

Effects of Anxiety Reducing Interventions on Performance Anxiety in Graduate Nurses

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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
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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



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

Sarason, 1984; Duchscher, 2001; Kim, 2003; Peplau, 1952, 1991

Purpose

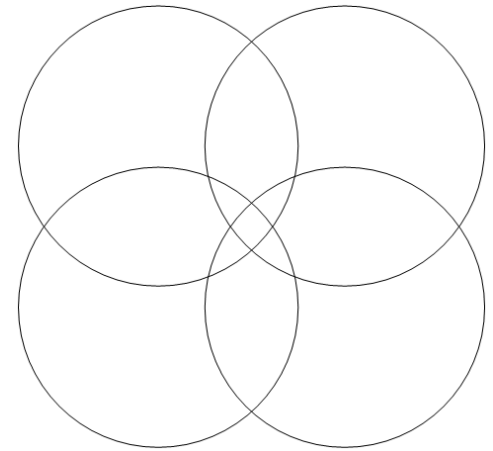
- Verify and clarify level of performance anxiety
- Evaluate effectiveness of anxiety reducing interventions



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

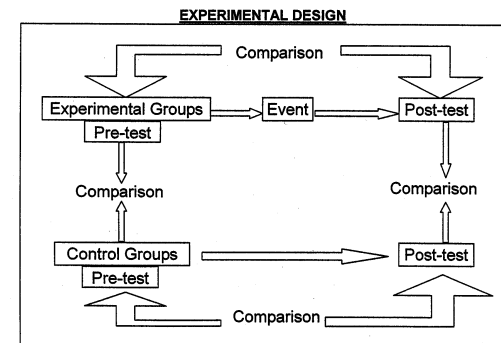
- New graduate transition
- Performance anxiety
- Anxiety & the theory of interpersonal relations
- Nursing students & test anxiety
- New professional nurses & performance anxiety
- Preceptor/new-graduate relationship & performance anxiety
- Theory of interpersonal relations
- Performance anxiety reducing 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, 2006; Hinds & 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
-
- ```
graph LR; A[Experimental Groups] --> B[Pre-test]; B --> C[Event]; C --> D[Post-test]; D --> E[Comparison]; A --> F[Comparison]; F --> C; E --> G[Comparison]; G --> D;
```



# 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

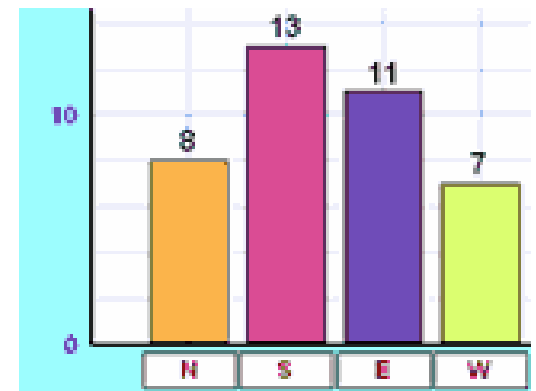
- Cognitive behavior therapy concepts
- Progressive muscle relaxation
- Reflective journaling
- Monthly @ residency sessions



# Methods

## Data Analysis Plan & Parameters

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



- Methodological limitations
- Delimitations



# Results

## Descriptive statistics

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

| Characteristic             | Group                                           | Statistical analysis<br>X <sup>2</sup> (df) sig |
|----------------------------|-------------------------------------------------|-------------------------------------------------|
| Length of time as an RN    | Treatment – 100%<br>Control – 60%<br><1 – 3 mos | 5.100(1).024                                    |
| Educational preparation    | Treatment – 100%<br>Control – 33.3%<br>BSN      | 8.571(1).003                                    |
| Nursing as a second degree | Treatment – 66.7%<br>Control – 12%<br>Yes       | 10.161(1).001                                   |

| Measurement tool                    | Reliability coefficient |
|-------------------------------------|-------------------------|
| PRQ85                               | .794 (.87-.93)          |
| Clinical Experience Assessment form | .838 (.82)              |

# Results

## Research Question 1

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

| Variable & Measurement                                         | Mean(SD)                                                                                                                     | Mixed model ANOVA<br>F(df)sig                                                                                                                                  |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance anxiety-<br>Clinical Experience<br>Assessment form | <b>Control</b><br>Pre – 45.80(1.963)<br>Post – 39.12(1.632)<br><b>Treatment</b><br>Pre – 47.56(4.090)<br>Post – 39.11(4.046) | <b>Within groups<br/>difference</b><br>16.775(1).001*<br><b>Pre Post*Group<br/>effect</b><br>.228(1).636<br><b>Between group<br/>difference</b><br>.067(1).798 |

# 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?

| Intervening variable                                                             | Moderated Regression Analysis<br><i>F(df)sig</i> |
|----------------------------------------------------------------------------------|--------------------------------------------------|
| Interaction effect of social support on performance anxiety                      | 2.794(3).057                                     |
| Interaction effect of preceptor/new-graduate relationship on performance anxiety | 1.142(3).350                                     |

# Post Hoc results

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

# Results

## Post intervention survey

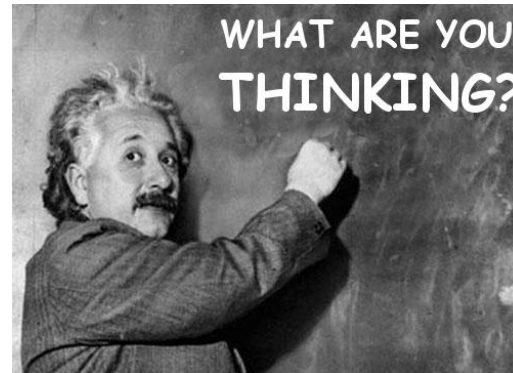
| Statement                                                              | Percentage - response |
|------------------------------------------------------------------------|-----------------------|
| I found the CBT sessions useful                                        | 56% “not much”        |
| I found the PMR exercises useful                                       | 67% “not much”        |
| I found the journaling useful                                          | 67% “not much”        |
| The group interactions during the CBT & PMR sessions were useful to me | 38% “some”            |

$p < .05$

# 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!

