Expanding Consciousness- Experiencing the "Virtual" Reality of Life with Dementia

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Background
- Over 50 million people worldwide live with dementia and 10 million people are anticipated to be diagnosed each year (World Health Organization, 2017).
- Nurses and nursing students worldwide have been found to lack dementia knowledge, attitude or interest (Scerri, Scerri 2013; Wang, Xiao, Wang, Li, Yang, 2017)
- There have been calls for clinical experiences to be added to enhance this but many institutions find this is not feasible. Experiential learning appears to play a role in dementia knowledge and attitude, if they cannot add clinical is there another way?

Virtual Reality and Experiential Learning for Dementia
- Immersive learning is an effective teaching and learning approach (Farra, Smith, Ulrich, 2018).
- Technology in the classroom is readily available through the use of students’ devices and virtual reality (VR) googles are affordable options to enhance this and make VR in the classroom a possibility (Brown, Green, 2016)

Intersections of these Concepts
- Alzheimer’s UK has created a Virtual Reality App “A Walk Through Dementia” where participants get to “be” Mary with Alzheimer’s
- This app was utilized as a learning modality in first and fourth year student classes looking at Dementia

Research Design and Methodology
- First Year Communication Class participants n=33
- Fourth Year Chronicity Class participants n=49
- Mixed method study with:
  - pre- and post- completion of the Dementia Attitude Scale (O’Connor, McFadden, 2010) and the Dementia Knowledge Assessment Scale (Annear et. Al., 2017)
  - Qualitative survey on the learning experience of VR in the Classroom
- Students completed the pre-survey, did the 3 VR experiences, had a debrief (no formal teaching) and then post-survey

Results and Discussion:
- Dementia Attitude Scale Results:
  - Year One Students: Average score pre- was _________ and average score post was ______
  - Year 4 Students: Average score pre- was _________ and average score post was ______

- Dementia Knowledge Assessment Scale Results:
  - Year 1 Students: showed a statistically significant p-value change for the positive in 6 questions of this survey
  - Year 4 Students: showed a statistically significant p-value change for the positive in ___ questions of this survey
  - This demonstrates that this activity was able to positively impact knowledge and beliefs.

- Qualitative Results:
  - 36% of participants reported as Very Effective, 59% as Effective, <1% Ineffective, and 3% Very Ineffective.
  - Participants reported higher levels of physical responses then the literature reports (which were frequently around 10%).
  - Some classroom management principles may be enhanced (clearer instruction and more formalized orientation to VR may aide)
  - Debriefing was identified as a valuable part of making meaning of the experience and learning from it not just participating in it.

Future Plans:
- Will continue the use of this strategy
- Advocate it could be introduced into other contexts
- Continue to use SoTL research to enhance the efficacy of teaching strategies
- Further research into increased prevalence of physical symptoms
- Anecdotally, I would not recommend widespread use of VR (novelty provided more memorable learning).

References on handout.