Annie. Without your unconditional love and support and frequent, very necessary encouragement, I would not have been able to finish this journey. I promise that I will be steadfastly focused on making up for all the moments, evenings, weekends, and early mornings that I missed with you to work on this.

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Nurse Educators' Perspectives and Experiences with Clinical Judgment

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Abstract

Sound clinical judgment (CJ) is an essential skill every nurse needs to care for individuals competently and safely. Over the last two decades, nursing education has struggled to sufficiently prepare and develop students' CJ, despite various educational and curricular changes. This study utilized a Naturalistic Inquiry approach to explore prelicensure nurse educators' perceptions and experiences with teaching and evaluating nursing students' CJ to gain essential insight to educators' perceptions of this education deficit. Eight prelicensure nurse educators participated in this study, recruited through the memberships of the National League for Nursing (NLN). Data saturation was evident after six participants. Four main categories emerged from the data: Making Sense of Clinical Judgment, Efforts to Foster Clinical Judgment in the Classroom and Clinical Setting, Perceived Challenges for Nurse Educators Related to Clinical Judgment, and The Next Generation National Council Licensure Examination (NGN) Impact. The findings indicate nursing education needs to agree on a definition and utilization of a CJ model to help teach. The findings also indicate creating an active learning environment, using simulation, and educators actively posing questions to students are strategies used to foster CJ in

the clinical and classroom settings. The data from this study also reveals prelicensure nurse educators' perceived challenges to teaching and evaluating students' CJ and their perceptions on the new changes to licensure examination. The findings from this study support and add to the accelerating body of literature on nursing CJ and lay the groundwork for future research on fostering nursing students' CJ.

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LIST OF ABBREVIATIONS

AACN	American Association of Colleges of Nursing
CJ	Clinical Judgment
CR	Clinical Reasoning
CT	Critical Thinking
GSBS	Graduate School of Biomedical Science
IRB	Institutional Review Board
MSN	Master of Science in Nursing
NCJMM	NCSBN Clinical Judgment Measurement Model
NCLEX-RN	National Council Licensure Examination – Registered Nurse
NCSBN	National Council of State Boards of Nursing
NGN	Next Generation National Council Licensure Examination
NI	Naturalistic Inquiry
NLN	National League for Nursing
PhD	Doctor of Philosophy
RN	Registered Nurse
UTMB	University of Texas Medical Branch

CHAPTER ONE: INTRODUCTION

INTRODUCTION

The following dissertation includes the examination and findings of a Naturalistic Inquiry (NI) study that was conducted to explore the perspectives and experiences of nurse educators teaching and evaluating pre-licensure nursing students' clinical judgment (CJ). Chapter One will first present the study's background and significance. Chapter One will then include the study's aim and provide an overview of the study's design. Chapter One concludes with a plan for the remaining chapters.

STUDY BACKGROUND AND SIGNIFICANCE

Over the last two decades, there has been a remarkable shift of responsibility from physicians to nurses at the bedside; a responsibility that relies on and requires nurses to think and act more quickly and critically than before (Benner et al., 2010; Betts et al., 2019; Saintsing et al., 2011). Healthcare provider orders serve more as guidelines and parameters than as specific directives and require nurses to implement and adjust care based on the patient's condition (Benner et al., 2010; Caputi, 2018). In addition, the emerging aging population, and a significant spike in people with one or more chronic conditions, means nurses are caring for patients whose condition often is critical and complex (Betts et al., 2019; Del Bueno, 2005; Kavanagh & Szweda, 2017; National Academies of Sciences, Engineering, and Medicine, 2021). The knowledge and skills required of nurses to be able to provide competent and safe care has increased significantly, placing a greater reliance on a nurse's clinical judgment (CJ).

While experienced nurses typically have astute CJ, most newly licensed nurses are ill-prepared to make sound clinical decisions and do not have adequate CJ to safely care for patients independently (Benner et al., 2010; Berger et al., 2023; Berkow et al., 2008; Betts et al., 2019;

Del Bueno, 2005; Kavanagh & Sharpnack, 2021; Kavanagh & Szweda, 2017; Muntean, 2012; Saintsing et al., 2011). Lack of sound CJ is of concern for nurses and has been linked to poor patient outcomes, preventable errors and complications, and increased incidents of failure-to-rescue (Brennan et al., 2004; Clarke & Aiken, 2003; Lapkin et al., 2010; Levett-Jones et al., 2010; Muntean, 2012; Saintsing et al., 2011). Furthermore, there is a critical nursing shortage and a deficit of experienced nurses at the bedside, which has exponentially increased since the COVID-19 pandemic and is predicted to worsen over the next decade as the baby boomer generation retires, challenging nursing schools to continuously increase the number of students being admitted each year (Kavanagh & Sharpnack, 2021; National Academies of Sciences, Engineering, and Medicine, 2021; Saintsing et al., 2011).

In response to the nursing shortage and lack of sufficient CJ among newly licensed nurses, Benner et al. (2010) and Berkow et al. (2008) called for sweeping transformation in nursing education to focus more on developing and evaluating nursing students' CJ with the goal of graduating safer and more clinically competent nurses. Additionally, the National Council of State Boards of Nursing (NCSBN) is evolving the nursing licensure examination, the National Council Licensure Exam for Registered Nurses (NCLEX-RN), to what is now known as the 'Next Generation NCLEX' – NGN for short – to have considerable emphasis on evaluating nursing CJ skills (Betts et al., 2019; Dickison et al., 2019; NCSBN, 2017). Furthermore, the American Association of Colleges of Nursing (AACN) published and defined ten *Essentials* necessary for a high-quality baccalaureate nursing curriculum in April of 2021; several competencies within the *Essentials* document calls for entry-level professional nursing education to focus on CJ development. There has been a remarkable shift of focus on evaluating and validating CJ of nursing students in prelicensure nursing programs.

STUDY PROBLEM

With the shift of focus on fostering clinical judgment (CJ) skills and to produce more clinically competent nurse graduates, nurse educators are challenged to teach and evaluate nursing students' CJ before students graduate and sit for the licensure examination. The problem is that there is a lack of understanding of the specific shortfalls of the academic-practice gap within the literature (Berkow et al., 2008). Additionally, it is challenging for nurse educators to create meaningful exercises to foster CJ in nursing students (Dickison et al., 2019; Kavanagh & Sharpnack, 2021) and teaching strategies that foster CJ, as well as effective methods to evaluate CJ, remain elusive within the literature (Dickison et al., 2019; Nielson et al., 2022). There is little known from the literature indicating how nurse educators are confronting this educational shift in focus.

The aim of the study is to examine the perceptions and experiences of nurse educators currently teaching and evaluating clinical judgment in pre-licensure nursing students. The study will explore nurse educators' understanding of CJ and their experiences with teaching and evaluating nursing students' CJ in the classroom and clinical settings.

OVERVIEW OF METHODOLOGY

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) approved all procedures employed in the study. The study used a naturalistic inquiry (NI) methodology as first described by Lincoln and Guba (1985) and further developed by Erlandson et al. (1993). The philosophical underpinning of a naturalistic approach is to develop an understanding of people's experiences and perceptions of a given phenomenon and to illuminate constructs and meaning related to that phenomenon (Erlandson et al., 1993). The NI approach

suits the study's aim – to examine the perceptions and experiences of nurse educators teaching and evaluating nursing students' CJ.

Pre-licensure nurse educators currently teaching in the United States were recruited for the study. Potential participants were recruited via email through the National League for Nursing (NLN) membership directory. Participants were asked to participate in a one-on-one virtual interview. A total of eight pre-licensure nurse educators participated in the study, four of which participated in an additional, follow-up interview for member checking.

Data collected from participants included demographic data, participant's recorded interview, researcher's field notes and observations, and researcher's memos. Data was analyzed using methods as described by Lincoln and Guba (1985) and Erlandson et al. (1993). Data analysis within NI is an iterative process, occurring at the start of data collection sessions and ending when the final report is completed. The data analysis steps began with "unitizing" the data, then designating categories, and conducting a negative case analysis for each category. Final steps of data analysis involved considering if any of the categories can "bridge" or link together, if any of the categories are "extending," meaning it is appropriate for the study but is incomplete, and if there is any data that is "surfacing," meaning the data has potential to be fruitful, but needs further exploration in another round of data collection or another study (Erlandson et al., 1993, p. 117-122).

SUMMARY OF CHAPTER ONE

Chapter One introduced the current study by first providing an overview of the background and significance of the phenomenon of interest. The Chapter then described the study's problem and specific aim. Chapter One concludes with a brief introduction and overview of the study's methodology and procedures.

PLAN FOR REMAINING CHAPTERS

Chapter Two provides an extensive review of the extant literature of clinical judgment. Chapter Three goes into further detail of the study's methodology and procedures employed. Chapter Four presents the study's findings. Chapter Five provides a thorough discussion of the study's findings, comparisons and implications drawn from the extant literature, the study's strengths and limitations, and provides suggestions for future research.

CHAPTER 2: REVIEW OF THE LITERATURE

INTRODUCTION

Nursing clinical judgment (CJ) has been difficult to define and describe (Benner, 1984; Manetti, 2018; Tanner, 2006). Thus, the literature provides no universally accepted definition of the term (Brown Tyo & McCurry, 2019; Dickison et al., 2019; Klenke-Borgmann et al., 2020; Muntean, 2012). Clinical judgment is a complex and dynamic term used widely in the health care field and frequently is used synonymously with critical thinking and clinical reasoning (Brentnall et al., 2022; Brown Tyo & McCurry, 2019; Klenke-Borgmann et al., 2020; Tanner 2006). There is a lack of consensus about the precise differences among the terms critical thinking, clinical reasoning, and clinical judgement, yet many authors argue it is important to clearly differentiate the terms in order to distinguish them from each other to further illuminate understanding of the terms (Brentnall et al., 2022; Brown Tyo & McCurry, 2019; El Hussein et al., 2022; Gonzales et al., 2021; Klenke-Borgamnn et al., 2020; Manetti, 2018, Muntean, 2012; Tanner, 2006).

LITERATURE REVIEW OF TERMS

CRITICAL THINKING

Critical thinking (CT), in the context of the nursing profession, often is used to describe the type of thinking nurses use to make decisions in clinical situations (Klenke-Borgmann et al., 2020). Although Benner et al. (2010) believe the nursing profession overuses and overvalues the term and suggest that CT is not the only type of thinking nurses do. Nevertheless, CT is understood generally to be more of an umbrella term for the higher-level cognition required to analyze and synthesize knowledge in the clinical setting (Manetti, 2018; Pitt et al., 2015; Victor-Chmill, 2013).

Clinical Reasoning

Clinical reasoning (CR) is understood to be more of a prelude to clinical judgment (Alfayoumi, 2019; Simmons, 2010). Tanner (2006) explained the term CR refers to the "processes by which nurses and other clinicians make their judgments" (p. 204), while Simmons (2010) defined CR as a "complex process that uses formal and informal thinking strategies to gather and analyze patient information, evaluate the significance of this information and weigh alterative actions" (p. 1155). A systematic review from an interprofessional health professions perspective defines CR similarly as "the process of gathering and synthesizing information; generating hypotheses; and formulating a clinical impression, diagnosis, prognosis, treatment, care, and/or management plan" (Brentnall et al., 2022, p. 936 para 1). Thus, CR could be understood as the various thinking processes a nurse uses to discern information that is presented clinically.

Clinical Judgment

Different authors use the term, nursing clinical judgment (CJ), to refer to the outcome of the nurse's decision-making process or the application of CT in the clinical setting (Dickison et al., 2016; Dickison et al., 2019; Tanner, 2006). Although CJ is also understood to be the nurse's cognitive processes by which clinical decisions are made (Benner et al., 2010; Manetti, 2018). An extensive literature review (Muntean, 2012) and input from panels of subject matter experts led to the National Council of State Boards of Nursing (NCSBN) to accept the following definition:

> Nursing clinical judgment is the observed outcome of critical thinking and decision-making. It is an iterative process that uses nursing knowledge to observe and access

> presenting situations, identify a prioritized client concern, and generate the best possible evidence-based solutions in order to deliver safe client care. (Betts et al., 2019, p. 23)

The NCSBN's accepted definition of CJ recognizes that CJ is both a decision-making process and is the outcome of the cognitive process leading to that decision. The aforementioned definition has been cited 25 times in peer-reviewed articles since 2019 (Semantic Scholar, 2023), and it appears the literature is beginning to unite on this definition.

Nonetheless, the numerous similar terms and definitions of these terms contribute to the misuse and misunderstanding of the concept of nursing CJ (Brown Tyo & McCurry, 2019; Muntean, 2012) and distinction among the terms, CT, CR, and CJ, is necessary (Brentnall et al., 2022; Cappelletti et al., 2014; El Hussein et al., 2022). The confusion and misuse of terms may be a contributing factor to nurse educators' difficulties in attempting to teach and evaluate students' clinical judgment.

CLINICAL JUDGMENT IN OTHER HEALTH CARE PROFESSIONS

The term clinical judgment is used in other healthcare professions, including research studies from medical physicians, surgeons, pharmacists, psychiatrists, and counselors. Many studies in the medical field do not explicitly define clinical judgment (CJ) but rather refer to CJ as a "clinicians' judgment," or a "gut instinct" based on "clinicians' experience, specialty, and accumulated knowledge" (van Dam et al., 2022, p. 422), or a physician's assessment of a client (Montgomery, 2006). One systematic review study simply referred to CJ as "the knowledge, skills, and experience of experienced practitioners" (Veldhuis et al., 2022, p. 918). And several studies aimed to compare client outcomes when a provider utilized a structured diagnostic tool and when a tool was not utilized in treatment decisions and were based solely on a clinicians' clinical judgment (Brady & Harding, 2018; Schuringa et al., 2021; van Dam et al., 2022).

A study by Schuringa et al. (2021) described the historical progression and literature on treatment plans based on "unstructured clinical judgments" in forensic psychiatry, and they described CJ as "subjective judgments by a clinician" lead by the clinicians' "insight, intuition, professional opinion, confidence, training, and experience" (p. 1822). Similarly, a study on rehabilitation counseling defined CJ as a "counselor's observations and inferences about uncertain client characteristics and events" and are informed by ones' "education, clinical experience, and knowledge of the individual and their environment" (Austin & Leahy, 2015, p. 28). Additionally, a study from Waghorn et al. (2021) explored the role of CJ in pharmacists, and they posit clear distinctions from physicians: pharmacists' purpose is based on non-maleficence principles rather than beneficence; therefore, pharmacists are focused more on "therapeutic decision-making" and "medicines-management" rather than "diagnostic decision-making" (p. 2098).

Schalock and Luckasson (2005 & 2014) published a book, *Clinical Judgment,* a first and second edition respectively, with the American Association on Intellectual and Developmental Disabilities. Their book extensively describes clinical judgment for clinicians in this field and provides their own definition:

> Clinical judgment is defined as a special type of judgment built upon respect of the person. Clinical judgment emerges from the clinician's specialized training and experience, specific knowledge of the person and his/her environments, extensive data, and use of crucial thinking skills. (Schalock & Luckasson, 2014, p. 10)

Their definition encapsulates several parts of the definitions shared in the field of nursing and other clinical professionals but includes other characteristics to consider when forming clinical

judgments, such as a respect and a person's wellbeing and background (Schalock & Luckasson, 2014).

In brief, the term clinical judgment is applied in a variety of ways, though it is essentially understood in healthcare professions to refer to a healthcare professional's clinical decision regarding client care. Furthermore, an individual's CJ is informed in most part from one's clinical experiences, knowledge, and education. In comparison to the nursing field, which has a detailed definition of nursing clinical judgment, it seems that clinical judgment is more of a broadly used term understood to be a clinicians' assessment or decision.

NURSE EDUCATOR'S PERSPECTIVE OF CLINICAL JUDGMENT

HISTORICAL LITERATURE REVIEW

Clinical judgment (CJ) has been present in nursing literature since 1982 when Dr. Patricia Benner's seminal research on the application of the Dreyfus Model of Skills Acquisition (Dreyfus & Dreyfus, 1980), *From Novice to Expert*, was published. Benner spent the next 20 years conducting three studies to cultivate the model to outline nurse's skill acquisition in various stages of learning and to help describe a nurse's development of CJ (Benner, 2004). Benner explained nursing students remain in the first of the five stages, novice, and do not advance to the second stage of skills acquisition, advanced beginner, until beginning their first year as a newly licensed graduate nurse in practice. In the first stage, Benner explains how nursing students are thinking: students follow rules, rely on textbook knowledge, and have little to no experience to draw from to form clinical judgments. Benner suggests that nurse educators should utilize actual patient case studies, with careful discussion regarding the situation and positing possible changes that could arise, to advance students' critical thinking. She further

explains that ‘good’ nursing instructors provide students with actual clinical context and inform students of what to expect in practice (Benner, 2004).

Apart from Benner’s seminal research, del Bueno’s research, starting from 1990, is the next relevant focus on nursing CJ in extant literature. del Beuno’s research focuses on CJ and practice readiness in new graduate nurses. del Beuno’s 2005 landmark ten-year longitudinal study of newly licensed nurses (N=31,401) from 1995-2004 revealed that only 35% of newly licensed nurses met entry-level expectations of CJ, implicating a significant deficiency in prelicensure nursing education (p. 279). Specifically, del Beuno suggests the problem in nursing education is the emphasis on learning nursing content rather than the application of nursing knowledge. She suggested nurse educators develop “implicit questioning activities that require learners to apply, analyze, and synthesize knowledge for specific patient situations” instead of traditional teacher-driven lecture (del Bueno, 2005, p. 281). Additionally, del Beuno suggested exposing students to more virtual and clinical experiences and ensuring that students have preceptors in clinical settings who will ask questions to challenge students’ thinking in the moment with real patients.

Another pivotal study on nursing clinical judgment was Tanner’s 2006 research study, in which she created the Clinical Judgment Model (CJM). The CJM described four steps of forming clinical judgments: noticing, interpreting, responding, and reflecting. Tanner’s research also offered factors that influence and inform a nurse’s clinical judgments: educational knowledge, an individual’s background, an individual’s experience with knowing the patient and the condition, and the culture of the unit. Tanner’s CJM was well-received in the nursing profession and highly referenced following its’ publication. It has served as inspiration for many research studies since 2006, notably Laster (2007)’s clinical judgment rubric (LCJR) to guide educators’ evaluation of

students' performance in simulation, as well as the NCSBN's new clinical judgment measurement model (CJMM), which was used to create new test items on the NCLEX specifically to evaluate candidates' clinical judgment skills (Dickinson et al., 2016; 2019).

In 2010, Benner and colleagues published a significant study funded by Carnegie Foundation called *Educating Nurses: A Call for Radical Transformation*, which extensively discussed the severe practice-education gap and offers educators ways to improve teaching and evaluating nursing students in the clinical and classroom setting. The study was one of the only studies in extant literature that offered qualitative insight to nurse educators and nursing students' perspectives and experiences with clinical judgment. The authors performed an extensive review of the literature and conducted a nation-wide survey for nurse educators and nursing students. Following the data results, they recommend four paradigm shifts in nursing education: to include more situation-based learning, to bring clinical to the classroom and vice versa, to use multiple ways of thinking (i.e., clinical reasoning and critical thinking), and to make the shift from socialization and role taking to "formation" of the nursing profession (Benner et al., 2010, p. 82-89).

Another important recommendation Benner and colleagues (2010) made in their study agreed with del Beuno (2005)'s suggestions – that educators may be too fixated with assessing students' ability to pass an examination, rather than focusing on assessing students' application of knowledge in clinical or simulation settings. In response, the National Council of State Boards of Nursing (NCSBN) began identifying the need to update how the NCLEX was evaluating candidates from 2012-2014, citing the significant deficit in newly licensed nurses' readiness, the increasingly complex patient conditions nurses are caring for and increased responsibility of the nurses at the bedside (NCSBN, 2017). This initiated the journey to significantly transform the

examination to develop improved ways to evaluate candidates' clinical judgment (NCSBN, 2018); the new exam is now known as the Next Generation NCLEX or NGN for short (NCSBN, 2017). The NGN was released on April 1, 2023, and so far, there has been a significant increase in pass rates across the board (NCSBN, 2023). More data will be needed to provide insight into the efficacy of the increased pass rates and newly licensed nurses' clinical judgment skills.

LITERATURE REVIEW OF RESEARCH ON CLINICAL JUDGMENT IN NURSING ACADEMIA

Benner, del Bueno, and Tanner's research stimulated over a decade of nursing curricular changes with a greater focus on developing nursing CJ before students graduate. Many areas of focus were on nurses in the field or newly licensed nurses (Berkow et al., 2008; Fero et al., 2009; Kantar & Alexander, 2012; Nielsen et al., 2016; van Graan et al., 2016). The research studies that included prelicensure nursing students or nurse educators in academia focused on utilizing high-fidelity simulation to evaluate nursing students' clinical judgment (Ashley & Stamp, 2014; Bussard, 2015; Cazzell & Anderson, 2016; Fero et al., 2010; Glynn, 2012; Lapkin et al., 2010; Lasater, 2007; Lasater et al., 2014; Lasater & Nielsen, 2009a; Lavoie et al., 2017). There were several studies on evaluating students' clinical judgment in the classroom in a variety of ways, including the use of concept maps or concept-based learning (Alfayoumi, 2019; Gonzalez, 2018; Lasater & Nielsen, 2009b), utilizing a flipped-classroom (Peisachovich et al., 2016), gaming (Weatherspoon & Wyatt, 2012), and other activities (Lancaster et al., 2015; Tedesco-Schneck, 2018; Timbrell, 2017).

Despite numerous research studies attempting to foster clinical judgment in nursing students and nursing schools across the country implementing curricular changes in a variety of ways over the last couple decades, Kavanagh and Szweda (2017) replicated del Bueno's (2005) study and documented that 23% of newly licensed nurses had acceptable levels of CJ from 2011-

2015, which is a decrease of 12% in 12 years. Furthermore, continued aggregate data from 2016-2020 found only 14% of newly licensed nurses had acceptable levels of CJ (Kavanagh & Sharpnack, 2021). With staggering declining levels of new graduate nurse's clinical competence and arguably no effective curricular changes, it is a wonder whether curricular changes are the answer to address the education deficiency. It is not clear within the literature how nurse educators can or have effectively addressed the vast deficient level of CJ among newly licensed nurses, despite the plethora of research from nurse educators utilizing specific strategies attempting to increase clinical judgment skills in nursing students in simulation and the classroom.

Despite significant research published calling out the crisis in nursing competency, few articles published in the last two decades (including 2004 – through 2023) specifically focus on nurse educators' perspectives and experiences related to fostering the development of CJ in their nursing students. One study explored the development of nursing clinical judgment among undergraduate nursing students, their finding was informed by three nurse educators, three nurse preceptors, and one nurse researcher (Boyer et al., 2015). Another study used a teaching circle as a strategy to discuss clinical judgment with nurse educators and to brainstorm ways to incorporate clinical judgment into the curriculum (Martin et al., 2020). However, no studies were found that provided insight into nurses' feelings and experiences with teaching and evaluating clinical judgment in the classroom and clinical setting. Further insight on what nurse educators' experiences have been in teaching and evaluating clinical judgment in nursing students is needed to identify potential areas of focus for future research on fostering clinical judgment skills in novice nursing students.

Dickison et al. (2019) posits, based on their experience and research with the National Council of State Boards of Nursing (NCSBN), that it may be difficult for nurse educators to create meaningful exercises to foster development of CJ in nursing students, and several factors have been suggested as contributors to the challenge of teaching CJ. Firstly, CJ is dynamic and almost entirely dependent on context and a person's background (Dickison et al., 2016; Martin et al., 2020; Muntean, 2012; Schalock & Lucksson, 2014; Sommers, 2018). Lasater (2007) adds that CJ is a skill that is highly complex, interpretive, "dependent on the situation" (p. 496). Essentially, each exercise designed to help develop nursing CJ may be perceived differently by each learner, which may lead to a variation in learning outcomes and interpretations (Brentnall et al., 2022; Cappelletti et al., 2014). Secondly, an integrative review by Brown Tyo and McCurry (2019) and Brentnall et al. (2022) suggests that because the concepts of CR or CJ are ambiguous, nurse educators find it difficult to use evaluation tools to measure CJ, which further challenges their ability to recognize nursing students' CJ skills. Furthermore, CJ is understood to be developed over time by the individual through experience (Benner, 1984; Cappelletti et al., 2014; Gonzalez et al., 2021; Tanner, 2006) and, in many cases, through intuition (Benner, 1982; 1984; Krishnan, 2018).

Several authors who have published research on nursing CJ agree that it is particularly important to have a clear grasp of the concept of CJ prior to evaluating students or making curricular revisions (Brentnall et al., 2022; Dickison et al., 2019; Gonzales et al., 2021; Klenke-Borgmann et al., 2020; Lasater, 2011; Martin et al., 2020; Mutean, 2012). It is also important to consider other factors that influence a person's clinical judgment, i.e., a person's background and knowledge, and may result in a variation of outcomes (Benner et al., 2010; Boyer et al., 2015; Caputi, 2018; Tanner, 2006). The literature also makes it clear that it is essential for nurse

educators to remain up to date on the literature regarding CJ, particularly from the NCSBN (Cappelletti et al., 2014; Dickison et al., 2019; Gonzales et al., 2021; Klenke-Borgmann et al., 2020).

Summary of Literature Review

It is evident that CJ may be difficult to describe and define due to the various similar terms and multiple definitions, but there seems to be headway in a consensual definition. It is also clear that many nurse educators find it challenging to teach, assess, and evaluate CJ in nursing students. With the need to transform nursing education to focus on developing sound CJ, which was underscored by the launch of the NGN examination in the Spring of 2023, nurse educators need a better understanding of CJ and should be prepared to teach and assess their students' CJ skills in the classroom and clinical settings. To date, little research has been identified that focuses specifically on helping nurse educators understand, teach, and evaluate CJ in prelicensure nursing students.

Plan for Remaining Chapters

Chapter Three will present the research methodology and design used to explore nurse educators' experiences and perceptions of clinical judgment. The Chapter will include a description of how the Naturalistic Inquiry methodology was utilized to guide each aspect of the research study. Then, in Chapter Four, a detailed presentation of the study's findings is provided. Finally, Chapter Five offers a discussion of the study's findings, conclusions, possible implications, and recommendations for future research.

CHAPTER 3: METHODS

DESIGN

The study utilized naturalistic inquiry (NI) methodology as described by Lincoln and Guba (1985) and further developed by Erlandson et al. (1993). The philosophical underpinning of a naturalistic approach is to develop understanding of people's experiences and perceptions of a given phenomenon and to illuminate constructs and meaning related to that phenomenon. An assumption of NI is that individuals operate within their own reality and, therefore, a goal of NI is to tap into and discover "parts" of those realities to begin to understand the "whole" (Erlandson et al., 1993, p. 14). Erlandson and colleagues state, "multiple realities enhance each other's meanings; forcing them to a single precise definition emasculates meaning" (p. 15). Therefore, proponents of NI should aim for a "deep understanding and explication of social phenomena as they are observed in their own context" (p. 16). NI is fitting for the study because the overall aim is to explore nurse educators' perceptions and experiences with clinical judgment.

STUDY PARTICIPANTS

The central focus of naturalistic research is to intentionally seek out individuals who will best inform the study's purpose and design (Creswell & Poth, 2018; Erlandson et al., 1993; Streubert & Carpenter, 2011). Therefore, purposive and snowball sampling techniques were employed to recruit participants to the study. A purposive sampling technique allows the principal investigator (PI) to focus on recruiting and including participants that may best inform the study. Erlandson et al. (1993) explain that purposive sampling increases the potential range of data and maximizes the opportunities for the PI to adequately identify themes and constructs. Snowball sampling occurs when potential participants (PP) share recruitment materials with

other individuals who have experience with the phenomenon and may be willing to participate in the study.

Participants Inclusion Criteria

Study participants were nurse educators who:

1. Currently are teaching in a prelicensure (ADN or BSN) nursing program in the United States,
2. were willing to participate in up to two data collection (DC) sessions,
3. had access to and could use online conferencing.

Participants Exclusion Criteria

Potential participants who did not meet all the inclusion criteria were excluded from the study. Nurse educators were not restricted from participating in the study based on gender identity, race or ethnicity, age, or highest level of education obtained.

Sample Size

NI is focused on quality versus quantity of data when it comes to sample size, and Erlandson et al. (1993) asserted that there are no rules for sample size in a NI study. For that reason, the number of participants in the study depended on data saturation. Data saturation occurs when no new themes emerge, data is repeating, and the categories are well-formed, cohesive, and complete (Bowen, 2008; Strauss & Corbin, 1990).

In this study, there were a total of eight participants. Data saturation and redundancy were evident by the sixth participant's DC session, meaning no new categories emerged following the sixth participant's DC session, and several themes were repeated among all eight participants.

PARTICIPANT RECRUITMENT

After the study was reviewed and approved by the University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) (Appendix A), recruitment of potential participants (PP) began. The strategy for recruiting participants in the study evolved around utilizing the National League for Nursing (NLN)'s membership directory. The NLN is a professional nursing organization for nurse educators in the United States because the NLN accredits nursing schools all over the country and a vast amount of nurse educators are members of the organization.

Member contact information (emails) was extracted from the NLN membership directory to an excel spread sheet. A UTMB IRB-approved email (Appendix B), which included a short description of the study, participant eligibility criteria, and the PI's contact information (email and phone number), was sent to 500 members at random. The recruitment email also encouraged recipients to share or forward the recruitment email with any nurse educator acquaintances who might be interested in participating. Mass recruitment emails of 500 were sent out twice, approximately one month apart during data collection, with a sum of 1000 recruitment email recipients.

The first round of recruitment emails yielded 98 automated invalid email notices and six potential participants responded to the researcher expressing interest; five of which participated in the study, one did not show nor respond back to the researcher. Approximately one month later, a second round of emails was sent and yielded 83 automated invalid email notices and four potential participants responded to the researcher expressing interest; three of which participated in the study, one did not show nor respond back to the researcher.

The recruitment email instructed nurse educators interested in participating in the study or who have questions about the study to contact the PI via phone or email. A total of ten PP

expressed interest by replying directly from the recruitment email. The PI responded to the PPs who replied to the email by thanking the PP for their interest in the study and inquired how the PP wishes to correspond – via email or phone call – all preferred to correspond via email. The PI shared the study's overview via "Fast Fact Sheet" (Appendix C) and the study's eligibility criteria. PP responded by directly replying to the email, and once eligibility and interest were confirmed, the PI inquired about the PP's availability to meet virtually. All participants preferred to use the Zoom virtual platform. Eight DC sessions were scheduled and completed, one DC was scheduled and not completed due to PP not showing up or responding to researcher to schedule a follow-up time, and one PP did not respond after the initial contact email to researcher expressing interest.

SETTING

Data collection sessions took place virtually out of an abundance of caution for the (then current) COVID-19 pandemic. Moreover, the use of a virtual platform for data collection allowed inclusion and diversity of PP from across the United States. DC sessions were recorded on two devices. To ensure privacy, participants were encouraged to participate in DC sessions from a location that would be private, comfortable, quiet, and where there were minimal opportunities to be overhead and interrupted during the DC session. The PI conducted the DC sessions in a home office, where the internet was secure, and the setting was a private location.

DATA COLLECTION FORMS

Data for the study consisted of demographic data, interview data (audio-video recorded and typed transcripts), and the principal investigator's (PI) observations and field notes.

Informed Consent

To promote transparency and inclusivity regarding the study, the PI sent each PP a "Fast Fact Sheet" prior to the DC session (Appendix C). Then, at the time of the initial DC session, the PI explained more information about the study, provided an opportunity for the PP to ask questions, and obtained verbal informed consent from the PP with the guide of an informed consent narrative (Appendix D). The procedure for obtaining informed consent is described in detail below.

Demographic Data

Once the participant provided verbal informed consent, the PI began data collection of demographic data (DD) using the DD form (Appendix F). The PI read the DD items to the participant, so the participant's responses were captured in the recording and transcription.

Interview Data

Once the demographic data was collected, the DC session continued with guidance of the semi-structured interview guide (Appendix G). The guide contains a grand tour question, several specific follow-up questions that the PI asked during the DC sessions, as well as closing questions and statements.

Field Notes

Field notes were recorded by the PI during and at the end of each DC session. Erlandson et al. (1993) emphasized that naturalistic research involves using all five senses plus intuition to "gather analyze, and construct reality from data" (p. 82). The PI's field notes included observation of the participant's verbal cues (i.e., tone, inflection, pauses) and non-verbal cues (i.e., body language, affect). Other notes included the PI's own feelings, thoughts, ideas that

occurred during the interview and afterwards. All field notes were utilized in data analysis to help capture and further understanding of the "whole" (p. 14).

DATA COLLECTION PROCEDURES

INFORMED CONSENT

The informed consent process began when the PI emailed the "Fast Fact Sheet" (Appendix C) prior to the DC session. At the agreed-upon day and time of the initial DC session, the PI discussed the study using the informed consent narrative (Appendix D) which described what participation in the study entails, risks of participation, and study participants' rights. The PI also provided an opportunity for the PP to ask questions and answer those questions. At the end of the verbal informed consent narrative, the PI asked the PP if they were willing to participate in the study. The PP's statement of willingness to participate allowed the PI to turn on the recording devices. The PI then asked the participant to restate, for the purpose of the recorded session, her willingness to participate in the study. No recording occurred until after the participant gave verbal consent to participate. The PI logged each verbal consent obtained through the DC sessions on the verbal consent log (Appendix E).

INTERVIEW DATA

Once the DD was collected (Appendix F), the DC session continued with the interview with a semi-structured guide (Appendix G). The semi-structured interview was conducted in the form of a conversation whose topics were led by the items in the interview guide, which allowed both the PI and the participant the freedom to ask questions or elaborate as needed. The interviews began with the statement: "I'm really interested in hearing about your understanding of the concept 'nursing clinical judgment."

Throughout the session, the PI responded to the participant's comments according to their understanding, asked questions or made comments when the PI would like the participant to elaborate or clarify (i.e., "Could you elaborate on/clarify what you meant when you said…"). The PI also asked specific follow-up questions as the PI saw fit (i.e., "How do you recognize clinical judgment in nursing in clinical and non-clinical settings?).

FIELD NOTES

Field notes were created to record the PIs observations during and after the data collection sessions. The PI made a note of specific observations (verbal or non-verbal) of the participant and/or any thoughts, feelings, or ideas generated during the interview. Field notes were added to the DC session transcript by the PI immediately following the conclusion of the session with the participant and throughout the data analysis process.

DATA MANAGEMENT

All data collection (DC) sessions were recorded using two devices. The PI recorded the data collection sessions utilizing the recording capabilities of the teleconferencing platform, Zoom. Zoom allowed for the DC sessions to be video- and audio-recorded. A second audio recording was recorded as a back-up on a handheld device, the PI's personal, password-protected cellphone, in case any issues arose with the Zoom recordings. After each DC session, the PI downloaded and saved all the recordings on the PI's personal OneDrive on UTMB's secure network, and all back-up audio recordings on the PI's personal cell phone were sent to the PI's university email and saved on the OneDrive.

Zoom's recordings also provided an audio transcription of the DC sessions, creating a typed transcript of the session. The PI downloaded the transcription in a Microsoft word document and saved it on OneDrive. The PI reviewed each transcript for accuracy by listening to

the recording while reading the transcript, providing updates and edits to ensure the transcript was verbatim. Once the transcripts were accurately updated, the transcripts were saved as a "read-only" document in a separate folder on the PI's personal OneDrive; these are considered the "original" copies of the transcript, kept separately to promote accuracy.

The PI then created a de-identified copy of each transcript. De-identification involved removing any personally identifying data (i.e., participant's name, name of towns, universities, etc.) from the document and replacing the participants name with a code number (i.e., P1, P2, P3, etc.) and redacting any other information that could link the transcript to the participant. The PI saved a code book linking participants' names with the designated code in a folder in PI's personal OneDrive on UTMB's secured network. The PI's field notes were also added to the de-identified transcripts and used for data analysis.

DATA PROTECTION

The de-identified versions of the transcripts, all materials related to data analysis and writing up were stored separately from the original versions in different folders within the PI's OneDrive on UTMB's secure network. Any physical field notes taken during the DC session were added to the de-identified transcript and the physical notes were shredded using the PI's personal shredding machine.

DATA ANALYSIS

According to Erlandson and colleagues (1993), data analysis and data collection occur simultaneously in a naturalistic study; the two elements have an inseparable relationship. Therefore, data analysis primarily occurred in two phases – during the DC session and afterward, however, data analysis does not cease until the final report has been written (Erlandson et al., 1993).

Erlandson and colleagues (1993) drew from the work of Lincoln and Guba (1985) to summarize NI data analysis as the following steps:

1. Unitizing data, which involves "disaggregating data into the smallest pieces of information that may stand alone with independent thoughts" (p. 117).

2. Emergent category designation, involves the following steps:

2a. "Read the first unit of data.

2b. Read the second unit of data.

2c. Proceed in this fashion until all units have been assigned to categories.

2d. Develop category titles or descriptive sentences or both.

2e. Start over" (Erlandson et al., 1993, p. 118).

3. Negative case analysis, which involves "addressing and considering alternative interpretations of the data" (Erlandson et al., 1993, p. 121).

4. Bridging, extending, and surfacing data: Bridging involves linking together two or more categories that may logically piece together (Erlandson et al., 1993). Extending is called for when a category seems appropriate but may be incomplete (Erlandson et al., 1993). Surfacing may be used when there is an emerging category that has surfaced and suggests "unexplored, potentially rich sources of data exist" but needs to be explored in the next round of DC (Erlandson et al., 1993, p. 122).

TRUSTWORTHINESS

Trustworthiness in qualitative research is essentially the researchers' efforts to persuade the readers that their work is honest and worthy of their time (Lincoln & Guba, 1985). Efforts to enhance trustworthiness for the study were accomplished by utilizing Lincoln and Guba's criteria for assessing qualitative work: credibility, transferability, dependability, and confirmability.

CREDIBILITY

Credibility is essentially the "confidence in the truth" of the study's findings (Lincoln & Guba, 1985, p. 290); the term is used interchangeably with "truth value" (Erlandson et al., 1993, p. 29). To establish credibility for the study, the following strategies were employed: triangulation, negative case analysis, peer debriefing, and member checking.

Triangulation and negative case analysis were employed during the data analysis process, as described earlier in the chapter. Triangulation involves using multiple sources of data, including time, people, and methods, and negative case analysis requires the researcher to consider alternative conclusions or interpretations of the data (Erlandson et al., 1993). This study strived and was able to include a diverse group of participants in the study from all over the United States, and the data was also triangulated with the use of multiple sources of data during data analysis, i.e., comparing interview data to the field notes.

Peer debriefing was another strategy used to enhance credibility and involved peer reviewing the study procedures to test conclusions and hypotheses, bring forth ideas or concerns, and collaborate with the PI (Erlandson et al., 1993). An additional role of the peer debriefer was to ensure the PI's study procedures and conclusions do not reflect bias or preconceptions. For this study, peer debriefing included two 'peers' – the researcher's advisor and another Nursing PhD faculty member and committee member – both of whom reviewed each DC session transcript, provided feedback to the researcher, collaborated on the researcher's evolving categories and themes and challenged the researcher to enhance interview techniques between interviews. Their perspectives helped the researcher stay focused on and immersed in the data.

The fourth strategy used to enhance credibility was member checking. Lincoln and Guba (1985) claim that member checking is one of the most important strategies for establishing

credibility of an NI study and urge all NI studies to include member checking. Member checking involves the study participants' reviewing the PI's interpretations and conclusions (Erlandson et al., 1993; Lincoln & Guba, 1985). For this study, the researcher gained permission from each participant to contact them in the future for member checking at the end of each initial DC session. The researcher contacted each participant approximately one year following the initial DC session. Four out of the eight participants were willing and able to meet virtually on Zoom for a follow-up session. Each of the four participants who were able to meet were sent their original transcript and were given copies of the study's findings. After reviewing the transcript and study findings, the researcher met with the participant on Zoom for an average of 42 minutes. In the member-checking session, the PI asked each participant to first share their thoughts of their previous interview and then the study's findings. Each participant validated and verified the study's findings.

TRANSFERABILITY

Transferability essentially refers to the ability of the study's findings to be applied to other contexts or situations. Erlandson et al. (1993) use the term "applicability" interchangeably with the term, transferability. The strategies that were used to enhance transferability were purposive sampling and thick descriptions. The study utilized purposive sampling, a sampling technique that sought to include people in the study who have knowledge and experienced the phenomena of interest.

Thick descriptions are used to build transferability by a process that Erlandson et al. (1993) described as "describing [the data] in multiple low-level abstractions" so that "transferability judgments may be made by potential appliers" (p. 145). Essentially, thick descriptions are detailed explanations that allow the readers to gain further insight on the PI's

process to further understand the study's findings (Erlandson et al.). Additionally, this study used direct quotations from participants to further enhance transferability of the study findings.

Dependability and Confirmability

Erlandson and colleagues (1993) referred to dependability as the consistency of a study's results, and confirmability as the objectivity or neutrality of the study's results. Both dependability and confirmability can be enhanced through an audit trail and the peer debriefer.

The audit trail consists of all materials related to the study, including the proposal; all study data, including interview transcripts, the PI's field notes; and data analysis products (Lincoln & Guba, 1985). An audit trail is important so adequate records are maintained throughout the study and so the PI and the peer debriefer can essentially "fact check" and find a source before making assumptions with no supporting data (Erlandson et al., 1993). The audit trail also made it possible for an independent researcher, the peer debriefer, to follow and validate the PI's process from the beginning of the study through the conclusions and written reports of the study. Erlandson et al. recommend labeling, keeping notes and staying organized so material can be located easily. The researcher of this study was able to maintain an organized audit trail, labeling each folder and saving each document used within the study on the researcher's university OneDrive account.

Human Subjects

This qualitative study was submitted for review and approved by the UTMB IRB. Additionally, the study only included participants who volunteered to participate, and each participant received and read a description of the study, along with a detailed consent form. The participants were given an opportunity to ask questions prior to consenting to participate in the

study. Prior to and after providing consent, participants were informed of their right to withdrawal their participation at any time.

There was minimal risk to the human subjects involved in this study. There is some risk of loss of confidentiality and participant fatigue or distress during data collection. The risk of loss of confidentiality was minimized by removing and coding identifying information about the participants in the study, such as the participant's name, date of birth, and the names of places, institutions, or states. Each participant was assigned a numerical code, which the PI used in place of their name in all study documents. Although there are steps in place to minimize the loss of confidentiality, the PI disclosed and discussed the steps that were taken to minimize loss of confidentiality with the PPs during the informed consent process.

Other potential risks to participants were the risk of feeling fatigue and emotional distress, depending on the length of the sessions and topics that could arise during the sessions. To mitigate the risk of fatigue and emotional distress, the PI offered breaks at 30-minute intervals and when the PI suspected a break may be needed. The PI checked-in with the participant several times throughout the data collection sessions to ensure the participant was doing well and still wished to continue with the session. Lastly, the participant was assured if at any time they feel distressed or fatigued, or if the PI believed the participant may be uncomfortable or fatigued, the data collection session could have been paused or completed, but no participant expressed the need for a break or wished to end the DC session at any time.

SUMMARY OF METHODS

Chapter Three has presented a description of Naturalistic Inquiry, followed by the study's research question and aim. Chapter Three also provided a detailed description of how study participants were recruited, and how data was collected, managed, and analyzed. Finally,

Chapter Three concluded with a discussion on the efforts to increase the study's rigor and considerations for human subjects.

PLAN FOR REMAINING CHAPTERS

Chapter Four will discuss and expound on the study's findings. Chapter Five will include potential implications for the study's findings, provide suggestions for future research, and conclude the study.

CHAPTER 4: STUDY FINDINGS

INTRODUCTION

Chapter Four presents the findings of this study of prelicensure nurse educators' perspectives and experiences with nursing clinical judgment (CJ). The Chapter will begin with a presentation of the study's participants and follow with an in-depth explanation of the study's findings, including the four overarching categories and subsequent categories.

STUDY PARTICIPANTS

Eight prelicensure nurse educators participated in this study (N=8). The participant demographic data is presented in Table 4.1. Each participant was assigned a participant number, consisting of the letter "P" and a number in lieu of using personal identification information. However, to further promote anonymity, participant numbers are not included in the table; only demographic information is provided.

All participants identified as female, with a mean age of 55.125 years old. Six participants were Caucasian, one was Hispanic, and one was Asian. The number of years the participants had been a nurse educator ranged from 4 to 18 years, with a mean of 13.5 years. Three participants reported they were working in Bachelor of Science in Nursing (BSN) programs at the time of data collection and four were working in Associate Degree in Nursing (ADN) programs; one was working in a program where she was teaching both BSN and ADN students (see Table 4.1).

Table 4.1: Participant Demographics

Age	Gender Identity	Ethnicity	State	Type of prelicensure program	# Years as an educator
49	F	C	MS	BSN	4
63	F	C	CA	BSN	17
56	F	C	MI	ADN	16
49	F	A	NC	BSN	18
58	F	H	NJ	ADN	9
49	F	C	GA	BSN & ADN	17
57	F	C	AL	ADN	14
60	F	C	NY	ADN	13

Legend

F = Female
C = Caucasian
H = Hispanic
A = Asian
ADN = Associate Degree in Nursing
BSN = Bachelor of Science in Nursing

Four of the participants have a Master of Science in Nursing (MSN) degrees, while the other four participants have a doctoral degree; two are a Doctor of Education, one is a Doctor of Philosophy in Nursing, and one is a Doctor of Nursing Practice. The participants have varying areas of clinical expertise as a nurse and specialties in nursing education (see Table 4.2).

Table 4.2: Participant Professional Experience

Highest Level of Education	Clinical Experience Areas	Areas of Expertise in Nursing Education
MSN	Medical-Surgical	Health Assessment, Health Policy, Ethics, Research
PhD	Public Health	Community/Public Health, Psych/Mental Health
DNP	Critical Care	Fundamentals
MSN	Critical Care, Pediatrics, Oncology, Nephrology, Labor & Delivery	Medical-Surgical, Fundamentals, Pediatrics, Women's Health
MSN	Medical-Surgical, Oncology	Medical-Surgical
EdD	Pediatrics, Newborn	Pediatrics, Women's Health, Pharmacology, Fundamentals, Research
EdD	Critical Care, Cardiac Care	Psych/Mental Health, Medical-Surgical
MSN	Medical-Surgical, Cardiac Care	Medical-Surgical

Legend

MSN = Master of Science in Nursing
PhD = Doctor of Philosophy in Nursing
DNP = Doctor of Nursing Practice
EdD = Doctor of Education

INTRODUCTION TO FINDINGS

The purpose of the study was to explore and better understand prelicensure nurse educators' perceptions and experiences with nursing CJ. Data analysis revealed four major categories and several subcategories. The following is an outline of the study's findings.

I. Making Sense of Clinical Judgment
   a. Describing Clinical Judgment
   b. Distinguishing Among Clinical Judgment, Critical Thinking, and Clinical Reasoning
   c. Differentiating Clinical Judgment from the Nursing Process
II. Efforts to Foster Clinical Judgment in the Classroom and Clinical Setting
   a. Fostering Clinical Judgment in the Classroom
   b. Fostering and Evaluating Clinical Judgment in the Clinical Setting

III. Perceived Challenges for Nurse Educators Related to Clinical Judgment
    a. Persisting Issues in Nursing Education
        i. Disconnect Between Academia and Real-Life
        ii. Faculty-to-Student Ratios
        iii. Inconsistencies Among Educators
    b. Clinical Judgment-Specific Challenges
        i. Educators Perceive Clinical Judgment Differently
        ii. Feelings of Frustration in the Classroom
        iii. Hesitancy to Use and Rely on Education Products
    c. Clinical Judgment Takes Time to Develop
    d. The COVID-19 Pandemic Impact
IV. The Next Generation National Council Licensure Examination Impact
    a. Nurse Educators' Thoughts and Feelings
    b. Advice to Help Faculty Foster Clinical Judgment Skills

The following sections will provide a detailed presentation of the study's findings. The reporting of the data categories will be supported by participant quotations to illustrate the points being made to enhance the study's credibility. The participant quotations will be cited in the following format: (P1, 101). The notation, P, refers to the participant number, which in this case indicates that the quote is from the transcript of the interview with Participant 1; the number that follows the P number indicates the location of the quote in the transcript.

I. Making Sense of Clinical Judgement

Over the last three decades, the term clinical judgment (CJ) has been relevant to the nursing profession. While the concept received some traction from notable, ground-breaking studies in the early 2000s (del Bueno, 2005; Tanner, 2006), it was not until 2018 when the National Council of State Boards of Nursing (NCSBN) endorsed a robust definition of CJ that the nursing profession started to pay attention and utilize the term. In the ensuing years, the NCSBN has evolved the nursing licensure examination to have a primary focus on testing candidate's CJ skills; this examination was released April of 2023 approximately a year before data collection. Additionally, the American Association of Colleges of Nursing (AACN) published new "Essentials" in 2021 that outline the necessary curriculum content and

competencies for nursing education programs; the first domain specifically calls for fostering nursing students' CJ. Prior to 2018, there had been no consensus on a definition of the term CJ. Moreover, the researcher's observations and conversations with other nurse educators revealed discrepancies between what was in the literature and what was being understood by the educators responsible for implementing requirements and preparing nursing students for success in their licensure examinations. Those observations led to this study, with the goal of exploring participants' understanding of the concept CJ. The nurse educators who participated in the study had varying opinions and understandings of the term CJ. "Making Sense of Clinical Judgment" addresses the participants' attempt to share their understanding of CJ and consists of three sub-categories: Describing Clinical Judgment, Distinguishing Among the Terms Clinical Judgment, Clinical Reasoning and Critical Thinking, and Differentiating Clinical Judgment and the Nursing Process.

In "Describing Clinical Judgment," participants share their own understanding and description of the concept CJ, while the second and third subcategory focus on the participant's distinctions and similarities of the term CJ with other terms such as clinical reasoning and critical thinking and the nursing process. Each of the sub-categories are important pieces to include within the first category because together, the sub-categories attempt to show how nurse educators are "making sense" of the concept clinical judgment.

Describing Clinical Judgment

Early in the interviews, each nurse educator was prompted to share her description and understanding of CJ. Every participant provided some sort of description of CJ, although four participants admit CJ is difficult to describe or to put into words. One participant described CJ as an innate or "intuitive" (P2, 258 & 845), "sometimes painful" (P2, 260), "deep and sort of

neurological response… [that eventually allows one to] “just know what to do” (P2, 244-247). One participant described clinical judgment as “thinking like nurse” (P3, 164-165). Another participant equated clinical judgment with “common sense… [explaining that clinical judgment] in real simplistic terms… is just taking information and making a good, safe decision” in a clinical setting (P6, 157, 161-163, 178, 228).

Participants also provided clinical examples to illuminate their description instead of trying to give a precise definition. For example, one participant explained, “Clinical judgment doesn’t mean I put the best IV [intravenous] in at the beside; it’s way more than that . . . clinical judgment involves taking pieces of a patient’s history, presentation, symptoms, and deciding ‘What do I need to do?’ ‘What concerns me most?’” (P6, 378-382). Four participants used similar analogies; one participant summarized by explaining that clinical judgment is “the ability to take [clinical information] in and make the best possible decision” (P2, 825-828).

The nurse educators also described clinical judgment in terms of the extant clinical judgment models, as described by one participant in terms of Tanner’s (2006) clinical judgment model and three participants used the National Council State Boards of Nursing’s clinical judgment measurement model (2017) steps. For example, one participant explained, “I like to use Tanner’s model when explaining [clinical judgment] to my students...the first step is to notice...then interpret the information...respond...and reflect” (P3, 226-241).

Distinguishing Among Clinical Judgment, Clinical Reasoning, and Critical Thinking

Nursing literature is often unclear when it uses the term clinical judgment (CJ), lacking clear distinctions between similar terms such as clinical reasoning (CR) and critical thinking (CT). This lack of distinction was echoed by four of the participants who inadvertently used these terms interchangeably throughout data collection. In an attempt to further grasp how the

nurse educators understood the terms, each participant was asked to share their understanding and use of the terms. Six of the participants shared their understanding of the differences amongst the terms, while two participants felt the terms were effectively the same.

Two participants described the term critical thinking as using the knowledge and skill developed in the classroom; one participant said, "[critical thinking] is the didactic piece" in nursing education (P5, 194-195). Another participant explained, "the opposite of critical thinking is when I hear students say… 'tell me what you want me to [think]' (P1, 196-197). On the other hand, the term clinical reasoning is described as the "mental processes" that a nurse uses to in the "clinical area" (P5, 195-196). Two other participants agreed, summarizing that clinical reasoning is critical thinking in the clinical setting. And finally, participants differentiated the term clinical judgment as the "end-product" or "application" (P1, 193) of critical thinking and clinical reasoning (P5, 197); it's the "decision" or "action" a nurse takes (P2, 828; P5, 158; P6, 154-155; P7, 172). One participant shared that a nurse "has to have really good clinical reasoning. . .to make good clinical judgments…and you really have to have critical thinking before you do any [of that]" (P1, 195-196).

Two participants thought the three terms, clinical judgment, clinical reasoning, and critical thinking, were essentially the same. One participant shared:

> [I feel] … a little frustrated with this clinical judgment idea because I feel like we have been teaching clinical judgment, we've just been calling it a different name. We've been saying "critical thinking," we've been saying "clinical decision-making," and to me, it's like we're just putting a new label on something that we have been attempting to do anyway…I think it's saying the same thing. Now, some academia, and this might be part of…your thesis… you're going to be defining…what is critical thinking and how is it

different from clinical judgment? But it's really, in my opinion, splitting hairs. (P3, 171-183; 215-219)

Most participants differentiated among the term's clinical judgment, clinical reasoning, and critical thinking, and provided distinctions. In summation, critical thinking was a term used to describe the type of thinking nurses develop in the classroom-like settings, while clinical reasoning is the term used to describe the application of critical thinking in the clinical setting. Clinical judgment is the term participants described as the action or the decision that the nurses make after using critical thinking and clinical reasoning. However, two participants felt it is unnecessary to differentiate amongst the terms.

Differentiating Clinical Judgment from the Nursing Process

The third sub-category is differentiating CJ with the nursing process (NP). Equating or differentiating CJ with the nursing process was discussed by seven of the eight participants. Three participants were in the opinion that the nursing process and CJ were essentially the same, one participant added that the nursing profession is just "putting on a new label" on the nursing process and calling it CJ (P3, 181&192). Four participants disagreed, explaining that CJ is not the same as the NP because CJ takes the NP a step further to account for more critical thinking and does not include nursing diagnoses, and the clinical judgment model accounts for more of what nurses do in "real life" (P2, 503, 519-529; P4, 313-314; P5, 176-181; P6, 230). Nevertheless, the other two participants who favor the nursing process explain that the nursing process is "simpler," "more straightforward," and "easier" to understand compared to clinical judgment (P3, 251; P7, 411-412). The same participants said they feel "comfortable" with teaching the nursing process rather than clinical judgment to their students because that is what they "have always used" (P3, 251; P7, 411-412).

While there is only one traditional nursing process model, there were two different CJ models participants referenced. Three participants referred to and expressed favor for the National Council of State Boards of Nursing's (NCSBN) clinical judgment measurement model (CJMM), while one participant referenced Tanner's (2006) clinical judgment model (CJM). When participants were asked what they instructed their students about CJ and the nursing processes, four participants admitted only teaching the students about the nursing process, while three participants taught both or a "hybrid" version of the nursing process and a CJ model (P8, 348-349). One participant that only teaches the nursing process to her students adds that she only teaches the nursing process because the CJ model "the [National Council of State Boards of Nursing] is pushing out…is more complex… it looks very cumbersome… and scary…and creates more confusion" for the students (P3, 233-270).

Although the nursing process is similar in many ways to CJ, three participants admitted they are "confused" or at least "struggling" with what they should be teaching their students about the nursing process and the clinical judgment model (P3, 304; P4, 313; P7, 465). Two participants said they think the directives from the NCSBN are unclear about how to approach the dilemma of which nursing model to teach to their students, some resorting to teaching both models, which, in turn, creates "more confusion" for the students (P3, 302-309; P7, 566-569).

The participants were split with their preferences for using the nursing process or clinical judgment model, whether they favored the nursing process because it is what they are familiar with or favored CJ because it is a better reflection to how nurses are practicing now. While most participants (six out of eight) discussed the differences between the nursing process and CJ, there were differing opinions as to how nurse educators should be teaching their nursing students.

II. Efforts to Foster Clinical Judgment in the Classroom and Clinical Setting

Despite the lack of clarity about the term, clinical judgment, the nurse educators who participated in the study were able to describe the strategies they were using in the classroom and clinical settings to try to foster development of CJ in their students. The second category presents the strategies the nurse educators used in the classroom and clinical setting to help foster their students' CJ.

The researcher queried the participants about their experiences teaching CJ not only in the clinical setting, such as the hospital and simulation or laboratory areas, but also in the classroom because both settings are vital to students' learning and development of CJ skills. Three participants taught in both the classroom and clinical setting at the time of data collection. Three other participants only taught in the classroom, while the remaining two participants only taught in the clinical setting. Nevertheless, two subcategories were formed naturally based on participants' experiences fostering clinical judgment. The subcategories include Fostering Clinical Judgment in the Classroom and Fostering Clinical Judgment in the Clinical Setting.

Fostering Clinical Judgment in the Classroom

The nurse educators who participated in the study had varying definitions of the term, classroom, because of changes necessitated by COVID-19 pandemic during the time of data collection. Participants loosely defined classroom as any sort of didactic instruction, which took place either in-person, virtually (online), or a mixture of both in-person and online interactions. The participants' descriptions of how they tried to foster CJ in the didactic setting included teaching in-person didactic instruction and teaching students in an online venue. During the time of data collection, though, all participants were teaching in the classroom face-to-face, but

several participants included their recent experiences with online instruction and how the transition back to in-person instruction changed the way they set up their classroom.

Six out of the eight participants currently taught in the classroom setting during the time of data collection. First, participants were asked about if and how they taught their students about clinical judgment in the classroom (e.g., "Do you teach your students about clinical judgment during didactic instruction and if so, how?). Only one participant reported teaching their students about the concept of clinical judgment, explaining that she "introduces" the concept early in the first semester nursing school course, Fundamentals of Nursing, using various learning strategies (i.e., case studies, group activities) to help the beginning nursing students apply the knowledge (P3, 221-223). The five other participants reported not directly teaching their students about CJ, but rather used various learning activities to apply and test their students' CJ skills in the classroom.

The participants were asked how they used the classroom environment to attempt to help their students learn CJ. The participants mentioned several different types of active learning activities, including group work, quizzes, clinical case studies, reflexive journaling, and various games. Overwhelmingly, the participants favored using unfolding case studies to foster development of CJ in the classroom. One participant described how she uses unfolding case studies: "[I give students a] clinical scenario...with questions to answer with a little bit of knowledge that they have learned...and have them think through it... [while] the teacher...walk[s] through the case with [the students by] leading and asking them questions [in order to hear what students are thinking]" (P3, 360-361). The participant explained that unfolding case studies "allows [teachers] to assess whether [students] are thinking about things in the way we want them to" (P3, 368-371). Essentially, the unfolding case studies provided opportunities for nurse

educators to foster the development of students' CJ by allowing the students to carefully walk through a clinical scenario, challenging the student with queries to assess their knowledge, and stimulating active discussion about the situation. The nurse educators said that case studies allow students to discuss real-life clinical scenarios in the classroom setting, but they also force the students to think about how to handle the situation, and the educator can help assess and guide the students' thinking to encourage sound CJ skills (P1, 250-253; P2, 667-668; P3, 589-593; P6, 439-444).

Another active learning strategy described by four participants to cultivate CJ in the classroom was giving students various activities to complete in groups, either with partners or small groups of students. One participant shared, "[students learning in] small groups [in order] to be able to hear other students talk out loud...is really helpful…I have found that oftentimes if you have a good diversity of students in a group, students hear and see things differently, and then they can pull it all together and get a better picture" (P1, 404-406). Another participant agreed, adding that working in groups helps students think "outside the box" (P6, 544-547) to solve a problem or to plan care for the patient whose case was being discussed in class. The participants believed that having students working in groups helps stimulate different kinds of ideas to address a problem and contributes to the development of students' CJ skills. Additionally, two other participants suggested more benefits to group work, which is that group work can save time for the educator to assess more of their students in a shorter period of time (P2, 781-784) because it is easier to get to each student in groups rather than individually, and group work may "help the students that are shy... [who] may not verbalize in front of the class...but they may [verbalize or participate] within pairs or small groups" (P3, 360-364). In short, participants believe that group work helps to foster students' clinical judgment by

encouraging a diversity of ideas to think about or to solve a problem, and group work also allows educators to assess their students' thinking more efficiently during the activity.

In addition to the type of activities used in the class to foster clinical judgment, study participants also emphasized the type of classroom style employed (i.e., flipped, or traditional classroom) aided in CJ development. Three participants agreed the use of a flipped classroom style helped foster development of CJ in their students. The term, flipped classroom, usually means the educator requires students to complete course work prior to class such as reading materials, listening to a recorded lecture, or doing some sort of work and using class time to engage students in discussion or various activities to apply or test the content (de Tantillo & Christopher, 2020). One participant explained, "We record our lecture online. . .we would post it for the students, and then in the classroom, we would work on case studies and activities" (P6, 247-249). The three other participants who taught in the classroom used more of a scrambled classroom approach. A scrambled classroom is similar to a flipped classroom but generally includes more instruction from the teacher during class time (Barnett, 2014). One participant explained, "I have the students read ahead of time, even though [the students] do not always. . .and I will use a PowerPoint lecture as a guide. . . to discuss the important topics. . . and then have the students break off into groups to [complete] activities. . . like case studies" (P8, 221-228). Another participant added, "Students should not have to sit and listen to lectures for two hours . . . That has been shown not to work. . .If anything, [lecturing in class] for short tidbits, like 20 or 25 minutes, is all that we should be doing" (P6, 470-472). In short, educators were of the opinion that a traditional classroom style, in which the educator provides instruction, commonly using a lecture format, for most of the class period is ineffective for fostering CJ. Rather, educators who participated in this study emphasized that classrooms where the students

are engaged in an active learning environment (i.e., flipped and scrambled style classroom), which require more participation and discussion from the students, helps to stimulate CJ skills in their students. One participant added, “You have to have an active session to be able to evaluate [students’ thinking], because just having [students] sit and listen to a lecture does not evaluate their ability to do clinical judgment” (P6, 495-498). Another participant added active learning “activities that help evaluate [students’] learning in real time” is important because it helps teachers know if students “really understood what we talked about” (P8, 472-476).

The participants agreed that CJ skills are developed better in the classroom when students are actively participating, thinking, and applying the content being taught. The participants favored unfolding case studies as an active learning activity to help foster CJ skills in the classroom. Although there is certainly not a fool-proof way to set up a classroom to foster CJ, participants agreed that no matter what teaching strategy is employed in the classroom, evaluating students’ learning in real time, where teachers are able to understand students’ thinking, is key.

Fostering Clinical Judgment in the Clinical Setting

The clinical setting includes a hospital, clinic, or a simulated clinical environment in the laboratory on campus, and five participants taught in the clinical setting during the time of data collection. Participants were asked to share how they foster their students’ CJ skills in the clinical setting. Although the responses varied, the participants agreed it is challenging to recognize CJ developing in their students in the clinical setting because each clinical situation the students are in must be taken on a case-to-case basis. Participants explained that in the clinical setting, the clinical nurse faculty needs to assess and know each of their students and their students’ patients in order to get a good grasp of what the student knows and is dealing with for

the day. A clinical nurse faculty must actively participate and seek out opportunities to recognize and evaluate their nursing students' CJ, otherwise, the clinical nurse faculty would not be able to properly help students' CJ development. Additionally, the participants emphasized the need for faculty to directly inquire the student about what they understand about their patient during the clinical shift. Participants explained that if the clinical nurse faculty is not asking their students questions about their experience with the patient, it is difficult to discern what the student is thinking.

The participants agreed that asking their students about what is going on with their patient and asking appropriate follow-up questions to gage the student's thinking was critical to recognizing whether a student was using CJ and at what level. For example, one participant explained, "As soon as I walk into a patient room and my student has said they did the head-to-toe assessment, I [assess] the whole patient and I [ask], ok what did you do about this? What did you do about that? Did you notice this? And that's how I get to see [the students'] clinical judgment" (P4, 358-361). Another participant describes a similar process, explaining:

In the moment…[faculty] can sort of model, redirect, make suggestions, but there's nothing like reviewing after the fact with a student, pointing out for them there to say, "Yeah. That was a great assessment strategy." "Oh, and look at there, you were deciding which way to go. You got all of that with just a few bits of information. You're recalling what you'd read in the record and heard in report. You were starting to understand." And [the student] says, "I was?! All I felt was totally anxious and what do I say or do now?" And so, I point out for them like that's the beginning of developing that clinical judgment. (P2, 330-340)

In addition to querying her students, another participant required students to utilize resources available in the clinical setting in order to answer her questions. The participant

explained, “[students] get report with their nurse, they assess their patient, provide their care, then they do some chart diving” (P5, 316-317). The participant continued, “And when [students] found out the pathology, they are all like, ‘Wow!’ I said so let's [talk about this]. What are your [patients’] cues? What wasn't showing? What are your interventions? What are you going to do? What is our action plan for this patient? Show me” (P5, 317-320). The participant further explained the importance of asking “the why questions” (P5, 339) to encourage them to think and “make connections” (P5, 344) because, oftentimes, students “do not even realize they can make the connections we need them to” (P5, 351-352).

Participants describe the importance of knowing the students’ patients in the clinical setting and following-up with the student with pertinent questions to gage the students’ thinking. Each student and patient circumstances will be different, but the clinical nurse educators’ role remains to be actively engaged with students in the clinical setting to foster and evaluate students’ CJ.

Additionally, during the discussion on clinical evaluation, participants were specifically asked if they complete a summative evaluation of their students’ CJ in the clinical setting. Five of the six participants who taught in the clinical setting stated that they do not formally evaluate their students’ CJ but explained that the term ‘clinical judgment’ is part of one or more of the clinical objectives on the clinical evaluation tool they complete for each of their students at the end of each clinical course. Participants further explained each clinical evaluation tool was created by their school and is specific for each clinical course, and students are evaluated as “satisfactory,” “unsatisfactory,” “needs improvement” for each clinical objective. None of the participants used a research-based tool to evaluate their students’ CJ, though four of the six

participants expressed that they wished there was a clinical tool to help them evaluate their students' CJ.

Furthermore, three of the participants added that the most important element for them to consider when they are evaluating their students' CJ was "patient safety" (P4, 199) and whether a student could make "safe clinical decisions" (P6, 163) based on where the student was within the program. Students being clinically safe and developing good clinical judgement were closely associated for these participants. One participant added, "The bottom line... [I am asking myself] "is [the student] safe? Can I really move them forward [in the program]?" (P2, 366-368). Participants explained patient safety was something they kept in mind throughout the semester and would ask themselves when they evaluated each of their students' CJ development.

Each subcategory within category II provided insight into nurse educators' perspectives and experiences with their attempts to foster CJ in their students. From sharing the type of classroom environment created and learning strategies used to foster clinical judgment in the classroom, to sharing their unique experiences with fostering CJ in the clinical setting, the participants provided vital information regarding an important part of nursing education.

III. Perceived Challenges for Nurse Educators Related to Clinical Judgment

Category three presents a deeper exploration of nurse educators' feelings and experiences related to CJ. Participants were broadly asked to share their perceptions of and experiences with CJ (e.g., "How has your experience been with fostering or evaluating clinical judgment?). While a couple participants shared specific positive experiences, each participant shared a variety of adverse experiences related to fostering CJ in the classroom and clinical setting. The resounding responses from nurse educators related to the perceived challenges nurse educators faced when teaching, assessing, or evaluating CJ. This category is divided into four subcategories, each of

which represents nurse educators' perceived challenges related to CJ. The subcategories include Persisting Issues in Nursing Education, Clinical Judgment-Specific Challenges for Nurse Educators, Clinical Judgment Takes Time to Develop, and the COVID-19 Pandemic Impact.

Persisting Issues in Nursing Education

The first subcategory includes a description of four perceived challenges expressed by nurse educators, all of which relate to persisting issues in nursing education. The three sub-subcategories, Disconnect Between Academia and Real-Life, Faculty-to-Student Ratios, and Inconsistencies Among Educators, are not inherently related to CJ, but were brought up by participants when discussing the challenges of teaching and evaluating CJ.

Disconnect between Academic and Real-Life

One of the most common responses from participants related to a persisting issue in nursing education – a disconnect between what is learned in academia and what occurs in real-life practice. One participant shared an optimistic perspective of this issue: "I think it is a positive direction that we are going in. I think it is a necessary direction. . . I think that our world has changed, and so the way we learn has changed" (P6, 173-174, 207-215). The educator shared further:

> [Currently] nursing students are trying to memorize everything. But [nursing students] can't [make good clinical judgments] when they are too busy trying to recite textbook information . . . The reality is that they do not need to know everything to be a safe nurse . . . I think the new clinical judgment model [helps bridge the gap between] academia and real-life [practice]. (P6, 225-236)

The educator's opinion regarded the need for, relevancy, and importance of the shift in focus on fostering good CJ skills in nursing education, and although the educator explained this shift is a

positive direction for nursing education, there are legitimate challenges to adjusting to this change as a nurse educator, such as content overload and memorizing content.

Similar to the previously mentioned educator, who expressed positive feelings of the shift in focus on CJ but stated there are challenges to address, another participant expounded on the challenge of the disconnection between academia and real clinical practice and its' impact on developing CJ in nursing students. The educator explained:

> One thing I am struggling with as a nurse educator is [content overload]. Teaching the nursing process . . .and [teaching] the DSM (the Diagnostic and Statistical Manual of Mental Disorders), a 700 and something page document, and then you add a textbook. . . It's crazy how much stuff we're throwing at students. . . For me, teaching [students] how to make good judgments in clinical practice, I think [all the content] is an impediment. . . because now. . . everything [that nurses need to know about their patient] is in the electronic health record; that's where you're getting the majority of the information. (P2, 475-487)

The participant further shared, "[Nurse educators] keep thinking more, more, more [content] is needed. I say less, less, less" (P2, 455-457). Essentially, the two participants are sharing that there is a disconnect between how and what nursing students learn in the classroom compared to how nurses need to think and apply in real practice. This participant believed content overload, which effectively means educators requiring students to use and learn from a vast amount of content, impedes CJ development for nursing students, and the educator suggested the focus in academia should be more on helping students learn to understand and apply information from the medical chart.

The other participant agreed with this perspective, sharing her explanation of the challenge of teaching CJ to students:

> We do need to teach students skills. It's absolutely important because you'll have to do it to be a nurse. However, there's a bigger picture here…trying to blend the classroom experience with the clinical experience comes from the faculty member making sure their students understand the importance of not just the skills, but the evidence-based practice, the nursing process, the clinical judgment… And clinical judgment doesn't mean 'I put the best IV [intravenous] in at the bedside.' It is actually way more than that, because if you wanted to come here just to learn how to put IVs in, we can pay someone a lot less money at the bedside to do that. We need [students] to see the whole picture…A lot of my teaching surrounds how a nurse does so much more than skills – and part of that "clinical judgment" is taking pieces of a patient's history, presentation, symptoms, and deciding: What do I do first? What concerns me the most? That is really what it is. I haven't called it the "clinical judgment model" until now, but that's what it is. (P6, 360-382)

Similar to the challenge of content overload in nursing education, two participants specifically discussed the challenge of students memorizing content and the difficulty of knowing if a student truly understands the content. One participant shared that one of her challenges when evaluating CJ is that she fears students may be just memorizing information, and wondered, "How do we know if [students] really understand the content?" (P8, 476). The participant also posed that some students test well in the classroom but may not do well in clinical, and at the same time, there are some students that do well clinically, but do not test well in the classroom (P8, 300-323). The participant shared: "We'll get students that will test well. They can memorize [the

information] . . . but they can't use [the information in practice] . . . Sometimes we can see that in students' clinical paperwork . . . and we can see it when they are trying to make sense of their patient in clinical" (P8, 256-259). The participant further shared that it is challenging to notice if a student may be stronger in class versus clinical and vice versa if the educator is not teaching the students in both the classroom and clinical setting. Additionally, educators are now challenged with figuring out ways to foster CJ skills in several different to cater to these different types of students.

Memorizing content may get some students to excel on examinations, but the other participants expressed concerns about how the disconnect between academia and real-life has serious implications. The participant shared:

> The reality is [students] are not going to have to know everything to be a safe nurse. But yet they can't be safe because they're so busy trying to remember everything they memorized. So, they can't make basic, common sense, clinical judgment decisions. And that's just crazy that we're at that point. And then, it falls over or spills over into clinical decisions. I mean true, real-life work. So, we put these wonderful nurses that are so smart and can recite the textbook to you into the workforce and we give them a situation where they have to make a decision that's not in the textbook and they're lost. It's almost a workforce versus academic setting. We've got to melt those together again, and I think that's where the push to do this clinical judgment model is coming from. (P6, 225-237)

The participant suggests that the new clinical judgment measurement model may help better evaluate students that are just trying to memorize information and excel on examinations; that the new model will better help educators teach and evaluate CJ skills.

Faculty-to-Student Ratios

Another challenge brought up by participants that is a long-standing issue in nursing education is inadequate faculty to student ratios in the classroom and clinical setting. The Texas Board of Nursing (2013) limits faculty-to-student ratios in the clinical setting to 1:10, however, there is no ratio designated for the classroom. In the study, participants expressed not having enough time or the capacity to hear from all their students during the allotted class or clinical time. One participant shared, "I'm constantly writing on a piece of paper [in clinical] right after I leave [a student] to remind myself what we spoke about. It's challenging when you have so many students and you're trying to keep them straight" (P4, 436-437). Another participant agreed, sharing her experience:

> It's much harder [when there are so many students]. How can you possibly [have enough time to know each student]? It is very frustrating for me. We are told often that administration thinks, 'oh this is where we can save some money and we can have more students in clinical.' Supposedly it's easier. No, it's just the numbers to them. And how can you possibly find enough time to interact with students in theory classes? (P2, 775-784)

The two participants felt there is not sufficient time for faculty to individually evaluate each student, whether that be in the classroom or clinical setting. The overriding concern of inadequate faculty-to-student ratios is that faculty may not effectively evaluate each students' CJ during these activities.

Inconsistencies Among Educators

Another perceived challenge to fostering CJ expressed by participants was potential inconsistencies among nurse educators. A participant shared that their own understanding of the

concept, clinical judgment, may vary and therefore may impact how clinical judgment is taught and evaluated (P7, 191). Additionally, another participant shared that many nurse educators are "frustrated" (P3, 314) and "confused" (P3, 304) with what they are supposed to be teaching regarding CJ, "Do we still teach nursing process? Do we have to show them the new [clinical judgment] grid? I don't think we are all on the same page" (P3, 305-307).

Four participants acknowledged that clinical faculty may not be as prepared to evaluate and foster nursing students' CJ, explaining that some faculty's expectations and standards vary greatly causing an inconsistent clinical evaluation. One participant explained, "I don't think all faculty are on the same page and I think they should be. We throw faculty out there and we say 'Your clinical is from 0630 to 1530. Use this paperwork. This is the homework.' But we don't really do a good job of guiding [faculty] to make sure we are all on the same page." (P4, 209-214). Another participant agreed that clinical faculty need to be on the same page and faculty need to challenge students by asking students "why" and trying to help students make the connections to start developing clinical judgment, explaining: "Faculty need to understand that we need to be asking that student why? 'All right, I know you're going to do this, but tell me why. What's the rationale behind it?' Versus a [faculty] that goes 'okay that sounds good' with [no follow-up questions]" (P8, 192-195).

Another participant suggests a potential reason behind some of the inconsistencies – the faculty's educational background. The participant explained that while nurse educators are at least master's-prepared, many educators received their master's in nursing degree with a nurse practitioner focus (MSN-NP) instead of a nursing education focus (MSN-Ed) (P6, 569-570). The participant clarified, "In your MSN-Ed [program], you really learn about how to be a nurse educator. I can say that I may only have two out of 16 faculty where I work [are MSN-Ed

prepared] . . . [Nurse educators without an educational background in nursing education] need to learn how to teach" (P6, 568-590).

Participants suggested a few different reasons why there may be some inconsistencies among nurse faculty. Whether the inconsistencies among nurse faculty were related to faculty's educational background or a lack of understanding or mentoring in the faculty role, the fact that there are irregularities among nurse faculty on how CJ is fostered and evaluated in their nursing students is a challenge in nursing education.

Clinical Judgment-Specific Challenges for Nurse Educators

The second subcategory includes three challenges perceived by participants that pertained to the nature of clinical judgment and its' impact on nurse educators. The challenges include Educators Perceive Clinical Judgment Differently, Feelings of Frustration in the Classroom, and Hesitancy to Use and Rely on Educational Products.

Educators Perceive Clinical Judgment Differently

As previously mentioned in Category I, CJ may be perceived differently by educators. Although there is a generally accepted definition of the term since the NCSBN offered a definition in 2018 (as previously provided), the concept of CJ can be understood and interpreted a variety of ways, which may impact how educators teach CJ and how educators evaluate CJ developing in their students. One participant shared that evaluating CJ in nursing students is challenging because from her perspective the term CJ is "not very clear" and is a "very general, global term" (P7, 184-186). The participant further shared, "We all know that we're supposed to be evaluating [clinical judgment] in our students, but how can we measure that? We can't . . . It is a very general, generic term and it would be different for everyone" (P7, 185-191).

Similarly, another participant expressed feelings of "confusion" (P1, 308), "frustration" (P1, 310) and "insecurity" (P1, 316), stating she does not necessarily feel she has the "wisdom" (P1, 317) to translate her interpretation of CJ to her students and discern if her students are understanding or not. The participant shared:

> I would say there is a lot of confusion on my part in that you can have a great idea, but how to translate that across to a classroom full of 50 students who all are coming from different places? So, I try not to allow my frustration to get too high . . . but it's also this personal journey for me. Do I really understand what [clinical judgment] looks like and how to translate that into the classroom? I ask myself . . .What is clinical judgment? What is critical thinking? What is clinical reasoning? And I could speak to the definition, but do I have the wisdom or understanding to translate that across so that I can help students and meet them where they are and bring them forward? (P1, 308-319)

The challenge the participants shared about educators not properly understanding the term CJ may impact their ability to properly teach and evaluate CJ skills in their students. Additionally, if there are inconsistencies on how CJ is understood by educators, teaching and evaluating CJ may look differently to each educator.

Feelings of Frustration in the Classroom

On a similar note, two other participants also felt "confused" and "frustrated" in the classroom but specifically discussed the challenges of employing a new classroom style in attempts to foster CJ in their students. As discussed in Category II, five participants converted their traditional classroom style to a flipped or scrambled style classroom in an attempt to better encourage CJ development. Although there were many positives, as discussed in Category II, participants shared many challenges regarding their experience.

The most frequently expressed challenge was the extensive amount of time it takes nurse educators to create lectures, activities, and test questions to foster and evaluate clinical judgment. One participant shared, “For me, writing a good question can take me anywhere between six to eight hours.” (P5, 456-457). Two participants stated that making the change from traditional to a flipped or scrambled classroom required double the work for faculty and the students (P6, 445 & P1, 499-510). In addition, one participant shared that in her experience, many of the students do not like this type of classroom because it required students to put in “more time and effort,” which usually resulted in negative course “evaluations for faculty” (P6, 279-281). The participant explained her experience with changing up the classroom style:

> [When using a flipped classroom] some students think it actually doubles time for them. It can increase the time span for students because they have to watch the online presentation and come to class and do the classroom stuff. So, it's almost like they're trying to keep up, but they just can't keep up. It’s a double-edged sword. Yes, it allows [faculty] to evaluate their [students’] clinical judgment better in the classroom when you have these activities, but it does increase time span, and it does increase workload [for faculty]. So, there's some downside. We've got to find that magic between the two… I don’t know the answers to this but I’m still struggling with it. (P6, 279-295)

While it may take more time and effort for nurse educators to create an environment where students can develop CJ in the classroom, faculty are frustrated with the lack of support from administration and from their students. It is also unclear for faculty to see if their time and effort to change their classroom environment is truly helping to foster CJ skills in their students.

HESITANCY TO USE AND RELY ON EDUCATIONAL PRODUCTS

Five participants shared they are apprehensive about the products their schools want them to use to help either facilitate or evaluate the students' clinical judgment. A participant shared, "I really struggle with…relying on 'Elsevier' and other products like the 'HESI' and 'ATI.'" (P2, 595-596). The participant shared that not only is she being asked by administration to learn and use new products often, but she does also not have time to fully learn the product and understand how the products are determining the students' evaluation. Another participant agreed, adding, "I just hesitate for [educators] to rely on a product that claims to test CJ for us." (P1, 380-381). For the participants, hesitancy stems from the educational products themselves and from the fact that evaluating CJ is still relatively new to many educators. Participants question the educational products' validity, wondering how educators can rely on these products to do the work for them when CJ is rather subjective and dependent on various situations.

Clinical Judgment Takes Time to Develop

The third subcategory describes the challenge of the time it takes for CJ to develop in students and nurses. Participants agreed that CJ takes time to understand and develop, and for that reason, time may pose a potential challenge for nurse educators to properly evaluate CJ in their students. Although participants were not precise on a time frame, participants agreed CJ development does not occur right away, but rather over a period of time.

One participant shared, "One thing I sometimes get frustrated with is time, because it takes students a little while to warm up, to be able to speak their thoughts out loud. If I could put a little helmet on their head and read their thoughts, that would be so great" (P1, 328-331). Five participants discussed CJ being introduced to students in the first semester of the program. One participant shared, "I feel like we do a poor job introducing [clinical judgment] at the right time"

(P4, 190-191). Although introducing the concept to first semester students seems like an appropriate place to start, two participants agreed that it may be "premature" (P4, 188) because "it is too much" for students to understand (P5, 200-201). One of the participants added, "I tried to introduce it to my [first semester] students, but it was just way too much for them. Like they had that look like 'what are you talking about?'" (P5, 199-202). Two participants posed that students may need at least some clinical exposure to grasp the concept properly, stating, "for some students, it clicks for them in the first semester. Some students it doesn't click until second semester…when they have [learned and seen more]" (P4, 218-222). The other participant added, "It took a good ten weeks of clinical to get [students to understand]. So, by week nine, they were like, 'Oh! We got it! We got it!'" (P5, 226-246). Another participant added, "Students are going to have some [understanding of clinical judgment] just based on their personalities, their learning styles, their life experiences…but it will take time. It takes lots of time." (P2, 256-259).

Participants shared that not only does it take time for nursing students to understand and develop CJ – and that the timing may be different for each student – but it also is important to consider the appropriate time to introduce the concept to nursing students. Because it is challenging to effectively evaluate students' CJ, it is important for educators to consider time as a factor. Participants suggest that educators should consider leveling their expectations of CJ development based on the student's level within the nursing program.

The COVID-19 Pandemic Impact

The fourth subcategory involves the COVID-19 pandemic and its' impact on nurse educators' ability to foster and evaluate CJ. The World Health Organization (WHO) declared the COVID-19 outbreak a pandemic on March 11, 2020 (WHO, 2020a). In the United States, this pandemic caused drastic changes to everyday lives, particularly when most of the country was on

lockdown with various ‘stay-at-home’ orders to help slow the spread of the virus and protect much of the population in 2020 (WHO, 2020b). Although the WHO (2023) officially declared the end of the pandemic emergency on May 4, 2023, the effects of COVID-19 are still enduring and impacting many aspects of the healthcare industry and nursing education at the time of writing this report.

The COVID-19 pandemic served as a particularly unique challenge to teaching and evaluating nursing students’ CJ during the time of data collection, since data collection occurred a little over year after the pandemic began, from May to July of 2021. Some of the challenges participants shared related to the impact on the clinical environment for students and educators. For instance, the participants teaching in the clinical environment shared that during the height of the pandemic in the United States (after March 2020 through the following year), many clinical faculty were not able to go into patient’s rooms with their students. One participant shared, “It was not as accessible to assess students [in clinical] because we're not always able to go into every room with each of the students. I mean students may be seeing their patients and performing skills, but we are not able to stop and talk with them afterwards [because of the restrictions on certain units].” (P1, 585-589). Additionally, one participant shared that the nurse preceptors paired with students hardly had time to teach students throughout the day because nurses were just trying to stay afloat with their own responsibilities and felt students had to just follow along or shadow them, one participant shared further:

> The nurses that are willing to take students are oftentimes the busiest on the unit and they are the best options, but they're juggling a lot of other things, and so they're not . . . [teaching] or asking [students] those questions. A lot of times [nurses] just assume that they can hand off a skill to students, like ‘Did you go take care of it? Is the patient still

> alive? Ok, great. Let's go document.' And there's not a conversation that's taking place. (P1, 590-597)

The clinical faculty's ability to facilitate important conversations during the students' clinical experiences were greatly impacted by COVID-19. As discussed in Category II, participants emphasized the importance of ensuring the clinical faculty stimulates the students' learning by facilitating these critical conversations with the students.

Other challenges participants shared included limited clinical placements and shortened clinical time, as many hospitals and clinical areas were not allowing additional, non-essential personnel into facilities for various reasons (e.g., lack of personal protective equipment or resources, and lack of available nurses at the bedside). When students were allowed into clinical facilities, some facilities were not able to allow more than a couple students on the hospital units at a time, causing a significant decrease of in-person clinical experiences for nursing students. One participant shared her perspective of this impact, "I think the human interaction is so much better experience for [students]. With COVID-19, we had to do everything online, and I feel like [those students] that had to do [clinicals] online suffered a bit…I think having a real patient is really important." (P4, 562-565). The participant expressed the sincere need for having more time and clinical exposure to real patients and real experiences, rather than alternative clinical experiences for students, such as virtual simulations or simulated experiences in the laboratory.

On the other hand, one participant who taught in psychiatric/mental health nursing, found the limiting clinical facilities during the pandemic to be beneficial for her class. The participant explained:

> Some really good things happened [from the pandemic] . . . For instance, we've gotten really good at [communicating with one another online], where you can make eye contact

> and you can really develop empathy . . . So, this helped students get good with Zoom-facilitated simulations [with the psychiatric/mental health clinical scenarios], and I'm really looking forward to developing more in the future. (P2, 986-1003)

The participant's experience with virtual clinical simulations turned into an overall positive alternative for her students amid the pandemic. In addition, the participants shared that another positive impact was students' access and comfort with technology such as Zoom.

The COVID-19 pandemic also greatly impacted the way students were learning in the classroom. Participants shared that most classes were held virtually during the academic year 2020-2021. Although there may have been many pitfalls to this change from an in-person to a virtual classroom, one participant emphasized that this shift in content delivery in the classroom allowed her and her colleagues to "flip" their classroom, which involved faculty to record the weekly lecture content, require the students to listen to the recording and read the required texts before class, and the faculty would use class time to utilize active learning strategies (P6, 427). The participant explained:

> We would actually record our lecture online in some kind of format, we would post it for the students, and then in the classroom, we would work on case studies and other activities. So, while that was really good, we're now transitioning out of the pandemic and all back [in-person] on campus, and my faculty are still doing that type of teaching.. Those activities, those case studies, those group projects, team presentations, those types of in-class activities allow us to evaluate [students'] ability to make clinical judgments better than just those traditional lectures. (P6, 427-442)

Another participant shared a positive impact of the pandemic, which was smaller faculty-to-student ratios. The participant explained:

> With COVID-19, the hospitals [where our students were placed required] a decrease in the number [of students allowed in the facility at a time], which was phenomenal because we see so much more with six students than we do with eight or ten. You get so used to having eight students and suddenly we have six. It's like, wow! I've got this extra time to really stay on top of them . . . It's been an eye opener for us. (P8, 273-279)

Although there were many challenges that have negatively impacted students' and educators' experiences during the COVID-19 pandemic, there were few positive experiences that are still impacting how participants are teaching the in the classroom and clinical environment. It seems that overall, COVID-19 was a factor in positively or negatively impacting nurse educators' experiences with fostering and evaluating CJ.

IV. The Next Generation National Council Licensure Examination Impact

The National Council of State Boards of Nursing (NCSBN) is the nursing licensure regulatory board in the United States which, among other things, creates and regulates the licensure examination for registered and practical nurses called the NCLEX, the National Council Licensure Examination. From 2012-2016, the NCSBN began researching and piloting changes to the NCLEX (NCSBN, 2018), and then in 2017, it was officially announced that the NCLEX would have significant changes (i.e., test item types and scoring changes) to focus on better evaluating candidate's clinical judgment. The updated version of the examination is referred to as the Next Generation NCLEX or NGN for short (NCSBN, 2017).

Since the NCLEX moved to an online format in 1994, the NCLEX has not undergone drastic changes (NCSBN, 2014). However, the NCSBN explains the legitimate need for changing the way the examination is testing a candidate's clinical judgment ability (NCSBN, 2018). With these changes, there have been many research articles completed by the NCSBN to

help nurse educators understand how the NCSBN will test candidates differently. So, naturally, since these changes have been in the works for the last ten years, the participants in this study brought up the NGN and how it has impacted teaching and evaluating their students.

This fourth category is divided into two subcategories, Nurse Educators' Thoughts and Feelings and Advice to Help Faculty to Foster Clinical Judgment Skills. In this final category, the participants shared their current state of mind regarding the new changes to the NCLEX, how they have responded to the changes, what kind of impact the NGN is currently having on teaching and evaluating their students, and participants also shared advice for students and educators regarding CJ development.

Nurse Educators' Thoughts and Feelings

In this first subcategory, participants shared their thoughts and feelings relating to the NGN. Although some participants brought up the NGN naturally during the session, other participants were asked directly, e.g., "What are your thoughts about the NGN?" Six out of the eight participants felt the NGN will be a positive change to the nursing profession. One participant shared:

> I think it is a positive direction that we are going in. I think it is a necessary direction. I've been a nurse for a long time. I was doing this when I was a nursing student on my own to the point that I almost feel like some people have an ingrained ability to make clinical judgments in a way that is just natural; almost like common sense, like brainstorming, like completing a puzzle. (P6, 173-179)

The participant believed the NGN is finally focused on testing candidates on how nurses should be thinking with the information presented to them in the clinical setting. She also believed that CJ comes so naturally to some, it may be equated with "common sense," like she suggested, and

that nurses may not even realize that the thinking they are doing is clinical judgment. The participant added later, “This evolution of the clinical judgment model [from the NCSBN] will be attractive. It is going to change [the nursing profession]” (P6, 636-367).

Another participant is excited about the NGN and felt the new changes to the exam will be testing candidates congruently to how nurses are thinking and practicing in real life. The participant explained:

> So, that is what I love about the NGN format, that they will use the real clinical, real world experience, at least in hospital-based nursing, to access the health record and get information of the health record and plus a blurb, and this is where it kind of all comes together. Here's the patient scenario. Here's the electronic health record information. And now I'm being asked to figure out what's going on, and to make a decision. [The NGN] is testing them on what a nurse is doing in real clinical practice . . . The NGN better represents the process of working together with an interprofessional team, to make sure that the patient is getting the care, their family, their community is getting their needs met. (P2, 500-529)

Three participants expressed concern and frustration about how educators will be able to duplicate the new formats and types of questions in their classroom. A participant shared:

> That's another frustrating piece, what they're going to do in their testing per state board. How can I duplicate that kind of data at my level?... I can do some cases and then build some multiple-choice questions and select all questions, but I don't know how I’d ever going to be able to duplicate some kind of drop downs…we don't even have the capacity to do like hot spots or audio . . . concerns me because I don't think I can really duplicate fully what the boards [NCSBN] are going to be doing [on the NCLEX]. (P3, 314-325)

Another participant echoed a similar concern, “In the new question format, it is not easy [to duplicate] those bow tie-type questions. They are beautiful, but how do you do that in our learning management system? …You can't” (P2, 734-736). Similarly, another participant added:

> We knew the NGN was coming with this incoming class [Fall 2022 cohort]. So, companies like NurseTim, NurseThink, Exam Soft, they are finally up and running,where they've got a question bank so we're not having to create anything from scratch. We can go in and pull from what they have and tweak it a little bit. But I’m not reinventing the wheel. (P8, 585-590)

Although any changes to a high-stakes examination may inherently cause educators to be anxious, the participants share real concerns about being able to properly prepare their students for these new test items because it is not easy to duplicate in the classroom.

Lastly, three participants commented that the NGN is a nod to the paper-version NCLEX from the 1990s and that the NCSBN is “going back” to how they used to test candidates through case studies and various amounts of information instead of just multiple-choice questions. One participant explained:

> I feel like before my time, [the NCSBN] did test us using the same kind of methods we're moving to now, as far as the case studies and such, and I feel like they're just kind of reinventing the wheel again…So that's my frustration. I feel like everyone's putting this new label on [the exam] like it’s this new rocket science. But I feel like we've already done this. (P3, 187-194)

Another participant agreed, adding her thoughts regarding the version of the NCLEX since 1994-2022:

> We got easy with the electronic version . . . The exam went from paper and a little scantron to electronic and it became a much more standardized test, where each question was just an individual question, or maybe you had a small five sentences with maybe a couple of questions that went with it. (P8, 554-558)

The participants share that the NCLEX version prior to 1994 did evaluate candidates with similar item questions that the new version is coming out with, and the participant suggest that the switch from paper to computer test made it easier because of the formatting challenge.

Overall, participants had many thoughts and feelings regarding the new changes to the NCLEX. However, most participants felt despite major changes to the nursing licensure exam and the practicality of creating the new formatted items, the NGN will be able to better evaluate a candidate's ability to think like a nurse in real life.

Advice to Help Faculty Foster Clinical Judgment Skills

In this second subcategory, participants shared advice for educators to help foster CJ skills in their students, as well as advice that may help prepare nursing students for the new licensure examination (NGN). Participants were asked a few questions, i.e., "What advice would you give to educators to help them teach and evaluate CJ? What advice would you give to educators to help them prepare their students for the NGN? What kinds of resources do you need to better help you as an educator?"

Three participants suggested bringing simulation and clinical experiences into the classroom and using simulation to help foster and evaluate CJ. One participant shared, "I love the idea of bringing simulation into the classroom. That is one of the changes that I encourage faculty to consider. Simulation doesn't just have to be this long-drawn-out process in the in the lab; it can be in the classroom." (P1, 423-427). Another participant concurred, "The main thing I

would say for faculty is to really use those simulations and clinical experiences; that's where [clinical judgments] really happen" (P2, 928-930). And she elaborated further, "Simulation is a great place to evaluate clinical judgment… I build in more time in simulation for reflection [debriefing with students] than the actual simulation" (P2, 415). The participants felt more time needs to be spent discussing patient case studies and scenarios, whether that be in the classroom or clinical setting, in hopes of building students' CJ skills.

Other advice three participants shared regarded utilizing their co-workers and peers for new ideas and to gain different perspectives on classroom activities and test items. One participant shared, "Every semester I take some time for reflection, and I continuously seek out continuing education opportunities to hear other [educators'] perspectives, because there's really not…a textbook that [contains everything an educator needs] (P1, 321-326)." Another participant agreed, "One thing I do think we should do more is as a faculty –and I know we don't have the time – but we should periodically check in on one another, just to see if there's a better way to do things" (P4, 464-468). The participants felt that educators need to take time to reflect on their class, seek opportunities to hear other educators' perspective on what those peers are doing to foster CJ and consider making changes. A third participant agreed that utilizing peers is a good resource for educators, she explained, "I think best practice is to have faculty write their own [NGN] questions and case studies, and for their peers to review each other's work, to make sure that we're on the right track" (P2, 906-907). The participants felt another perspective from a peer benefits the educator and should be utilized more.

One participant shared advice for clinical faculty to not only help foster CJ, but to help set students up for success in the clinical setting, sharing:

> I think it's important to be clear with your students in the morning of clinical days. What are their goals? What are their needs? What are my expectations of them? And then seek out those opportunities for them during the clinical day. (P4, 510-512)

Other pieces of advice from participants were to try to "keep things simple" (P3, 385) and to not overcomplicate the activities in the classroom (P3, 385-386). Another participant agreed, adding, "Most educators feel a need to teach everything that we know. And that's not what [students] need anymore" (P6, 527-529). Additionally, one participant advised educators to "fully understand the [new NGN and clinical judgment model]," adding that it "may be hard to do because some people are open to [learning and using the new model] and others are not" (P5, 444-445).

Two participants commented on the importance of consistency within the nursing program. One participant shared her current struggles with consistency and utilization of resources within her school:

> The resource currently being plugged by our faculty is Iggy's book on developing clinical judgment [Donna Ignatavicius's *Developing Clinical Judgment: for Professional Nursing and the Next-Generation NCLEX-RN Examination*]. We purchased it, but the problem is that [the school] makes decisions about curriculum, but then not everybody uses the books or resources. So, it sounds great, but is there buy-in and follow through all the way through a program? And what I find is I'll use the books and resources, introduce it in the first semester, but then there's no follow through the rest of the program. (P3, 255-263)

Another participant shared what is working within her school regarding consistency among faculty:

> [Faculty] meet almost monthly for curriculum meetings. . . to hear what we all are doing in the classroom, and we look at growth from simple to complex, from first semester to fourth semester, to ensure that students are getting the same message from us all. (P8, 210-214)

The takeaway message from the two participants is that faculty in all points within a program need to communicate and be consistent with resources (i.e., textbooks, software programs) and nursing models (i.e., clinical judgment model).

Regarding resources for educators to be more successful, two participants felt faculty need more time and to be compensated for the time it takes to create a learning environment that helps foster clinical judgment. One participant explained:

> Most of us [educators] are 9-month contract faculty, August to May, and we are working full steam the whole time trying to take care of our students. We need to pull away and find time to focus on [the NGN changes]. And I understand that everybody wants and should be reimbursed for their time and time away from family – it's a sacrifice. But we're making this big transition, and if we're not prepared, then we can't prepare our students, and they're not going to be prepared to sit before the boards, and then our success rates are really going to drop. Are we okay with that? And if we're not, we need to be more proactive than what we're doing, because this is happening soon. (P1, 496-506)

The participant elaborated and suggested all the faculty need to go on a “retreat” with the goal of devoting time to learn and grow from one another and make changes to better prepare their students for the NGN changes. The participant explained:

> We need a retreat. We need to pull away and find time. So, I think what would be great is for us to become students again; somebody to model for us a variety of ways of what could occur in the classroom and in the clinical setting to help us experience it ourselves and feel the awkwardness, even as nurses, and I think that'll help prepare [faculty] to be better learners in the classroom for students. (P1, 498-510)

The participant also felt having DEUs (dedicated education units) help students have more one-on-one opportunities with nurses that want to teach students in the clinical setting. The DEU is an academic-practice collaboration between a hospital unit and school or college of nursing, where a student can receive an "extended, personalized learning experience" and the hospital unit becomes unit "devoted to educating students" (Pryse et al., 2020). The participant shared:

> We had the DEUs [dedicated education units] at our hospitals pre-COVID [prior to March 2020] . . .I just think that that provided such a great opportunity for students to have more one-on-one time in the clinical setting. But the program has gone away from that, but during that time, I was really interested in the idea of having that clinical person identified within the hospital, while students also have a clinical educator on the unit that students can say 'here was my experience' and they immediately go to the educator and say 'help me to understand what just happened' or 'helped me to understand what do I need to think about before I enter into this real life scenario right here to connect those pieces,' because otherwise, we have one clinical faculty member to ten students. (P1, 558-572)

DEUs were established to help promote and facilitate student learning by providing an intimate and intentional relationship with nursing students and precepting nurses in clinical areas, and oftentimes, the nurses in these units or programs elect to work with nursing students so they can

teach and get to know a nursing student on a deeper level (Marcellus et al., 2021). The participant felt that when her school utilized this type of resource in the clinical settings, that the students benefited greatly by having in-real-time conversations about what is going on with their patients.

In summation, participants shared several pieces of advice for nurse educators regarding fostering CJ in nursing students. Participants felt that bringing "clinical into the classroom," keeping things simple rather than overly complex and complicated in the classroom is key and ensuring that the faculty within a program are consistent with resources and teaching models. Resources that participants felt were important for faculty to advocate for were time – time to create and update their classroom material and collaborate with peers – in hopes of better preparing nursing students for the new changes to the licensure exam.

PLAN FOR REMAINING CHAPTERS

Chapter Five will provide a comprehensive discussion of the study. The Chapter will include a comparison of the study's findings to the exact literature, discussion of the study's implications, strengths, and limitations, and will conclude with suggestions for future research.

CHAPTER 5: STUDY IMPLICATIONS

INTRODUCTION

The current study utilized Naturalistic Inquiry (NI), drawing references from Erlandson et al. (1993) and Lincoln and Guba (1985), to explore prelicensure nurse educator's perceptions and experiences with teaching and evaluating clinical judgment (CJ). The fifth and final Chapter presents an overview and discussion of the study's four major findings, conclusions, and recommendations for future research regarding nurse educators and nursing clinical judgment. Chapter Five begins with a review of the problem under study and the methodology used. The Chapter will then offer interpretations of the four major findings of the study, followed by a discussion on the study's implications for nurse educators regarding fostering CJ in the classroom and clinical settings. Chapter Five will conclude with a discussion of the study's strengths and limitations and recommendations for further research.

STATEMENT OF PROBLEM

Clinical judgment is an essential, acquired skill nurses develop over time and is used innately by experienced nurses to inform their clinical decisions and actions to care for individuals safely. Over the last two decades, the nursing profession has noted a significant decrease in nurse's – particularly newly licensed nurse's – CJ ability (Benner et al., 2010; Betts et al., 2019; Del Bueno, 2005; Kavanagh & Szweda, 2017; Muntean, 2012; Saintsing et al., 2011), and the nursing profession has called for a major transformation in nursing education to focus on fostering and evaluating nursing students' CJ skills (Benner, 2010; Berkow et al., 2008).

To answer the call to transform nursing education, the nursing licensure examination (Betts et al., 2019; Dickison, et al. 2019), as well as the American Association of College of

Nursing (AACN)'s latest recommendations for revising nursing program curricula (AACN, 2021), prelicensure nurse educators are charged with finding ways to teach, foster, and evaluate nursing students' CJ in the classroom and clinical settings more effectively. However, nurse educators find the term 'clinical judgment' challenging to understand and challenging to evaluate in nursing students (Dickison et al., 2019; Lasater, 2007; Manetti, 2018). To date, there is little research published focusing on helping nurse educators better understand, teach, and evaluate CJ in prelicensure nursing students.

REVIEW OF THE METHODOLOGY

The current study utilized a qualitative approach, naturalistic inquiry (NI) inspired by Erlandson and colleagues (1993) and Lincoln and Guba (1985), to address the research question: What are prelicensure nurse educators' perceptions and experiences with teaching and evaluating clinical judgment? A major assumption of NI is that people operate and live in their own reality and it's unique to the individual, and therefore, a goal of a naturalistic approach in the study is to derive meaning from a person's experiences (Erlandson et al., 1993). NI is a valuable approach for the current study because it allows the research to gain insight and knowledge with the goal of illuminating constructs and drawing meaning from the participants' experiences and perceptions with CJ in the classroom and clinical settings.

INTERPRETATION OF THE FINDINGS

There was one specific aim of the study: To explore prelicensure nurse educators' perceptions and experiences with teaching and evaluating nursing students' CJ. Four overarching categories emerged from the data: 1) Making Sense of Clinical Judgment, 2) Efforts to Foster Clinical Judgment in the Classroom and Clinical Setting, 3) Perceived Challenges for

Nurse Educators Related to Clinical Judgment, and 4) The Next Generation National Council Licensure Examination Impact.

Nurse educators' perceptions and experience with CJ were unique to each participant. It is evident in the data that each participant had their own understanding of what CJ meant and that it was, in part, difficult for participants to explain what CJ is. Among the eight participants in this study, two understood CJ to be essentially the same concept as nursing process and did not differentiate between the two terms or processes. Other participants were able to describe CJ in various ways, but participants frequently used similar terms (i.e., clinical reasoning and critical thinking) interchangeably with CJ throughout the session. Additionally, the data indicates that educators were divided on the utilization of the new CJ model from NCSBN or Tanner's (2006) clinical judgment model in lieu of the nursing process when teaching CJ.

When participants were queried about how CJ is taught and evaluated in the classroom and clinical setting, there were many similarities in the approach participants took in the classroom. The data indicates most educators used an active learning classroom (i.e., flipped or hybrid classroom style) with the goal of fostering CJ skills in their students, as well as helping facilitate evaluating students' CJ ability. Additionally, the participants agreed utilizing case studies in the classroom aided students' CJ development. It is evident in the data that nurse educators believed activities in the classroom that required students to apply and to reason yielded better CJ development than not eliciting any participation (or passive participation) from the students.

Teaching and evaluating CJ in the clinical setting (e.g., the hospital) was different than the classroom setting. Though nurse educators in the study admit it is difficult to explain exactly how they foster and evaluate nursing students' CJ, the data indicates that with active supervision,

engagement, and through individual discussions with students, educators are able gauge their students' CJ development. The study also found that nurse educators do not utilize a tool to help measure and evaluate students' CJ; the only clinical tools utilized were program-created tools to track students' clinical progress and achievement of clinical goals for the semester.

The nurse educators in the study shared numerous frustrations and challenges with CJ in academia, which is the third overarching category in the findings. Some of the data suggests educators are frustrated with inherent, persisting issues in nursing education, i.e., the disconnection between academia and real-life situations, content overload, challenges with faculty-to-student ratios, and inconsistencies among educators, while other frustrations from educators centered around clinical judgment specifically, i.e., educators perceive CJ differently, frustrations in fostering CJ in the classroom, and hesitancies to use and rely on educational products to evaluate students' CJ.

Another study finding that was a challenge for educators was that CJ takes time to develop, which imposes several implications for educators to teach and evaluate students' CJ ability. Essentially, educators were uncertain about appropriate timing and expectations for students' CJ development throughout the prelicensure program – i.e., When is the appropriate time to introduce CJ to students? When it is appropriate to test students on their CJ? What is the expectation for a student in their second semester regarding their ability to make clinical judgments? Timing and leveling of students' CJ development is a point of uncertainty for nurse educators.

And the last finding within the third category of frustration related to teaching and evaluating CJ involved the COVID-19 pandemic and its' impact on nurse educators. Since the study occurred approximately two years after the COVID-19 pandemic began, educators were

still dealing with the pandemic's effects. The data indicates COVID-19 was, for the most part, a hinderance for educators in evaluating nursing students' CJ in the classroom and clinical settings and caused significantly decreased clinical opportunities for students. However, there were a couple positive impacts from the pandemic. Participants explained there were smaller faculty-to-student ratios, which allowed faculty to have more oversight and grasp of each student, and there were more virtual learning opportunities, which helped provide a new avenue for students to learn and develop their CJ skills. The data also indicates that educators resiliently adapted their teaching methods (many to virtual classrooms and clinical settings), and while many educators are adjusting back to in-person, 'pre-COVID-19' times, educators are still trying to figure out which teaching, and evaluation methods are effective in the 'post-COVID-19' world.

The final major findings in the study involved the new nursing licensure examination (Next Generation National Council of State Boards of Nursing Licensure Examination, NGN for short), which directly impacted prelicensure education programs. The study findings indicate educators are aware of and have been preparing for the NGN in a variety of ways for some time, from several months to years. Most of the educators favored the upcoming changes of the exam to evaluate students' CJ, agreeing the NGN changes will be testing students congruently with how nurses think in real life. However, there were concerns about the NGN changes, i.e., the newly formatted questions and the practicality of replicating those type of questions in the classroom for students to learn. The findings of the study conclude with educators sharing advice for fellow educators on NGN changes, fostering CJ, and resources that may be needed. The data indicates educators should bring more real clinical scenarios into the classroom, educators in a program need to be supportive of one another and be consistent with teaching and evaluation CJ,

and educators need more time (compensated time) to implement these changes to better prepare their students for the NGN and to be better equipped to foster and evaluate nursing students' CJ.

COMPARISON OF EXTANT LITERATURE

Since the NCSBN's declaration of changes to the nurse licensure examination in 2017, there has been a plethora of research studies regarding nursing clinical judgment. However, the literature that currently exists regarding nurse's CJ is lacking from the perspective of nurse educators. The study's findings provide a unique and much needed insight into current nurse educator's experiences with teaching and evaluating nursing students' CJ.

This study found that several educators used the terms clinical judgment, clinical reasoning, and critical thinking interchangeably, which is supported in extant literature (El Hussein et al., 2022; Mutean, 2012; Victor-Chmill 2013). The study findings affirm the need for the terms to be better understood in the nursing profession (Brown Tyo & McCurry, 2019). Additionally, participants were divided on their use of the nursing process and a CJ model. Even though most of the literature since Tanner's 2006 CJ model was published as an expansion and enhancement of the nursing process, it is unclear in the literature if the traditional nursing process and the CJ model are both needed in nursing academia, which Sherrill (2020) and Jesse et al. (2023) posit as well. This is an evident gap in the literature since participants in this study felt the need to compare CJ with the nursing process. Moreover, a national study on current practices on teaching CJ noted the lack of consensus of using a model to teach CJ (only 27% of schools admit to using a model) leads to mixed messages and confusion amongst nursing faculty and students and have an impact on CJ development (Jesse et al., 2023; Nielsen et al., 2022).

There is little research in the extant literature that focuses nurse educators' experiences with nursing CJ, as well as limited research on effective ways educators can foster CJ in the

classroom (Nielsen et al., 2022). Most of the research within the current literature regarding nursing CJ focuses on the clinical setting (i.e., hospital and simulated clinical environments) (Brentnall et al., 2022; Bussard, 2015; Dresser et al., 2023; El Hussein et al., 2022; Lasater, 2007; Lasater & Nielsen, 2009a; Wright & Scardaville, 2021). This study's findings of educators' experiences teaching and evaluating CJ in the clinical setting supports the extant literature's recommendations for fostering and evaluating CJ in the clinical settings: to actively participate in students' clinical experiences and engage the student in probing, challenging questions to stimulate their thinking and to attempt to help them make connections (Benner et al., 2010; Brown Tyo & McCurry, 2019; del Beuno, 2005; Monagle et al., 2018; Nielsen et al., 2022); a few studies called this teaching strategy "clinical coaching" (Jesse et al., 2023; Jesse & Tanner, 2016; Nielsen et al., 2022, p. 10). Additionally, the study findings support the need for educators to use a tool to help evaluate CJ skills in the clinical setting, but there are no effective evaluation tools in the current literature (Brown Tyo & McCurry, 2019).

It is evident in the extant literature and this study that teaching and evaluating CJ in the classroom is different than the clinical setting, but there are variety of opportunities to attempt to encourage CJ development. This study's findings of creating an active learning environment in the classroom supports several studies and recommendations of nursing education (Benner et al., 2010; Brown Tyo & McCurry, 2019; Calcagni et al., 2023; Caputi, 2018; Nielson et al., 2022). Although participants in this study agree that any type of active learning activity is preferred to traditional classroom style, unfolding case studies and simulation were noted most often by participants to be the mostly frequently used strategies, which is well-supported in the extant literature (Brown Tyo & McCurry, 2019; Calcagni et al., 2023; Jenkinson et al., 2023; Klenke-Borgmann, 2020 & 2021; Lancaster et al., 2015; Nielsen et al., 2022; Peisachovich et al., 2016;

Tedesco-Schneck, 2018; Timbrell, 2017). One strategy the study participants noted that was not evident in the extant literature was the utilization of group work to help encourage students' participation and diversify their thinking to aid in CJ development. This is a study finding that may add to the growing body of literature.

This study also adds educators' perceived challenges to teaching and evaluating nursing students' CJ. Participants in the study felt CJ was complicated to understand and they were also not confident with their understanding of the concept. In addition, participants felt that educators were inconsistent when evaluating students' CJ. These findings support Brown Tyo and McCurry's (2019) recommendations, following their integrative review of the literature for teaching clinical reasoning teaching strategies, that there needs to be more defined and accepted definitions of nursing CJ and clinical reasoning to develop effective teaching strategies and evaluation methods. It is also recommended that educators utilize a CJ model to help teach CJ, and the use of a model may help educators be more consistent (Jessee et al., 2023; Neilson et al., 2022).

This study's findings about nurse educators needing time, support from administration and colleagues, and compensated time to learn and develop curriculum are supported within the literature (Martin et al., 2020; Nielsen et al., 2022). Nielsen and colleagues (2022) advocate for faculty to have the time and freedom to teach in a diversity of ways. Additionally, while there is support for the growing use of technology (i.e., virtual simulations) to help teach and evaluate students' CJ (Brown Tyo & McCurry; Nielsen et al., 2022), this study found that some nurse educators are hesitant to use and rely on educational products to evaluate their students' CJ skills.

STUDY IMPLICATIONS

Clinical judgment continues to be a priority in the nursing profession, and nurse educators are charged with helping students foster sound clinical judgment before graduation. The study's findings have several implications.

Nurse educators who participated in this study do not define or describe CJ clearly and several confuse and interchangeably use the CJ model and the nursing process, even though these are two distinct concepts and models. Use of a model to teach and help evaluate nursing students' CJ is a recommendation supported by two recent national research studies (Jessee et al., 2023; Nielsen et al., 2022), but further consensus of the relevance of the nursing process needs to be examined.

Clinical experiences are crucial in students' learning but may not be as meaningful if educators miss the opportunity to help the students make connections to what is going on with their patients in real time. The study findings suggest nursing educators in the clinical setting engage in 'clinical coaching' to stimulate students' thinking and develop their clinical judgment skills. Additionally, it is clear clinical educators need guidance from a clinical tool, to promote consistency and to operationalize the evaluation expectations of CJ at various levels within the nursing program.

Students spend much of their time in nursing school in the classroom setting and participants in this study emphasize the need for educators to foster students' CJ by having active learning activities, particularly using unfolding case studies. Participants stressed the need for faculty to bring clinical to the classroom and facilitate an active discussion, e.g., the Socratic method, to gauge students' thinking. The study's findings also suggest educators should consider using alternative classroom environments, i.e., flipped or hybrid classrooms, instead of

traditional didactic lecture, to facilitate the students' learning progression: To go from memorizing, to understanding, application, and synthesis.

Additionally, the study's findings underscore the need for faculty development and support in nursing education programs to implement changes to better teach and evaluate their students' CJ. The data indicates faculty do not feel well supported, i.e., not given time to learn and develop teaching strategies, no time allotted to change their courses and/or program curriculum, nor do educators feel there is time to collaborate with colleagues to be consistent within their programs about how they are evaluating students' CJ each at level.

With the new changes to the NCLEX, curriculum, teaching strategies, and evaluation methods need to evolve. There are many opportunities for nursing educators to develop new, creative, and innovative learning activities to promote CJ development, but it is clear nursing programs need to support educators in a variety of ways, e.g., time to develop courses and activities, updating the curriculum, and reaching a consensus on using a CJ model within the program.

STRENGTHS

One of the strengths of this study is added insight on current nurse educators' thoughts, feelings, and experiences regarding nursing CJ. There are only a handful of research studies in the extant literature that add specific insight into current nurse educators' experiences and perspectives with teaching and evaluating nursing students' CJ.

Additionally, the study was able to include various prelicensure nurse educators from eight different states with different clinical backgrounds, a variety of teaching experience (ranging from 4 years to 18 years of experience teaching), and a balance of educators teaching in

an ADN and BSN program from across the country sharing their understandings, perceptions, and experiences with nursing CJ.

The study revealed important information about educators' experiences with clinical judgment, which is a significant focus of research right now in the nursing profession. There are many calls for research on effective strategies to foster and evaluate CJ, and this study's focus on nurse educators' perspective and experiences with CJ is an important first step to having a deeper understanding of what educators are currently thinking and struggling with.

The findings also have identified gaps in the literature – best practices for teaching clinical judgment and the question of where the nursing process fits into current teachings, educators' feelings regarding the NGN, as well as perceived barriers to teaching and evaluating clinical judgment.

LIMITATIONS

The study has limitations including the impact of the COVID-19 pandemic prior to and during data collection (2020-2022) which caused an unprecedented shift in nursing education curricula, and nursing students' clinical experience, which may limit or change nurse educators' experience with CJ. Another limitation is the nature of qualitative studies, in that nurse educators that participated in the study may have exaggerated or inflated their understanding of CJ while being interviewed and may not reflect their true understanding and experiences. Additionally, the small sample size could be considered a limitation as the data may not be generalizable.

RECOMMENDATIONS FOR FURTHER RESEARCH

The current study is one of the very few qualitative research studies to explore nurse educators' perceptions and experiences with CJ. Since a Naturalistic Inquiry approach was utilized, the recruitment strategy was to purposively select potential participants who fit the

eligibility criteria, and although this study was able to yield a diverse sample geographically and in terms of years of teaching in nursing education, a replicated study in the future should obtain a larger sample size and broaden recruitment to include male participants. Additionally, utilizing a snowball recruiting technique, as well as attempting to recruit from an additional nurse educator platform, would likely yield a greater sample.

Since the new nursing licensure examination has been available (as of April 1, 2023), there is an opportunity to conduct additional research on nurse educators regarding their experiences with preparing students for the new examination which focuses on testing CJ. Due to the vast amount of data that emerged from this study, additional research specifically focusing on learning environments and learning techniques to foster CJ in the classroom setting is certainly needed. Additionally, another area of focus should be on evaluation methods, including the ethical implications for nurse educators' inconsistencies in evaluating students' CJ.

Furthermore, there is a unique opportunity to pivot this research study to explore the nursing students' (and/or newly licensed nurses) perceptions and experiences with nursing clinical judgment. There is little understanding of students' point of view on CJ development, apart from feelings of satisfaction as it relates to a certain CJ activity. The nursing profession may greatly benefit from this study approach focused on students' experiences.

CONCLUSIONS

Sound clinical judgment is an essential skill every nurse needs to care for individuals safely, and the extant literature shows new nurses' CJ skills have been severely declining over the last two decades. Nursing education has made major strides to transform nursing prelicensure programs in the last several years to shift focus on fostering and evaluating nursing students' CJ skills. It is clear from this study that the shift in nursing education priorities is still

very new, and educators have not quite figured out what is the best ways to adapt to the changes, though educators are trying new techniques and activities to help better prepare students. The current study utilized Naturalistic Inquiry to explore nurse educators' perceptions and experiences with CJ. Data was collected during one-on-one virtual interviews. Data was analyzed utilizing a four-step process outlined by Erlandson et al. (1993). Four major categories emerged from the data: Making Sense of Clinical Judgment, Efforts to Foster Clinical Judgment in the Classroom and Clinical Setting, Perceived Challenges for Nurse Educators Related to Clinical Judgment, and The Next Generation National Council Licensure Examination Impact. The findings of the study have several implications for nursing education, particularly illuminating the need for nurse educators to better understand CJ, as well as the need for further research on effective strategies to foster and evaluate CJ in the classroom and clinical setting, and the need for educators to be further supported in this time of change in nursing education.

APPENDIX A

UTMB IRB APPROVAL TO CONDUCT RESEARCH STUDY

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Institutional Review Board
301 University Blvd.
Galveston, TX 77555-0158
Submission Page

20-Apr-2022

MEMORANDUM

TO: Chelsey Rosen
Grad School Biomedical Science GSBS9999

FROM: Alexander Duarte, MD
Vice-Chairman, IRB #2

RE: Initial Study Approval

IRB #: IRB # 22-0078

Submission Number: 22-0078.003

TITLE: Nurse Educators' Perspectives and Experiences with Clinical Judgment

DOCUMENTS: Research Protocol
Demographic form
Fast Fact Sheet
Interview Guide
Recruitment Email
Verbal consent log
Verbal narrative

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research protocol via an expedited review procedure on **12-Apr-2022** in accordance with 45 CFR 46.110(a)-(b)(1). Having met all applicable requirements, the research protocol is approved. The approval for this research protocol begins on **20-Apr-2022.**

Continuing Review for this protocol is not required, as outlined in 45 CFR 46.109. The Principal Investigator is still responsible for:

1. Submitting amendments for protocol changes.
2. Reporting Adverse Events, Protocol Violations, and Unanticipated Problems, as outlined in IRB policies and procedures.
3. Closing the project once it ends, or when personal identifiers are removed from the data/biospecimens and all codes and keys are destroyed.

Written documentation of consent is waived in accordance with 45 CFR 46.117(c).

The approved number of subjects to be enrolled is **30.00**. If the approved number needs to be increased, you first must obtain permission from the IRB to increase the approved sample size.

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.

APPENDIX B

RECRUITMENT EMAIL

NURSE EDUCATORS' PERSPECTIVES & EXPERIENCES WITH CLINICAL JUDGMENT

Seeking Prelicensure Nurse Educators to Participate in a Qualitative Research Project on Nursing Clinical Judgment

The study will ask questions such as:

- What do nurse educators understand about nursing clinical judgment?
- What are the current practices of teaching and evaluating nursing students' clinical judgment in the classroom and clinical setting?
- Based on your experience, what would be helpful for other nurse educators to know about teaching and evaluating clinical judgment?

Participation is completely voluntary and can be withdrawn at any time. Your participation will be kept confidential; the research team will be the only ones that will know your responses. No personally identifying information will be shared.

This research project is IRB approved (22-0078). The UTMB Institutional Review Board (IRB) will answer any questions about your rights as a research subject and can address any comments or complaints you may have. You can contact the UTMB IRB at IRB@UTMB.edu

Please to reply to this email expressing your interest to participate or contact the PI below.
Also, please feel free to forward this email to any nurse educator that may be interested in participating.

For more information about this study, please contact the principal investigator:
Chelsey Rosen, MSN, RN (PhD Candidate)
CHLPERRY@UTMB.EDU
832-248-2709

APPENDIX C

FAST FACT SHEET

IRB#: 22-0078

Study Name: Nurse Educators' Perspectives and Experiences with Clinical Judgment

Contact Information:
Principal Investigator: Chelsey Rosen Mobile 832-248-2709
Study Coordinator: Trish Richard PhD, RN Office 409-772-8221

What is the purpose of this research study? The purpose of the study is to examine nurse educators' perspectives and experiences of teaching and evaluating nursing students' clinical judgment.

What are the Research Procedures? Participants will be asked to provide consent to participate in the study. They will be asked to talk about their perceptions and experiences as a prelicensure nurse educator in the United States. I may ask to talk with Participants up to two times. The first data collection session will not last more than 90 minutes; if Participant agrees to a follow-up session, the session will not last longer than 30 minutes. I will record our conversations, so I do not miss anything.

What are the Risks and Benefits? Any time information is collected, there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. You may not receive any personal benefits from being in this study. I hope the information learned from this study will benefit other nurse educators in the near future. There is a potential risk for emotional distress, but you are free not to answer any questions that make you uncomfortable. There is a potential risk for fatigue, but I will offer you to take breaks during our conversation as needed.

Costs and Compensation: It will not cost you anything to participate in this study. No compensation is offered for participating in this study.

How will my information be protected? Information we learn about you in this study will be handled in a confidential manner. If we publish the results of the study in a scientific journal or book, we will not use any information that could identify you.

Who can I contact with questions about this research study? This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office via email irb@utmb.edu.

For questions about the study, contact Chelsey Rosen at the number listed above.
Before you agree to participate, make sure you have read (or been read) the information provided above; your questions have been answered to your satisfaction; you have been informed that your participation is voluntary, and you have freely decided to participate in this research.
This form is yours to keep.

APPENDIX D

NARRATIVE FOR OBTAINING VERBAL INFORMED CONSENT

Explanation of the Study for Potential Participants

You are being asked to participate in my research project entitled, *Nurse Educators' Perspectives and Experiences with Clinical Judgment.* I am a student in the nursing PhD program at the University of Texas Medical Branch in Galveston, Texas. You have identified yourself as a prelicensure nurse educator that currently lives and teaches in the United States. The risks of participating in this study are minimal and include loss of confidentiality and fatigue or emotional distress. To protect your privacy, a participant identification number will be used instead of your name, and any information that could be linked to you will be removed or masked.

The data I will ask you to provide include some demographic information and responses to interview questions. Our data collection session today should take no longer than 90 minutes. You might be asked to participate in an additional interview if needed, but it will not take longer than 30 minutes. The data collection session will be recorded on a virtual teleconferencing platform.

The potential benefit of participating in this study is the opportunity to share your experiences with teaching, assessing, and evaluating nursing students' clinical judgment. There is no reimbursement for your participation in the study. There is no cost for participating in the study. You can withdraw from participation in the study at any time or you can stop the interview if you become fatigued. Do you have any questions about the study or your participation?

(Any questions will be answered. Once the potential participant's questions have been answered, the researcher will ask:) Are you willing to participate in the study? Your verbal consent will allow me to start recording this video conference and begin the data collection process.

(Recording turned on, then ask:) Would you please repeat for the recording that you have given your consent to participate in the study.

I will then document in the Verbal Consent Log the participant number, the date and time when verbal consent was given, and who collected the participant's verbal consent.

APPENDIX E

VERBAL CONSENT DOCUMENTATION FOR STUDY

Nurse Educators' Perspectives and Experiences with Clinical Judgment

Participant Number: _____

Participant Consent Information

Attempt	Date	Time	Person who made call	Consent captured on recording?
1				
2				

Name of person giving consent: _____

Relationship to participant (highlight): PARENT SUBJECT Other: _____

Language consent interview was completed in: ENGLISH SPANISH

_____ _____ _____

Name of the Investigator Consenting Signature Date

APPENDIX F

DEMOGRAPHIC DATA FORM

Participant code	
Date	
Time session begin	
Time session ended	

Preferred Gender Identity	
Age	
Ethnicity	____ Asian ____ American Indian or Alaskan Native ____ Black or African American ____ Caucasian ____ Hispanic ____ Native Hawaiian or Pacific Islander ____ Multi-ethnic ____ Other _____
Zip code of place of employment	
Highest level of completed education	
Professional Certifications	
Current job title	
# years since obtaining RN license	
Clinical experience areas	
Area of expertise in nursing education	
# years teaching nursing education	
Type of prelicensure nursing program: ADN or BSN? Concept-based or traditional curriculum?	
Which level do you usually teach in the program? (first-semester, last-semester)	

APPENDIX G

SEMI-STRUCTURED INTERVIEW GUIDE

Participant code	
Date	
Time session begin	
Time session ended	

Grand Tour Question:

- To kick off the conversation, I'm really interested in hearing from you about your understanding of the concept "nursing clinical judgment."

Specific Follow-up Questions:

- What is your understanding of the similarities and differences of clinical judgement compared to the concepts of critical thinking and clinical reasoning? (Clarifying whether concepts are similar, interchangeable, or completely different concepts from the P's perspective.)
- Please tell me about your experience with clinical judgment in the courses you teach (or have taught in previously) (seeking clarification for classroom vs clinical setting if applicable)
- How do you ***recognize*** clinical judgment in nursing students? (And how (or whether) P recognizes clinical judgment in clinical and in non-clinical settings.)
- How do you ***evaluate*** clinical judgment in nursing students? (Specifically asking if P uses any tools to help or not, and what their experiences with evaluating CJ have been.)
- What do you think are some things that would help nursing faculty teach nursing students about clinical judgment (to prepare them for NGN)? Why?

Closing questions

- Is there anything else that you would like to add to this discussion today?
- I really appreciate you taking the time to meet with me today.
- Would you be willing to be contacted again if I have further questions, need clarification or what we discussed today, or to discuss the research findings? Would you prefer that I contact you by email or phone?
- Lastly, if you know of any nurse educator that has a different perspective and experiences with teaching and evaluating clinical judgment, would you be willing to share my contact information with them?

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