



FINDING BALANCE:
Quasi-Experimental
Evaluation of Trading Final
Semester Undergraduate
Acute-Care Hours for
Leadership Clinical
Activities

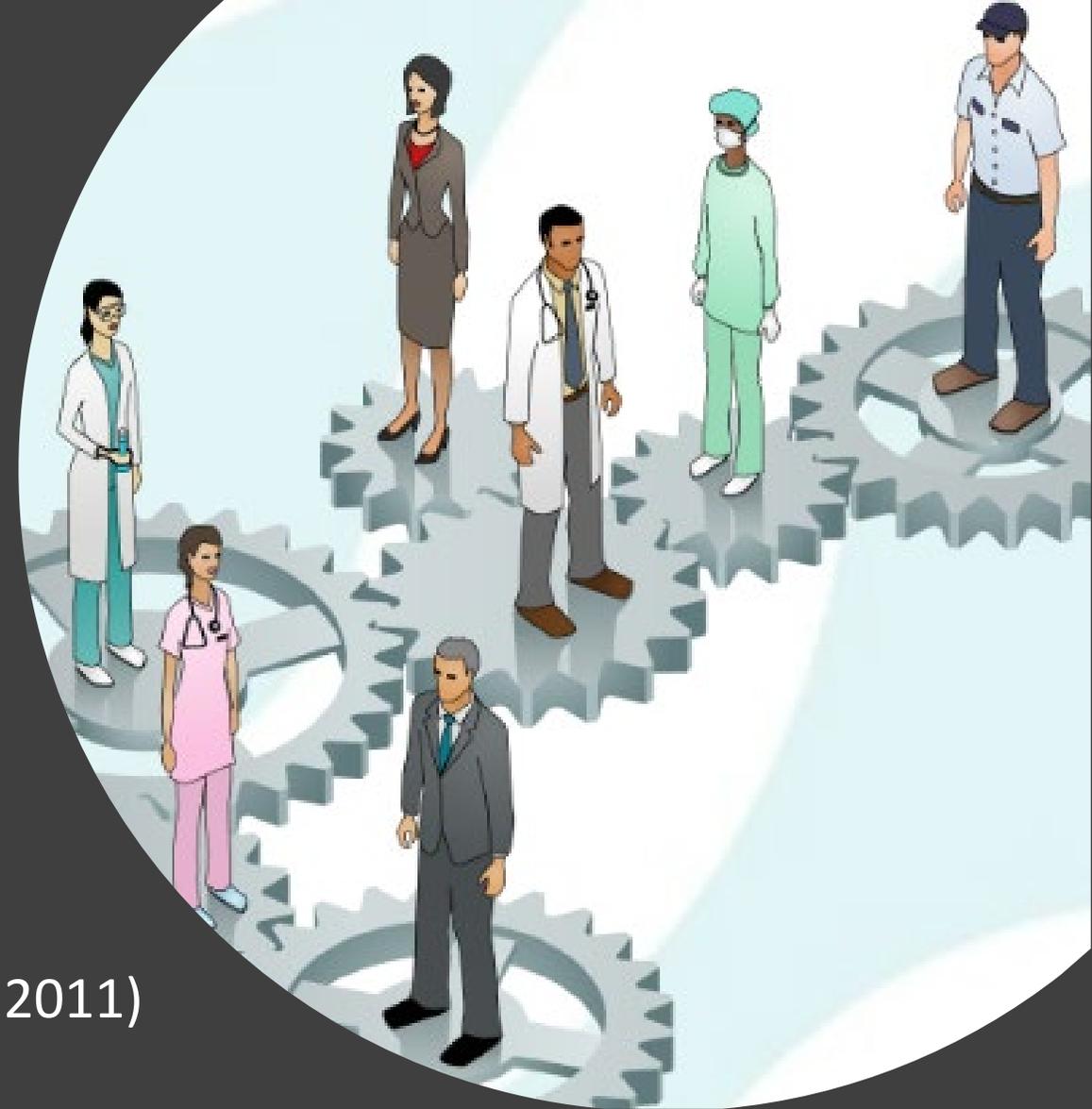
Nancy Novotny PhD, RN

Sandra Nielsen, MS, RN-BC

Mennonite College of Nursing at
Illinois State University
Normal, IL USA

Prelicensure Nursing Education

- **Basic patient care skills are required**
 - Medication and IV fluid administration
 - Client teaching
 - Assessments
 - Assisting mobility
 - Performing nursing procedures
- **Collaborative practice is needed within inter-professional teams** (Francis-Shama, 2016, IOM, 2011)
 - Leadership
 - Communication
 - Teamwork



Educational Challenge:

In prelicensure nursing education, can we amply teach both *clinical patient care skills* and *leadership skills*?

New graduates are expected to possess clinical care skills and capacity for leadership and collaboration (Francis-Shama, 2016; IOM 2011)

Leadership is not well-integrated into clinical nursing practices (Curtis, Sheerin & Vries, 2011)

Front-line nurse leaders are dissatisfied with competence of new nurse graduates (Berkow, Virkstis, Stewart & Conway, 2009)

Students lack confidence and comfort performing basic skills (Aldridge, 2017)

Frequency of clinical skill is related to student comfort and self – confidence (Demiray, Kecici & Cetinkaya, 2016; Wright & Wray, 2012)

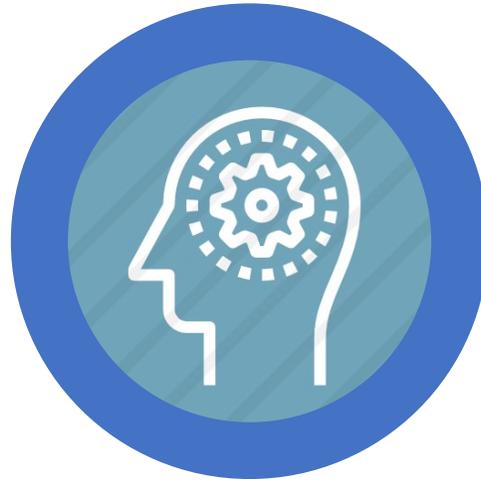
New graduates are unable to demonstrate leadership skills such as taking initiative and prioritization (Berkow et al., 2009)

Goals of the Revised, Expanded Clinical Education



Balance

Clinical hours to increase practice and comfort with clinical nursing skills while enhancing leadership skills



Engage

Students in clinical patient care skills plus other experiences that enlighten the value of leadership



Facilitate

Envisioning leaders as collaborators rather than only observing leaders in management silos



Research Objective

To identify differences in students who were in 86 versus 56-hour acute-care experiences in the final semester leadership clinical on:

1. How often students performed 27 direct patient care clinical skills
2. Students' comfort level performing each skill

Comparison Groups by Clinical Experiences

Historical Clinical

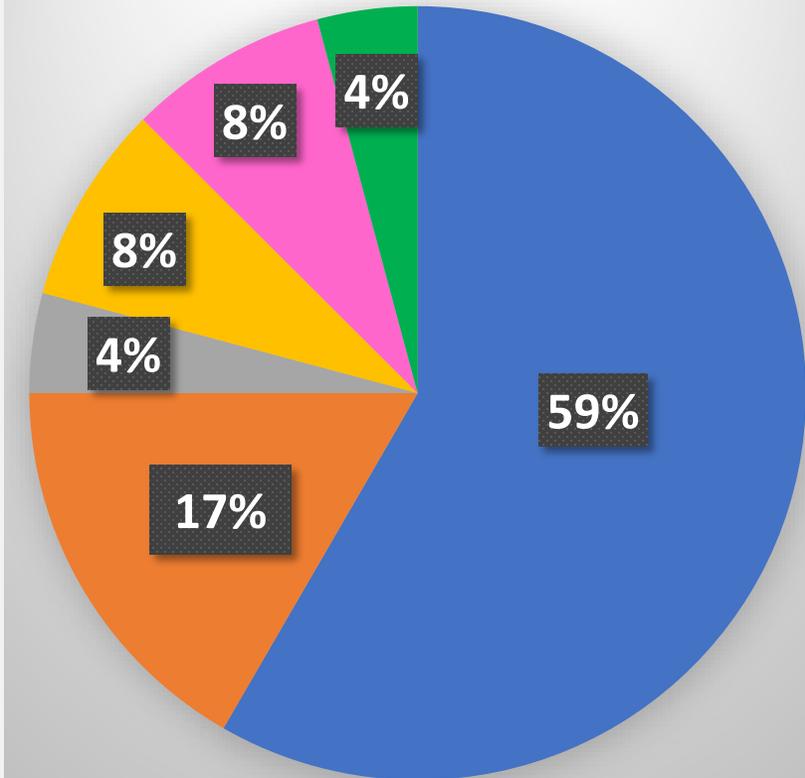
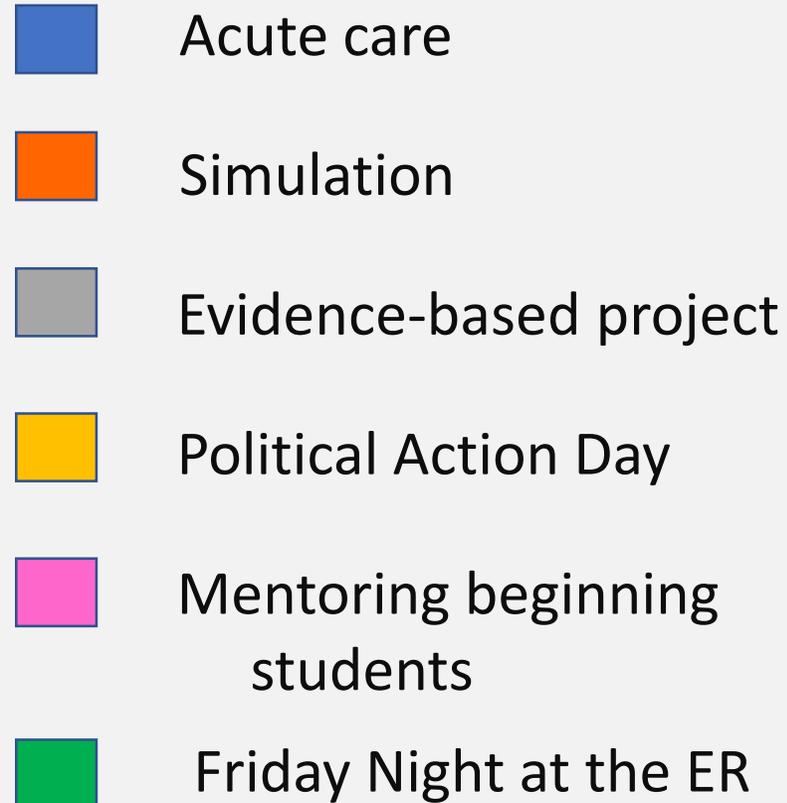
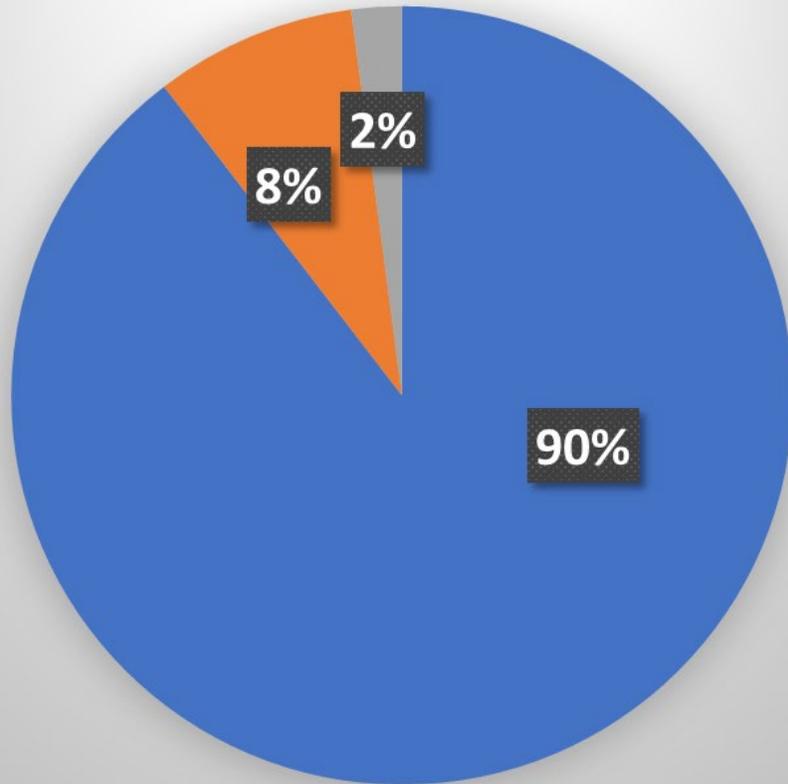
86 acute care hours

n=47, 2015-2017

New Clinical

56 acute care hours

n=129, Spring 2018



Comparison of Clinical Groups

Self-report of frequency and comfort with 27 skills on:

Frequency: Number of times performed in clinical

Comfort: Ranged from 1=*very uncomfortable* to 4=*very comfortable*

| Clinical Group | Before Semester | End of Semester |
|----------------|-----------------|-----------------|
| Historical | X | X |
| New | X | X |

Skills Recorded



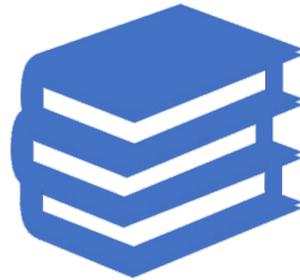
Med Preparation
& Administration



IV Fluid
Administration



Patient
Mobility



Patient
Education



Assessments



Procedures

Data Analyses

Start of semester: Differences between Groups

- *T*- tests for skill frequency
- Mann-Whitney U for comfort with skills

Pre-post Skill Correlations

- Pearson for skill frequency
- Spearman for comfort

End of semester: Differences between Groups

- Identified differences in frequency, controlling for start of semester frequency of each skill using ANCOVA
- Compared the change in comfort level with each skill between groups using Mann-Whitney U

Results

GROUP DIFFERENCES AT START OF SEMESTER

By skill comfort

- New group more comfort with 56% of skills ($p < .006$)

By skill frequency

- Historical group performed 11% more often ($p < .005$)
- New group performed 22% more often ($p < .003$)

PRE-POST SCORE CORRELATIONS (p values .01 to $< .001$)

- 96% of skills for comfort level
- 70% of skills for frequency performed

GROUP COMPARISONS AT END OF SEMESTER

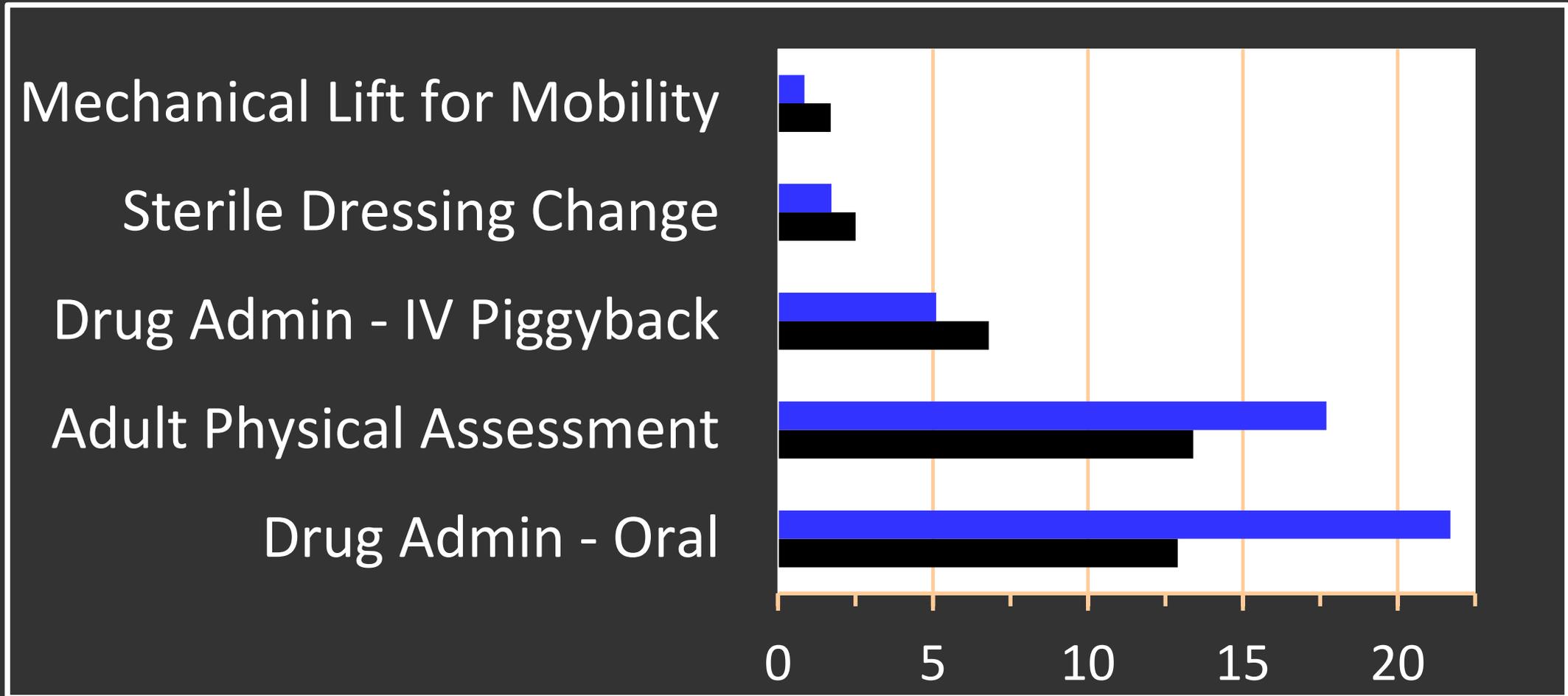
By skill comfort

- Historical group were more comfortable on most IV, oral and injectable drug administration, and IV pump skills ($p < .006$)

By skill frequency

- No differences for 81% of skills
- Differences on five skills (p values from .01 to .001)

Significant Adjusted Group Differences on Frequency Performing Five Skills



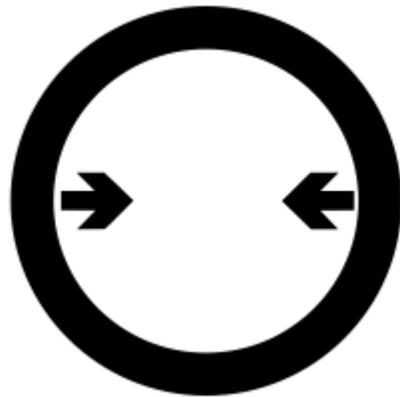
Summary

Strengths



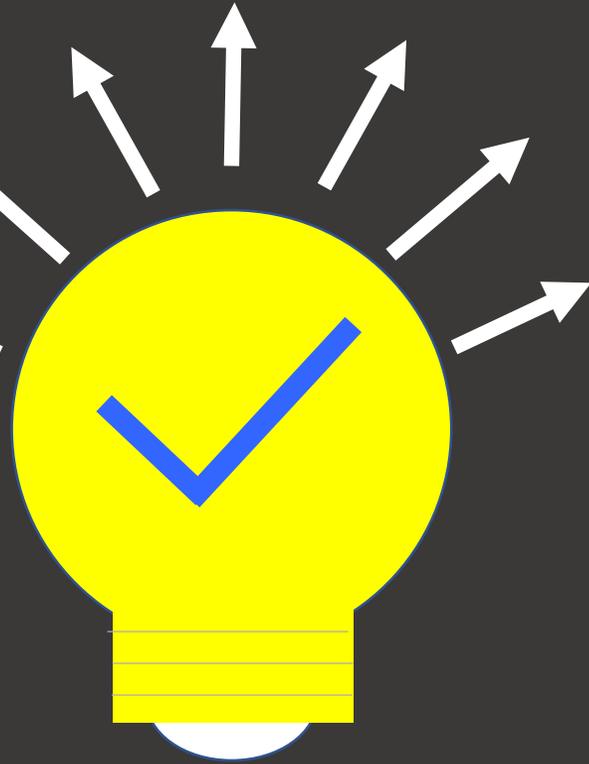
- ✓ Quasi-experimental design
- ✓ Contributes to a small body of mostly qualitative evidence supporting specific clinical experiences for final semester undergraduate BSN students

Limitations



- Type I error risk with multiple tests
- Comparison groups varied in size
- Historical group all within same acute care clinical site
- May not generalize to other programs

Conclusions



Less time in acute care during the leadership clinical had little impact upon students' frequency or comfort performing skills.

Physical assessment and oral drug administration were performed *more* often in the new clinical group despite *fewer* hours in acute care.

Encouragingly, students were able to devote more time in experiences to develop their leadership capacities without sacrificing further development of direct patient care skills.

Recommend future study to determine whether students' engagement in leadership experiences enhances leadership skills.

Finding time to develop leadership *and* direct patient care skills will likely remain a challenge.

References

- Aldridge, M. D. (2017). Nursing students' perceptions of learning psychomotor skills: A literature review. *Teaching and Learning in Nursing, 12*(1), 21-27.
- Berkow, S, Virkstis, K., Stewart, J., & Conway, L (2009). Assessing new graduate nurse performance. *Nurse Educator, 34*(1) 17–22.
- Berragan, L., (2011). Simulation: an effective pedagogical approach for nursing? *Nurse Education Today, 31*(7), 660-663. doi: 10.1016/j.nedt.2011.01.019.
- Curtis, E., Sheerin, F., Vries, J. (2011) Developing leadership in nursing: the impact of education and training. *British Journal of Nursing, 20*(6), 344-352.
- Demiray, A, Kecici, A, & Cetinkaya, MY (2016). Students' perceptions of psychomotor skills training: A qualitative study. *International Archives of Nursing and Health Care, 2*(1), 1–6.
- Francis-Shama, J. (2016) Perceptions of leadership among final-year undergraduate nursing students. *Nursing Management, 23*(7), 35-39.
- Kaihlanen, A., Haavisto, E., Strandell-Laine, C. & Salminen, L. (2018). Facilitating the transition from a nursing student to a Registered Nurse in the final clinical practicum: a scoping literature review. *Scandinavian Journal of Caring Sciences, 32*(2), 466-477. doi:10.1111/scs.12494
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press.
- Manninen E. (1999). Longitudinal study of Finnish nursing students' preferences for knowledge in nursing practice. *Scandinavian Journal of Caring Science, 13*(2), 83–90. doi: 10.1111/j.1471-6712.1999.tb00520.x
- Stayt, L. C., & Merriman, C. (2013). A descriptive survey investigating pre-registration student nurses' perceptions of clinical skill development in clinical placements. *Nurse Education Today, 33*(4), 425-430.
- Wieland, D. M., Altmiller, G. M., Dorr, M. T., & Wolf, Z.R. (2007). Clinical transition of baccalaureate nursing students during preceptored, pregraduation practicums. *Nursing Education Perspectives, 28*(6), 315–21.
- Wright, J., & Wray, J. (2012). Exploring the experiences and expectations of year 1 children's nursing students. *Nursing Children and Young People, 24*(4), 24-28.

Questions
