Connecting the Dots: Nurse Practitioner Core Competency Skill Acquisition in Pace University FNP Students: A Multidimensional Approach to Assessment

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Background

- AACN recommendations for DNP
- Standardization of Curriculum
- NONPF Core Competencies
- End of Program Student outcomes
Student Assessment of Skill Acquisition

- Change in student clinical assessment
- Teacher Lead Simulation
  - After 110, 330, 550 hours of clinical practicum
  - Core competencies are assessed
- Completion of Instruments
Simulation Assessment Format

**First Hour:**
- Teacher led simulation scenario
- Scenario after 110 hours of clinical practica will be based on population covered in the experience
- Scenario after 330 hours of clinical practica may be based on any of the clinical practica covered at the time of assessment
- Scenario after 550 hours of clinical practica will follow the same rule as 330 hours

**One week post assessment:**
- Faculty met with student for debrief to review
  - Scenario
  - Areas of strength
  - Areas in need of remediation
  - Action plan for continued success and improvement
- There will be no pass/fail with this assessment
Connecting the Dots Study Design

**Second Hour:**

- **Study Protocol**
  - repeated measures design at three data collection points, post 110 clinical hours, 330 clinical hours, and 550 clinical hours.
  - This design will identify changes over time within and across groups.
  - Tool development will include exploratory and confirmatory factor analysis, and establishing reliability and validity of the tool.
Assessment tools

- EBP Beliefs and Implementation tool (EBPBI): completed at 110 and 550
- Transcultural Self-efficacy tool (TCSE): completed at 110 and 550
- Leadership Practices Inventory (LPI): completed at 110 and 550
- NP Core Competency Self-efficacy tool (NPCCSE): completed at 110, 330, 550
Research Participants

- Pace University, Lienhard School of Nursing, Department of Graduate Studies, FNP students.
- N = 120
- 95% female, 5% male, with over 40% racial/ethnic diversity.
Preliminary Data

- EBPBI
- TCSE
- LPI
- NPCCSE
# Sample Demographics

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<th>Variable</th>
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<tbody>
<tr>
<td>Age</td>
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<tr>
<td>M=37.35, SD=8.95, Min/Max=28-58</td>
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<tr>
<td>Race/Ethnicity</td>
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<tr>
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<td>100.0</td>
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<tr>
<td>Setting</td>
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<td>%</td>
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<td>-------------------------</td>
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<td>10.5</td>
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<tr>
<td>Multiple Settings</td>
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<td>10.5</td>
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<tr>
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## Participant Current Health Care Setting

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<td>Women’s Health</td>
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<tr>
<td>Geriatric</td>
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<td>5.3</td>
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## Level of Nursing Education

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<tbody>
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<tr>
<td>Associates (Hospital)</td>
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<tr>
<td>Baccalaureate</td>
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<td>50.0</td>
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<td>Master’s</td>
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<tr>
<td>Multiple Types</td>
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EBP - Beliefs Scale

Pretest

M=58.19,
SD=5.11

Postest

M=61.72,
SD=6.10

t(19)=-2.85,
p<.01
Pretest EBP - Implementation Scale

Pretest: M=50.44, SD=13.53
Postest: M=60.72, SD=16.22

$t(18)=-2.63$, $p<.05$
TSET - Cognitive Scale

M = 7.69, SD = 1.90

M = 8.84, SD = 1.07

t(17) = -2.82, p < .01
EBP – Practical Scale

Pretest

Postest

M=7.50, SD=2.26

M=8.79, SD=1.26

t(18)=-2.91, p<.01
**EBP - Affective Scale**

Pretest: $M=8.67$, $SD=1.03$

Postest: $M=9.22$, $SD=.64$

$t(17)=-2.69$, $p<.05$
LPI – Model Scale

Pretest

M=50.04,
SD=7.05

Postest

M=53.90,
SD=4.73

t(19)=-3.54,
p<.01
LPI - Inspire Scale

Pretest

Postest

M=46.69, SD=9.05

M=52.15, SD=6.85

\[ t(19) = -2.47, \quad p < .05 \]
LPI - Challenge Scale

Pretest

Postest

M=47.65, SD=8.32

M=51.80, SD=7.11

$t(19)=-3.53$, p<.001
LPI - Enable Scale

Pretest

Postest

M=52.68, SD=5.82

M=54.70, SD=4.62

t(19)= -1.83, p=.08
All NPC Scales = Not Significant

- NPC - Scientific Foundation Competencies
- NPC - Leadership Competencies
- NPC - Quality Competencies
- NPC - Practice Inquiry Competencies
- NPC - Tech & Info Literacy Competencies
- NPC - Policy Competencies
- NPC - Health Delivery System Competencies
- NPC - Ethnics Competencies
- NPC - Independent Practice Competencies
Lessons Learned

- Data is preliminary
- Length of tools
- Number of tools
- Sample size
- Timing of data collection
Next Steps

- Need to refine the NPCCSE tool
- Have students complete the NPCCSE tool while on campus
- Improve recruitment to increase sample size
- Change data collection location (on campus, before class)