

### LEARNING OBJECTIVES

- Discuss gaps in the nursing work environment research literature
- Describe key constructs in the Theory of Psychological Ownership
- Discuss the use of an expanded measure of psychological ownership in a nursing population
- Discuss how psychological ownership could be employed in nursing work environment research as a mechanism to improved and patient outcomes

### NURSE WORK ENVIRONMENT RESEARCH

- Magnet work
- Magnet measures
  - NWI (Kramer & Hafner, 1989) NWI-R (Aiken & Patrician, 1994)
  - PES-NWI (Lake, 2002)
  - EOM I & II (Kramer & Schmalenberg, 2004/5)
- 14 Magnet characteristics/ 5 components
  - Transformational Leadership
  - Structural Empowerment
  - Exemplary Professional Practice
  - New Knowledge, Innovation, and Improvements
  - Empirical Quality Results
- IOM Keeping Patients Safe: Transforming the Work Environment of Nurses



# Turnover JobStress Burnout JobSatisfaction

AdverseEvents Mortality
PatientSafety

### **OUTCOMES ARE INCONSISTENT**

- Relationship between + working conditions and patient outcomes inconclusive (Bae, 2011)
- Job satisfaction is related to working conditions, but further research is needed (Lu, et al, 2011)
- It is not possible to conclude Magnet® status has effects on nurse and patient outcomes (Dariel & Regnaux, 2015)

Assessing the relationships between nurse working conditions and patient outcomes: systematic literature review

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International Journal of Nursing Studies 49 (2012) 1017-1038



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#### International Journal of Nursing Studies

Nursing Studies

journal homepage: www.elsevier.com/ijns

#### Review

Job satisfaction among hospital nurses revisited: A systematic review Hong Lu<sup>a</sup>, K. Louise Barriball<sup>b</sup>, Xian Zhang<sup>a</sup>, Alison E. While b,\*

Do Magnet®-accredited hospitals show improvements in nurse and patient outcomes compared to non-Magnet hospitals: a systematic review.

JBI Database of Systematic Reviews and Implementation Reports. 13(6):168-219. IUL 2015

Odessa Petit Dit Dariel; Jean-Phillipe Regnaux

DOI: 10.11124/jbisrir-2015-2262

### RECOMMENDATIONS FOR FURTHER RESEARCH

- Contextual and multivariate influences are needed (Bae, 2011)
- The absence of a robust causal model is undermining the research (Lu, et al., 2011)
- Need more robust designs that measure the impact of Magnet® status on outcomes (Dariel & Regnaux, 2015)
- Identify causal mechanisms and interventions to bring about change (Norman, 2013)
- Need to provide a better understanding of the mechanisms that link the nursing environment to patient outcomes (Kazanjian, et al., 2005)

Nurse Work Environment Factors Improved Outcomes

### STUDY AIMS

- Investigate measurement of Psychological Ownership in a nursing population
- Explore relationship between Psychological Ownership and Nursing Practice Environment

### THEORY OF PSYCHOLOGICAL OWNERSHIP

Psychological Ownership is the state of mind that leads individuals to feel a target of ownership is "theirs"

### ROOTS (WHY) FOR OWNERSHIP DEVELOPMENT

- Efficacy and effectance
- Self-identity
- Having a place/Home



### ROUTES (HOW) TO OWNERSHIP DEVELOPMENT

- Control
- Intimate knowledge
- Investment of self



Organizations provide opportunities for development of ownership through how work is structured

### OUTCOMES OF PSYCHOLOGICAL OWNERSHIP



Motivation
Changeacceptance
PersonalSacrifice
In-RolePerformance
EXPERIENCEDRESPONSIBICITY
TobSatisfactions
Commitment

Of Self

## EXPERIENCED RESPONSIBILITY FOR WORK OUTCOMES-

"The degree to which the individual feels personally accountable and responsible for the results of the work he or she does"





### Psychological Ownership

Control
Intimate Knowledge
Investment of Self



Improved
Nurse &
Patient
Outcomes

### STUDY DESIGN

- Cross-sectional survey design
- Electronic survey of Florida APRNs working in hospitals
- Inclusion criteria: working in an APRN role in a Florida Hospital
  - Nurse Practitioners, Nurse Anesthetists, Nurse Midwives, Clinical Nurse Specialists
- Exclusion criteria: not working in an APRN role, not working in a hospital setting, not working in Florida
- 18,411 survey were sent/542 usable surveys returned
  - unknown how many APRNs work in hospitals
- Approved through University of Miami IRB

<b>APRN Characteris</b>	*Florida			
Age (N=486)		M=48.1 (SD 10.86)	(range 26-72)	M= 47.4
Gender (N=542)	Male Female	98 (18%) 444 (82%)		15% 85%
Race (N=542)	Hispanic Caucasian African American Asian	55 (10%) 467 (86%) 28 (5%) 16 (3%)		11% 71% 11% 4%
Type (N=537)	CRNA NP CNM CNS	161 (30%) 332 (61%) 35 (7%) 4 (<1%)		17% 59% 4% 1%
Highest Degree (in nursing	) (N=536) Bachelors Masters DNP PhD	19 (4%) 432 (80%) 69 (13%) 16 (3%)		11% 79% 3% 2%
Years as: (N=542) (N=539) (N=539)	RN (prior to APRN) APRN Current Position	M=10.22 (SD 8.01) M=12.87 (SD 9.90) M= 6.42 (SD 6.42)	· · · · · ·	

## MEASURE/ANALYSIS: EXPANDED PSYCHOLOGICAL OWNERSHIP QUESTIONNAIRE

- 21 items, 4 subscales: Control, Intimate Knowledge, Investment of Self, Psychological Ownership
- 4-point Likert-type scale (strongly agree, agree, disagree, strongly disagree)
- Analysis Plan
  - Descriptive Statistics
  - Reliability: Cronbach's alpha
  - Validity: Confirmatory Factor Analysis

### RESULTS

- Missing data 6-8% (maximum likelihood)
- **Good Subscale Reliability**

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$$\alpha = .88$$

$$\alpha = .77$$

$$\alpha = .84$$

$$\alpha = .91$$

#### **Good Construct Validity**

- Model fit
  - $\times^2$  (393) = 403.19, p = .351
  - RMSEA = .007
  - CFI = .998
- **Factors loadings**

•	Control	.6989

- Intimate Knowledge .65-.88
- Investment of Self .79-.93
- Psychological Ownership .83-.92



Control

.89\*

.87



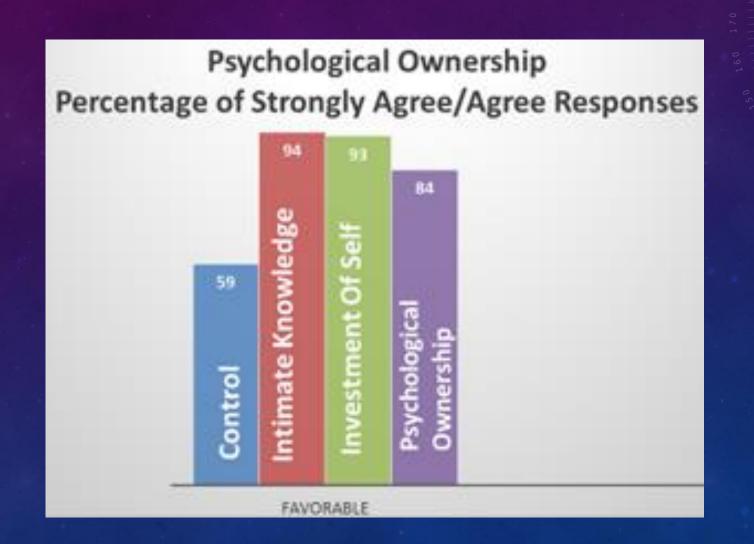


**Psychological** 

Ownership

.91\*

### **RESULTS**



### CONCLUSIONS

- The Expanded Psychological Ownership Questionnaire performed well in an APRN population
- Favorable responses were low in the Control subscale compared to other subscales
- APRNs perceive a high degree of Psychological Ownership for their jobs, but may derive it through Intimate Knowledge and Investment of Self
- Limitations
  - Generalizability outside of Florida APRNs
  - Oversampling of CRNAs and CNMs may bias results
  - Measurement issue: Likert type scale

## FUTURE DIRECTIONS

Nurse Work
Environment
Factors

Psychological
Ownership
Control
Intimate Knowledge
Investment of Self

Improved
Nurse &
Patient
Outcomes

- Psychological Ownership has applications for the nursing work environment research by offering a possible mechanism through which work environment factors influence nurse and patient outcomes.....
- Does Psychological Ownership result in positive outcomes in nursing, as found in other professions
- Does manipulation of work environment factors that impact nursing Psychological Ownership improve patient outcomes

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