Undergraduate nursing students' beliefs and readiness to implement evidence based practice

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Faculty Disclosure

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Conflict of interest	None
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Sponsorship/Commercial support	None

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Conflict of interest	None
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Goal and Objectives

- Goal
  - The purpose of this presentation is to disseminate findings of a study regarding nursing students' beliefs and readiness implement evidence based practice (EBP).
- Objectives
  1. The learner will be able to discuss the influence innovative teaching methods have on beliefs and implementation of EBP.
  2. The learner will be able to identify the advantages of teaching nursing research using innovating teaching methods.

Background

- Evidence based practice (EBP) combines
  - Best evidence
  - Clinical experience
  - Patient preferences
- However:
  - Take years to implement new evidence into clinical practice

Background

- Classroom setting may not translated into `real world' practice
  - Silos
- Overwhelming amount of literature
- Limited ability to critique

- Gap between evidence and practice
  - Tradition and history

Purpose

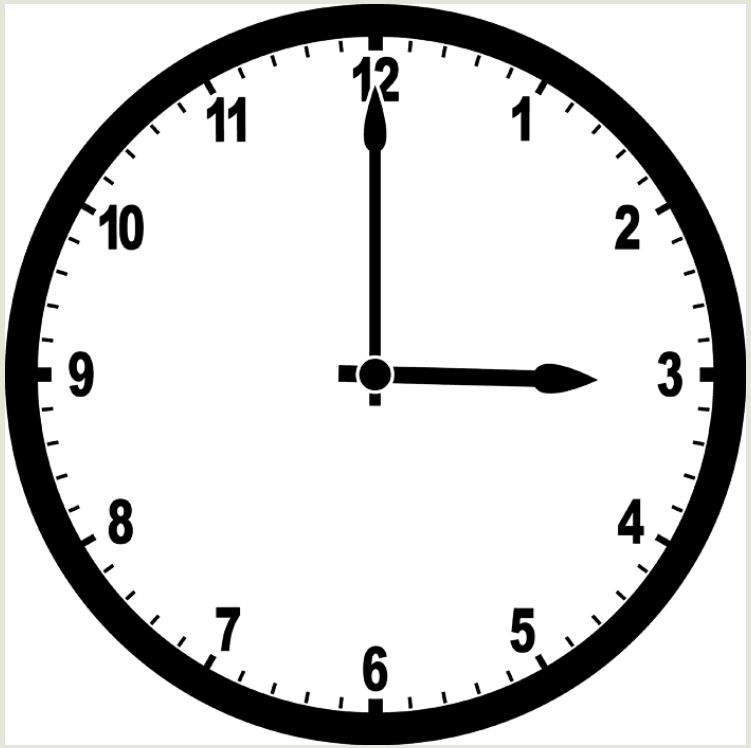
- Explore nursing students' perceptions of EBP
  - Before and after an undergraduate scholarly inquiry course

Purpose

- Hypotheses
  - Students will
    1. Increase
       A. Their belief in EBP
       B. Implementation of EBP
    2. Report positive feeling regarding teaching methods

Classroom teaching strategies

- Weekly instruction of course material
  - Didactic
  - In person
  - 3 hours

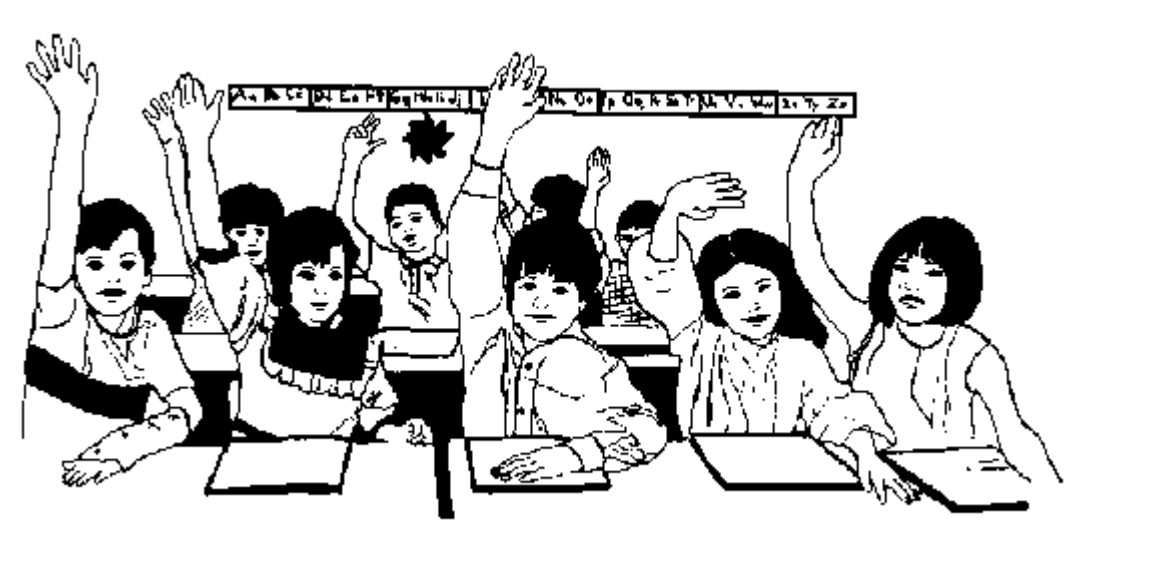


Classroom teaching strategies

- Innovative teaching methods:
  - PowerPoint presentations
  - Video clips
  - Interactive games
  - Hands-on activities
  - A scenario-based written paper about implementation of EBP

Methods

- A convenience sample
  - 240 student nurses
  - Currently enrolled in a scholarly inquiry course
  - Four separate semesters



Methods- tools

- EBP Beliefs Scale
  - Melnyk, Fineout-Overholt, & Mays, 2008
- EBP Implementation Scale
  - Melnyk, Fineout-Overholt, & Mays, 2008
- Demographics

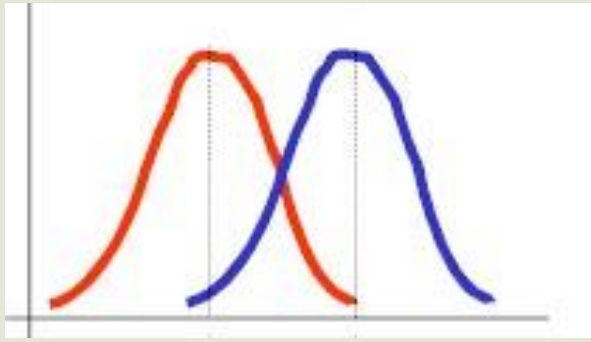
Methods

- The EBP Beliefs Scale is a
  - 16-item questionnaire
    - General beliefs about the usefulness of EBP
  - 1-5 Likert scale (Strongly Disagree to Strongly Agree)
- The EBP Implementation scale is an
  - 18-item questionnaire
    - Application of EBP activities in the prior clinical experience
  - 0-4 scale (0 = No application and 4 = Applied this principle 8 or more times)

Melnyk, Fineout-Overholt, & Mays, 2008

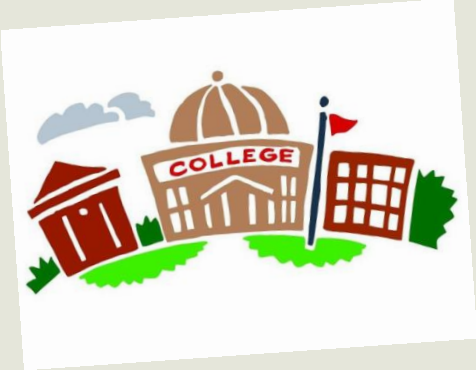
Analysis

- Reviewed for missing data and outliers
- Descriptive statistics
- Paired t-tests
  - Assess pretest/posttest changes
    - EBP belief scores
    - EBP implementation scores



Results - n

- 198 participants completed questionnaires
  - 180 at pretest
  - 174 at posttest
  - 156 completed both times

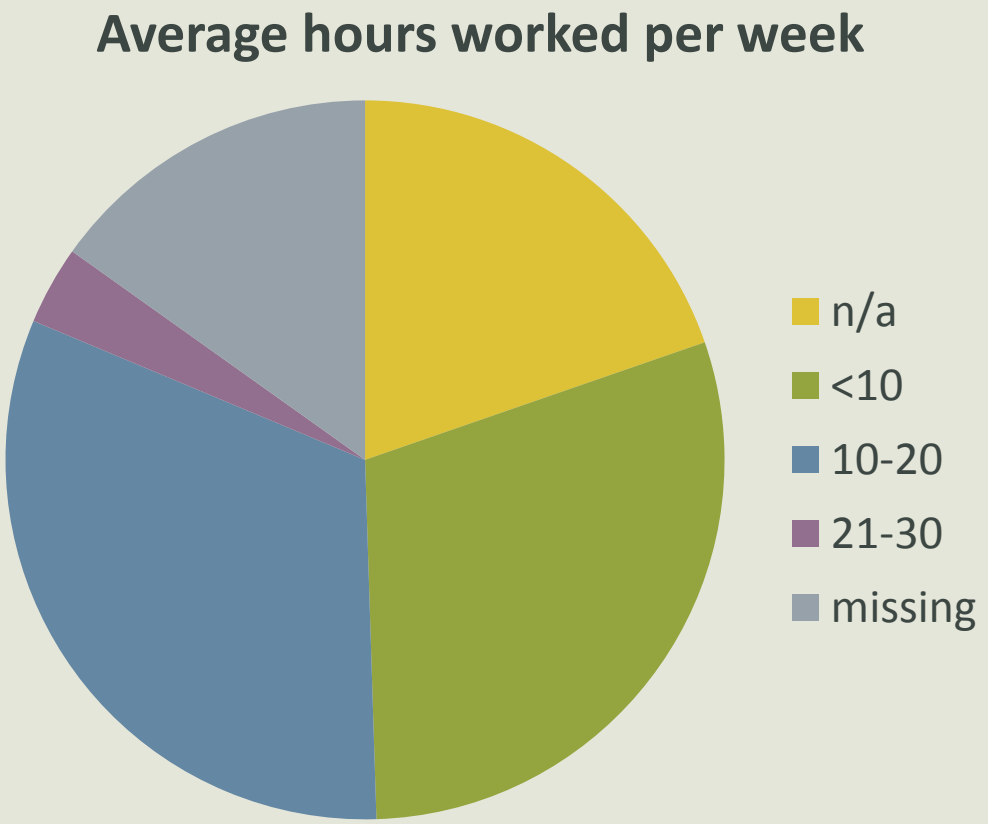


Results- demographics

- Demographics
  - Participants were young
    - M= 21.2 years (2.1)
  - Female
    - 92.4% n=183
      - Male n=9 4.5%
      - Missing 6
  - Reported GPA (grade point average)
    - M= 3.78 (0.19)
      - 4 is highest

Results- demographics

- Students reported working in addition to attending school
  - 63 not working (31.8%)
  - 128 working (64.6)
  - Missing n=7



Results- EBP Beliefs

- EBP belief scores
  - Negatively skewed at time 1
  - Slightly negatively skewed at time 2
  - Univariate outliers noted in pretest and posttest scores for EBP Beliefs
- Cronbach's alpha for the EBP Beliefs scale
  - .83 at pretest
  - .82 at posttest

Results- EBP Beliefs

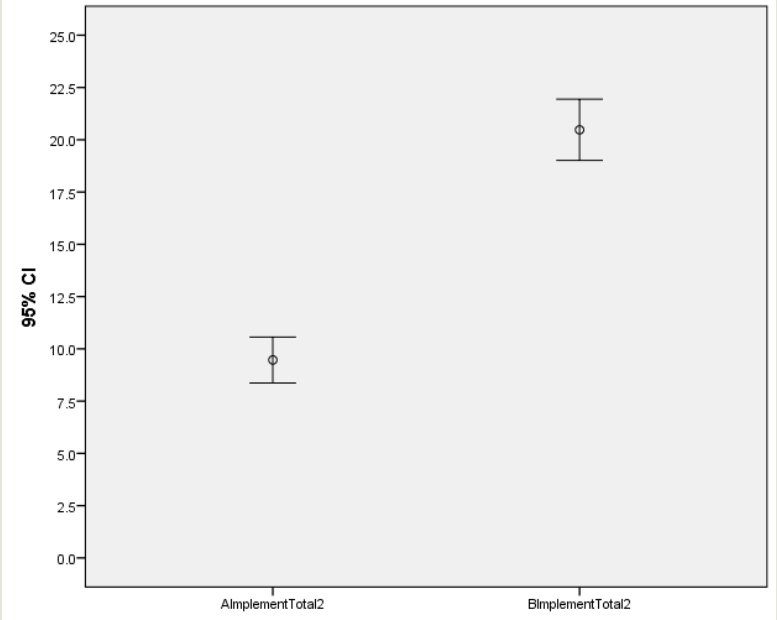
- Paired t-tests were conducted to assess changes from pretest to posttest for EBP belief scores
- The test for EBP belief was significant
  - $t(155) = -17.1$, $p < .001$, $d = 1.38$
- EBP belief scores increased
  - Pretest ($M = 53.3$, $SD = 6.4$)
  - Posttest ($M = 62.6$, $SD = 5.7$)

Results- EBP Implementation

- EBP implementation scores were positively skewed
  - Time 1 and time 2
  - Univariate outliers noted in pretest and posttest scores
- Cronbach's alpha for the EBP Implementation
  - .89 at pretest
  - .89 at posttest

Results- EBP implementation

- Paired t-tests
- The test for EBP implementation was significant
  - $t(155) = -15.97$, $p < .001$, $d = 1.3$
- EBP implementation scores increased from
  - Pretest ($M = 9.5$, $SD = 6.9$)
  - Posttest ($M = 20.5$, $SD = 9.3$)



Conclusions

- Improved the beliefs and implementation of EBP
- Corroborated increase
  - Clinical setting
  - EBP beliefs and implementation following education

(Wallen et al., 2010)

Implications

- Students need opportunities apply EBP principles
  - Early and often
  - ‘Real life’ settings
- Collaboration
  - Clinical sites and faculty
    - Promote innovative teaching strategies
    - Engage current and future staff
    - Life-long learning of EBP principles

Future research

- Effect of EBP education strategies in nursing students
  - Throughout education
- Long term retention of EBP beliefs and implementation
  - What happens after school

Limitations

- Convenience sample
- Relatively young
- Primarily female
- One university
- High GPA

- May not generalize well to male or older populations of student nurses

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Thank you

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Questions

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