Effects of Anxiety Reducing Interventions on Performance Anxiety in Graduate Nurses

Georgita Tolbert Washington, PhD, RN-BC, MSN
Alumnus CCRN

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Presenter Disclosure Information

- Georgita Tolbert Washington

- Effects of Anxiety Reducing Interventions on Performance Anxiety in Graduate Nurses

**DISCLOSURE INFORMATION:**

- The following information exists related to the presentation:
  - Partial Funding
    - Epsilon Sigma Chapter
    - Sigma Theta Tau International Honor Society of Nursing
    - East Tennessee State University, Johnson City, Tennessee
Objectives

- Discuss the concept of performance anxiety
- Identify those who may be experiencing performance anxiety
- Discuss the implications of the results for nursing
Background

- The laws of supply and demand apply to nurses
- Successful transition of new graduates
- Interventions needed to facilitate transition

Berkow, Virkistis, Stewart, & Conway, 2009; Kelly & Courts, 2007; Schoessler & Waldo, 2006
Transition

• Influencing factors
  ◦ Lack of confidence
  ◦ Mistakes
  ◦ New situations
  ◦ Overwhelmed
  ◦ Socialization
  ◦ Self-sufficiency
  ◦ Night shift
  ◦ Physicians
  ◦ Expectations
  ◦ Medications
  ◦ Managing groups of patients
  ◦ New procedures
  ◦ Preceptors

• Unsuccessful
  ◦ Organizational
  ◦ Professional
  ◦ Personal

Oermann & Garvin, 2002; Phillips, 2006; Hyrkas & Shoemaker, 2007
Newhouse, Hoffman, & Hairston, 2007; Goode & Williams, 2004; Pine & Tart, 2007
Performance anxiety

- Anxiety that affects ability to perform
- Previously learned information
- Reaction to a stimulus
  - Different than general anxiety
  - Occurring in certain situations

- Occurs intrapersonally
- Manifested interpersonally

American Psychiatric Association, 2000; American Hospital Association, 2000; Rodenbaugh & Chambless, 2004
Purpose

- Verify and clarify level of performance anxiety
- Evaluate effectiveness of anxiety reducing interventions
Theoretical perspective
Interpersonal Relations

- Nurse/patient vs Preceptor/new graduate
- Overlapping phases
  - Orientation
  - Working
    - Identification
    - Exploitation
  - Resolution
- Anxiety
- Relief behaviors (dysfunctional)

Model cases

- Mary
  - Intrapersonal
  - Interpersonal

- Georgita
  - Intrapersonal
Research Questions

- In the acute care setting
  - Does the level of performance anxiety differ between new graduate nurses who have and have not experienced anxiety reducing interventions?
  - What is the effect of the preceptor/new graduate relationship and perception of social support on performance anxiety in new graduate nurses who do and do not experience anxiety reducing interventions?
Review of the literature

- New graduate transition
- Performance anxiety
- Anxiety & the theory of interpersonal relations
- Nursing students & test anxiety
- New professional nurses & performance anxiety
- Preceptor/new-graduate relationship & performance anxiety
- Theory of interpersonal relations
- Performance anxiety reducing interventions

Peplau, 1952, 1991; Meisenhelder, 1987; Forchuck, 1991; Duchscher, 2001; Wright, 2002; Roche, Lamoureux, & Teehan, 2004; Fox, Henderson, & Malko-Nyhan, 2006
Kirchner, 2003; Everhart and Slate, 2004; Valentine, Meyer-Dinkgrafe, Acs, Wasley, 2006; Sonnenmoser, 2006Hinds & Harley, 2001; Reising, 2002; Nolan & Murphy, 2006; Schoessler & Waldo, 2006
Methods

• Protection of human subjects
  ◦ IRB approval

• Sample
  ◦ 15-facility health care organization
  ◦ Graduate nurse orientation
    • Nurse residency program

• Research design
  ◦ Quasi-experimental
  ◦ Mixed methods
Methods
Data collection tools

- Demographic data
- Relationship form (adapted)
- Clinical Experience Assessment form (adapted)
- Personal Resource Questionnaire 85
- Open ended questions**
- Post intervention statements**

** Treatment group
Methods

Interventions & Application

- Cognitive behavior therapy concepts
- Progressive muscle relaxation
- Reflective journaling
- Monthly @ residency sessions
Methods
Data Analysis Plan & Parameters

- Descriptive
- Mixed model
- Chi square
- Moderated regression
- Content analysis

- Methodological limitations
- Delimitations
# Results

Descriptive statistics

<table>
<thead>
<tr>
<th>Sample descriptive</th>
<th>Value</th>
<th>Sample descriptive</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>n = 34</td>
<td>Educational preparation</td>
<td>53.3 % AD</td>
</tr>
<tr>
<td>Control</td>
<td>42 (25)</td>
<td>First degree</td>
<td>73.5%</td>
</tr>
<tr>
<td>Treatment</td>
<td>24 (9 -2)</td>
<td>JCMC</td>
<td>47.1%</td>
</tr>
<tr>
<td>Gender</td>
<td>88.2% female</td>
<td>Medical Surgical</td>
<td>35.5%</td>
</tr>
<tr>
<td>Age range</td>
<td>67.6% 20 – 29</td>
<td>Personal anxiety</td>
<td>43.8% “very much”</td>
</tr>
<tr>
<td>Time RN</td>
<td>70.6% &lt; 3 mos</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Post Study**

| One preceptor            | 39.4%          | Five of six sessions    | 55.9%          |
|                         |                |                          |                |
| > 2 preceptors           | 60.7%          | Personal anxiety         | 38.2% “very much” |

p< .05
### Results

**Statistical differences between groups & Reliability Coefficients**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Group</th>
<th>Statistical analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of time as an RN</td>
<td>Treatment – 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control – 60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;1 – 3 mos</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.100(1).024</td>
</tr>
<tr>
<td>Educational preparation</td>
<td>Treatment – 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control – 33.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSN</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.571(1).003</td>
</tr>
<tr>
<td>Nursing as a second degree</td>
<td>Treatment – 66.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control – 12%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.161(1).001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measurement tool</th>
<th>Reliability coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRQ85</td>
<td>.794 (.87-.93)</td>
</tr>
<tr>
<td>Clinical Experience Assessment form</td>
<td>.838 (.82)</td>
</tr>
</tbody>
</table>
Results

Research Question 1

- Does the level of performance anxiety differ between new graduate nurses who have and have not experienced anxiety reducing interventions?

<table>
<thead>
<tr>
<th>Variable &amp; Measurement</th>
<th>Mean(SD)</th>
<th>Mixed model ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance anxiety-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre – 45.80(1.963)</td>
<td></td>
<td>Within groups</td>
</tr>
<tr>
<td>Post – 39.12(1.632)</td>
<td></td>
<td>difference</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td>16.775(1).001*</td>
</tr>
<tr>
<td>Pre – 47.56(4.090)</td>
<td></td>
<td>Pre Post*Group</td>
</tr>
<tr>
<td>Post – 39.11(4.046)</td>
<td></td>
<td>effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.228(1).636</td>
</tr>
</tbody>
</table>

p< .05
Results

Research Question 2

- What is the effect of the preceptor/new graduate relationship and perception of social support on performance anxiety in new graduate nurses who do and do not experience anxiety reducing interventions?

<table>
<thead>
<tr>
<th>Intervening variable</th>
<th>Moderated Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction effect of social support on performance anxiety</td>
<td>2.794(3).057</td>
</tr>
<tr>
<td>Interaction effect of preceptor/new-graduate relationship on performance anxiety</td>
<td>1.142(3).350</td>
</tr>
</tbody>
</table>

p< .05
## Post Hoc results

<table>
<thead>
<tr>
<th>Variable &amp; Measurement</th>
<th>Mean(SD)</th>
<th>Mixed model ANOVA F(df)sig</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preceptor/new graduate relationship – Relationship Form</strong></td>
<td>Control</td>
<td>Within groups difference .218(1).644 Pre Post*Group effect .416(1).524 Between group difference .465(1).501</td>
</tr>
<tr>
<td></td>
<td>Pre – 3.88(1.922)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post – 3.80(1.658)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre – 3.17(.983)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post – 3.67(1.033)</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived Social support – PRQ85</strong></td>
<td>Control</td>
<td>Within groups difference 4.613(1).040* Pre Post*Group effect .543(1).467 Between group difference 2.902(1).099</td>
</tr>
<tr>
<td></td>
<td>Pre – 114.40(17.347)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post – 120.20(11.944)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre – 119.29(10.111)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post – 131.14(15.093)</td>
<td></td>
</tr>
</tbody>
</table>

p< .05
## Results

Post intervention survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage - response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I found the CBT sessions useful</td>
<td>56% “not much”</td>
</tr>
<tr>
<td>I found the PMR exercises useful</td>
<td>67% “not much”</td>
</tr>
<tr>
<td>I found the journaling useful</td>
<td>67% “not much”</td>
</tr>
<tr>
<td>The group interactions during the CBT &amp; PMR sessions were useful to me</td>
<td>38% “some”</td>
</tr>
</tbody>
</table>

*p* < .05
Results
Open ended questions

- What were your thoughts while engaging in the CBT exercises?
- What were your thoughts while engaging in the PMR exercises?
- What were your thoughts while engaging in reflective journaling?
- What is your overall evaluation of the usefulness of these sessions in reducing performance anxiety?
Results
Open ended questions

- Four categories
  - Rejection of the intervention
  - No active engagement with the intervention**
  - Attention to the intervention
  - Active engagement with the intervention
Discussion

Outcomes related to this research

- Performance anxiety present in new graduates

- Intervening variable – relationship
  - No interaction effect on performance anxiety

- Intervening variable – social support
  - Statically significant increase within groups
Discussion
Outcomes related to this research

- Increased support – no progress of relationship***
- Journaling
- Rejection of the intervention
- Interventions unnecessary
Discussion
Outcomes related to the literature – The sample (n=34)

- Similarities
- Differences
- Control vs treatment

- Interventions useful in decreasing performance anxiety
  - Consistent
- Differences between groups
  - Not consistent
- Journaling
  - These results inconclusive
Discussion
Outcomes related to the literature – research questions

- **Relationship**
  - Multiple preceptors
    - Dissatisfaction
  - Consistent

- **Support**
  - Desired and needed
  - Increase is consistent
  - Not a factor
    - inconsistent
Conclusions

- Existence of performance anxiety
- Appropriate level to cope with transition
  - Other factors influence performance anxiety
  - Identify those other factors
  - Small sample
- Instrument modifications
Strengths

• Extends the study of performance anxiety to this population
• Existence demonstrated
• Evaluation of existing tools in this population
• LCSW as expert with the interventions
Limitations

- Small sample size
  - Unclear of effect of these interventions
  - Unable to generalize results
- Non-randomized groups
- Multiple preceptors
- Not all attended all sessions
- No mechanism to determine practice
- Environmental noise
Implications for Nursing

- Research
  - Further exploration of the preceptor/new graduate relationship

- Education
  - Acknowledge its existence

- Practice
  - Increased awareness of preceptors, managers, tenured staff, new graduates
The End!