

# The Effect Of Combining E-learning Module With Simulation On Prelicensure Nursing Students' **Knowledge And Attitudes Toward Person-Centered Dementia Care** Cynthia E. Johnson PhD, RN, CHSE; Rebecca M. Gee, PhD, RN, CHSE; and Katie Morales, PhD, RN, CNE

# **Summary of the Problem**

•Due to global prevalence of dementia, US Department of Health and Human Services National Plan to Address Alzheimer's Disease recommends healthcare professionals prepare to address complex needs of people with dementia. •Nursing programs adopted experiential learning methods to address this gap.

•While such methodologies are increasingly used, limited evidence exists to inform best teaching practices.

## Purpose

Evaluate the combined effect of an e-learning module with the Virtual Dementia Tour® (VDT®) on prelicensure nursing students' knowledge and attitudes toward person-centered dementia care.





## **Methods**

- The study used a crossover, quasi-experimental, multi-site design with a pre-test/post-test approach.
- A convenience sample of nursing students was recruited from three public universities in the Southeast United States.

## Acknowledgments

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- We have no conflicts of interest to disclose.

## **Research Questions**

- RQ1: Does prelicensure nursing students' (students) baseline knowledge of dementia care differ significantly based on previous dementia care *education*?
- RQ2: Does students' baseline *knowledge* of dementia care differ significantly based on previous dementia care *experience*?
- RQ3: Do students' baseline *attitudes* of dementia care differ significantly based on previous dementia care education?
- RQ4: Do students' baseline *attitudes* of dementia care differ significantly based on previous dementia care *experience*?
- RQ5: What are the relationships between baseline *attitudes*, baseline knowledge, previous dementia care experience, and previous dementia care education?
- RQ6: After controlling for previous dementia care *education* and *experience*, is there a significant difference in students' *knowledge* of dementia care from the baseline after completing the e-learning module?
- RQ7: After controlling for previous dementia care training and experience, is there a significant difference in students' *attitudes* of dementia care from the baseline after completing the VDT®?
- RQ8: After controlling for previous dementia care training and experience, is there a significant difference in students' knowledge of dementia care from the baseline based on the order of the interventions?
- RQ9: After controlling for previous dementia care training and experience, is there a significant difference in students' *attitudes* of dementia care from the baseline based on the order of the interventions?
- RQ10: What is the relationship between the students' score on the VDT® observation sheet and their *attitudes* toward dementia care score after taking the VDT®?

# Results

- Experience was a stronger predictor of attitudes than education.
- Significant improvements in attitudes toward people with dementia were found in students with previous dementia care experience or those employed to provide services to people with dementia.
- However, the reliability of the Dementia Knowledge Assessment Scale (DKAS) was not sufficient in this study.

# Limitations

- Use of convenience sample may have led to selection bias and limit generalizability to other samples and settings.
- system which may affect external validity.
- Use of self-report instruments may introduce response bias and affect accuracy of data.
- Scales of the DKAS were unreliable in this study, which affected robustness of results for this variable.

While study included multiple sites, all were members of same university

•Experience was a stronger predictor of attitudes than education.

•Findings supported Bandura's premise that lived experiences and outside influences are essential to learning and developing self-efficacy. Previous dementia care experience, such as being employed to provide services to people with dementia, and experiential learning positively affected students' attitudes of dementia care. •Those who completed e-learning module first scored higher on attitudes after the virtual simulation, suggesting this served as a pre-brief.

- positively affecting attitudes.
- completed first.
- participants.
- with dementia.





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## Discussion

• In accordance with Bandura's theory, this provided a learning method to master content prior to simulation,

 When students completed virtual simulation prior to elearning module, they were overwhelmed by emotions and behaviors while immersed in the virtual environment. Relationship between students' scores on observation sheet and attitudes in dementia care score were negatively affected when virtual simulation was

• During debriefing after virtual simulation:

Participants expressed they felt overwhelmed and struggled to hear and follow the provided instructions during simulation, leading them to "look for something to do." While this behavior was interpreted as wandering, rummaging, or hoarding by faculty observers, these behaviors had meaning to

Participants reported they felt more empathy for people

 The findings may inform best practices for experiential learning in nursing education to prepare graduates to provide quality care for people with dementia.

### Contact



## References

