The Ohio State University
COLLEGE OF NURSING

The Helene Fuld Health Trust
National Institute for Evidence-based Practice

EBP Knowledge and Competency in Nurses at Magnet and Non-Magnet Healthcare Institutions: *A National Survey*

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fuld.nursing.osu.edu

In God We Trust, Everyone Else Must Bring Data!

EBP = The Quadruple Aim in Healthcare

- Enhance the patient experience (includes quality)
- Improve population health
- Decrease costs
- Improve the work life of healthcare providers

WORLDviews on EVIDENCE-BASED NURSING™

The Establishment of Evidence-based Practice Competencies for Practicing Registered Nurses and Advanced Practice Nurses in Real-World Clinical Settings: Proficiencies to Improve Healthcare Quality, Reliability, Patient Outcomes, and Costs

2014

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The State of EBP throughout the U.S.: Hot off the Press Findings from the National Competency Study

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WORLDviews on EVIDENCE-BASED NURSING™

The First U.S. Study on Nurses' Evidence-Based Practice Competencies Indicates Major Deficits That Threaten Healthcare Quality, Safety, and Patient Outcomes

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Melnyk et al 2018

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Aims:

- describe the state of EBP competency in nurses across the U.S.
- determine important factors associated with EBP competency

Methods:

- Cross sectional anonymous descriptive survey with nurses across the U.S.

Melnyk et al 2018

Sample:

- 2,344 nurses from 19 hospitals/healthcare systems

- Mean age = 44.5 years

- 92% female

- 85% non-Hispanic White

- 58% had a bachelor's degree

- 69.2% worked in a Magnet organization

Melnyk et al 2018

Reported Level of EBP Competency by the Nurses

EBP Competency (Items 1 to 24)

1. Questions clinical practices for quality improvement
2. Describes clinical problems using internal evidence
3: Formulates clinical questions using PICO(T) format
4: Searches for external evidence for clinical questions
5: Critical appraisal of evidence
6: Critical appraisal of published research
7: Evaluation and synthesis of evidence
8: Collects data as internal evidence
9: Integrates external/internal evidences
10: Implements changes to improve care
11: Evaluates outcomes
12: Disseminates best practice evidences
13: Strategies to sustain an EBP culture
14: Systematically search for external evidence
15: Critically appraises pre-appraised evidence/studies
16: Integrates a body of external evidence
17: Leads trans-disciplinary teams
18: Generates internal evidence
19: Measures processes/outcomes of clinical decisions
20: Formulates evidence-based policies/procedures
21: Generates external evidence
22: Mentors others
23: Implements strategies to sustain an EBP culture
24: Communicates best evidence

1 (Not Competent) 2 (Need Improvement) 3 (Competent) 4 (Highly Competent)

# State of Self-reported EBP Competencies by Nurses Across the United States (N = 2075)

Melnyk et al 2018
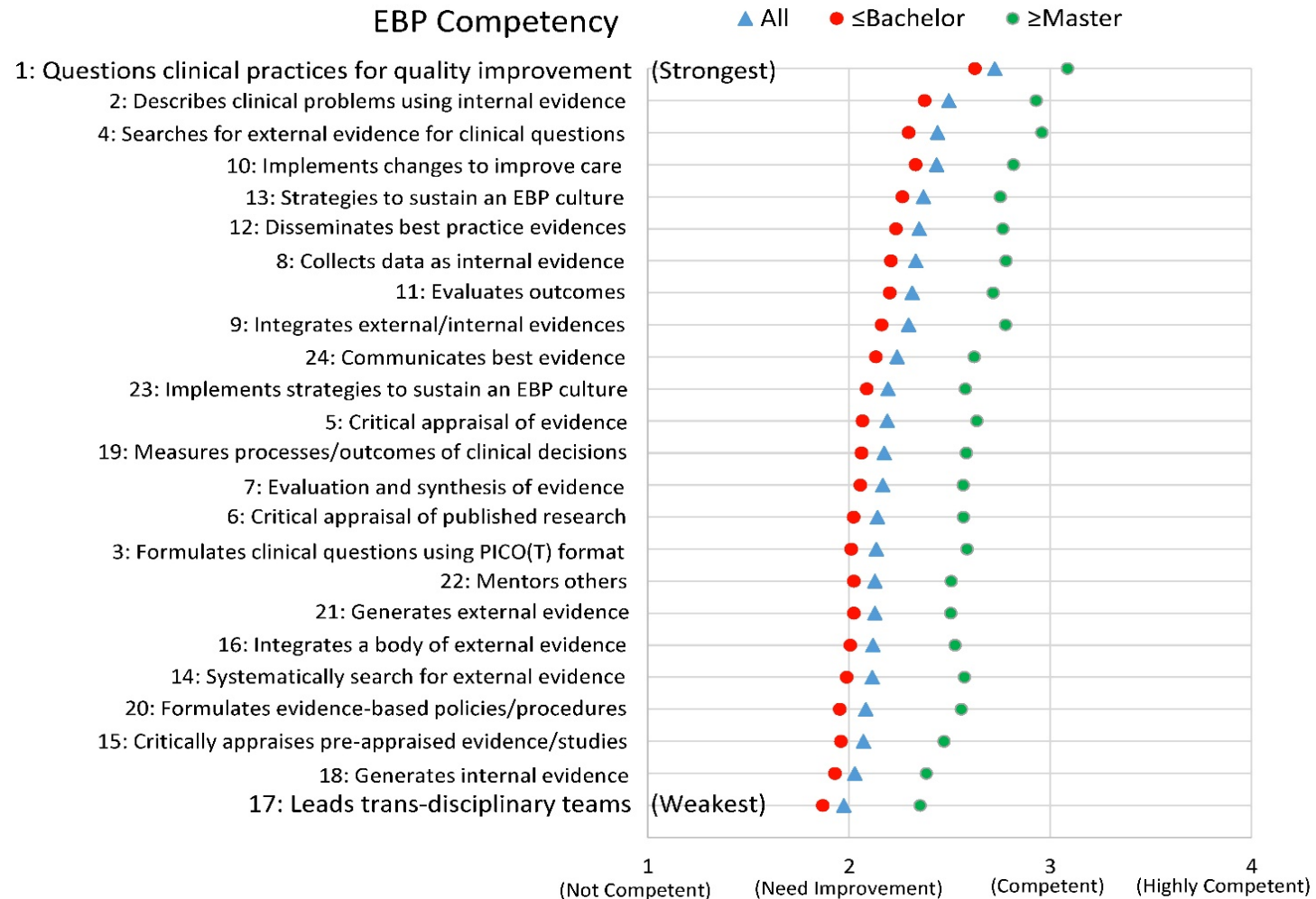
Correlations among EBP Competency and EBP Culture, Knowledge, Beliefs and EBP Mentoring

	Mean (SD)	Pearson Correlation Coefficient			
		Competency	Culture	Knowledge	Beliefs
Culture	80.2 (21.9)	0.29	–	–	–
Knowledge	19.5 (7.0)	0.43	0.28	–	–
Beliefs	56.7 (8.5)	0.66	0.47	0.42	–
Mentoring	21.4 (10.9)	0.69	0.69	0.24	0.47

P < 0.001 for all the Pearson correlation coefficients

Melnyk et al 2018

Structural Equation Model
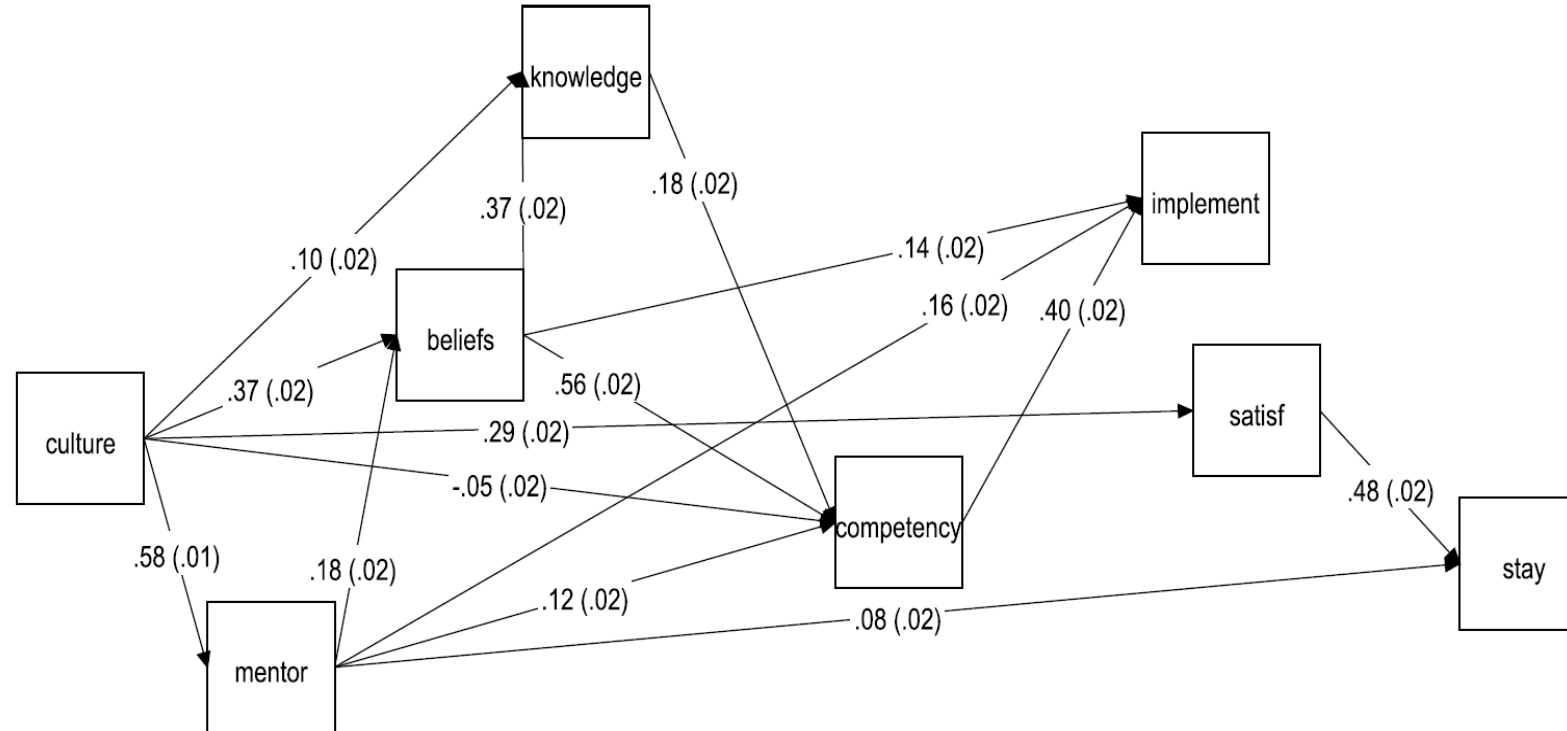
1. Figure shows the standardized coefficient (SE) of each path.
2. All paths are statistically significant.
3. The model has a close fit.
   Chi-square =84.8, df = 12, p<0.001 (due to large sample size)
   RMSEA = 0.051 (90% CI: 0.041-0.061)
   CFI =0.987
   TLI = 0.969
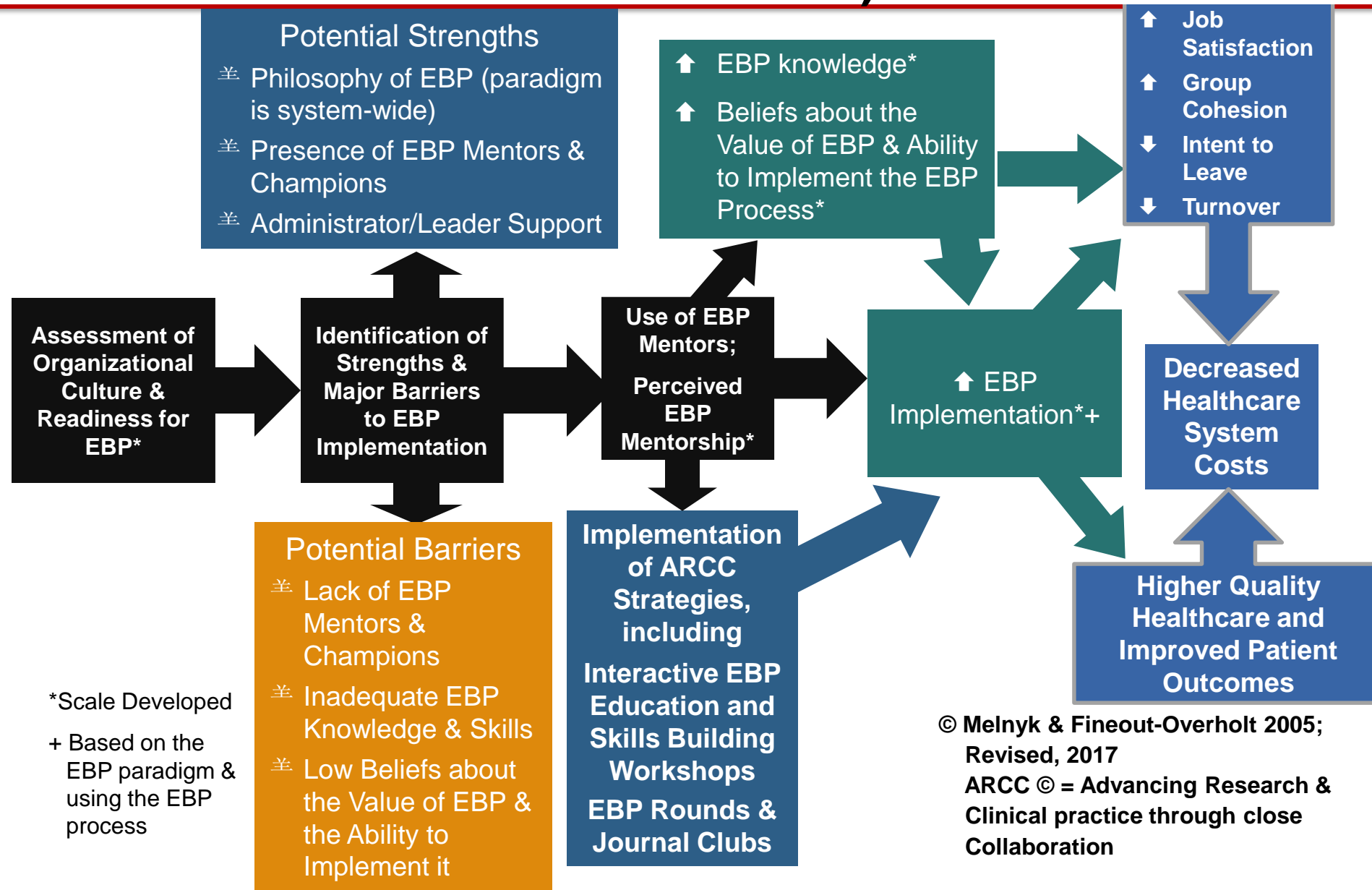4. No significant modification indices

Creating a Culture and Environment to Assist Clinicians in Achieving the EBP Competencies and Sustaining EBP
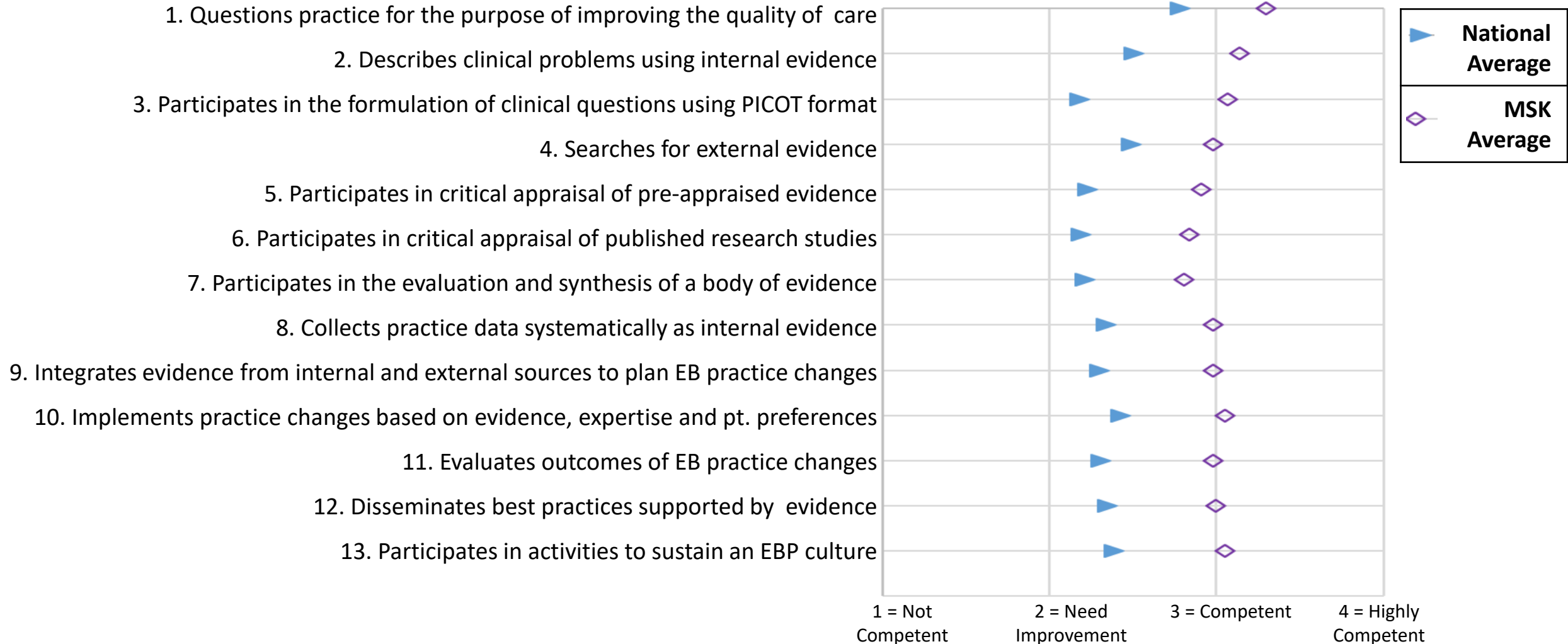
*Remember,
Culture Eats Strategy!*
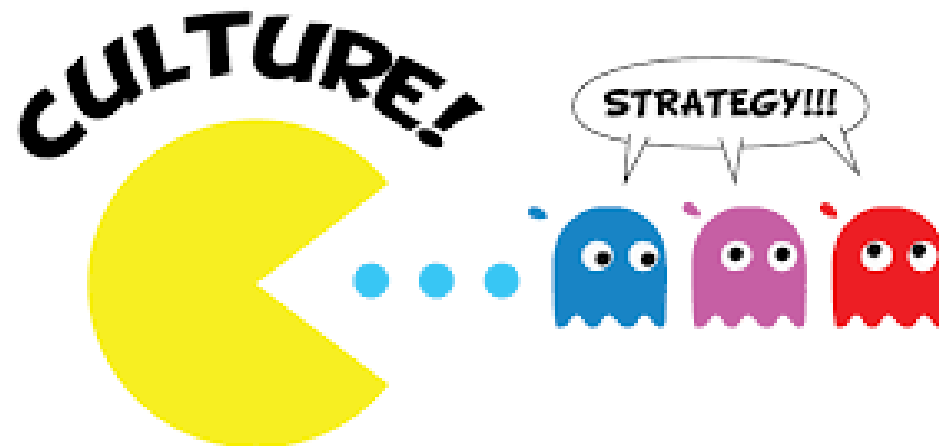
The ARCC© (Advancing Research and Clinical practice through close Collaboration) Model

Potential Strengths
- Philosophy of EBP (paradigm is system-wide)
- Presence of EBP Mentors & Champions
- Administrator/Leader Support

↑ EBP knowledge*

↑ Beliefs about the Value of EBP & Ability to Implement the EBP Process*

↑ Job Satisfaction
↑ Group Cohesion
↓ Intent to Leave
↓ Turnover

Assessment of Organizational Culture & Readiness for EBP*

Identification of Strengths & Major Barriers to EBP Implementation

Use of EBP Mentors; Perceived EBP Mentorship*

↑ EBP Implementation*+

Decreased Healthcare System Costs

Potential Barriers
- Lack of EBP Mentors & Champions
- Inadequate EBP Knowledge & Skills
- Low Beliefs about the Value of EBP & the Ability to Implement it

Implementation of ARCC Strategies, including
Interactive EBP Education and Skills Building Workshops
EBP Rounds & Journal Clubs

Higher Quality Healthcare and Improved Patient Outcomes

*Scale Developed

+ Based on the EBP paradigm & using the EBP process

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ARCC © = Advancing Research & Clinical practice through close Collaboration

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Outcomes of Implementing the ARCC Model at Washington Hospital Healthcare System

- Early ambulation in the ICU resulted in a reduction in ventilator days from 11.6 to 8.9 days and no VAP

- Pressure ulcer rates were reduced from 6.07% to .62% on a medical-surgical unit

- Education of CHF patients led to a 14.7% reduction in hospital readmissions

- 75% of parents perceived the overall quality of care as excellent after implementation of family centered care compared to 22.2% pre-implementation
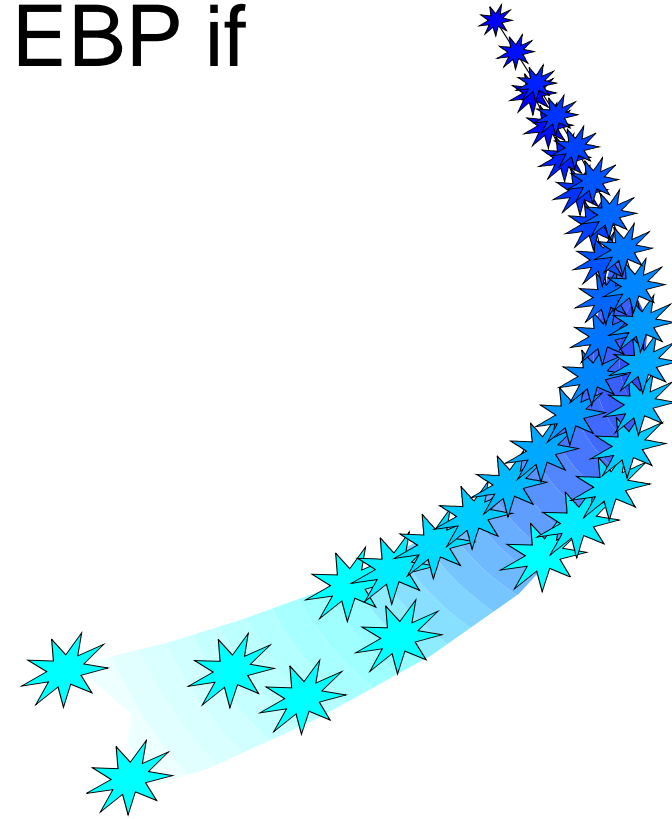
Melnyk et al., 2017, *Worldviews on Evidence-based Nursing*

What will you do in the next 90 days to advance EBP if you know you cannot fail?

Keep dreaming, discovering and delivering!!!

There Is A Magic In Thinking Big!

The Helene Fuld Health Trust National Institute for EBP in Nursing & Healthcare took 10+ years for the dream to become reality

Inaugural Fuld National Expert Forum and Summit

October 18-20, 2017

Recommendations just published in Worldviews on Evidence-based Nursing

See https://fuld.nursing.osu.edu/

A DREAM DOESN'T BECOME REALITY THROUGH MAGIC; IT TAKES SWEAT, DETERMINATION AND HARD WORK.
- COLIN POWELL

- **Fuld EBP Summit, November 21 & 22, 2019**
- **EBP Certificate Approval by the Accreditation Board for Specialty Nurse Certification (First Accredited Certificate of Added Qualification in EBP)**

Contact Information

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