

Clinical Instructors' Perception of Engaging and Assessing Nursing Students' Clinical Judgment Using Evidenced-Based Tools

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Abstract

Introduction

The study aimed to determine whether clinical instructors perceived using evidence-based tools enhanced engaging and assessing nursing students' clinical judgment competencies in the clinical setting.

Background

The traditional approach to educating nursing students is proving to be ineffective in preparing entry-level nurses for today's complex healthcare demands. Nursing regulatory bodies, healthcare agencies, and safety organizations have advocated that students need increased emphasis on clinical judgment experiences to deliver safe care. Unfortunately, academia as an entity has not consistently prepared new graduates with increased competency-based clinical judgment.

Method

Perceived engagement and assessment methods utilized by clinical instructors were compared with post perceptions after utilizing evidence-based clinical judgment tools with students over 12 weeks. The NCSBN Clinical Judgement Measurement Model (NCJMM) tool was used to engage students in clinical judgment with patient rounding, post conferences and case studies. Lasater's Clinical Judgement Rubric (LCJR) tool was utilized to evaluate nursing students' clinical judgment competencies.

Results

The pre and post survey analysis determined the NCJMM tool ($z = -3.42$, $p = <.001$) and LCJR tool ($z = -2.687$, $p = .007$) demonstrated a statistically significant improvement in the clinical instructors' perception of their ability to engage and assess students' clinical judgment competencies.

Conclusion

The use of both tools is worth considering as strategies to support clinical instructors in targeting clinical judgment as a priority. Participants indicated benefit using the NCJMM tool in enhancing their ability to engage students with clinical judgment concepts. Similarly, the LCJR tool demonstrated positive results and feedback in assisting instructors by assessing student competencies in a consistent and behavior-based manner.

Keywords: clinical judgment evidence-based tools, clinical instructors, nursing students, NCSBN Clinical Judgment Measurement Model, Lasater's Clinical Judgment Rubric

1. Introduction

Nursing programs are expected to ensure that new graduates can demonstrate competencies in clinical judgment. However, studies indicate that novice nurses' clinical judgment competencies have declined over the past 2 decades (Ignatavicius & Silvestri, 2022; Kavanagh & Sharpnack, 2021; Kavanagh & Szweda, 2017). The Nursing Practice Act identifies the guidelines for *nursing practice* as the ability to observe, determine abnormality, and act as appropriate (California Board of Registered Nursing [BRN], n.d.). A nursing license serves as a safeguard to ensure safe patient care (NCSBN, n.d.-a). The observed decline in graduates' ability to recognize patient deterioration and apply sound clinical judgment is therefore alarming, as it poses significant risks to patient safety (Calcagni et

al., 2023). Traditional nursing education methods may no longer be sufficient to prepare entry-level nurses for the increasing complexity of today's healthcare environment.

The American Association of Colleges of Nursing (AACN) has recently updated its *Essentials* for entry-level professional nursing education, calling for reform and a transition toward competency-based education. Aligning the AACN Essentials with the curriculum requires incorporating innovative, evidence-based teaching strategies. The 2021 Essentials have woven clinical judgment competencies throughout the ten domains. The changes highlight the importance of clinical judgment and the impact of nursing education on the new graduate's (CJ) competency (AACN, 2021; Calcagni et al., 2023). AACN's recent update to The Essentials advocates that more programs move toward a competency-based education model to prepare future nurses for practice (AACN, n.d.). The approach goes beyond traditional time-based education using credit hours, focusing instead on demonstrated mastery of essential skills (AACN, 2019). To achieve these goals, stakeholders have advocated for academia to better prepare clinical faculty with innovative teaching strategies to develop, assess, and evaluate students' competencies (Betts et al., 2019). To accomplish this, nursing programs are encouraged to incorporate evidence-based models that equip clinical instructors with the tools to achieve learner outcomes (AACN, n.d.; Spector et al., 2020).

At the nursing program examined in this study, end-of-program data revealed a need to strengthen graduates' clinical judgment. During the final semester of the program, the nursing students completed the Assessment Technologies Institute (ATI) comprehensive predictor examination. Historically, reports from the comprehensive predictor exam analyzed the overall cohort score percentages that met the program's benchmark (70%). Therefore, the nursing program had not identified a need for change. However, drilling down into individual clinical judgment reports reveals cause for concern. Figure 1 shows the percentage of students scoring below 70% in the clinical judgment category across three graduating cohorts. Each Cohort had 60 graduating students. Cohort A had 28% of students score below 70%; Cohort B had 44%; and Cohort C had 36%. The individual students' report explicitly identified opportunities to address student clinical judgment competencies (ATI, n.d.).

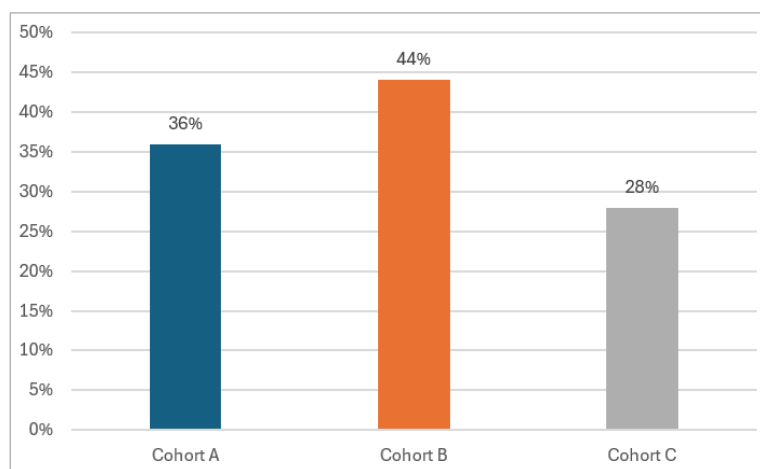


Figure 1. Clinical Judgment Scores below Benchmark on ATI Comprehensive Predictor Exam
(Percentage of Students Scoring Less Than 70% in Clinical Judgment)

One hypothesis for these results is the program's inconsistent approach to teaching and assessing clinical judgment. Additionally, with approximately 35 part-time clinical instructors with a high turnover in the medical-surgical semesters, there is limited consistency in pedagogy. New instructors also lack a formal orientation process to guide instructional methods and evaluation of clinical judgment (S. Miller, personal communication, December 5, 2022). Collectively, these factors may contribute to an incongruous approach to developing students' clinical judgment competencies.

2. Literature Review

Clinical judgment is described as "essential to managing today's complex client needs in a dynamic healthcare environment" and builds upon the nursing process (Ignatavicius & Silvestri, 2022, p. 7). A review of the literature

identified studies that demonstrated a decline in nurse graduates' clinical judgment competency but also found a lack of studies on pedagogical approaches to improve engagement and assessment of nursing students' clinical judgment. Kavanagh and Szweda (2017) reported that only 23% of new graduates were rated as competent to work independently; of the remaining deemed unsafe, 23% could not identify a change in patient condition requiring intervention. In a recent 2021 study, the acceptable level of the new graduate clinical judgment competency dropped to 9% (Kavanagh & Sharpnack, 2021). In addition to studies demonstrating low acceptable levels of clinical judgment competencies, data demonstrated that new graduates account for 50% of practice errors (Ignatavicius & Silvestri, 2022). When examining error types, researchers found that 65% were related to poor clinical decision-making (Ignatavicius & Silvestri, 2022). These findings have heightened concerns among nurse executives about patient safety and the need for improved clinical judgment training (Ignatavicius & Silvestri, 2022; NCSBN, n.d.-b).

As a response to the decline in clinical judgment and practice errors among new graduates, regulatory and professional organizations have called for greater emphasis on clinical judgment experiences during undergraduate education to better prepare graduates for practice (Jessee, 2021; Kavanagh & Szweda, 2017; NCSBN, n.d.-b; Nibbelink & Brewer, 2018). According to the National Council of State Boards of Nursing (NCSBN) Strategic Practice Analysis survey, the data identified 286 tasks separated into knowledge, skills, and abilities required for the new graduate. The analysis demonstrated that clinical judgment was among the top five *skills* associated with the nurses' skills required and accounted for 46.5% of the tasks performed by nurses (Betts et al., 2019; NCSBN, 2018). The survey results support why clinical judgment should be emphasized in nursing programs. Consistent with these results, new graduates themselves have recognized the importance of enhanced preparation in these skills to ensure patient safety following graduation. In a study by Marino et al. (2020), newly licensed nurses reported that their academic programs were inadequate in preparing them for real-world clinical decision-making. Consequently, many new nurses need to prioritize the development of clinical judgment skills during their first year of professional practice. Sutor and Painter (2020) collected data from healthcare organizations experiencing the highest attrition rate from new graduates in their first year. New nurses stated that feeling overwhelmed by the work environment, self-doubt, and concluding they are not a good fit for the nursing profession were reasons for leaving. Pre-pandemic attrition rates ranged from 17% in the first year to 30% within three years. One strategy to assist the new graduates has been the implementation of nurse residency programs which aims to better support transition to practice (Sutor & Painter, 2020).

Despite these efforts to raise awareness and promote change, academic nursing programs continue to struggle to prepare graduates who consistently demonstrate high-level clinical judgment. (Betts et al., 2019; Kavanagh & Sharpnack, 2021; Kavanagh & Szweda, 2017; Lasater, 2007). In response, the (NCSBN) developed the Clinical Judgment Measurement Model (NCJMM), which was integrated into the Next Generation NCLEX (NGN) to evaluate higher-order thinking and ensure readiness for safe practice (Calcagni et al., 2023; Dickison et al., 2019). The NCJMM provides a structured framework to assess the cognitive processes underlying sound clinical decision-making. The revised exam measures clinical judgment traits with psychometric rigor and scrutiny, with the aim of ensuring that newly licensed nurses demonstrate adequate competence needed for safe practice (Ignatavicius & Silvestri, 2022; NCSBN, 2019a). According to Ignatavicius and Silvestri (2022), the changes to (NGN) exam are forcing academic nursing programs to pause and evaluate current methodologies utilized to ensure students can pass the new NCLEX exam and demonstrate practice readiness. For entry-level nurses to safely manage complex patient situations, academia must incorporate innovative, realistic strategies to teach and evaluate student clinical judgment competencies (Betts et al., 2019).

For clinical education, experts recommend moving beyond the lowest levels of Bloom's taxonomy, such as a skill checkoff with return demonstration. Instead, faculty are encouraged to create mini simulation environments in which students encounter opportunities to apply clinical judgment while performing a skill or assessing a patient (Ignatavicius & Silvestri, 2022). Such experiences demonstrate the sophisticated way nurses think and require students to recognize patient changes, act appropriately, and evaluate outcomes (NCSBN, 2019b). The NCJMM used Tanner's Clinical Judgment model (CJM) as a framework, which also recognizes how the nurse's knowledge, accumulative experiences, and various ways of reasoning help the nurse process information and make decisions (Betts et al., 2019; Jessee, 2021; Tanner, 2006).

Research also supports incorporating structured feedback and coaching to enhance students' clinical judgment. Studies by Monagle et al. (2018) and Harvey (2015) advocate active learning environments through real-time rounding, high-level questioning, clinical coaching, role modeling, and immediate feedback. Sherrill (2020) identified that students' clinical judgment development is advanced when nursing programs use a standardized, objective, and observable measurement method to teach and evaluate students' clinical judgment competencies.

Harvey (2015) further discussed how student learning outcomes often depend on the clinical instructors. Clinical instructors are likely to be part-time, vary in academic expertise and engagement level. One recommendation to reduce variation in student learning outcomes is to standardize post-conferences and include topics connecting classroom theory to practice (Harvey, 2015). As academia advances toward competency-based education, nursing programs are well-positioned to adopt improved methods for assessing students' clinical judgment competencies (Nielsen et al., 2023). Ensuring students are actively engaging in clinical judgment allows faculty and clinical instructors to evaluate students' clinical judgment competencies. Utilizing established methods to assess students' ability to demonstrate clinical judgment is highly recommended. The Lassater Clinical Judgment Rubric (LCJR) is an example of this recommendation. The tool is a validated assessment tool initially utilized with simulation (Lasater, 2009). In practicum, the faculty using the LCJR tool can observe specific behaviors that align with Tanner's CJM and assign a level of competency (NCSBN, 2023).

Integrating evidence-based frameworks such as the NCJMM and LCJR throughout the nursing curriculum allows students to develop clinical judgment progressively through repetition, feedback, and reflection (Sherrill, 2020). In the ATI (2023) document State of Nursing Education, the authors focused on the benefits of adopting a standardized approach to teaching and assessing clinical judgment. The article advocated for NCJMM to be incorporated into the program curriculum to improve students' clinical judgment, help them pass the new exam, prepare them for practice, and reduce attrition among nurses in their first three years. Nielsen et al. (2022) concluded in their study that current strategies to increase practice-ready nurses must ensure that clinical judgment efforts are consistent and deliberate, which is most important.

With evidence-based, standardized clinical judgment tools established in the practicum, the clinical faculty can be better prepared and have clear expectations for their roles in teaching and assessing student competencies. Standardized tools can also decrease assessors' bias during the summative assessment. An added benefit of using standardized tools is the ability of faculty to provide specific, actionable feedback to students. When students receive vague feedback, they rely on self-assessment to gauge their competencies. Studies have indicated that student self-reporting is associated with overconfidence and does not reflect actual abilities (Baxter & Norman, 2011; Leighton et al., 2021; Reljić et al., 2017). Because academia is being called upon to prioritize curriculum reforms that emphasize teaching methods promoting clinical judgment and assessments that validate performance competencies (Jessee, 2021; Makary & Daniel, 2016; Sherrill, 2020), this study selected two evidence-based frameworks: the NCSBN Clinical Judgment Measurement Model and Lasater's Clinical Judgment Rubric.

The NCJMM, originally developed to assess clinical judgment on the (NGN), can also serve as a pedagogical framework to teach nursing students how to understand and apply clinical reasoning in practice. The model is structured into several layers—Layer 0 (observation), Layers 1–3 (cognitive operations), and Layer 4 (contextual factors) (Betts et al., 2019; Dickison et al., 2019). Of these, Layer 3 is particularly valuable for engaging students during clinical experiences, as it outlines six cognitive processes central to clinical judgment: (a) recognizing cues, (b) analyzing cues, (c) prioritizing hypotheses, (d) generating solutions, (e) taking action, and (f) evaluating outcomes (ATI, 2022; Betts et al., 2019; Dickison et al., 2019). In practice, *recognizing cues* involves identifying relevant data and distinguishing between normal and abnormal findings. *Analyzing cues* requires clustering and interpreting this information to identify potential patient problems. Together, these steps lead the student nurse to form and *prioritize hypotheses* about the patient's condition. Once priorities are established, the student *generates solutions* and *takes action* by implementing appropriate interventions. The final process, *evaluating outcomes*, determines whether the chosen interventions achieved the desired results. If the evaluation reveals ongoing deterioration or ineffective outcomes, the nurse re-engages the process by gathering new cues, refining hypotheses, and taking further action as needed (ATI, 2022; Betts et al., 2019; Dickison et al., 2019).

Lasater's (2007) evidence-based tool assesses clinical judgment competencies through observation. Lasater also used Tanner's CJM as her theoretical framework to create the rubric. Lasater's rubric is an assessment tool divided into 11 domains separated by Tanner's (2006) CJM's four stages: (a) noticing, (b) interpreting, (c) responding, and (d) reflecting (Lasater, 2007). The rubric provides the student and the clinical instructor with developmental descriptors to understand expectations for clinical judgment (Lasater, 2007). The tool was initially used to assess clinical judgment during simulation and has since expanded into the clinical practice setting. By delineating specific, observable criteria, the LCJR enhances fairness in assessment and fosters transparency in expectations (Lasater, 2007; Lasater et al., 2015; Manetti, 2018; Monagle et al., 2018; Nielsen et al., 2022). The rubric provides both students and faculty with clear developmental descriptors, categorizing performance as *beginning*, *developing*, *accomplished*, or *exemplary*. The tool can be used with or without scoring rubric (Manetti, 2018). To effectively utilize the LCRJ, multiple assessments are recommended through observation or reflection journals on students at different times (Jessee, 2021). Specific feedback is vital for students' growth, and the specific performance

indicator helps students identify their strengths and opportunities (Adamson et al., 2012). Calcagni et al.'s (2023) study concluded that consistent use of the LCJR tool provided students and faculty with a standardized, meaningful framework for assessment and feedback in the clinical setting.

In synthesizing the literature, clinical judgment is an essential competency for safe nursing practice and that new graduate nurses continue to demonstrate deficiencies in this area. Multiple studies document declining clinical judgment competencies, increased practice errors, concerns regarding patient safety, and inadequate preparation for independent practice (Ignatavicius & Silvestri, 2022; Kavanagh & Sharpnack, 2021; Kavanagh & Szveda, 2017). These findings have prompted regulatory agencies and professional organizations, including the National Council of State Boards of Nursing and the American Association of Colleges of Nursing, to advocate for competency-based education and emphasis on clinical judgment throughout nursing curricula. While literature clearly establishes the importance of improving clinical judgment, several limitations remain on how to effectively accomplish improvement.

The review also revealed variability in the strategies nursing programs use to develop students' clinical judgment competencies. Few studies examine the effectiveness of specific pedagogical interventions, especially evidence-based tools designed to improve clinical judgment within undergraduate nursing education. Although authors recommend active learning, coaching, standardized feedback, and competency-based teaching strategies, limited empirical evidence exists evaluating how these recommendations are implemented in clinical education specific to clinical judgment. Furthermore, no studies were identified that examined the use of the Clinical Judgment Measure Model as a structured framework to actively engage students in clinical practice. This is likely due to the tool's recent development. Several studies were found that utilized the Lasater Clinical Judgment Rubric to assess clinical judgment; however, these investigations were conducted primarily in simulation settings rather than direct patient care environments.

Another limitation identified in the review is the limited attention given to the clinical instructor's role in developing students' clinical judgment. Variability in instructors' experience, teaching approaches, and evaluation methods, combined with a heavy reliance on part-time faculty, contributes to inconsistent clinical learning experiences. Although researchers advocate standardized teaching and assessment strategies, few studies were found to have examined clinical instructors' perceptions of using evidence-based clinical judgment tools in the practicum setting. Exploring the clinical instructors' perceptions will contribute to pedagogical literature by informing strategies to standardize clinical instruction, strengthen students' clinical judgment competencies, and ultimately improve new graduate readiness for professional practice.

2.1 Objective

The study's first aim was to determine whether clinical instructors perceive that using evidence-based clinical judgment tools in practicum improves their ability to *engage* nursing students in clinical judgment. The second aim was to determine whether clinical instructors perceive that using a clear, objective, and observable *measurement tool* aids in evaluating nursing students' clinical judgment competencies and assists in providing specific feedback to students.

3. Method

The university's IRB approved the study. The study used quantitative surveys and included an area to provide individual feedback on their overall positive, neutral or negative experience with the tools. The quantitative presurvey design explored the clinical instructors' perceptions of the effectiveness of their current methods in engaging students' clinical judgment using the six cognitive processes outlined in Layer 3 of the NCJMM (NCSBN, 2019a). The second portion of the presurvey inquired about the clinical instructor's confidence in assessing students' clinical judgment using their method. The LCJR themes assessed for confidence used (a) recognizing, (b) interpreting, (c) responding, and (d) reflecting (Lasater, 2007; Tanner, 2006). Surveys used a 5-point Likert scale to quantify clinical instructors' agreement or disagreement, comparing the effectiveness and confidence of their methods before and after using the tools. The survey also collected the clinical instructors' education level, nursing practice years, clinical education years, and familiarity with evidence-based clinical judgment tools. The study utilized convenience sampling with the clinical instructors teaching medical-surgical clinical courses as the inclusion criteria. The convenience sample invited 15 clinical instructors to participate in the project. Nine of the 15 (60%) consented and completed the presurvey questionnaire. After consents were collected, access to the presurvey form was closed. Clinical instructors received training on the tools. Various teaching strategies for engaging students using the Clinical Judgment Measure Model tool were reviewed and discussed with the participants. Participants attended a one-hour training session via Zoom to communicate the project's background and purpose, introduced the two clinical judgment tools, and ensured participants understood how to use the tools

effectively.

Examples of how the NCJMM tool was used, clinical instructors and students used a worksheet based on the six mental processes. Instructors utilized the worksheet to model clinical judgment during patient rounds and post conference scenarios for first-semester students. For more advanced students, the worksheet helped elicit their clinical judgment competencies during patient rounds, clinical coaching sessions, and post conferences. The students used the worksheet to complete virtual simulation and reflection assignments. The NCJMM tool aimed to shift the focus toward prioritizing clinical judgment in patient care over skill acquisition and tasks.

Clinical instructors also learned to use the LCJR during the training by viewing a short simulation of two students demonstrating clinical judgment. Each participant then completed the LCJR tool to establish interrater reliability. A group discussion followed to ensure understanding of the tool and its use for assessing and providing feedback on students' clinical judgment. In addition, the students received a copy to self-identify behaviors linked to clinical judgment processes. The clinical instructors used both clinical judgment tools, one to engage and the other to assess students for over 12 weeks in the clinical practicum setting. For the three cohorts participating in the study, the practicums were in the acute care hospital setting on medical surgical units.

A post-survey was emailed to participants during the final week of the semester. Responses were collected using the Likert scale and analyzed using SPSS software. The Wilcoxon Signed-Rank test, a nonparametric alternative to the paired t-test, was used to analyze pre- and post-survey 5-point Likert responses from the same participants (Knapp, 2016). The analysis examined clinical instructors' perceptions of effectiveness in engaging and confidence in assessing students' clinical judgment after implementing the EBP tools. An identified limitation to the study was the small sample size for analyzing quantitative statistics, which is why Wilcoxon Signed-Rank non-parametric test is appropriate for this study (Knapp, 2016).

4. Results

Demographic data included instructors' education, nursing experience, and academic experience. Participants held a doctoral degree (22%), a master's degree (33%), or a bachelor's degree (44%). Nursing experience ranged from fewer than 5 years (11%) to more than 20 years (22%), with most participants reporting 5-10 years of experience (44%). Academic experience was limited, with 66% having fewer than 5 years, 22% having 11-20 years, and 11% having more than 20 years. The high proportion of participating clinical instructors with fewer than five years of academic experience reflects trends in faculty turnover and the increasing presence of novice instructors in undergraduate nursing programs, highlighting the need for better faculty preparation (AACN, 2022; Flood & Robinia, 2014).

Table 1 displays the results for the overall tool analysis and each cognitive process analyzed. The accumulative effectiveness of engaging students in clinical judgment comparing clinical instructors' methods before ($M = 3.50$) and after using the NCJMM tool ($M = 4.11$) demonstrated a statistically significant difference, $z = -3.42$, $p = <.001$. The Wilcoxon signed-rank test demonstrated that clinical instructors perceived using the NCJMM tool improved engaging students in clinical judgment activities over the semester more effective than their previous method. When analyzing each cognitive process individually, the clinical instructor's mean scores improved for each process but did not achieve a p value $<.05$. Interpretation of the results recognizes that the NCJMM tool is most effective when using all six cognitive processes versus using a single cognitive process to engage students. Two participants were excluded from the analysis. One participant did not complete the postsurvey and the other participant confused the NCJMM tool with an assigned virtual simulation activity, thus providing feedback based on the latter.

Table 1. Clinical Instructors Rate Effectiveness of NCJMM Tool to Engage Students in Clinical Judgement

Variables	Pre survey Current method			Post survey NCJMM Tool			Asymp. Sig. (2-tailed)	Z-score
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>		
NCJMM Tool	3.50	.740	7	4.11	.632	7	.<.001	-3.42
Q5 Recognizing Cues	3.00	1.00	7	4.14	.690	7	.066	-1.84
Q6 Analyzing Cues	3.57	.534	7	4.14	.690	7	.157	-1.41
Q7 Prioritizing Hypothesis	3.71	.487	7	4.14	.690	7	.257	-1.13
Q8 Generating Solutions	3.85	.690	7	4.00	.577	7	.564	-.577
Q9 Taking Action	3.42	.534	7	4.14	.690	7	.059	-1.89
Q10 Evaluating	3.42	.975	7	4.14	.690	7	.197	-1.28

Note. Questions were categorized based on NCJMM cognitive process steps judgement. Response based on a 5-point Likert scale. Wilcoxon Signed Ranks test used with a *P-value* >.05 indicating statistically significant. When using Wilcoxon test, a negative Z-Score test indicates that the scores improve from time 1 to time 2 (e.g., pre-test to post-test).

An accumulative clinical instructor's confidence analysis to assess students' clinical judgment (see Table 2), comparing before and after the LCJR tool, demonstrated overall improvement. Confidence improved after using the LCJR tool (*M* = 4.12) compared to the clinical instructor's methods (*M* = 3.46). A Wilcoxon Test indicated the tool demonstrated statistically significant improvement, *z* = -2.68, *p* = .007. However, analysis of a single phases did not achieve a *p* value <.05. Interpretation of the results recognizes that the LCJR tool is most effective when using all phases versus using a single phase to assess students. One participant excluded from the confidence level quantitative analysis did not complete the postsurvey.

Table 2. Clinical Instructors Rate Confidence Level Assessing Student Clinical Judgement Competencies using LCJR

Variables	Pre survey Current method			Post survey LCJR Tool			Asymp. Sig. (2-tailed)	Z-score
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>		
LCJR tool	3.46	1.16	8	4.12	.491	8	.007	-2.687
Q1 Notice	3.75	1.28	8	4.0	.534	8	.739	-.333
Q2 Interpret	3.25	1.16	8	4.0	.534	8	.096	-1.667
Q3 Respond	3.22	1.16	8	4.12	.353	8	.084	-1.725
Q4 Reflect	3.62	1.18	8	4.37	.518	8	.131	-1.511

Note. Questions were categorized based on Tanner's CJM. Response based on a 5-point Likert scale. Wilcoxon Signed Ranks test used with a *P-value* >.05 indicating statistically significant. When using Wilcoxon test, a negative Z-Score test indicates that the scores improve from time 1 to time 2 (e.g., pre-test to post-test).

5. Discussion

Based on the findings from this study, the use of both evidence-based tools may be worth considering as strategies to support the development and assessment of clinical judgment among nursing students during practicum. Clinical instructors who participated in the study identified benefit from using the NCJMM tool, as it showed statistical significance in enhancing their ability to engage students with clinical judgment concepts. Similarly, the LCJR tool demonstrated potential in assisting instructors by assessing student competencies in a consistent and behavior-based manner. Clinical instructor's additional feedback reflected positive experiences using both tools. Novice instructors identified the tools helped guide them in promoting and assessing clinical judgment competencies which are more difficult to do over learning hands on skills. More experienced clinical instructors indicated appreciation for new updated models to incorporate into practice and be intentional with the students.

These tools offer practical approaches for integrating clinical judgment into clinical education. Being intentional and prioritizing clinical judgment provides the students with the needed repetition and constant exposure to develop competencies (Sherrill, 2020). The NCJMM tool can intentionally engage students with clinical judgment during patient rounding through role modeling, coaching, or prompting reflective inquiry. Nursing programs using the tool can guide clinical instructors to highlight the importance of clinical judgment in post-conference discussions, case study reviews, or simulation activities. Meanwhile, the LCJR tool may provide a helpful framework for evaluating students' clinical judgment behaviors across developmental stages (beginning, developing, accomplished, and exemplary) while also supporting instructors in delivering more specific, formative feedback. For clinical instructors who find it challenging to define or assess clinical judgment, these tools may serve as valuable resources to guide both formative and summative evaluations. Additionally, a standardized use of such tools across courses and instructors may promote greater consistency in how clinical judgment is taught and assessed, thereby reinforcing the importance of clinical judgement competency throughout the curriculum.

For the subsequent graduating cohort (Cohort D; $n = 58$), whose clinical instructors had participated in this study during the students' previous semester, ATI Comprehensive Predictor clinical judgment scores demonstrated significant improvement. The exam results demonstrated that 94% of the students achieved benchmark results ($>70\%$) in clinical judgment. Recommendations for the nursing program in this study are to consistently use the tools intentionally to engage and assess competencies to support achieving clinical judgment scores exceeding the nursing program's acceptable benchmark of over 70%, thus promoting practice readiness. This outcome is promising, and it may be beneficial for other nursing programs to replicate the study to further examine the potential relationship between NCJMM and LCJR tool usage and improved student outcomes. Such efforts could contribute to broader strategies aimed at preparing students to meet the complex demands of contemporary nursing practice and reflect nursing education's intentional efforts, documented in the literature, to enhance students' clinical judgment competencies by the time of graduation.

5.1 Clinical Relevance

The NCJMM and LCJR tools are worth consideration as effective strategies to assist clinical instructors in fostering and evaluating clinical judgment among nursing students during practicum experiences. These evidence-based tools may also promote a more standardized approach to teaching and evaluating clinical judgment competencies while providing valuable support to novice clinical instructors.

5.2 Highlights

- New nursing graduate clinical judgment is declining, creating a safety risk for patients.
- National standards now prioritize competency-based education centered on clinical judgment in nursing programs.
- Clinical instructors using the NCJMM tool identified improved effectiveness in engaging students with clinical judgment concepts.
- Clinical instructors identified using the LCJR tool increased confidence assessing students' clinical judgment competencies.
- Improved clinical judgment assessment scores using Assessment Technology Institute's comprehensive predictor examination noted the following semester.

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