Learning How to Learn: Nurses' Experiences with Failure and Success

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Research Questions

• To describe the experiences of nurses who failed a nursing course, completed a nursing program and passed the NCLEX on the first attempt

• *Research questions:* What are the factors registered nurses identify as:

1. Contributing to their failure of a nursing course?
2. Facilitating their successful completion of the failed nursing course?
3. Promoting their continued success in nursing courses and completion of their nursing program?
4. Sustaining the nurse’s success through passing the NCLEX-RN examination on the first attempt?
Rationale / Significance of Study

• **Nursing shortage**
  - 1.09 million by 2024

• **College attrition rates**
  - 30-41% attrition rates
  - Graduation rates of 22-66%

• **Nursing school attrition rates**
  - Prediction of nursing student success
  - Admission/academic variables
  - Remediation
## Review of Literature

### Admission Criteria
- Grade Point Average
- Prior courses completed
- Pre-admission tests
- Age
- Gender
- Ethnicity
- English as a second language
- Pre-requisites at community college versus 4 year university

### Attrition Studies
- Course grades/Pre-admission tests to predict course completion and/or NCLEX-RN results
- Reasons for leaving a program
- Personal characteristics of completers versus non-completers
- Understanding of nursing school requirements
Review of Literature

• **Retention studies**
  – Demographic characteristics and sociocultural data

• **Remediation studies**
  – Tutoring, learning styles, alternative teaching styles, lack of scientific rigor

• **Lived experience studies**
  – Richer description than academic measures, older studies

• No conclusive answers – Gap in the literature
Conceptual Framework

• **Hermeneutic philosophy**
  – Theory based on a person’s verbal or written communication of the experience/phenomenon

• **David Kolb’s Experiential Learning Theory**
  – Combines experience, perception, cognition, and behavior
Methods - Research Design

- **Interpretive qualitative phenomenology**
  - Used when little is known about phenomenon
  - Explore data “stories” to identify themes not obvious to the participant
Methods

• **Institutional Review Board**

  – Study was submitted to the University of Arkansas for Medical Sciences Institutional Review Board

  – Request to change inclusion criteria from completing a BSN program within 12 months of the interview to 18 months
Methods - Sample

• **Inclusion Criteria**
  - Male or female nurses of all races and ethnicities who were 21 years of age or older
  - Had failed one nursing course, then successfully completed the course
  - Had completed a BSN nursing program within 18 months of the interview
  - Had successfully passed the NCLEX-RN examination on the first attempt
  - Consented to participate in the study
Methods - Sample

• **Exclusion Criteria**
  
  – Remediation outside the program that is not required as a course/program requirement or an independent NCLEX review course
  
  – Completion of an accelerated BSN program
Methods - Sample

• Recruitment
  – Purposive
    • Contacts with faculty (n=18)
    • Snowball with participants (n=2)
  – Total potential participants identified (n=20)
  – Total participants recruited (n=14)
  – Participants recruited from 5 different public universities
Methods - Sample

• **Saturation**
  
  – Reached at seven interviews as determined by Principal Investigator and confirmed by Dissertation Chair

  – Recruitment and interviews continued until fourteen were completed
Methods - Setting

- **Location of Interviews**
  - Private, quiet locations
  - Mutually agreed upon by participants and Principal Investigator
Methods- Measure/Instruments

Demographic Form

- Age
- Gender
- Ethnicity
- English as a primary language
- Learning disability
- Marital status
- Number of children in the home
- Work during school
- Financial Assistance
- Type of nursing program
- Pre-admission test required
- Graduation date
- Number of semesters enrolled in nursing
- Course failed
- Type of course failed
- Previous experience with course failure
**Methods - Measure/Instruments**

- **Interview Guide**
  - Open ended with lead-in and probe questions
  - Lead in: “Tell me about your experiences of failure and then success within your nursing program”
  - Probe question eliciting the most data was “What would you tell someone who is struggling in a nursing program?”

- **Field Notes**
  - Recorded after each interview
  - Non-verbal behavior
Methods - Measure/Instruments

- **Information Sheet – no consent required**

- **Demographic Form**
  - Developed from review of literature
  - Completed prior to starting interview
Trustworthiness

• Qualitative standard
  – Credibility
  – Dependability
  – Confirmability
  – Transferability
Procedure - Interviews

• **Audiotaped**
  – Digital recorder
  – Initial interviews (40-150 minutes)
  – Participants reported accurate interpretation of data and did not provide further information on follow-up interviews

• **Transcribed**
  – Two experienced transcriptions used for data
  – Transcribed within two weeks of receiving interview
  – Confidentiality maintained
Procedure - Data Analysis

• **Demographic Information**
  – SPSS version 22
  – Descriptive statistics – frequencies

• **Interviews**
  – Verbatim - each transcription was compared with audiotape by PI
  – Second interview used to verify accuracy
  – Ethnograph 6.0 data management software
Procedure - Data Analysis

- **Naïve reading of interviews**
  - Immersion in data

- **Content analysis**
  - Analyzing line by line to identify patterns and codes

- **Code book**
  - Definitions after third interview
  - Dissertation Chair reviewed coding of first six interviews
  - Each interview coded

- **Constant comparison**
  - Comparing data from each interview to find commonalities from the raw data
  - Emerging themes
## Characteristics of Participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>78.6%</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td>10</td>
<td>71.4%</td>
</tr>
<tr>
<td>26-30</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>36-40</td>
<td>3</td>
<td>21.4%</td>
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<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>3</td>
<td>21.4%</td>
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<tr>
<td>Caucasian</td>
<td>10</td>
<td>71.4%</td>
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<tr>
<td>Hispanic</td>
<td>1</td>
<td>7.1%</td>
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<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
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<tr>
<td>Single</td>
<td>8</td>
<td>57.1%</td>
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<tr>
<td>Married</td>
<td>5</td>
<td>36.7%</td>
</tr>
<tr>
<td>Divorced</td>
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<td>7.1%</td>
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</table>
### Characteristics of Participants

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<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Dependent Children: Yes</td>
<td>4</td>
<td>28.6%</td>
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<tr>
<td>No</td>
<td>10</td>
<td>71.4%</td>
</tr>
<tr>
<td>Number of Children: 1</td>
<td>1</td>
<td>14.3%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>7.1%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Primary Language: English</td>
<td>13</td>
<td>92.9%</td>
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<tr>
<td>Spanish</td>
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<tr>
<td>Learning Disability: ADHD</td>
<td>2</td>
<td>14.3%</td>
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</tbody>
</table>

Sample Demographics
## Characteristics of Participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work During School</td>
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<tr>
<td>No</td>
<td>4</td>
<td>28.6%</td>
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<tr>
<td>Full-Time</td>
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<td>14.3%</td>
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<tr>
<td>Part-Time</td>
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<td>57.1%</td>
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<tr>
<td>Financial Aid/ Scholarship</td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>13</td>
<td>93.0%</td>
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<tr>
<td>No</td>
<td>1</td>
<td>7.0%</td>
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<tr>
<td>Pre-requisite Courses Completed</td>
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<tr>
<td>Community College</td>
<td>3</td>
<td>21.0%</td>
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<tr>
<td>4-year University</td>
<td>8</td>
<td>57.0%</td>
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<tr>
<td>Both</td>
<td>3</td>
<td>21.0%</td>
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<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Failed previous college course</td>
<td>2</td>
<td>14.3%</td>
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<tr>
<td>Failed nursing course in first or second semester</td>
<td>12</td>
<td>85.7%</td>
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<tr>
<td>Severe test anxiety</td>
<td>4</td>
<td>29.0%</td>
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</tbody>
</table>
## Sample Demographics

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<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course failed</td>
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<tr>
<td>Theory</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>Theory/Clinical</td>
<td>12</td>
<td>86%</td>
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<tr>
<td>Semester failed</td>
<td></td>
<td></td>
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<tr>
<td>First or Second</td>
<td>12</td>
<td>86%</td>
</tr>
<tr>
<td>Last</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>Clinical area of failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics</td>
<td>3</td>
<td>21%</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>Critical Care</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>Foundations</td>
<td>4</td>
<td>29%</td>
</tr>
</tbody>
</table>
Findings

Focused on the nursing student learning process

• Themes:
  – Difficulty Learning
  – Learning to Learn
Findings

Difficulty Learning

• Lack of Study Skills
  – Didn’t know how to study
    • Read everything but didn’t understand
      – Caucasians aged 20-26 (n=6;43%)
    • Only studied the night before a test
      – All males and 4 females (n=7;50%)
    • Too much information/didn’t know what to study
      – Reported by a majority of participants (n=9;64%)
      – Diversity in age, gender, and ethnicity
Findings

**Difficulty Learning**

- Lack of Study Skills
  - Didn’t know how to study

- Emotional impact
  - Frustrating – males (n=3; 100%)
  - Terrifying/overwhelming – females (n=9; 82%)
  - Blame others for lack of skills – younger (age 20-25) (n=8; 80%)
  - Blame current life experiences – older (age greater than 25) (n=4; 100%)
Findings

**Difficulty Learning**

- **Lack of Study Skills**
  - Prior learning experiences
    - Prior failure (n=2; 14%)
      - All older participant (n=4; 29%) prior academic + life experiences did not prepare them
      - Young participants (n=6; 60%) prior academic did not prepare them
  - **Test Anxiety**
    - All participants reported test anxiety
      - Severe test anxiety (n=4; 29%)
Findings

**Difficulty Learning**

- Lack of Study Skills
  - Didn’t ask for help
    - Overconfident
      - Males (n=3; 21%)
    - Fear of being perceived as stupid
      - Females (n=9; 82%)
Findings

Learning to Learn

• Effective Study Skills/Habits
  – Priorities
    • Family - all older participants
    • Social activities - all younger participants
    • Decrease in work hours (n=4; 29%)
    • Being more focused (n=6; 43%, all in the age group of 20-25, female, and Caucasian)
Findings

Learning to Learn

• Effective Study Skills/Habits
  – Time Management
    • Daily study time – all participants
    • Decreased work time – 2 African Americans were able to decrease work hours after obtaining scholarships and increase study time
    • Identification of learning style (n=7; 50% females in the age group of 20-25, all ethnicities)
Findings

**Learning to Learn**

- Effective Study Skills/Habits
  - Test taking strategies
    - Most common
      - NCLEX-RN style questions with rationales (n=13; 93%)
      - Access to NCLEX-RN style questions using technology (n=10; 71.4%)
Learning to Learn

• Effective Study Skills/Habits
  – Asking for help
    • From faculty
      – Asking questions in class
      – Individual meetings
      – Required remediation
    • Peer support
      – Asking about assignments
      – Works of encouragement
      – Effective study groups
      – Females organized peer support groups
Findings

Learning to Learn

• Self-Advocacy
  – Determination – “whatever it takes”

  – Stress Reduction
    • Physical activity – all males, females (n=5; 45%)
    • Spending time with family (n=8; 57%)
      – All married participants and all with children

  – Faith (n=10; 71%) All minority, all older than 25

  – Passion/calling
    • All participants reported using passion as motivation
    • Females (n=7; 64%) dreamed of being a nurse since they were little, only one male reported this
Study Limitations

- Small sample
- Five schools from one geographic location
- Time from experience with failure to interview
Nursing Research

• Conceptual Framework
  
  – Hermeneutic philosophy
    • Participants were able to verbalize their experience with failure and success to provide a rich data

  – Kolb’s Experiential Learning
    • Participants were able to provide an in-depth description of their experiences, perceptions, cognition, and behavior
Nursing Research

- Demographics of sample did not follow the identified student characteristics in previous studies focused on attrition, retention, and/or remediation.

- Using the qualitative method provided new insight into the problem of nursing student attrition and retention.

- Through listening to the “lived experience” stories of students that failed and succeeded, a wealth of information was gained to decrease attrition.

- Further research needs to verify the results of this study.
Implications – Nursing Education

Nursing Education

• Admission criteria using prior academic measures not indicative of student’s ability to study effectively for nursing courses

• Academic measures did not indicate the effectiveness of student’s coping strategies

• Success with prerequisite courses caused a false security – over confident with abilities

• Students identified issues
  – Lack study skills/habits
  – Inability to handle the stress of nursing school
  – Need the support of faculty
Implications - Student Focus

**Development of effective study skills/habits**

- Assistance with identifying their learning styles and study skills/habits that support the learning style

- Use standardized examination results to study/remediate

- Willingness to seek faculty help when needed

- Commitment to changing study habits according to input from faculty
Implications - Student Focus

Time management and prioritization

- Nursing school is very different and more demanding than previous experiences of students
- Students do not understand the time requirement for success in a nursing program
- Students lack experience with prioritization related to providing health care
- Students need assistance with identifying prioritization of nursing school requirements
- Students need to commit to an appropriate amount of study time
Implications - Student Focus

**Self-Advocacy**

- Students have limited experience with failure
- Students lack effective coping strategies when facing failure
- Students need determination to find effective ways to take charge of their education and nursing school experiences
- Students must be willing to seek and ask for help
Nursing Education

• Faculty are a key component to student success
  – Faculty need to initiate positive relationships early in program
  – Open to students asking for help
  – Interactive teaching techniques to incorporate different learning styles
  – Actively participate in remediation
Implications-Faculty Focus

Nursing Education

• Incorporation of effective learning tools
  – Use of NCLX-RN style questions
  – Case studies
  – Faculty experiences as examples
  – Clinical experiences
  – Use of end of course standardized examination
  – Concept review after course examinations
  – Teaching test taking skills
  – Assist with time management/prioritization
Implications- Nursing Education

Administrators

Nursing Education

- Communicate the differences in nursing versus pre-requisite courses
  - Admission letter
  - Pre-nursing course
  - Initial nursing course
    - Focus on:
      - Effective study habits
      - Time management/prioritization
      - Coping skills
      - Learning style
      - Interaction with faculty
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