Clinical Judgement in Baccalaureate Pre-licensure Nursing Students

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Learning Objectives

1. The learner will be able to describe the use of the Lasater Clinical Judgement Rubric (LCJR) as a method of assessing clinical judgment in nursing students.

2. The learner will be able to integrate the use of the LCJR in their curriculum as a means of assessing students' clinical judgement.

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- This research was partially funded by an internal grant from the University of Scranton and the NLN Jonas Scholars program 2014-15.
The purpose of this presentation is to share research findings that describe and compare the clinical judgement of junior and senior baccalaureate pre-licensure nursing students in the medical-surgical clinical setting using the Lasater Clinical Judgment Rubric (LCJR).
Theoretical Framework:
Tanner (2014)

An Integrative Model of Clinical Judgement

NOTICING
A perceptual grasp of the situation at hand.

- Context
- Background
- Relationship

Expectations

Initial Grasp

Reflection-on-Action and Clinical Learning

INTERPRETING
Developing a sufficient understanding of the situation to respond

- Reasoning Patterns
  - Analytic
  - Intuitive
  - Narrative

Reflection-in-Action

RESPONDING
Deciding on a course of action deemed appropriate for the situation, which may include “no immediate action”

Action

Outcomes

Reflecting

Attending to patients' responses to the nursing action while in the process of acting.
Research Questions 1 and 2

Research Question 1:
What are the total clinical judgement scores of junior and senior baccalaureate, pre-licensure nursing students?

Research Question 2:
What are the noticing, interpreting, responding, and reflecting clinical judgement subscale scores of junior and senior baccalaureate, pre-licensure nursing students?

Descriptive exploratory
Descriptive statistics for clinical judgement were computed for each group on the total scale and four subscales.
Research Question 3 and Hypothesis

**Research Question 3:**
What are the differences between junior and senior baccalaureate, pre-licensure nursing students’ clinical judgement total and subscale scores?

**Hypothesis:** Senior baccalaureate, pre-licensure nursing students will have higher total and subscale scores of clinical judgement on the LCJR than junior baccalaureate, pre-licensure nursing students.

**Descriptive comparative**
An independent t-test was used to determine the differences in clinical judgement total scores between the two groups.
A MANOVA was used to determine the differences in clinical judgement subscale scores between the two groups.
Setting and Sample

- Cross section of junior and senior nursing students
- Purposive, convenience sample

Sample:
- 136 students; 75 juniors and 61 seniors; sufficient for a power of .80 with a moderate effect size

Inclusion Criteria:
- over 18 years old, spoke English
- junior or senior baccalaureate, pre-licensure nursing student enrolled in a medical-surgical nursing course
- traditional student - first-degree, pre-licensure students

18 clinical faculty served as data collectors
Instrumentation

- Student Demographic Questionnaire
- Clinical Faculty Demographic Questionnaire
- The Lasater Clinical Judgement Rubric
Lasater’s Clinical Judgment Rubric

- Describes clinical judgement behaviors developmentally based on Tanner’s four phases of clinical judgement: noticing interpreting, responding, and reflecting.

- Lasater (2007b) further defined each phase into 11 dimensions

- The performance levels are categorized as beginning, developing, accomplished, and exemplary
# LASATER CLINICAL JUDGMENT RUBRIC

## Noticing and Interpreting

<table>
<thead>
<tr>
<th>Effective NOTICING involves:</th>
<th>Exemplary</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused Observation</td>
<td>Focuses observation appropriately; regularly observes and monitors a wide variety of objective and subjective data to uncover any useful information</td>
<td>Regularly observes/monitors a variety of data, including both subjective and objective; most useful information is noticed, may miss the most subtle signs</td>
<td>Attempts to monitor a variety of subjective and objective data, but is overwhelmed by the array of data; focuses on the most obvious data, missing some important information</td>
<td>Confused by the clinical situation and the amount/type of data; observation is not organized and important data is missed, and/or assessment errors are made</td>
</tr>
<tr>
<td>Recognizing Deviations from Expected Patterns</td>
<td>Recognizes subtle patterns and deviations from expected patterns in data and uses these to guide the assessment</td>
<td>Recognizes most obvious patterns and deviations in data and uses these to continually assess</td>
<td>Identifies obvious patterns and deviations, missing some important information; unsure how to continue the assessment</td>
<td>Focuses on one thing at a time and misses most patterns/deviations from expectations; misses opportunities to refine the assessment</td>
</tr>
<tr>
<td>Information Seeking</td>
<td>Assertively seeks information to plan intervention; carefully collects useful subjective data from observing the client and from interacting with the client and family</td>
<td>Actively seeks subjective information about the client’s situation from the client and family to support planning interventions; occasionally does not pursue important leads</td>
<td>Makes limited efforts to seek additional information from the client/family; often seems not to know what information to seek and/or pursues unrelated information</td>
<td>Is ineffective in seeking information; relies mostly on objective data; has difficulty interacting with the client and family and fails to collect important subjective data</td>
</tr>
<tr>
<td>Effective INTERPRETING involves:</td>
<td>Exemplary</td>
<td>Accomplished</td>
<td>Developing</td>
<td>Beginning</td>
</tr>
<tr>
<td>Prioritizing Data</td>
<td>Focuses on the most relevant and important data useful for explaining the client’s condition</td>
<td>Generally focuses on the most important data and seeks further relevant information, but also may try to attend to less pertinent data</td>
<td>Makes an effort to prioritize data and focus on the most important, but also attends to less relevant/useful data</td>
<td>Has difficulty focusing and appears not to know which data are most important to the diagnosis; attempts to attend to all available data</td>
</tr>
<tr>
<td>Making Sense of Data</td>
<td>Even when facing complex, conflicting or confusing data, is able to (1) note and make sense of patterns in the client’s data, (2) compare these with known patterns (from the nursing knowledge base, research, personal experience, and intuition), and (3) develop plans for interventions that can be justified in terms of their likelihood of success</td>
<td>In most situations, interprets the client’s data patterns and compares with known patterns to develop an intervention plan and accompanying rationale; the exceptions are rare or complicated cases where it is appropriate to seek the guidance of a specialist or more experienced nurse</td>
<td>In simple or common/familiar situations, is able to compare the client’s data patterns with those known and to develop/explain intervention plans; has difficulty, however, with even moderately difficult data/situations that are within the expectations for students, inappropriately requires advice or assistance</td>
<td>Even in simple of familiar/common situations has difficulty interpreting or making sense of data; has trouble distinguishing among competing explanations and appropriate interventions, requiring assistance both in diagnosing the problem and in developing an intervention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effective RESPONSING involves:</th>
<th>Exemplary</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calm, Confident Manner</td>
<td>Assumes responsibility; delegates team assignments, assess the client and reassures them and their families</td>
<td>Generally displays leadership and confidence, and is able to control/calm most situations; may show stress in particularly difficult or complex situations</td>
<td>Is tentative in the leader’s role; reassures clients/families in routine and relatively simple situations, but becomes stressed and disorganized easily</td>
<td>Except in simple and routine situations, is stressed and disorganized, lacks control, making clients and families anxious/less able to cooperate</td>
</tr>
<tr>
<td>Clear Communication</td>
<td>Communicates effectively; explains interventions; calms/reassures clients and families; directs and involves team members, explaining and giving directions; checks for understanding</td>
<td>Generally communicates well; explains carefully to clients, gives clear directions to team; could be more effective in establishing rapport</td>
<td>Shows some communication ability (e.g., giving directions); communication with clients/families/team members is only partly successful; displays caring but not competence</td>
<td>Has difficulty communicating; explanations are confusing, directions are unclear or contradictory, and clients/families are made confused/anxious, not reassured</td>
</tr>
<tr>
<td>Well-Planned Intervention/Flexibility</td>
<td>Interventions are tailored for the individual client; monitors client progress closely and is able to adjust treatment as indicated by the client response</td>
<td>Develops interventions based on relevant patient data; monitors progress regularly but does not expect to have to change treatments</td>
<td>Develops interventions based on the most obvious data; monitors progress, but is unable to make adjustments based on the patient response</td>
<td>Focuses on developing a single intervention addressing a likely solution, but it may be vague, confusing, and/or incomplete; some monitoring may occur</td>
</tr>
<tr>
<td>Being Skillful</td>
<td>Shows mastery of necessary nursing skills</td>
<td>Displays proficiency in the use of most nursing skills; could improve speed or accuracy</td>
<td>Is hesitant or ineffective in utilizing nursing skills</td>
<td>Is unable to select and/or perform the nursing skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effective REFLECTING involves:</th>
<th>Exemplary</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation/Self-Analysis</td>
<td>Independently evaluates/analyzes personal clinical performance, noting decision points, elaborating alternatives and accurately evaluating choices against alternatives</td>
<td>Evaluates/analyzes personal clinical performance with minimal prompting, primarily major events/decisions; key decision points are identified and alternatives are considered</td>
<td>Even when prompted, briefly verbalizes the most obvious evaluations; has difficulty imagining alternative choices; is self-protective in evaluating personal choices</td>
<td>Even prompted evaluations are brief, cursory, and not used to improve performance; justifies personal decisions/choices without evaluating them</td>
</tr>
<tr>
<td>Commitment to Improvement</td>
<td>Demonstrates commitment to ongoing improvement; reflects on and critically evaluates nursing experiences; accurately identifies strengths/weaknesses and develops specific plans to eliminate weaknesses</td>
<td>Demonstrates a desire to improve nursing performance; reflects on and evaluates experiences; identifies strengths/weaknesses; could be more systematic in evaluating weaknesses</td>
<td>Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improve performance but tends to state the obvious, and needs external evaluation</td>
<td>Appears uninterested in improving performance or unable to do so; rarely reflects; is uncritical of him/herself, or overly critical (given level of development); is unable to see flaws or need for improvement</td>
</tr>
</tbody>
</table>

Clinical faculty rated students’ clinical judgement performance on each of the **11 dimensions** of the LCJR.

The rubric was converted into a **4-point ordinal scale**:
- **1** represented *beginning* level clinical judgement,
- **2** represented *developing* level,
- **3** represented the *accomplished* level, and
- **4** represented an *exemplary* level of clinical judgement.

This resulted in a **possible range of total scores** from **11 to 44**.

The total scores were used for statistical analyses.
Data Collection

- **IRB approval**
- Permission from **Dean or Chairperson and course coordinators**
- **Faculty recruitment** via face-two-face meeting or via email
  - Faculty Consent
  - Faculty Confidentiality Agreement and Conflict of Interest Form
  - Faculty Demographic Form at end of the study after rubric completion
- **Student recruitment** visited medical-surgical nursing class
  - Student Informed Consent
  - Students established de-identified code
  - Students completed Demographic Form
- **Faculty were notified** as to the student subjects in their group
Data Collection

- **Training of clinical faculty**
  - Tanner’s IMCJ (10 minute voice-over PPT)
  - LCJR scoring (21 minute video produced by Adamson-Haerling, 2011)

- **Inter-rater reliability (IRR) was established**

- At the end of the clinical rotation, after usual school required evaluation, clinical faculty completed
  - LCJR on the study subjects and returned the rubrics and Faculty Demographic Questionnaire to the researcher
## Descriptive Statistics of Students' Categorical Demographic Data (N = 136)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Juniors (n = 75)</th>
<th>Seniors (n = 61)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67</td>
<td>55</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>White/Caucasian</td>
<td>70</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Black/African American</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Asian/Pacific Islander</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Latino</strong></td>
<td>Yes</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>69</td>
<td>58</td>
</tr>
<tr>
<td><strong>Work Experience</strong></td>
<td>Yes</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td><strong>Work Role</strong></td>
<td>Nursing Assistant/NA</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>EMT/Paramedic</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Medical Assistant</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>7</td>
<td>15</td>
</tr>
</tbody>
</table>
### Research Question 1 & 2
Descriptive Statistics of LCJR Total and Subscale Scores for Juniors ($n = 75$) and Seniors ($n = 61$)

<table>
<thead>
<tr>
<th>Variable and Subscale by Group</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>29.77</td>
<td>4.7</td>
<td>20 – 40</td>
</tr>
<tr>
<td>Seniors</td>
<td>36.10</td>
<td>5.4</td>
<td>25 – 44</td>
</tr>
<tr>
<td><strong>Noticing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>7.87</td>
<td>1.6</td>
<td>5 – 12</td>
</tr>
<tr>
<td>Seniors</td>
<td>9.89</td>
<td>1.8</td>
<td>6 – 12</td>
</tr>
<tr>
<td><strong>Interpreting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>5.17</td>
<td>1.1</td>
<td>3 – 8</td>
</tr>
<tr>
<td>Seniors</td>
<td>6.46</td>
<td>1.1</td>
<td>4 – 8</td>
</tr>
<tr>
<td><strong>Responding</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>10.93</td>
<td>1.7</td>
<td>8 – 14</td>
</tr>
<tr>
<td>Seniors</td>
<td>13.25</td>
<td>2.1</td>
<td>8 – 16</td>
</tr>
<tr>
<td><strong>Reflecting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>5.80</td>
<td>1.0</td>
<td>4 – 8</td>
</tr>
<tr>
<td>Seniors</td>
<td>6.51</td>
<td>1.2</td>
<td>4 – 8</td>
</tr>
</tbody>
</table>
Research Question 3
Independent t-test Results for LCJR Total Scores

An independent t-test was computed to compare senior \( (M = 36.10, \text{SD} = 5.42) \) and junior \( (M = 29.77, \text{SD} = 4.67) \) total LCJR scores.

Seniors had a significantly higher mean score than juniors \( (t = 7.31, \text{df} = 134, p < .001) \).
## Research Question 3
MANOVA Results for LCJR Subscale Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing</td>
<td>47.97</td>
<td>1, 134</td>
<td>&lt; .001</td>
<td>1.00</td>
</tr>
<tr>
<td>Interpreting</td>
<td>47.19</td>
<td>1, 134</td>
<td>&lt; .001</td>
<td>1.00</td>
</tr>
<tr>
<td>Responding</td>
<td>50.01</td>
<td>1, 134</td>
<td>&lt; .001</td>
<td>1.00</td>
</tr>
<tr>
<td>Reflecting</td>
<td>14.20</td>
<td>1, 134</td>
<td>&lt; .001</td>
<td>.96</td>
</tr>
</tbody>
</table>
Descriptive Statistics of Demographic Data for Clinical Faculty (N = 17)

- 100% female
- 56% held a master’s degree
- 78% currently practiced as a nurse
- 67% held the academic appointment of clinical faculty or instructor
- 51 mean age
- 27 mean years RN work experience
- 11 mean years as a clinical faculty
LCJR: Ease and Utility

- 67% rated the LCJR “somewhat or very easy to use.”

- 40% reported it took 10 minutes to complete the LCJR for each student.

- 56% judged the LCJR “very or quite valuable” assessment tool of students’ clinical judgement in the clinical setting.
Findings of the Study

- The research hypothesis that seniors have higher clinical judgement total and subscale scores than juniors was supported.
- Seniors scored at “exemplary” level on the total clinical judgement scale and on the noticing, responding, and reflecting subscales.
- Seniors scored at “accomplished” level on the interpreting subscale.
- Juniors scored at “accomplished” level on the total clinical judgement scale and all subscales.
- Clinical faculty reported the LCJR was valuable and easy to use in the clinical setting.
Limitations

- Convenience sample from two accredited universities in Pennsylvania
- Generalizing findings to all junior and senior baccalaureate, pre-licensure nursing students will be difficult
Implications

- Nursing Science and Research
- Nursing Education
- Nursing Practice
References


Thank You!