Nursing is a Team Sport

• Sideline Coaching to Achieve NCLEX-RN Success

Tricia O’Hara, PhD, RN
Associate Professor
Gwynedd Mercy University
Gwynedd Valley, Pa, USA
Purpose of the Study

The primary purpose of the study was to explore the relationships among BSN students’:

Academic Success
Perceptions of the Coaching relationship
Perceived NCLEX-RN exam readiness
And NCLEX-RN exam success
Secondary Purposes

• The secondary purposes of the study were to:
  • 1. Compare students’ HESI exit exam scores before and after coaching.
  • 2. Explore students’ perceptions of the coaching relationship after coaching.
  • 3. Examine the relationship between students’ perceptions of the coaching relationship and perceived readiness to take the NCLEX-RN exam.
Statement of the Problem

• There is a need to explore educational interventions that will have a significant impact on student academic success and may lead to a positive relationship between nursing faculty and nursing students, as well as lead to NCLEX-RN success.
Statement of Problem

• Academic Coaching has been identified as an educational intervention positively associated with student academic success, as well as being effective for enhancing a nurturing, trusting, and honest relationship between the coach and student.
Research Questions

1. What is the difference in BSN students’ HESI exit exam scores, before and after coaching?
2. What are students’ perceptions of the coaching relationship after academic coaching?
3. What is the relationship between students’ perceptions of the coaching relationship and perceived readiness to take the NCLEX-RN exam?
Research Questions

• 4. What are the relationships among BSN students’ academic success, perceptions of the coaching relationship, perceived NCLEX-RN exam readiness, and NCLEX-RN exam success?
Review of Literature

• CINAHL search consisted of articles on:
  • Coaching
  • Coaching in Healthcare
  • Coaching in Nursing Education
  • Predictability of HESI Exit Exam
  • NCLEX Scheduling Lag Time
  • Academic Success
  • Perceived Faculty Support
  • Research Testing Peplau’s Theory
Theoretical Framework

• The O’Hara Model of Academic Success, derived from Peplau’s (1952) Interpersonal Relations in Nursing Theory provided the theoretical framework for this study.

• Peplau focused on the relationship between people with an emphasis on the nurse-patient relationship.
Theoretical Framework

• The O’Hara Model of Academic Success focuses on the relationship between people with an emphasis on the faculty-student relationship.
The O’Hara Model of Academic Coaching

![Diagram showing the O’Hara Model of Academic Coaching]

*Figure 3. O’Hara Model of Academic Coaching*
Research Design

• This study used both descriptive comparative and correlational designs to explore BSN students’ academic success and NCLEX-RN exam success and their perceptions of the coaching relationship.

• A comparative research design was used to describe the outcomes of HESI exit exam change scores and NCLEX-RN exam results after students were coached.
Sample and Setting

• Convenient sample (N = 51)
• One CCNE accredited pre-licensure BSN program
• 48 Female; 3 Male
• Average age 25.4 years
• 32 Caucasians; 9 African Americans; 8 Asians
• Education Level: Majority's’ highest level of education prior to entering nursing school was a High school Diploma (78.4%)
• Self-reported GPA ranged from 2.75 to 4.00 with the majority ranging from 3.00 to 3.49 (79%).
Sample and Setting

46 out of 51 planning on taking NCLEX RN review course

• Almost all students attended their 8 mandatory coaching sessions (average of 94.61)
Sample Size

• **A Priori Power analysis** (Medium Effect Size; Significance Level of .05; Power Level of .80)
• Discriminate Analysis: Minimum size of 77
• Pearson Correlation: Minimum size of 82
• Paired $t$ – test: Minimum size of 32
Sample Size

- **Poster Power Analyses** for actual size of 51:
  - Discriminate analysis: power of 59; beta risk of .41;
  - Pearson Correlation: power of .60; beta risk of .41;
  - Paired t – test: power of .94; beta risk of .06.
- Only analysis with sufficient statistical power was paired t -test
Data Collection

- Information Sessions
- Informed Consent
- Data Collection using Research Booklet consisting of: Demographic Data Questionnaire (DDQ) and O’Hara Perception of the Coaching Relationship Instrument (PCR)
- HESI exit exam scores before and after coaching
- NCLEX exam dates and outcomes
Data Collection

• HESI exit exam scores and PCR scores linked to student confidential ID numbers by course coordinator

• NCLEX exam dates and outcomes obtained from National Council of State Board of Nursing website; these results also linked to confidential ID numbers
Data Analysis

• No students eliminated from study
• SPSS 18 with level of significance set at .05
• Analysis included: descriptive, correlational and comparative statistics; statistical analyses included paired $t$ – tests, Pearson correlations, discriminate analysis, ANOVA and chi-square
Findings

- Research Question #1: “What is the difference in BSN students’ HESI exit exam scores, before and after coaching?”
- Paired t-test:
  - Statistically significant ($t = 6.55; df = 50; p < .001$)
  - Mean and SD increased from pre to post-coaching
  - ($M = 740.53$ to $843.06; SD = 67.80$ to $95.95$)
  - Gain of 102 points
Findings

• Research Question #2: “What are the students’ perceptions of the academic coaching relationship after coaching”?

• Descriptive statistics:
  • Scores ranged from 81 to 210 with $SD = 37.57$
  • Scores were bi-modal ($3$ at $180$; $3$ at $210$);
  • $M = 168.55; Median = 180$. Data revealed a negative skew of $-0.96$ with a slightly negative kurtosis ($-0.20$). 85% of scores clustered from the midpoint to the highest indicating positive perceptions
Findings

• Research Question #3: “What is the relationship between students’ perceptions of the coaching relationship and perceived readiness to take the NCLEX-RN exam”?

• Pearson Correlation with no statistical significance ($r = .06; p = .677$)
Findings

• Research Question #4: “What are the relationships among BSN students’ academic success, perceptions of the coaching relationship, perceived NCLEX-RN exam readiness and NCLEX-RN exam success”?

• Discriminate analysis: students could not be classified into groups due to large number passing NCLEX (92%).
Findings

• Open Ended Questions
• 3 questions were asked concerning what they liked and disliked about the coaching experience and what recommendations they would have for future coaching sessions.
Findings

• Category Reduction:
• Open Ended Question #1: “What did you like about the coaching experience”?
• Top 3 major categories:
  • Review of NCLEX questions
  • Personal and Individualized Sessions
  • Motivational
Findings

• Open Ended Question #2: “What didn’t you like about the coaching experience”?
• Top 3 Major Categories:
  • Waste of Time
  • Too much focus on doing multiple choice questions
  • No negative aspects
Findings

• Open Ended Question #3: “What recommendations do you have for future coaching experiences”?

• Top 3 Major Categories:
  • Flexible, More Convenient Meeting Times
  • Use of a Variety of Strategies
  • More Personalized Student-Faulty Coach matching
Limitations of Study

1. Limited Generalizability of Study Findings
2. Small Sample Size
3. Self-Selection of Sample
4. Mandatory Participation in Coaching
5. Assigned Coaches
7. Newly Developed Research Instrument
Implications for Nursing Research and Science

• Lends beginning support to the O'Hara Model of Academic Coaching
• New valid and reliable instrument to measure perceptions of the coaching relationship
• More research recommended on:
  • 1. Predictability of academic coaching and NCLEX success
  • 2. Academic coaching’s direct effect on perceived NCLEX exam readiness
Implications for Nursing Education

• Academic coaching in this study did prove to lead to positive student perceptions of the coaching relationship
• Academic coaching in this study led to an increase in HESI exit exam scores post coaching.
• Schools of nursing might consider implementing academic coaching as a strategy to improve first time NCLEX exam pass rates
Conclusions

1. There was a statistically significant increase in BSN students’ HESI exit exam scores after coaching when compared to before coaching scores.

2. Students’ perceptions of the coaching relationship were rated high.

3. 96% of the students in this study took their NCLEX-RN exam within 140 days of eligibility.
Conclusions

- 4. The relationship of BSN students’ academic success, perceptions of the coaching relationship, perceived NCLEX-RN exam readiness, and NCLEX-RN exam success was not statistically significant.
Conclusions

5. Additional analyses computed on age and PCR total, number of coaching sessions, and PCR total, age and perceived NCLEX readiness and the number of coaching sessions and perceived NCLEX readiness revealed no statistically significant findings.
Conclusions

6. ANOVAS on groups on self-reported GPA, PCR total and perceived NCLEX readiness found no statistically significant findings.

7. Chi-square analyses to explore association between self-reported GPA groups and hours employed, and between self-reported GPA groups an NCLEX success found no statistically significant findings.
Conclusions

• 8. Responses to open ended question on the positive aspects of coaching were found to be: “Review of NCLEX questions”, ‘Personal and individualized” and “Motivational”.

• 9. Responses to open ended question on the negative aspects of coaching were found to be: Waste of Time”, “Too much focus on doing multiple choice questions” and “No negative aspects”.

Conclusions

10. Responses to open ended question on recommendations for future coaching were:
   
   - “Flexible, more convenient times”,
   - “Use of a variety of strategies”
   - “More personalized student-faculty coach matching”.
Recommendations for Future Research

1. Investigate the lived experience of coaching
2. Replicate with nationwide sample to meet minimum requirement and improve generalizability.
3. Use of control group who do not receive coaching.
4. Replicate without mandating coaching.
5. Replicate allowing students to select their coach.
Recommendations for Future Research

• 6. Replicate using only faculty who want to coach.
• 7. Increase # of negatively-phrased questions on PCR instrument.
• 8. Continue to test reliability of PCR instrument.
• 9. Examine how each item on PCR contributes individually to a students’ perception of the coaching relationship.
Recommendations for Future Research

• 10. Perform a longitudinal study on academic coaching to see if this will improve academic performance throughout a student’s entire nursing curriculum.

• 11. Compare NCLEX-RN exam success for students who were coached and those who were not.
Recommendations for Future Research

12. Conduct a comparative study on effects of academic coaching and other educational strategies.

13. Increase sample size in order to compute a factor analysis on items on PCR instrument.

14. Expand study to include international students.

15. Measure faculty’s perceptions of the coaching experience.
Thank you!!!!!