

PROMOTING HEALTHY BEHAVIORS IN NURSING STUDENTS

Donna Callaghan, PhD, RN-BC, GCNS-BC, CNE
Associate Professor
Faith Community Nurse



Widener University

DISCLOSURE SLIDE

- AUTHOR: Donna Callaghan
- LEARNER OBJECTIVES:
 - 1. Summarize the influences of the theoretical framework that guided the development of the educational intervention to promote healthy behaviors in nursing students.
 - 2. Describe how the results of the educational intervention study can guide nurse educators in developing curricula that address students' self-care practices in both their personal and professional lives.
- EMPLOYER: Widener University
- NO Conflict of Interest
- NO Sponsorship or Commercial Support was received



Widener University

PURPOSE OF PROGRAM OF RESEARCH

- TO EXPLORE THE RELATIONSHIPS AMONG THE VARIABLES OF HEALTH-PROMOTING SELF-CARE BEHAVIORS, SELF-CARE SELF-EFFICACY, AND SELF-CARE AGENCY
- TO DEVELOP FAITH COMMUNITY NURSING INTERVENTIONS BASED ON THE CONCEPTUAL INTEGRATION OF THESE VARIABLES AND THEIR UNDERLYING THEORIES
- TO PROMOTE HEALTH ACROSS THE LIFE SPAN USING SPIRITUAL GROWTH AS THE FOUNDATION OF HEALTH



THEORETICAL FRAMEWORKS/INSTRUMENTS/VARIABLES

- HEALTH PROMOTION MODEL (PENDER ET AL., 2010)
 - HEALTH-PROMOTING LIFESTYLE PROFILE II (WALKER, SECHRIST, & PENDER, 1987)
 - SPIRITUAL GROWTH, STRESS MANAGEMENT, NUTRITION, PHYSICAL ACTIVITY, INTERPERSONAL RELATIONS, HEALTH RESPONSIBILITY
- SELF-EFFICACY THEORY (BANDURA, 1997)
 - SELF-RATED ABILITIES FOR HEALTH PRACTICES (BECKER, STUIFBERGEN, SOO OH, & HALL, 1993)
 - NUTRITION, PSYCHOLOGICAL WELL-BEING, EXERCISE, HEALTH RESPONSIBILITY
- SELF-CARE DEFICIT THEORY (OREM, 2001)
 - EXERCISE OF SELF-CARE AGENCY (KEARNEY & FLEISCHER, 1979)
 - SELF-CONCEPT, INITIATIVE AND RESPONSIBILITY, KNOWLEDGE AND INFORMATION-SEEKING, PASSIVITY



SAMPLES AND CANONICAL CORRELATION RESULTS

- 256 ADOLESCENTS (14 – 19) FROM A SUBURBAN HIGH SCHOOL
- 379 ADULTS (18 – 65) FROM A HEALTH SYSTEM, COUNTY COLLEGE, AND FIRE DEPARTMENT
- 235 OLDER ADULTS (65 – 98) FROM THE COMMUNITY-AT-LARGE, INDEPENDENT LIVING FACILITIES, SENIOR DAY CENTERS, AND A SENIOR CITIZENS CLUB
- SIGNIFICANT VARIATES ($p < .001$) WITH CORRELATIONS RANGING FROM .74 - .95 ACCOUNTING FOR 55 - 90% OF THE VARIANCES EXPLAINED (WEIGHTS INTERPRETED)
- LOADING VARIABLES INCLUDED THE HPLPII SUBSCALE OF SPIRITUAL GROWTH AND THE ESCA SUBSCALE OF INITIATIVE AND RESPONSIBILITY
- (CALLAGHAN, 2003, 2005, 2006)



CANONICAL CORRELATION RESULTS FOR MERGED DATA

- SIGNIFICANT VARIATE ($p < .001$) HAVING A CORRELATION OF .81 ACCOUNTING FOR 65% OF THE VARIANCE EXPLAINED (LOADINGS INTERPRETED)
- LOADING VARIABLES INCLUDED ALL OF THE VARIABLES IN SET 1 (SELF-CARE AGENCY AND SELF-CARE SELF-EFFICACY) AND SET 2 (HEALTH PROMOTING SELF-CARE BEHAVIORS)
- (CALLAGHAN, 2015)



CONCEPTUAL AND THEORETICAL INTEGRATION

- **OREM'S THEORY OF SELF-CARE DEFICIT**
- IF SCA IS < TSCD, THEN A SCD EXISTS
- IF A SCD EXISTS, THEN NA IS REQUIRED
- THEORY OF NURSING SYSTEMS – THREE LEVELS OF NURSING INTERVENTIONS – WHOLLY COMPENSATORY; PARTIALLY COMPENSATORY; SUPPORTIVE-EDUCATIVE
- ***THE SUPPORTIVE EDUCATIVE NURSING SYSTEM WAS USED TO MEET KNOWLEDGE DEFICITS RELATED TO HEALTHY BEHAVIORS.***



CONCEPTUAL AND THEORETICAL INTEGRATION

- **PENDER'S HEALTH PROMOTION MODEL**
- COMPONENT OF BEHAVIORAL OUTCOMES
- HEALTH-PROMOTION BEHAVIORS – SPIRITUAL GROWTH, STRESS MANAGEMENT, NUTRITION, PHYSICAL ACTIVITY, INTERPERSONAL RELATIONS, HEALTH RESPONSIBILITY
- ***THE HPLPII SCALE WAS USED TO MEASURE HEALTHY BEHAVIORS AND GUIDE HEALTH PROMOTION PROGRAM TOPICS.***



CONCEPTUAL AND THEORETICAL INTEGRATION

- **BANDURA'S THEORY OF SELF-EFFICACY**
- BEHAVIOR INFLUENCED BY COGNITIVE APPRAISAL OF INFORMATION OBTAINED FROM FOUR MAJOR SOURCES :
 - ENACTIVE MASTERY EXPERIENCE
 - VICARIOUS EXPERIENCE
 - VERBAL PERSUASION
 - PSYCHOLOGICAL AND AFFECTIVE STATES
- ***THESE SOURCES WERE USED TO GUIDE PROGRAM ACTIVITIES.***



HEALTH PROMOTION INTERVENTION WITH NURSING STUDENTS

- PURPOSE:
 - TO INVESTIGATE THE EFFECTS OF A HEALTH-PROMOTING NURSING INTERVENTION ON THE PRACTICE OF HEALTHY BEHAVIORS OF NURSING STUDENTS
- HYPOTHESIS:
 - THERE WILL BE AN INCREASE IN THE STUDENTS' PRACTICE OF HEALTHY BEHAVIORS AFTER PARTICIPATING IN THE NURSING INTERVENTION AS COMPARED TO THE PRE-INTERVENTION PRACTICE OF THESE BEHAVIORS.



CONCEPTUAL AND THEORETICAL FRAMEWORKS

- BANDURA'S (1997) FOUR MAJOR SOURCES OF INFORMATION WERE USED IN THE DEVELOPMENT OF THE SUPPORTIVE-EDUCATIVE NURSING INTERVENTION (OREM, 2001) TO PROMOTE THE PRACTICE OF HEALTHY BEHAVIORS (PENDER ET AL., 2006).
- SPIRITUAL GROWTH WAS PRESENTED AS THE FOUNDATION OF HEALTH PROMOTING ACTIVITIES SINCE IT WAS FOUND TO HAVE A POSITIVE RELATIONSHIP WITH INITIATIVE AND RESPONSIBILITY FOR SELF-CARE.



STUDY METHODOLOGY

- COMPARATIVE QUASI-EXPERIMENTAL ONE GROUP PRE-TEST POST-TEST DESIGN
- CONVENIENCE NON-RANDOM SAMPLE
- POWER ANALYSIS RESULTS: $P = .05$; POWER = .80; EFFECT SIZE = .5 (MEDIUM); SAMPLE SIZE = 27
- IRB AND APPROVAL FROM DEAN OBTAINED
- INSTRUMENTS - HEALTH-PROMOTING LIFESTYLE PROFILE II & A DEMOGRAPHIC INFORMATION QUESTIONNAIRE



HEALTH PROMOTION PROGRAM

- SIX SESSIONS ON THE TOPICS OF SPIRITUAL GROWTH (FOUNDATION OF HEALTH), STRESS MANAGEMENT, NUTRITION, PHYSICAL ACTIVITY, INTERPERSONAL RELATIONS, AND HEALTH RESPONSIBILITY
- THIRTY MINUTE POWERPOINT PRESENTATION ON EACH TOPIC RELATIVE TO NURSING STUDENTS AT THE UNIVERSITY
- THIRTY MINUTE ACTIVITY FOR EACH TOPIC THAT FOCUSED ON STRATEGIES THAT CAN INCREASE SELF-EFFICACY OF THAT SPECIFIC HEALTHY BEHAVIOR



SPIRITUAL GROWTH SESSION

- Presentation:
 - Definitions of spirituality and religiosity
 - Developmental aspects of and research related to spirituality and health
 - Ways a university nursing student can increase their spiritual growth
- Activities:
 - Spiritual assessment tool
 - Guided meditation



STRESS MANAGEMENT SESSION

- Presentation:
 - Definition and signs and symptoms of stress
 - Review of a variety of stress management strategies
 - Ways a university nursing student can improve their stress management
- Activities:
 - Stress assessment
 - Progressive muscle relaxation exercise



NUTRITION SESSION

- Presentation:
 - Dietary recommendations for young adults
 - Strategies that could promote healthy eating behaviors
 - Ways a university nursing student can improve their nutrition
- Activities:
 - Three day diet recall/analysis
 - Discussion of ways to make healthier food choices



PHYSICAL ACTIVITY SESSION

- Presentation:
 - Research findings related to physical activity and health
 - Daily recommendations for young adults
 - Ways a university nursing student can increase physical activity
- Activities:
 - Three day activity recall/assessment
 - Discussion of ways to increase daily physical activity



INTERPERSONAL RELATIONS SESSION

- Presentation:
 - Developmental aspects of and research related to interpersonal relations
 - Role of the family/support system in supporting members
 - Strategies that can influence the family's/support system's healthy behaviors
 - Ways a university nursing student can improve interpersonal relations
- Activities:
 - Social support assessment
 - Gratitude exercises



Widener University

HEALTH RESPONSIBILITY SESSION

- Presentation:
 - Information regarding health promotion and disease prevention for young adults
 - Primary and secondary prevention strategies for the common health problems seen in young adults
 - Ways a university nursing student can improve meeting their health responsibilities
- Activities:
 - Family medical history
 - Development of a family genogram



NURSING STUDENT SAMPLE DESCRIPTION

- INCLUSION CRITERIA: ENGLISH-SPEAKING; ABLE TO CARE FOR HIS/HERSELF; AGED 18 AND OVER; NURSING STUDENT AT THE UNIVERSITY
- DEMOGRAPHICS:
 - 36 PARTICIPANTS STARTED THE PROGRAM WITH 23 PARTICIPANTS COMPLETING ALL SIX SESSIONS;
 - AGES RANGED FROM 18 – 43 (M = 21);
 - ONE MALE AND 22 FEMALES;
 - EIGHTEEN WHITE, ONE BLACK, ONE HISPANIC, 3 MIXED;
 - 87% NEVER MARRIED;
 - 48% SOPHOMORE STUDENTS;
 - 74% LIVED IN DORMS



STATISTICAL RESULTS

- THE POST-TEST SCORES ($M = 164.4$) WERE 18 POINTS HIGHER THAN THE PRE-TEST SCORES ($M = 146.2$).
- THE PAIRED t -TEST RESULT WAS SIGNIFICANT ($t = -5.2$, $p < .001$).
- THERE WERE SIGNIFICANT INCREASES IN ALL SIX SUBSCALE SCORES (SPIRITUAL GROWTH, STRESS MANAGEMENT, NUTRITION, PHYSICAL ACTIVITY, INTERPERSONAL RELATIONS, AND HEALTH RESPONSIBILITY).



IMPLICATIONS OF THE RESEARCH

- NURSING INTERVENTIONS FOCUSING ON SPIRITUALITY AS THE FOUNDATION OF HEALTH ARE EFFECTIVE IN INCREASING THE PRACTICE OF HEALTHY BEHAVIORS IN NURSING STUDENTS.
- NURSING STUDENTS WERE TAUGHT SELF-CARE PRACTICES, INCLUDING SPIRITUAL GROWTH BEHAVIORS, WHO IN TURN CAN MODEL AND TEACH THESE PRACTICES TO OTHERS.
- INTEGRATING HEALTH PROMOTION THEORY AND PRACTICE INTO NURSING PROGRAM CURRICULA COULD LEAD TO NURSES WHO MAKE SELF-CARE A PRIORITY AND HAVE MORE POSITIVE IMAGES ABOUT THE PROFESSION.



DISCUSSION RELATED TO SELF-CARE AND IMAGE

- Bryer, Cherkis, and Raman (2013)
 - performed a descriptive study that investigated the health-promotion behaviors of undergraduate nursing students
 - recommended that nursing students should not only learn about health promotion but should also participate in health promotion activities suggesting it could possibly improve the academic success of these students
- Hensel and Laux (2014)
 - performed a longitudinal study that included measures of stress, self-care, and professional identity
 - suggested that integrating stress management strategies and spiritual growth practices in health promotion activities may be more effective in reducing stress levels in nursing students as well as improving their sense of fit with the profession



REFERENCES

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Becker, H., Stuijbergen, A., Soo Oh, H., & Hall, S. (1993). Self-rated abilities for health practices: A health self-efficacy measure. *Health Values, 17*, 42-50.
- Bryer, J., Cherkis, F., & Raman, J. (2013). Health promotion behaviors of undergraduate nursing students: A survey analysis. *Nursing Education Perspectives, 34*, 410-415.
- Callaghan, D. M. (2015). The development of a faith community nursing intervention to promote health across the life span. *International Journal of Faith Community Nursing, 1*(2). Retrieved from <http://digitalcommons.wku.edu/ijfcn/vol1/iss2/2/>
- Callaghan, D. M. (2006). The influence of spiritual growth on self-care agency in an older adult population. *Journal of Gerontological Nursing, 32*, 43-51.
- Callaghan, D. M. (2005). The influence of spiritual growth on adolescents' initiative and responsibility for self-care. *Pediatric Nursing, 31*, 91-95, 115.



REFERENCES

- Callaghan, D. M. (2003). Health-promoting self-care behaviors, self-care self-efficacy, and self-care agency. *Nursing Science Quarterly*, 16, 247-254.
- Hensel, D. & Laux, M. (2014). Longitudinal study of stress, self-care, and professional identity among nursing students. *Nurse Educator*, 39, 227-231.
- Kearney, B. Y. & Fleischer, B. J. (1979). Development of an instrument to measure exercise of self-care agency. *Research in Nursing and Health*, 2, 25-34.
- Orem, D. E. (2001). *Nursing: Concepts of practice (6th ed.)*. St. Louis: Mosby.
- Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (2010). *Health promotion in nursing practice (6th ed.)*. Upper Saddle River, NJ: Prentice Hall Health.
- Walker, S. N., Sechrist, K. R., & Pender, N. J. (1987). The Health-Promoting Lifestyle Profile: Development and psychometric characteristics. *Nursing Research*, 36, 76-81.

