

# **Mindfulness Based Educational Strategy to Increase Data Analysis Self-Efficacy of DNP Students**

Meigan Robb, PhD, RN and Kathleen Spadaro, PhD, PMHCNS, RN

# Background

- DNP prepared nurses should have competence in:
  - Translating research into practice
  - Evaluating practice improvement initiatives
  - Making practice based decisions

# Background

- Role of DNP nursing faculty:
  - Assess competencies
  - Create experiential learning activities
  - Support the development of essential skill-sets



# Background

---

**Setting:** Private university in Southwestern Pennsylvania

---

**Participants:** DNP Students ( $n = 44$ ) enrolled in an online data-driven decision making course

---

**Identified problem:** DNP students lacked data analysis self-efficacy

# Methods

- Mindfulness-based educational strategy
  - Requires students to pause and reflect
  - Requires students to be present in the moment
  - Requires students to not focus on distractors of past or future events

# Methods

- Series of single tasks:
  - Task 1: Self-assessment of current perceived level of competence related to self-efficacy
  - Task 2: Select and review three data analysis related tutorials
  - Task 3: Post a summary outlining knowledge and skills gained
  - Task 4: Exchange focused reflective dialogue



# Findings

- Written narratives revealed three categories of perceived competence:
  - 45% novice
  - 32% advanced beginner
  - 23% competent

# Findings

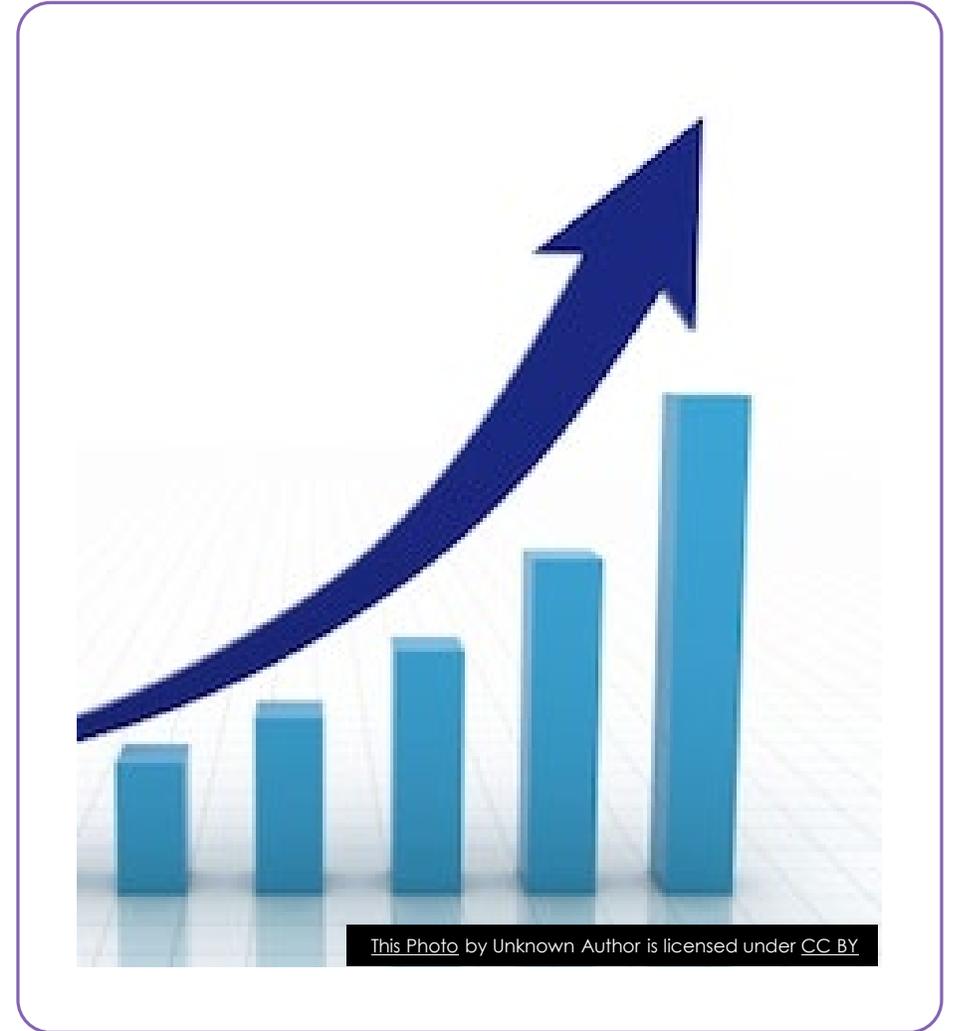
- Tutorial selections revealed three predominant themes of perceived weakness:
  - Steps for completing descriptive statistics
  - Procedures for writing formulas
  - Approaches to data management

# Findings

- Posted summary and exchange of dialogue revealed:
  - A revised sense of data analysis competence
  - Confidence in abilities to use the skills gained from the tutorials
  - Perceived readiness to complete the data analysis assignment

# Findings

- Final course evaluations reflected an increase in perceived ability to:
  - Identify appropriate data analysis steps to follow
  - Complete data analysis for future quality improvement projects
  - Use the outcomes of data analysis to make clinical decisions



# Conclusion

- Use of a mindfulness-based educational strategy:
  - Increases self-awareness
  - Enhances self-efficacy beliefs
  - Encourages focused reflection
  - Results in a comprehensive understanding of course topics

Robb, M., & Spadaro, K. (in press). A mindful approach to increase data analysis self-efficacy of DNP students. *Nurse Educator*.

# Questions

Meigan Robb, PhD, RN  
mrobb@iup.edu

Kathleen Spadaro, PhD, PMHCNS, RN  
kspadaro@chatham.edu



# References

- American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. Retrieved from: <http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf>
- Kosal, E. (2019). Mindfulness in the classroom. *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/articles/effective-classroom-management/mindfulness-in-the-classroom/>
- Miraglia, R., & Asselin, M. E. (2015). Reflection as an educational strategy in nursing professional development. *Journal for Nurses in Professional Development*, 31(2), 62-67.
- Schwind, J. K., McCay, E., Beanlands, H., Schindel Martin, L., Martin, J., & Binder, M. (2017). Mindfulness practice as a teaching-learning strategy in higher education: A qualitative exploratory pilot study. *Nurse Education Today*, 50, 92-96.
- Spadaro, K. C., & Hunker, D. F. (2016). Exploring the effects of an online asynchronous mindfulness meditation intervention with nursing students on stress, mood, and cognition: A descriptive study. *Nurse Education Today*, 39, 163-169. Available at <http://dx.doi.org/10.1016/j.nedt.2016.02.006>
- Walker, M., & Mann, R. A. (2016). Exploration of mindfulness in relation to compassion, empathy and reflection within nursing education. *Nurse Education Today*, 40, 188-190.