Peer Mentoring During Hospital Practicum to Reduce Anxiety in the First Semester Clinical Nursing Student

Danielle Walker PhD, MSN, RN, CNE
### Faculty Disclosure

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Danielle Walker PhD, RN, CNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicts of Interest</td>
<td>None</td>
</tr>
<tr>
<td>Employer</td>
<td>Texas Christian University</td>
</tr>
<tr>
<td>Sponsorship/ Commercial Support</td>
<td>None</td>
</tr>
</tbody>
</table>
Objectives

1. The learner will be able to identify reasons for implementing peer mentoring in the clinical setting.

2. The learner will be able to describe the research study design and peer mentoring intervention.

3. The learner will be able to critique the outcomes of utilizing peer mentors in the clinical setting with first-time clinical nursing students.

4. The learner will be able to interpret lessons learned from peer mentoring in the clinical setting research that are transferable to their teaching environment.
Significance

- Clinical experiences are the largest component of nursing educational experiences

- Clinical experiences are anxiety producing for nursing students (Audet, 1995; Kleehammer, Hart, & Keck, 1990)

- Anxiety can impede learning (Audet, 1995; Blainey, 1980; Melicanavage, 2011; Yerkes & Dodson, 1908)
Significance

- Research suggests peer mentoring facilitates learning and can decrease student anxiety (Christiansen & Bell, 2010; Dorsey & Baker, 2004; Giordana & Wedin, 2010; Harmer, Huffman, & Johnson, 2011; Sprengel & Job, 2004)

- Peer assisted learning/ peer mentoring has been studied and utilized in many academic settings (Colvin & Ashman, 2010; Topping, 2005)

- Little research on peer mentoring in the clinical setting has moved beyond descriptive and case studies (Crisp & Cruz, 2009; Gershenfeld, 2014; Zentz et al., 2014)
What is Peer Mentoring?

- a planned partnering of an experienced student with a less experienced individual to work towards academic and clinical growth (Dorsey & Baker, 2004)

- It is “providing support in a non-evaluative environment” (Sprengel & Job, 2004 p. 246)

- Peer mentoring requires participation of both parties, support, cooperative learning and development of a working relationship (Sprengel & Job, 2004)
Objectives:
1. To determine if peer mentoring in the clinical setting decreases “new” nursing student anxiety during clinical experiences
2. To determine if student perceptions of their clinical experience improve.

Central Hypothesis:
Peer mentoring in the clinical setting will decrease nursing student anxiety while increasing student satisfaction with the clinical environment.
RESEARCH DESIGN
Research Design

• Informed by previous study
• Pilot Study
• Quasi-Experimental
Sample and Setting

Purposive Sampling

• All possible subjects were first semester nursing students at Texas Christian University.

• Desired sample size = 70 subjects (35 in each group)

Inclusion Criteria
First semester nursing students enrolled in a clinical course.

Exclusion Criteria
Prior hospital experience and/or previous enrollment in a clinical nursing course.
Recruitment

- All potential subjects were introduced to the study at clinical orientation
- After potential subjects stated interest, they were screened to ensure they met criteria
- 65 subjects expressed interest
- 41 students were consented (4 excluded for administrative issues)
Recruitment of Mentors

- Recruited from Senior Class
  - Application
- Training
  - Informed by previous study
  - Modeled after training conducted by Sprengel and Job (2004)
- Daily Objectives
- Enrolled in an additional 1 credit course
Intervention

- Dyads created- “new” student and Senior student
- Peer mentoring for first 3 weeks of clinical experience
- Dyads spent the entire clinical day working together to care for the patient
- Research team members supervised mentors in the clinical setting
Instruments

- State Trait Anxiety Index (STAI)
  - Cronbach’s Alpha = .93

- Clinical Experience Assessment Form (CEAF)
  - Cronbach’s Alpha = .82
Protection of Human Subjects

- UTMB IRB approval
- TCU IRB approval
- Informed Consent prior to initiation of research
- All data collected online
- All data identified through ID only
- Data stored in a password protected database accessible only on a password secured laptop
DATA ANALYSIS, RESULTS, MAJOR FINDINGS, AND DISCUSSION
Sample Description

• N = 37
  – Intervention (n=19)
  – Observation (n=18)
  – Post test (n=35)

• 97% Female (n=36)

• 29.7% (n=11) Employed (full or PT)

• Mean Age= 19

• Mean GPA= 3.39
Differences Between Groups

- Differences between groups were analyzed for significance
  - No significant differences between groups across any measure (STAI/ CAEF) at pretest
  - Intervention group had a significantly higher GPA
  - Intervention group had more students who were not working (no employment was in hospital setting)
Psychometrics

- All instruments are reliable in this population

- Cronbach’s Alpha
  - State/Trait Anxiety pre-test = .714
  - State/Trait Anxiety post-test = .764
  - CEAF pre-test = .899
  - CEAF post-test = .755
Results

• Main effect of time on Anxiety (STAI, CEAF)
• At post-test the Intervention group had significantly lower Anxiety (CEAF)

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Trait Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>17</td>
<td>40.88</td>
</tr>
<tr>
<td>Posttest</td>
<td>17</td>
<td>39.12</td>
</tr>
<tr>
<td>State Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>17</td>
<td>48.82</td>
</tr>
<tr>
<td>Posttest</td>
<td>17</td>
<td>41.35</td>
</tr>
<tr>
<td>CEAF Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>17</td>
<td>3.51</td>
</tr>
<tr>
<td>Posttest</td>
<td>17</td>
<td><strong>2.32</strong></td>
</tr>
</tbody>
</table>
Results

• Specific CEAF items with significantly lower post test Anxiety in the intervention group
  – Using equipment
  – Patient Care

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n  M   SD</td>
<td>n  M   SD</td>
</tr>
<tr>
<td>Using Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>19  3.89 .94</td>
<td>18  3.61 .92</td>
</tr>
<tr>
<td>Posttest</td>
<td>18  2.56 1.34</td>
<td>17  1.47 .72</td>
</tr>
<tr>
<td>Providing Patient Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>19  3.74 1.05</td>
<td>18  3.39 1.14</td>
</tr>
<tr>
<td>Posttest</td>
<td>18  2.50 1.50</td>
<td>17  1.59 1.06</td>
</tr>
</tbody>
</table>
Limitations

- Quasi-experimental
- Limited generalizability
- Lack of time and attention control
- Possible confounding variables
Lessons Learned

- Experimental research in nursing education is difficult
- Nursing education research takes partnership
- Intervention length was effective
- More rigorous training may produce better results
- Matching of mentors can be difficult
- Anecdotal Findings
  - Nurses loved having the mentors
  - A lot of help was provided on EHR, students learned it better.


References


Questions