Abstract:
The purpose of this grant-funded project was to evaluate the effectiveness of the “Hearing Voices Simulation” experience for occupational therapy (OT) students. This project explored the value of the simulation in building empathy in (OT) students towards individuals who experience auditory hallucinations, most commonly as a symptom of a mental illness. The investigators facilitated the simulation lab in March 2019 with 116 first-year OT students enrolled in OTD 317: Occupational Therapy in Mental Health. Following the simulation, the students provided feedback on the effectiveness of the experience. The simulation proved to be an effective learning modality to build empathy toward individuals. Furthermore, with skill development and attainment of self-confidence through this simulation, students may overcome obstacles, including anxiousness, when applying their skills in mental health settings (Chaffin & Adams, 2013). In addition, students may change their attitudes and perceptions on individuals experiencing similar symptoms in mental health settings (Kidd, Tusae, Morgan, Freebe, & Garrett, 2015). The purpose of incorporating a virtual reality simulation in OTD 317 is to apply knowledge about mental illness, increase said knowledge with higher levels of familiarity, reduce anxiousness, and gain confidence and empathy.

Methods:
- Students were given a lecture on Schizophrenia and auditory/visual hallucinations the week of the lab experience, which took place approximately 5 weeks in to the 16 week semester.
- Students participated in the simulation during a scheduled lab
- Students watched a 55 min. video explaining the simulation experience as a large group.
- Students then begin the individual portion of the learning experience by wearing headphones and listening to a 45 min. MP3 recording of distressing voices. They were instructed to keep headphones on for the experience, but they may stop the simulation recording if hearing the distressing voices/auditory hallucinations became overwhelming at any time.
- Students were asked to complete activities such as creating a grocery list, math problems, taking a cognitive assessment, etc. while the distressing voices recording was playing - the intention was to simulate the experience of hallucinations while trying to participate in daily occupations such as ADLs, budgeting, meal planning, etc.
- Students concluded the lab in a large group debrief of the experience
- Following the lab, students completed a post-experience survey

Survey questions and sample student responses:
- 116 students in the simulation and post-experience survey
- Students responded to the following questions:
  1. How did the simulation affect your behavior at the various workstations? “I felt agitated, frustrated, irritable, and impatient with others/myself”, “I had to try “extra hard” to complete familiar and simple tasks”, “I engaged less with my peers during the experience”.
  2. How did the simulation affect your ability to perform tasks at the workstations? “It took me a lot longer to complete tasks”, “It was distracting at times, especially when the voices were negative”.
  3. What are the ways you tried to cope with the auditory hallucinations simulation during workstation tasks? “I tried to cope by talking with others, I actually found the silences very difficult, anticipating the voices would return.”
  4. How will this experience affect your work as an OT in the future? “This experience did allow me to better put myself in the shoes of someone with schizophrenia. It will give me more insight into their daily disruptions and needs to help better shape their treatment sessions”. “It helped me understand the experience a person may be going through and why they are trying to avoid certain tasks or people the way they are”.  
  5. What might you do differently as an OT in the future as a result of this experience? “I would set an appropriate environment for clients with similar symptoms, decrease distraction and interruption. And I would keep a slower pace for them because they need more time to execute all the information with the voice.”

Grant funding was secured in the spring of 2019 from The Teaching and Learning Center (TLC) at Creighton University to evaluate the effectiveness of the “Hearing Voices” simulation experience with 116 occupational therapy students in 4 pathways.

Learning objectives:
1. Investigate the effectiveness of the “Hearing Voices” simulation,
2. Examine the effect of the simulation on OT student empathy levels.

References available by request