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Engaging nursing students and older adults through service-learning

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Service-Learning Engages Nursing Students and Older Adults

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Engaging Nursing Students and Older Adults through Service-Learning

A basic qualitative study design (Merriam & Tisdell, 2016) was utilized to direct the data collection and analysis to achieve the aims of this study. The purpose of the study was to examine nursing students' (N=18) perceptions of interrelating with older adults to understand how such interactions might improve students' levels of cultural competence and enhance their future nursing practice. Additionally, the study sought to contribute to a higher level of technological competency in older adults. Four themes emerged from the data collected based on cultural knowledge, cultural skills, cultural desire, and engaging in cross-cultural interactions. Students reflected on how their experiences would help them to interact with older adults in their future nursing practices. Limitation of the research is that the exploratory study cannot be generalized for a wider demographic. Also, the students' prior experiences working with older adults was not considered and their reflections may not have accurately portrayed their true biases. Reflection is a valuable practice to help students think through their experiences and is considered a key component of service-learning. In this study, students reflected on how their experiences would help them to interact with older adults in their future nursing practices. Nursing students who are later employed take with them empathy, more sensitivity and positive attitudes toward older people to benefit the nurse-patient relationship with this population. This is one of a handful of studies located that pairs nursing students with older people in teaching technology skills through iPad technology.

Engaging Nursing Students and Older Adults through Service-Learning

According to the 2018 United States Census, older adults over 65 are the fastest growing segment of American society and for the first time, most (80%) of these households had access to computers and the Internet (Roberts, Ogunwole, Blakeslee, & Rabe, 2018). However, researchers have noted that cognitive deficits, working memory, and low self-efficacy may still prevent these older adults from using technologies (Jones, Kay, Upton, & Upton, 2013). Additionally, Chaumon, Michel, Bernard, and Croisile (2014) reported that as adults age, they may experience social isolation from their friends and family members resulting in psychological difficulties such as feelings of loneliness, depression, anxiety, and lowered self-esteem. In fact, the Centers for Disease Control and Prevention (2020) reported that older adults feel isolated and/or lonely and with the global coronavirus (COVID-19) pandemic of 2020; and, this social isolation and feeling of loneliness may be further elevated as many older adults have been socially quarantined.

As the population ages, there is a greater demand for healthcare workers to care for older adults. Research has shown that students' perceptions towards older adults improve when they are provided learning experiences that combine gerontological content and relevant practical experiences (Kogan & Schoenfeld-Tacher, 2018; Neville & Dickie, 2014; Zucchero, 2011). Such experiential education is often found in service-learning (SL), which is an educational approach that incorporates course content while allowing students to serve their community. According to Sabo et al. (2015), SL is a means to address health disparities and promote social justice, even in our most vulnerable communities. However, few studies reveal the relationships between gratitude, care willingness, and attitude towards the elderly (Zhang, et al., 2016). Moreover, LoBuono, Leedahl, and Maiocco (2020) reported that "more information is needed to understand

best practices for teaching older adults how to use technology and understand older adults'

reasons for continued participation in an intergenerational program" (p. 15). To promote better

social connectedness, reduce loneliness and social isolation, interventions are needed (O'Rourke,

Collins, &, Sidana, 2018).

This article describes an intergenerational service-learning project in which nursing

students supported an older adult population learning to use iPad technology. The American

Association of Colleges of Nursing (2020) conveyed that "with the increasing prevalence of

patient focused health information technologies, all nurses have a responsibility to advocate for

access and assist patients and consumers to optimally use these [technology] tools to engage in

care, improve health, and manage health conditions" (Domain 8, p. 5). Providing a service-

learning experience where nursing students provide technology support to older adults may allow

students to have a better understanding of the environments, in which, their patients live (Mengel

& McLaughlin, 2012). However, more research is needed to understand the attitudes and

preferences of nursing students towards caring for older adults (King, Roberts, & Bowers, 2013).

The aim of the study was to examine nursing students' perceptions of interrelating with

older adults to understand how such interactions might improve students' levels of cultural

competence and enhance their future nursing practice. Additionally, the study sought to

contribute to a higher level of technological competency in older adults.

Literature Review

According to the United States Census (2019), every day in the United States 10,000

people turn 65 years old. The U.S. Department of Health and Human Services predicted that in

2020, there would be more than 56 million individuals over the age of 65 (Administration for

Community Living, 2018). As the human lifespan increases, the health and quality of life of

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older adults will become one of national concern as nearly one-third of older adults live alone and many have health conditions such as heart disease or cancer, limitations in mobility, dementia, or even chronic depression (National Council on Aging, 2018).

Technology Use

Even though more people than ever are connected to the Internet, Pew Research reported that a digital divide still exists for older adults using and adopting new technologies (Anderson & Perrin, 2017). In fact, only 73% of older adults have Internet access (Statista, 2020) and only 34% use social media (Anderson & Perrin, 2017). For many, this lack of access is linked to multiple factors including age, educational attainment, income, and the type of community lived in (Anderson, Perrin, Jiang, & Kumar, 2019). For some older adults, a lack of digital literacy may also influence their use of technology. Alvseike and Brønnick (2012) also reported that cognitive deficits and low self-efficacy associated with older age significantly reduced participants' ability to use technology. Self-efficacy can be defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). For some seniors, this graying divide is based upon a lack of competence and/or knowledge about available technology.

According to Lindberg and Olofsson (2008), digital competence is one's ability to use technologies to solve problems, find information, and communicate with others. To improve confidence and self-efficacy, a recent study reported that older adults need access, infrastructure, digital inclusion, and training, which is tailored to their specific interests and needs (Author, in-press). With social isolation rising due to the quarantine from pandemics such as COVID-19, access to technology is even more important. However, this is often difficult to achieve as many seniors may lack the technology, technology proficiency, infrastructure, or support. For this

reason, many organizations around the country are providing tablets and training to seniors

(Fields, 2019). For example, states such as New York (Johnston, 2020) and New Mexico have

distributed hundreds of Internet connected tablets to older adults (Smith, 2020) to reduce the

technological constraints and help older adults connect socially with friends, family, and the

greater community.

Research has shown that appropriate digital training helps older adults acquire a range of

technological skills (Mah, Chen, & Teh, 2020) while improving digital literacy skills.

Furthermore, the use of technology interventions such as using iPads with older adults has shown

promise in curbing social isolation and improving ones' connection to society. According to

Kaplan, et al. (2013), as "older adult participants become more knowledgeable about technology

and comfortable sharing experiences and learning from and with people across generations in a

virtual world, new modes of communication become possible" (p. 11). Additionally, self-

efficacy may be improved through training and support from caregivers and others skilled in

technology use (Alvseike & Bronnick, 2012).

Intergenerational Service-Learning and Nursing Students

The National Service Learning Clearinghouse (nd) noted that SL is "a teaching and

learning strategy that integrates meaningful community service with instruction and reflection to

enrich the learning experience, teach civic responsibility, and strengthen communities" (para. 1).

Service-learning is a form of experiential education, which integrates class learning objectives

along with critical student reflection in order to extend the formal learning from the community

experience. Several benefits of SL have been reported such as improved student communication

and problem-solving skills (Leedahl, et al., 2018), increased civic engagement, cultural

competence, and knowledge of the community (DeBonis, 2016).

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Intergenerational SL involves the development of relationships and sharing of knowledge and skills between two generations. Likewise, Underwood and Dorfman (2018) noted the value of such intergenerational SL relationships, which allows for older adults to impart their life experiences with younger audiences willing to listen. Additionally, researchers have reported that ageism may be reduced when intergenerational contact is done in a positive manner such as younger individuals working with and sharing experiences with older adults (Marques, et al., 2020).

The American Association of Colleges of Nursing (2020) recommends using integrative learning strategies such as service-learning in a variety of settings as an essential practice for nursing education. According to George (2015), it is important that service-learning experiences integrate active learning with real-life applications. As the population ages, there will be a greater need for healthcare professionals as many older adults will face declining mental and physical capabilities. The increased longevity will also mean that there will be a need for more gerontologically trained nursing professionals to provide care for these aging adults. In order to adequately prepare nursing students to care for older adults, gerontological content should be included in undergraduate curricula as many times nursing students have a lack of knowledge of aging or hold ageist attitudes towards elderly individuals (Abudu-Birresborn, 2019). These attitudes may stem from the students' culture, personal beliefs, values, or media prior to entering nursing school (Lovell, 2005). Additionally, Hayes et al., (2006) reported that unless attitudes are improved during their nursing studies, students may choose not to work with older adults in later careers.

Theory Framework of Cultural Competence

According to Marcinkiw (2003), to become effective nurses in the 21st century, nursing

students must develop cultural competence. Based upon Campinha-Bacote's (2002) process of

cultural competence in the delivery of healthcare services, students need to identify their own

biases and/or prejudices of individuals who are different. Students should also seek to understand

(cultural knowledge) others' differences, examine and assess the needs of the individuals

(cultural skill), engage in cross-cultural interactions (encounters), while caring (cultural desire)

and learning from others in the community.

With approximately 20% of the U.S. population reaching 65 by 2030, nurses (and other

healthcare professionals) will need to be culturally competent in caring for older adult groups.

Wyman (2018) noted that ageist stereotypes and discrimination will impact older adults' health

and well-being. To improve cultural competence, healthcare professionals need to reflect upon

their own generalizations, beliefs, and implicit biases while working to eliminate ageism

(Wyman, 2018). Additionally, nursing students should be embedded into cultures different than

their own to help deter such negative perceptions (Marcinkiw, 2003).

Method and Participants

A basic qualitative study design (Merriam & Tisdell, 2016) was utilized in this study to

direct the data collection and analysis to achieve the aims of this study. The Institutional Review

Board approved this research prior to the launch of the study and subsequent data collection and

analysis. Eighteen undergraduate nursing students (1 male, 17 females) enrolled in a senior

level community health course at a regional university in the southwest USA participated in an

iPad project. This allowed the students to meet service-learning requirements and learning

outcomes for their clinical course in Community Health Nursing. The ethnicity of the

participants was comprised of 11.1% Asian (n=1), 22.2% African American (n=2), and 77.7%

Caucasian (n=15).

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Procedure

  For 10 weeks of their clinical rotation, the nursing students interacted with 25 older

adults two times per week, where their primary role was to assist the older adults as they learned

new technologies. The older adults, who were between 55 and 90 years old, resided at an

independent living apartment within a senior retirement community or at one of two apartment

complexes maintained by a nonprofit organization serving low-income senior citizens through

Section 8 Housing (HUD.GOV, 2020).

  Each student was randomly paired with one to three older adults and sat near them in the

training location so that they could offer support (See Figure 1). The iPad trainings consisted of

a series of modules from basic use to more sophisticated lessons. The trainings covered lessons

on the Internet, using email, photo sharing, Facebook, Pinterest, virtual conferencing applications

(e.g. Zoom), online books (Kindle, Overdrive), and four National Institute on Aging health

information modules on the topics of senior health, drugs and supplements, medical

encyclopedias, health news, and information regarding doctors and hospitals (National Institute

of Health, 2014).

Figure 1: Nursing Students Working with Elderly Adults

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Reflective Journals and Analysis of the Data

  Following each iPad training session, the nursing students wrote a reflection in their

journal describing their experiences with the older adults. These journal entries, grounded in

principles of reflective practice (Bulman & Schultz, 2013), served as first-hand observations of

the training of the older adults. The rationale for required use of journals was to encourage

students to think about what they experienced to promote critical thinking and growth throughout

the semester. Additionally, this activity helped students link the experience to their course

outcomes. The journals were graded weekly on a complete/incomplete basis.

The excerpts from the handwritten student reflective journals were typed into a word

processing document to create a *transcript* (Merriam & Tisdell, 2016) for analysis. The data

analysis was performed by a team of three researchers who independently sorted the data from

the transcripts into *apriori* categories based on the framework of cultural competence in the

delivery of healthcare services (Campinha-Bacote, 2002). Then, the researchers met over a video

conference (Zoom.us) to compare their results and reached consensus. According to Merriam

and Tisdell (2016), the use of a team of researchers, triangulation (utilizing multiple sources of

data and multiple investigators), and peer debriefing enhance the trustworthiness of the findings

of the study.

Study Results

Four themes emerged from the data collected (See Table 1). Theme 1 was named *Seek to*

understand others' differences (cultural knowledge). To illustrate, one nursing student in the

study wrote: "I know that individuals involved in this training are from a low socio-economic

status. So, it made my heart happy to see my partner so excited and fascinated by the iPad. I

heard a lot of laughs from the individuals around so that was really nice" (NP11, p. 1). Another

student related, "Older adults can learn new things when they're involved and show interest in

something" NP02, p. 1).

The second theme: *Examine and assess the needs of the individuals* (cultural skill) is

demonstrated through a quote from a nursing student: "One of the residents I was helping was

very hard of hearing. I had to talk super loud in order for her to hear what I was saying. In the

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future, I need to remember that many older adults struggle with this, so it's important to speak in

a manner they understand" (NP08, p. 2). Another nursing student reflected, "I was paired up with

a man that for the most part that had a good grasp of where all the buttons were and could tell me

how to connect to the. We were able to customize some of the settings such as bolding the text

and adjusting the brightness of the screen" (NP01, p. 1).

The third theme, *engaging in cross-cultural interactions* (encounters) is demonstrated

through a nursing student's comment about the older adult's interest in Pinterest, "My lady was

pinning like a pro! She was really enthusiastic about using this app. [and] pinned everything

from flowers…to motorcycles to quilts! She picked up on the instruction very quickly and we

had a lot of fun!" (NP10, p. 1). A second nursing student reported, "When I first got there

[training session], I had to show my new friends' pictures from the wedding because they had

been asking about it" (NP07, p. 1).

Caring and learning from others in the community (cultural desire) was the fourth theme

that emerged from the nursing student data. One student remarked, "I am kind of sad that next

week is our last week. It's been so great working with the eager residents and watching them

grow as they grasp the material" (NP08, p. 3). Another student wrote, "Next encounter [class],

I'll continue to be just as excited about exploring the iPad as my partner is. I truly get a lot out of

this service learning. A very rewarding and heartwarming time. I look forward to making a

difference in my patients' lives soon." (NP11, p. 3). See Table 1 for further illustrative extracts

from the Nursing student reflective journals.

Table 1: Qualitative Data from Nursing Students Reflective Journals

Discussion and Conclusion

Service-Learning has been used throughout nursing education to teach social awareness and develop critical thinking (Schmidt & Brown, 2016) and is an effective pedagogy for teaching culturally appropriate care while also introducing students to different cultural backgrounds (Amerson, 2010). Zhang, et al. (2016) reported that when nursing students gain knowledge about aging and have positive attitudes, students have an increased desire to care (*cultural desire*) for older adults. Similarly, in this study, we found that such intergenerational service-learning embedded into a course allowed nursing students to learn (*cultural knowledge*) about community health nursing and the older adult population through real-world experiences. Through such *cultural encounters*, the students had positive interactions, resulting in a broadened perspective on aging and empathy towards older adults. Furthermore, the students sought to understand and assess the needs of the individuals they were working with. Such empathy-building tasks, where students listen to the experiences of older adults were shown to result in more positive attitudes.

Reflection is a valuable practice to help students think through their experiences and is considered a key component of service-learning (Kalisch et al., 2013). In this study, students reflected on how their experiences would help them to interact with older adults in their future nursing practices further highlighting how service learning and reflective journaling (Bulman & Schultz may be an effective teaching pedagogy for addressing cross-cultural interactions between nursing students and older adults. Eyler and Giles (1999) remarked that ''experience enhances understanding; understanding leads to more effective action. Both learning and service gain value and are transformed when combined in the specific types of activities we call service-learning'' (p. 8).

However, this study is not without limitations. First, the work of this preliminary study cannot be generalized for a wider demographic as the service-learning project was incorporated

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into one clinical nursing education course. Campinha-Bacote's (2002) framework of cultural

competence in health care delivery also examines the construct of one's cultural awareness,

which is a self-examination into one's own cultural environment and the conditions surrounding

them. And although the results of this study provided an awareness into the cultural perceptions

of the nursing students, the students' prior experiences working with older adults was not

considered and their reflections may not have accurately portrayed their true biases. Furthermore,

the setting of the service-learning project may not be the same as their future place of clinical

employment. Despite these limitations, this study provides descriptive information on how

Nursing Faculty can provide Service-Learning and other experiential experiences and

assignments that are meaningful and provide learning about older adults, their challenges, and

also offering a lifetime of experiences to their younger counterparts to prepare them for their

future workplace as many seniors are aging in place. Future studies should examine if ageist

attitudes, beliefs, and stereotypes are reduced in nursing students when pairing them with older

adults.

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164x132mm (150 x 150 DPI)

Themes	Illustrative Extracts from Nursing Student Journals
Theme 1: *Seek to understand others' differences* (Cultural Knowledge)	• "It was quite interesting to watch and help her use the iPad. She wasn't completely clueless because she has been in some training where she's picking up on things for figuring things out on her own[but] I noticed were harder than it is for my generation. For us if we don't know how to do something on the iPad we can figure it out pretty quickly by just clicking around. For her, she had to stop and ask for help" (NP07, p. 1).
Theme 2: *Examine and assess the needs of the individuals* (Cultural Skill)	• "So next week I plan to speak a little louder and slower to them [to] listen and understand. This in general will be helpful when I have geriatric or hard of hearing patients" (NP09, p. 1). • "I think continuity is especially important in this process because I believe it facilitates older adult learning and allows us to foster relationships that allow us to teach/assist more effectively by adapting to our partners' individual needs and learning styles, which is good practice for delivering patient-centered care and teaching" (NP03, p. 2).
Theme 3: *Engaging in cross-cultural interactions* (Encounters)	• "I immediately noticed all of the older adults sitting at tables in the small room. They were all very pleasant and eager to learn and were all chatting away to each other. I looked around the room to find an older adult to pair up with and noticed he was sitting by himself, so I sat down next to him. Throughout the session he was so kind and had interesting things to say" (NP08, p. 1). • "I thought he was very into learning how to use the iPad and he told me he was even excited to eventually be able to talk/video call family. I felt the whole experience was positive" (NP02, p. 1).
Theme 4: *Caring and learning from others in the community* (Cultural Desire)	• "It makes me feel good to teach these seniors the new technology and they are very eager

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to learn. I hope I will be that way in a few years" (NP04, p. 2).

- "I'm excited to participate in the iPad project because I can get more involved with the community and know what's going on around me. It also provides me the opportunity to get rid of the misconceptions I have about the older generation" (NP05, p. 1).

- "I have really enjoyed getting to know these people. I wish I could continue on until the end of the semester. Thank you for this opportunity... I have enjoyed the time I spent getting to know them" (NP06, p. 4).