

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
<p>1. Discuss identified gaps in the body of nurse work environment research.</p>	<p>I. Nurse Work Environment Research</p> <p>a. Magnet Hospital Concept grew out of attempts to decrease turnover in severe nursing shortage in the 1980s</p> <p>b. 1990s- Magnet Recognition Program through ANA's America Credentialing Centre (AANC)</p> <p>14 Magnet characteristics</p> <p>c. Currently 14 characteristics are grouped in 5 components (AANC Website, 2015)</p> <p>1. Transformational Leadership</p> <p>2. Structural Empowerment</p> <p>3. Exemplary Professional Practice (autonomy, interdisciplinary relationships)</p> <p>4. New Knowledge, Innovation, and Improvements</p> <p>5. Empirical Quality Results</p> <p>d. 2004- IOM Keeping patients safe: Transforming the Work Environment of Nurses</p> <p>i. Outgrowth of 2 previous IOM reports: To Err is Human, and Crossing the Quality Chasm</p> <p>ii. Incorporated Magnet Elements</p> <p>e. Nurse work environment outcomes over 30+ years</p> <p>i. Nurse- decreased turnover, increased job satisfaction, lower burnout, decreased job strain/stress</p> <p>ii. Patient- fewer adverse events, decreased mortality, improved patient safety</p> <p>f. Recent Systematic Reviews</p> <p>i. Bae, 2011</p> <p>1. Nurse Working Conditions and Patient Outcomes</p> <p>2. Conclusion- evidence supporting positive relationships between working conditions and patient outcomes is inconclusive.</p> <p>3. Further studies (longitudinal, interventional) are needed including contextual and multivariate influences.</p> <p>ii. Lu, Barriball, Zhang, & While, 2011</p> <p>1. Nurse Job Satisfaction</p> <p>2. Conclusion- Hospital nurse job satisfaction is closely related to working conditions and organizational environment</p> <p>3. Further research is needed to understand the relative importance of the many identified factors. The absence of a robust causal model reflecting moderator(s) is undermining the development of interventions to improve nurse retention.</p> <p>iii. Dariel, Regnaud, 2015</p> <p>1. Magnet accreditation and nurse and patient outcomes</p> <p>2. Conclusion- Based on mixed results and poor quality in the research designs, it was not possible to conclude that Magnet accreditation has effects on nurse and patient outcomes.</p> <p>3. There is a need for more robust designs that can confidently measure the impact of hospital accreditation on objective outcomes</p> <p>g. Critical Analysis of nurse work environment research</p> <p>i. Kazanjian, Green, Wong, & Reid, 2005 (Older Systematic Review)</p> <p>1. Hospital nursing environment and patient mortality</p> <p>2. Conclusions- evidence indicates the social and environmental attributes of hospital nursing practice have an effect on the outcome of care</p> <p>3. Further research</p>

	<p>of greater rigor is needed to provide a better understanding of the mechanisms that link the nursing environment to patient outcomes ii. Ian Norman, Editor-in-Chief, International Studies in Nursing, 2013 1. "Existing research has drawn attention to the vital importance of organizational environments...further research is needed to further illuminate the nature of the organizational environment, identify causal mechanisms and...point to interventions to bring about change." (Norman, 2013, p. 1578).</p>
2. Describe key constructs in the Theory of Psychological Ownership.	<p>II. The Theory of Psychological Ownership (Pierce & Jussila, 2011)</p> <p>a. Psychological Ownership is the state of mind that leads individuals to feel a target of ownership is "theirs", or an extension of oneself</p> <p>i. Context-specific attitudinal state b. Theory developed in 1990s by Jon Pierce and colleagues</p> <p>i. Grew out of research into employee ownership situations (stock-options, EOP) ii. Some individuals without any legal ownership claims to a company also developed feelings of ownership c. Roots or motives for ownership to development</p> <p>i. Efficacy and effectance- the need to feel effective or useful ii. Self-identity- possessions are a symbolic expression of one's self-identity iii. Having a place or home- having a space where one can inhabit or dwell d. Routes or how ownership develops.</p> <p>i. Control ii. Intimate Knowledge iii. Investment of Self iv. In one or more of these ways, a path is forged for development of psychological ownership to develop v. Targets of ownership can be tangible things like objects, or intangible things like songs, ideas, or work vi. Organizations provide opportunities for development of work (or job) psychological ownership through how work is structured</p> <p>1. Allowing autonomy and control over work environments 2. Promoting access to knowledge about one's job (increasing the information an employee has about their job-mission, short and long-term goals, how their effort fits into the overall plan) 3. Encouraging investment of oneself into one's job (as investment into one's job increases, ownership emerges) e. Job Psychological Ownership links the organization or job to the employee- the worker OWNS the output f. Outcomes of Psychological Ownership for one's job</p> <p>i. Internal and intrinsic motivation, job satisfaction, organizational commitment, organizational self-esteem, experienced responsibility, improved in-role and extra-role performance, increased personal sacrifice, and acceptance of change ii. Experienced responsibility has particular relevance to patient care 1. Work outputs for nursing are patient outcomes 2. Implication is nurse</p>

	<p>psychological ownership will lead to increase sense of responsibility for patient health outcomes</p> <p>III. Psychological Ownership and Nursing Research</p> <p>a. Yoo & Yoo, 2012 i. Korean study of psychological ownership, professionalism, and citizenship behaviors in nurse managers ii. Not available in English</p> <p>b. Kaur, Sambasivan, & Kumar, 2013 i. Malaysian study investigating the mediator role of psychological ownership between spiritual and emotional intelligence and caring behavior</p> <p>IV. Measurement of Psychological Ownership</p> <p>a. Psychological Ownership Questionnaire i. Most used was developed by Van Dyne and Pierce in 2004 and revised in 2011 ii. 6-item Likert-type tool that measures the degree of psychological ownership present in a worker iii. Example, "I feel this job is mine"</p> <p>b. Expanded Psychological Ownership Questionnaire i. Developed in 2014 by Brown, Pierce, & Crossley to include the routes ii. 21-items, 4 subscales</p> <ol style="list-style-type: none"> 1. Original 6-item Psychological Ownership subscale 2. 6-item Control subscale 3. 4-item Intimate Knowledge subscale 4. 5-item Investment of Self subscale <p>iii. Example, "To what extent do you have influence over the things that affect you on the job", or "I have invested a major part of 'myself' into this job"</p>
3. Discuss the use of an expanded measure of psychological ownership in a nursing population.	<p>V. Methods</p> <p>a. Approval was obtained through the University of Miami IRB</p> <p>b. Data was collected in 2016</p> <p>c. 542 Florida advanced practice nurses responded to an emailed online survey using Qualtrics software</p> <p>i. Convenience sample</p> <p>ii. Recruited through online publically-available Board of Nursing database or through their Chief Nursing Officer</p> <p>iii. 126/225 (56%) Florida acute care hospitals were represented</p> <p>iv. 22,729 nurses were licensed as advanced practice nurses in Florida, but it is unknown how many work in hospitals</p> <p>d. Inclusion Criteria</p> <ol style="list-style-type: none"> i. Advanced practice nurse licensed in Florida 1. Certified Registered Nurse Anesthetist (CRNA) 2. Nurse Practitioner (NP) 3. Certified Nurse Midwife (CNM) 4. Clinical Nurse Specialists (CNS) <p>ii. Self-identified as working in an acute care hospital setting</p> <p>e. Exclusion Criteria</p> <ol style="list-style-type: none"> i. Not working in an advanced practice role ii. Not working in Florida iii. Not working in a hospital setting <p>f. Measure: The expanded Psychological Ownership Questionnaire measured on a 4-point Likert-type scale (strongly agree, agree, disagree, strongly disagree)</p> <p>g. Analyses</p> <ol style="list-style-type: none"> i. Descriptives ii. Multi-level analyses iii. Subscale reliability/internal consistency with Cronbach's alpha iv. Construct validity with Confirmatory Factor Analysis using MPlus Version 7.4 <p>VI. Results</p> <p>a. Descriptives</p> <ol style="list-style-type: none"> i. Age- mean 48.1 (SD=10.86) ii. 86% Caucasian iii.

82% Female iv. Type: Certified Registered Nurse Anesthetist (CRNA) 30%, Nurse Practitioner (NP) 61%, Certified Nurse Midwife (CNM) 7%, and Clinical Nurse Specialist (CNS) 1%. b. Missing Data i. Missing data ranged from 6-8% on the psychological ownership measure ii. The Psychological Ownership subscale contained the highest amount of missing data (8%) iii. 23% of APRNs did not report their hospital ID iv. Missing data was handled through maximum likelihood c. Multi-level analyses i. Given the clustered nature of the data (nurses in hospitals), a multi-level approach was used, which corrects the standard errors and test statistics when fitting the model to complex data. 1. a WLSMV estimator was used 2. 2 measurement levels were modeled, within-group and between-group, however psychological ownership is a nurse level construct, so only the within-level factor structure was analyzed ii. Intraclass Correlations (ICC) ranged from 0-.12. Only 1 item had ICCs greater than .1 (.12) confirming a primarily nurse-level construct d. Good Subscale Reliability was demonstrated i. Control $\alpha = .88$ ii. Intimate Knowledge $\alpha = .77$ iii. Investment of Self $\alpha = .84$ iv. Psychological Ownership $\alpha = .91$ e. Good Construct Validity was demonstrated i. Good fit of model to data, $\chi^2(393) = 403.185$, $p = .351$, RMSEA = .007, and CFI = .998. ii. All items for the 4 subscales had statistically significant strong factor loadings 1. Experienced Control (β range .75 - .84) 2. Intimate Knowledge (β range .65 - .87) 3. Investment of Self (β range .77 - .94) 4. Psychological Ownership (β range .83 - .91) f. Overall, 84% of APRNs surveyed reported favorable responses (strongly agree or agree) indicating a high degree of psychological ownership i. The most favorable subscale responses were in Intimate Knowledge (94%) and Investment of Self (93%) ii. The least favorable subscale responses were in Experienced Control (59%) VII. Discussion a. The expanded Psychological Ownership Questionnaire performed well in an advanced practice nursing population indicating the subscales were measured as intended by this instrument b. Factor loadings were significant and strong for all items on the 4 subscales c. Favorable responses to the Control subscale were low in comparison to the other subscales suggesting this route may be less distinct in the sample population i. Hospitals, as organizations, are known for their bureaucratic, hierarchical power structures and are less empowering for nurses than ambulatory settings, so it is not surprising that sample APRNs indicated a lower level of control than other routes to

	<p>psychological ownership i. Studies in other professions, and the Theory of Psychological Ownership itself suggest Control is the most important route to the development of psychological ownership ii. The high sense of psychological ownership reported in this study, combined with high scores in both Intimate Knowledge and Investment of Self suggest that in a hospital setting, APRNs do perceive a high sense of psychological ownership for their jobs, but they may derive it from Intimate Knowledge and Investment of Self, in contrast to other professions studied. Further research is need to confirm this finding. VIII. Limitations a. Generalizability may be limited to APRNs in hospital settings in one state b. Large amount of missing data on the cluster variable may affect the mean cluster size and multi-level analyses c. This study had an oversampling of CRNAs as a percentage of APRNs which may bias results</p>
<p>4. Discuss how psychological ownership could be employed in nursing work environment research as a possible mechanism to improved nurse and patient outcomes.</p>	<p>IX. Conclusion a. Psychological ownership is a contemporary concept with substantive applications for nursing work environment research b. Experts recognize the importance of nurse work environments, but are calling for research that can lead to work environment interventions to improve nurse and patient outcomes c. Psychological ownership for one's work has been found to improve employee and organizational performance and outcomes in other fields, but has not been studied in nursing d. Possible further research i. Investigation of psychological ownership in other nursing populations (RNs, ambulatory settings, long-term care, end-of-life, etc.) ii. Investigation of psychological ownership's role in the relationship between work environment and nurse and patient outcomes iii. Longitudinal and intervention studies to investigate what components of nurse work environment are associated with improved psychological ownership, and if these relationships are, in turn, correlated with improvement in nurse or patient outcomes (e.g. during Magnet journey process) e. Exploration of psychological ownership as a mechanism for improved outcomes, and organizational interventions to increase psychological ownership of nurses has great potential to meet the global goal of improved healthcare quality</p>