

## Sigma Theta Tau International's 29th International Nursing Research Congress

### Interprofessional Collaboration on an Aging Simulation

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#### **Purpose:**

The purpose of this interprofessional collaborative work was to provide nursing students with an aging simulation in which they not only experienced what an older adult goes through but also learned other healthcare discipline roles.

Background: Globally, we are aging with Centenarians being the fastest growing segment of the U.S. population, and the old-old (age 85 and above) comprising the second fastest (Mauk, 2018). The silver tsunami is having significant impact on the health care industry and will continue to do so for many years. This aging population is also the most diverse ever seen in the U.S. (Mauk, 2018). Young adults going into health related fields are not always thrilled to care for an aging population and many lack the knowledge and empathy needed. An interprofessional simulation created an environment in which the young adult health care student takes on the role of the older adult to experientially have a sense of what they go through in their older years. One of the greatest needs in healthcare is for older adults, and interprofessional teams will play a vital role in such care (Dillion, Ailor & Amato, 2009). Dahlkemper (2016) informs us that nursing practice must change in order to meet the different demands of the aging population. Collaborating with professionals outside of nursing is crucial in academia because students preparing for healthcare disciplines will be working together after graduation. Our current Sigma president, Dr. Tigges has called us to collaborate and connect and these skills are essential for interprofessional education to occur. Academia is leaving the silos behind as it is branching out while professors are modeling behavior of connecting and collaborating interprofessionally. Scheduling of courses often creates barriers that require creative and innovative thinking to overcome. However, this can be accomplished.

#### **Methods:**

A mixed methods design was used that included a pre-post survey on empathy, 3 qualitative questions prior to the simulated activity and a reflective journal after the activity. The *Into Aging: Understanding Issues Affecting the Later Stages of Life*, 2<sup>nd</sup> ed. (1991) simulation was developed by Susan Dempsey-Lyle, MSN CS RN, and Therese Lemire Hoffman, MSN BSN RN, is a highly interactive simulated experience in which the participant takes on the role and identity of an aging adult. This identity included their name, age (must have been >65 years old), occupation or retired from what occupation, their residence and three prized possessions. These prized possessions were to be things that the individual person holds dear value to (i.e. family photos or heirlooms). This simulation was used with undergraduate pre-licensure baccalaureate nursing students, social work, recreation therapy and one class of first semester graduate social work students after appropriate IRB approval was sought from an appropriate institution of higher learning. Informed consent was obtained from all volunteer participants prior to the simulated experience. Prior to the simulation, demographic information was collected and participants were asked to answer three questions: 1) Has there been an older adult in your life that you are or were particularly close to, 2) have you ever taken a class that focused specifically on aging, and 3) are you currently or have you worked with older adults within the last two years? Students were also asked to complete the Kiersma-Chen Empathy Scale (KCES) which consists of 15 likert scale questions (1-7 with 1= strongly disagree to 7=strongly agree). Four of the 15 questions were reverse coded. This scale resulted in a Cronbach alpha of 0.869 when used and validated in an aging simulation with nursing and pharmacy students (Kiersma, Chen, Yehle,& Plake, 2013). These questions were asked to establish a baseline.

## Results:

Of the 185 participants, 167 participants, across nursing ( $n=77$ ), recreation therapy ( $n=57$ ), and social work ( $n=45$ ) majors had complete data and were included in the final analyses. Eighteen participants were missing baseline or post-test data and were excluded from final analyses. Seven participants were missing baseline data, which included three participants from nursing, three from social work, and one from recreation therapy. Additionally, 11 participants were missing data at post-test, which included three participants from nursing, four participants from social work, and four participants from recreation therapy.

Three major overarching themes were identified through content analysis that was conducted individually then collectively by the three principle investigators (PI). All the PIs were doctorally prepared. The three themes from student's reflective journals are: 1) Impact of the aging experience (i.e., what it feels like to be an older adult), 2) approaches to care for older adults by health and human service providers, and 3) new personal and professional perspectives on aging. The impact of the aging experience includes subthemes of loss and meaning attached. Loss includes the loss of independence, the loss of decision-making capability, loss of physical ability, loss of prized possessions, and loss of self-image. A social work student stated, "I felt anxious, confined. I wanted to get out and reverse time." A nursing student stated, "it was very disheartening seeing elderly lined up and wait for death, slowly having their belongings taken away." A suicide option card was chosen at least once every semester by at least one student participant. Student's reported reasons for choosing a suicide card were: "loosing all possessions and money and workers were so insensitive, I opted out with suicide" (nursing student); "I had no sense of hope" (nursing); "realizing that committing suicide seemed better than being institutionalized, deaf, blind, and restrained on a daily basis" (nursing); "so little control...treated like a crazy person...the only choice I was given was suicide which is mostly why I did it" (social work). One nursing student stated, "I was surprised that two people chose suicide over life because of the way they were treated."

SPSS version 22 was used to analyze quantitative data. A Wilcoxon signed rank test was conducted to identify if a significant difference existed between mean empathy scores from pre-test to post-test, individually and between majors following students' participation in the *Into Aging* simulation (Pallant, 2016). Findings revealed a significant difference in mean empathy scores from pre-test to post-test,  $Z=-7.02$ ,  $p<.001$ , with a moderate effect size observed ( $r=-0.54$ ). These results indicated that participants demonstrated more empathy following their participation in the *Into Aging* simulation. Findings from Wilcoxon signed rank tests identified that there were significant differences in empathy scores from pre-test to post-test among nursing participants  $Z=-4.84$ ,  $p<.001$ ,  $r=-0.37$ , recreation therapy,  $Z=-3.65$ ,  $p<.001$ ,  $r=-0.28$ , and social work,  $Z=-3.50$ ,  $p<.001$ ,  $r=-0.27$ . These findings suggested that the *Into Aging* simulation had a small, but significant, improvement in empathy scores from pre-test to post-test for all majors after participation in the *Into Aging* simulation. A one-way ANOVA was conducted to identify if a difference existed across majors (Pallant, 2016). No significant differences identified between the majors in empathy test scores at baseline,  $F(2, 175)=.21$ ,  $p=.811$ , which indicated that groups were comparable at baseline in their level of empathy. A one-way repeated measures ANOVA was then conducted to compare the effects of majors (nursing, recreation therapy, and social work) on pre- vs. post-test scores on the KCES. A significant effect of time was identified, Wilks'  $\lambda = 0.76$ ,  $F(1, 164) = 51.17$ ,  $p<.001$ , partial  $h^2 = .24$ , which indicated that mean empathy scores on the KCES significantly improved from pre-test to post-test. However, there was no significant major by time interaction identified, Wilks'  $\lambda=0.99$ ,  $F(2, 164)=.33$ ,  $p=.718$ , partial  $h^2=.004$ , suggesting all majors improved their mean empathy scores at a similar rate. Thus, regardless of major all became more empathic following the *Into Aging* simulation.

## Conclusion:

It is plausible that students going into health care related fields already have a higher level of empathy towards others; therefore, a ceiling effect was possible. However, this experience made a significant difference even with a potentially higher level of empathy starting out. One student indicated they were impacted most by, "it can be one simple, sudden life event that can send a previously capable older adult into dependence." A nursing student reflects on their professional practice, "I hope I can provide better care." Another nursing student stated, "very influential experiment/simulation. All healthcare workers must

understand the feelings, viewpoints and aging process in order to help the elderly succeed.” A social work student indicated wanting to care for the aging population after this simulation. This simulation had significant impact on knowledge, attitude, beliefs and empathy towards older adults. Experiential activities facilitate student learning and understanding in an interactive manner, which is preferred by the traditional student.

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**Title:**

Interprofessional Collaboration on an Aging Simulation  
Symposium

**Keywords:**

Collaboration, Education and Interprofessional

**References:**

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**Abstract Summary:**

Young adults going into health related fields are not always thrilled to care for an aging population and many lack the knowledge and empathy needed. An interprofessional simulation created an environment in which the student takes on the role of an older adult. Significant impact on empathy was noted.

**Content Outline:**

Content Outline: Collaboration

Main Point #1: Many barriers exist in academia that prevent interprofessional collaboration from happening.

Supporting Point 1

1. Just a few of these barriers are scheduling a convenient time for classes to meet together, scheduling rooms large enough to hold more than 1 class of students, and allowing all students to experience the simulation.

Main Point #2: Health care does not work in silos and academia has been pushing away from these silos and encouraging professors to teach interprofessionally.

1. Departments that do not share a common building tend to work in silos; therefore having a common building in which health care professors can intermingle lends itself to development of interprofessional educational experiences for students.
2. Students reported that learning interprofessionally was helpful in understanding and respecting each other's discipline and role.

First Primary Presenting Author

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**Professional Experience:** 2013-present--Assistant Professor, UNCW, Wilmington, NC. Dr. Arms has been a Registered Nurse for over 20 years. 2007-present--Adult / Geriatric Nurse Practitioner. 2013 - present Family Psychiatric Mental Health Nurse Practitioner. Dr. Arms coordinates the undergraduate prelicensure gerontology/end-of-life course, in which she incorporates many interprofessional simulations. Dr. Arms also teaches heavily in the DNP program, and is currently developing a Psyche Mental Health Nurse Practitioner program.

**Author Summary:** Dr. Arms is an assistant professor in the School of Nursing at the University of North Carolina Wilmington. She holds a doctorate of nursing practice as an Adult/Geriatric and family Psychiatric Mental Health Nurse Practitioner. She has co-authored a book on clinical reasoning in Advanced Practice Nursing; co-authored a chapter on interprofessional simulation, and has published articles in the over arching field of geropsychiatry.