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The Effect of an Educational Intervention on the Psychomotor Competence and Self-Efficacy of Family Nurse Practitioner Students Enrolled in Advanced Health Assessment

Dorothea A. Esposito

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THE EFFECT OF AN EDUCATIONAL INTERVENTION ON THE PSYCHOMOTOR COMPETENCE AND SELF-EFFICACY OF FAMILY NURSE PRACTITIONER STUDENTS ENROLLED IN ADVANCED HEALTH ASSESSMENT.

A practice Dissertation Presented to
The Faculty of the Department of Nursing, College of Health Professions
Sacred Heart University

In Partial fulfillment of the requirements
For the degree of Doctor of Nursing Practice

By

Dorothea A Esposito DNP (c), MSN/ed APRN FNP-C, NP-C, BSN, ASN, RN

Approved

Kim Kuebler DNP APRN ANP

Minna Kapp EdD RN

Susan DeNisco DNP APRN FNP (Chairperson)

Date: April 26, 2013
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Abstract of a Practice Dissertation

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THE EFFECT OF AN EDUCATIONAL INTERVENTION

Abstract

The purpose of this descriptive, quasi-experimental pilot study is to assess the effect of an educational intervention on the psychomotor competence and self-efficacy of Family Nurse Practitioner (FNP) students enrolled in advanced health assessment. A pre-test/post-test pilot study was conducted to determine the feasibility of using a CD-ROM containing heart and lung sounds on the psychomotor competence and self-efficacy of FNP students. A convenience sample of FNP students registered for the advanced health assessment class at a medium sized private, nonprofit, religious university in Southern Connecticut were studied in this investigation.

Students were tested with heart and lung sounds from the CD chosen for this study. The pre-test and the post-test were exactly the same. A paired sample t-test procedure was employed to test the significance of changes in Psychomotor Competence. By contrast to Self-Efficacy, there was a significant increase in the numbers of correct answers on the measure of Psychomotor Competence, \( t(22) = 3.144, p = .004 \), effect size \( r = .30 \). The number of correct answers increased from the Pretest (\( M = 6.67, SD = 3.01 \)) to the Post-Test (\( M = 8.41, SD = 3.25 \)).

To examine the relationship between Self-Efficacy and Psychomotor Competence at the post-test after the intervention, Pearson correlation coefficients were calculated. Based upon the analysis, the relationship between Self-efficacy and Psychomotor Competence at the post-test was not significant \( r = 0.270 \).

The final stage of the analysis examined the relationship of nurses’ personal characteristics and experience with Self-Efficacy and Psychomotor Competence. Pearson correlation coefficients were computed. None of the correlations between nursing experience, education, age and measures of Self-Efficacy and Psychomotor Competence were statistically
significant. Independent t-tests compared levels of Self-Efficacy and Psychomotor Competence for nurses who had experience in Cardiac Care, Pulmonary Care, Telemetry, Emergency Room, and Intensive Care and those who did not. No significant differences were found related to nurses’ work experiences in the above areas.

This study provided evidence that supports the use of an educational intervention with FNP students who are enrolled in advanced health assessment. The fact that there was a significant increase in psychomotor competence at the post-test ear marks this study as important to advance nursing practice. It is the belief of the researcher based upon the results of this study that future FNP students would benefit from exposure to the same intervention over a longer period of time.

*Keywords*: Psychomotor Competence, Family Nurse Practitioner, Self-Efficacy, Advanced Practice Nursing, Nurse practitioner, and Nursing Education.
RULES COVERING USE OF PRACTICE DISSERTATIONS FROM THE DEPARTMENT OF NURSING, COLLEGE OF HEALTH PROFESSIONS, SACREDHEART UNIVERSITY

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THE EFFECT OF AN EDUCATIONAL INTERVENTION

Dedication
To my Husband
Domenick J. Esposito (1947 – )

Thank you for being the person who encouraged me to pursue higher learning. You nurtured me and you were my confidante and best friend throughout my many years of study. Your toleration of late hours is what gave me the time to accomplish this lifelong goal. You prepared many meals, did the grocery shopping, and performed so many more tasks around the house so that my DNP could become a reality. You were my cheerleader, my friend, my sounding board, and my lover. Thank you for your support through the times when I thought that I did not have the stamina to continue this journey. Thank you for always encouraging me to reach for the stars. I love you!

In Appreciation

Special thanks to my daughter Karen, my granddaughter Erica, and my son-in-law Michael for tolerating all the late hours and the time away from family. You were my inspiration to continue this journey and I could not have accomplished this without your support and loving encouragement.
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I would like to thank Dr. Kim Kuebler for being an example of what nursing scholarship is and should be. You made me strive for excellence and for this I will always be grateful.

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# TABLE OF CONTENTS

LIST OF TABLES ..................................................................................................................... xi

LIST OF FIGURES .................................................................................................................. xii

CHAPTER

1 INTRODUCTION ..................................................................................................................... 1
  Background .............................................................................................................................. 2
  Problem Statement/Aim ............................................................................................................ 3
  Purpose of the Study ................................................................................................................. 5
  Significance to Nursing .............................................................................................................. 6
  Theoretical framework .............................................................................................................. 8
    Theoretical Concepts ............................................................................................................. 9
    Theoretical assumptions ....................................................................................................... 12
  Research Questions ................................................................................................................. 12
  Theoretical Definitions ........................................................................................................... 13

2 LITERATURE REVIEW ......................................................................................................... 17
  What the Chapter Presents ...................................................................................................... 17
  Present Data Bases Used in the Search ..................................................................................... 17
  Review of the Literature Related to the Variables ................................................................... 18
    Psychomotor Competence .................................................................................................... 18
    Self-Efficacy .......................................................................................................................... 24
    FNP Curricula Related to Advanced Health Assessment ...................................................... 29
  Chapter Summary .................................................................................................................. 34

3 METHODS ............................................................................................................................ 35
  Design ........................................................................................................................................ 35
    Strengths of the design .......................................................................................................... 38
    Limitations of the design ....................................................................................................... 38
  Setting ........................................................................................................................................ 40
  Sample and Sample Size ....................................................................................................... 40
  Measures ..................................................................................................................................... 41
    Psychomotor Competence ...................................................................................................... 45
    Self-Efficacy .......................................................................................................................... 45
    Demographic Variables ........................................................................................................ 47
  Procedures .................................................................................................................................. 47
    Recruitment ............................................................................................................................ 48
    Data collection ........................................................................................................................ 49
    Data management .................................................................................................................. 51
    Statistical Analysis ............................................................................................................... 52
    Protection of Human Rights ................................................................................................ 53
  Potential Implications for Practice, Research, Policy, and Education ................................. 55
THE EFFECT OF AN EDUCATIONAL INTERVENTION

4 RESULTS AND DISCUSSION ................................................................. 56
Sample .................................................................................. 56
Demographics Characteristics ........................................... 57
Research Question 1 ............................................................. 57
Research Question 2 ............................................................. 58
Research Question 3 ............................................................. 59
Research Question 4 ............................................................. 60
Research Question 5 ............................................................. 61
Discussion ............................................................................. 64
Research Question 1 ............................................................. 64
Research Question 2 ............................................................. 65
Research Question 3 ............................................................. 66
Research Question 4 ............................................................. 67
Research Question 5 ............................................................. 68
Chapter Summary ................................................................. 68

5 SUMMARY ........................................................................... 70
Research Questions ............................................................. 70
Sample .................................................................................. 71
Pertinent Findings ................................................................. 71
Limitations ............................................................................. 72
Implications ............................................................................ 74
Theoretical Framework ........................................................ 74
Nursing Practice ................................................................. 75
FNP Certification Exam ....................................................... 76
Nursing Education ............................................................. 76
Health Policy ........................................................................... 77
Recommendations ............................................................... 77
Summary ................................................................................ 78

REFERENCES ........................................................................ 80

APPENDICES ........................................................................ 88
Appendix A .......................................................................... 88
Appendix B .......................................................................... 89
Appendix C .......................................................................... 91
Appendix D .......................................................................... 93
Appendix E .......................................................................... 97
Appendix F .......................................................................... 98
Appendix G .......................................................................... 91
Appendix H ......................................................................... 100
LIST OF TABLES

TABLE 1 ................................................................. 59
TABLE 2 ................................................................. 60
TABLE 3 ................................................................. 62
TABLE 4 ................................................................. 62
List of Figures

Diagram linking research with the variables.................................................. 12