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VLADIMIR MILAOR

**THE EFFECT OF EXPERIENTIAL AGEING SIMULATION ON THE
ATTITUDES TOWARD OLDER PEOPLE AMONG SENIOR
NURSING STUDENTS**

Thesis Adviser:

ASST. PROF. RITA C. RAMOS
Faculty of Management and Development Studies

8 August 2022

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This Special Project titled: **“THE EFFECT OF EXPERIENTIAL AGEING SIMULATION ON THE ATTITUDES TOWARD OLDER PEOPLE AMONG SENIOR NURSING STUDENT”** is hereby accepted by the Faculty of Management and Development Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Course.

RITA C. RAMOS
Adviser

23 September 2022
(Date)

RIA VALERIE D. CABANES
Program Chair

03 October 2022
(Date)

JOANE V. SERRANO
Dean
Faculty of Management and Development Studies

October 3, 2022
(Date)

Biographical Sketch

VLADIMIR T. MILAOR, RN

A Registered Nurse in the Philippines and the United States, who currently works as a nurse in a Medical-Surgical Telemetry Unit, in a US Hospital, applying his proficient theoretical background in the nursing process for managing adult clients with altered health patterns. His past experiences include taking a leadership role as a Nurse II in a Philippine Government Hospital, Emergency Nursing in an acute hospital setting, and Training Role in Managed Care Programs that involved a program dealing with older people. He had completed the final oral thesis defense for his research study entitled “The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students.”



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To God be the Glory!

Dedication

This academic undertaking is dedicated to my family.

To my wife, Janna. I am blessed with a very understanding wife who supports and tolerates all the compromises required to achieve my personal goals, including completing my master's studies. I am happy that we will spend the rest of our lives together, up to our 'senior' years. I promise always to support you the way you help me.

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Abstract

Considering the Philippines' aging population, positive attitudes toward older people and senior sensitivity are essential for nurses. However, international studies showed that nursing students have unfavorable attitudes toward older people. Little is known about this in the Philippine setting. This study aims to determine the effect of experiential ageing simulation on the attitudes (on the Responding level of Bloom's Affective taxonomy) toward older people among 4th-year nursing students in a Philippine setting; and to determine if age, sex, and experience in elderly care are factors affecting their attitudes. Quasi-Experimental, One-group Pretest-Posttest design was utilized for this study on 51 graduating nursing students. The students attended a 4-hour ageing simulation seminar workshop that provided knowledge and firsthand experience on common challenges of older people through wearing sensory simulators that mimic age-related changes. Before and after the intervention, the students accomplished Kogan's Attitudes Toward Older People (KATOP) Scale and Work Preference Ranking Form. The data were analyzed using paired t-test, independent t-test, and one-way ANOVA using Jamovi 2.2 software. The results revealed a significant difference in the attitudes toward older people of nursing students before and after the intervention (p -value <0.001 and a Cohen's d of 0.978). Additionally, the results of work preference ranking showed an extreme shift in their preference for elderly care after the intervention. It was also determined that age, sex, and experience in elderly care are not significant factors in the students' attitudes. Based on these, experiential ageing simulation has improved the attitudes toward older people of graduating nursing students. Adopting experiential ageing simulation in schools and other institutions may help prepare students to be more senior-sensitive in facing the country's aging population.

Chapter I

THE RESEARCH PROBLEM

Background of the Study

According to international studies, nursing students tend to have unfavorable attitudes toward older people due to stereotypes and inaccurate perceptions (Jang, Kim, Kim, 2018; Mathhos et al., 2015). These stereotypes are attributed to the traits of older people, the perceived intensity of care needed, and perceived communication difficulty (Abudu-Birresborn, 2019). Gerontology Nursing and caring for the older people age group, in general, is typically not a career choice among nursing students after completing the nursing program (Che et al., 2018; Garbrah et al., 2017; Sizer et al., 2016). Since most of them belong to the 'young people' age group as defined by World Health Organization (WHO, 2020), it is challenging for them to fully understand the functional health changes and special needs related to increasing age and existing chronic illnesses of the older people. Although high respect for the elderly is part of Filipino culture, stereotyping and prejudice against older people exist in the Philippines (Magtubo, 2017) and globally. It is a serious concern because the population of older people (60 years old and above) in the Philippines is rapidly increasing. According to Commission on Population and Development (2021), Filipino older adults account for 9.07% of the Philippine population, or more than nine million out of over 109 million Filipinos (Philippine Census, 2020). A country's population is considered 'aging' if older adults account for at least 7% of the total population. Thus, the Philippine population is aging (Castillo, 2019). This population growth in the older people age group will impact the Nursing profession as a further increase in the demand for nurses knowledgeable in caring for this age group would be apparent. Aging is a biological process that affects an individual's wholeness and causes physiological and anatomical changes in a human being. Due to these changes, older adults have special needs that nurses should be able to identify to render

high-quality nursing care effectively. These special needs encompass sensory changes (visual and hearing, including cognitive) and other aging-related experiences, such as losses from different areas of life that can happen during a brief period. With these aging-related changes in older adults, there is an increased frequency of chronic illnesses and a greater tendency to diseases. Older people are also prone to both wear & tear diseases and communicable diseases due to their declining immune system. Most of them have at least one (1) chronic disease and sensory changes, making older people more frequent users of hospitals and other healthcare services. Thus, an aging population equates to an increased demand for healthcare services, which include nursing services. Stereotypes and inaccurate perceptions about older people lead to a tendency for a significant number of nursing students and nurses to have negative attitudes toward older adults and not prefer to spend their professional careers caring for older people or in geriatric wards (Strugala et al., 2016). Attitude is an essential aspect of the nursing profession as it affects the quality of care provided to the patients. It influences how issues are perceived, how care is delivered, and what is deemed important, good, relevant, and appropriate. Positive attitudes toward elderly care are crucial to the effective delivery of high-quality care to this age group, which is the fastest-growing population in the Philippines. Nursing students' attitudes toward elderly care can be enriched to be more positive through diversified teaching strategies on gerontology nursing. One of the emerging strategies in gerontology is **“Experiential Ageing Simulation”** (Senior-sensitivity Workshop), which focuses on the experiential simulation of the expected sensory changes and other experiences of older adults to have younger people gain insight into the daily challenges among the elderly and have a better understanding on the unique needs of older adults. Thus, the experiential ageing simulation could be valuable in fostering positive attitudes among nursing students toward senior people and providing high-quality nursing care for patients in this age group.

Previous international studies that explored the effect of experiential ageing simulation on the attitudes toward older people were conducted in countries including the United States of America, the United Kingdom, and Portugal. These included the works of C. Fernandes et al. (2019), Perot et al. (2020), K. Kleszynski et al. (2018), A. Chen et al. (2015); S. Hong (2014); E. Yelland and J. Piper (2019). Research studies reviewed the effects of experiential ageing simulation (Senior-Sensitivity Workshop) among nursing students and other allied health professions revealed significant improvement in the participants' attitudes toward older adults, increased awareness of age-related sensory changes, and declines in the older people's functional abilities, improved their insight on effective communication, interaction and the degree of assistance for older people with identified age-related declines. A study by K. Kleszynski et al. (2018) showed that among healthcare professional students, more than ninety percent of participants had a better understanding of how it feels to be elderly. They thought the experiential ageing simulation would help them become better healthcare providers for older people, and they thought that the workshop significantly enhanced their awareness and comprehension of the expected changes experienced by older people.

This research study will add to the body of Gerontology Nursing literature in many ways. First, it will add to the body of literature in the Philippines regarding nursing students' attitudes towards older adults. Most studies exploring nursing students' attitudes toward older people were conducted outside the Philippines. There is a lack of recent studies conducted in the Philippine setting about this topic known to the researcher at the time of the study. Second, many topics on the effects of aging-sensitivity simulation activities were conducted outside the Philippines. This will provide information on how this workshop will affect Filipino Nursing students' attitudes toward older adults and care provision for this age group. As with the study about nursing students' attitudes, no studies

explored the effect of experiential ageing simulation in the Philippines on the researcher's knowledge. Although experiential ageing simulation is now emerging in Healthcare Industry and other Occupational Industries, formal research on its effect on younger people's attitudes toward older adults is insufficient.

Nursing students are the future of the nursing profession. In the years to come, they are the new blood of nurses in charge of nursing care for the population. The Philippine population is considered an 'aging population.' Thus, it is apparent that the current nursing students are expected to face the demand of providing nursing care to older people age group during their practice soon. The literature revealed that one of the factors that can bring about positive attitudes toward older people is being knowledgeable about older adults and geriatric care. However, nurses tend to have less accurate knowledge about aging and the aging process than other healthcare professionals (Ben-Harush et al., 2016). Nurses and nursing students also have conveyed a greater degree of anxiety about aging and demonstrated a trend of having a bias toward allocating a lower preference ranking to geriatric nursing compared to nursing for other age groups. For these grounds, the current nursing students must be the target population for this research study.

Statement of the Problem

This research study, "The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students," aims to explore the effect of a 4-hour Senior Sensitivity Training Workshop (simulating the common age-related sensory changes among older people) on the attitudes toward older people (60 years old and above) among the 4th year BS Nursing Students in a Public University in Marikina City. This study intends to determine how the attitudes of graduating nursing students will be affected by having them experience the common sensory changes and challenges

experienced by older adults.

Since the research intervention is a short course with the posttest delivered right after the intervention, the attitude measured in this research study is on the 'Responding Level' of Bloom's Affective Domain Taxonomy (second out of 5 levels of the taxonomy), which is committed to defining learning as evidenced by actively responding/reacting to a phenomenon or ideas. The affective domain represents the way humans react emotionally and their ability to empathize. It targets the awareness and growth in attitudes, feelings, and emotions. Since Experiential Ageing Simulation aims to foster insights into older adults' lives and gain awareness and a better understanding of their unique needs, evaluating the participants' attitudes at this level was appropriate.

Research Questions

1. What is the effect of experiential ageing simulation (Senior Sensitivity Workshop) on the attitudes (Responding Learning Level) toward older people among 4th-year BS Nursing Students?
2. Among 4th-year BS Nursing Students, does the effect of Experiential Ageing Simulation on attitudes toward older people vary with age, sex, and experience in elderly care?

Objectives of the Study

General Objective:

The general objective of this research study is to determine the effect of Experiential Ageing Simulation (4-hour Senior Sensitivity Workshop simulating the common aging-related sensory changes and experiences of people 60 years old and above) on the attitudes (responding learning level) toward older people among 4th year BS Nursing Students.

Specific Objective:

The specific objectives of the research study are:

1. To determine if there is a significant difference in the attitudes (Responding Level) toward older people of 4th year BS Nursing students:
 - 1.1. Before the Senior Sensitivity Training Workshop
 - 1.2. After the Senior Sensitivity Training Workshop
2. To determine if there is a significant difference in the attitudes toward older people among 4th-year BS Nursing students in terms of:
 - a. Age. To determine the effect of the intervention according to age.
 - b. Sex. To determine the difference in the attitudes toward older people between male and female, before and after the intervention.
 - c. Experience in elderly care/living with older adult/s. To determine the difference in the attitudes toward older people between students with experience in elderly care and those who do not have.

Significance of the Study

Existing Body of Knowledge

Most of the literature about nursing students' attitudes towards older people and the effect of experiential ageing simulation on their attitudes are international studies outside the Philippines. This research study will contribute to the body of Geriatric Nursing literature, especially in the Philippines. This will provide information on how this emerging teaching strategy, experiential ageing simulation, will affect nursing students' attitudes, particularly Filipinos.

Nursing Practice

A nursing trend that nurses face is the aging population locally and globally. The Philippine population is projected to 'age' in the next 5-10 years. This nursing trend will

affect the nursing practice as there will be a demand for special care for an aging population. This research study aims to determine the effect of experiential ageing simulation on nursing students' attitudes towards older people, which affects the quality of care delivered to this patient age group. The findings of this study will benefit the nursing practice and refine the Geriatric nursing subspecialty so that the determination of the effect of experiential simulation may positively affect one's attitudes towards the elderly, thus affecting the quality of care delivered to the seniors. Therefore, this research study aims to advance nursing practice.

Nursing Educational Institutions, Nursing Educators

Nursing Educational Institutions and Nursing Educators play a vital role in preparing nursing students to face the future demand for nursing after graduating. This research study may aid those in the nursing education field in implementing new strategies in gerontology nursing, such as experiential ageing simulation, to foster positive attitudes among the students, thus successfully producing nursing graduates ready to face the nursing demands of an ageing population.

Society, Health Institutions, and Private Organizations

As the Philippine population is considered an 'aging population,' keeping the society healthy by being able to attend to the healthcare and nursing needs of the population is imperative. Although this study focuses on graduating nursing students, the findings of this research may provide health institutions and private organizations the benefit of adopting experiential ageing simulation among their staff, which belongs to the young people age group, in the provision of high-quality care to the older adult age group.

Researchers

This research study will offer additional knowledge on the attitudes toward older people among nursing students in the Philippine setting and the effect of experiential

ageing simulation toon their attitudes towards older people before and after the intervention. This research study will be a valuable reference for the researchers who plan to make any related study regarding evaluating a young person's attitudes towards older people and experiential ageing simulation.

Nursing Students

This research study may benefit nursing students through possible exposure to a learning strategy that would start creating change in their attitudes toward older people to be more favorable. It would allow them to be more senior-sensitive and aware of the unique needs of older clients, thus making them more ready to face the country's aging population.

Older People in the Philippines

As older adults face daily challenges of age-related physical changes, diseases, and functional decline and losses, they require nursing care that responds to their unique needs. Older people may benefit from the findings of this research study by being the direct recipient of senior-sensitive nursing care. Higher quality of care may be expected in facilities where senior sensitivity is practiced.

Scope of and Limitation of the Study

This research study was conducted to determine the effect of a 4-hour Experiential Ageing Simulation on the perceived attitudes toward older people among the 4th year Students in a Nursing School in Marikina City during the study period of January - March 2021. Since attitude formation is an ongoing process that develops over time, the perceived attitude measured in this study was the 'Responding Level' of Bloom's Taxonomy Affective Domain, the second out of five taxonomy levels. In this level, the participants' attitudes were measured based on their perception of older people before and right after their active participation in the experiential ageing simulation. The aspects

examined in this study are the attitudes toward older people among the 4th year nursing students, and the difference in their attitudes toward older adults before and after the research intervention. This research study does provide an opportunity to determine if experiential simulation on common sensory changes and daily challenges of older adults will influence how younger people, explicitly graduating BS Nursing students, perceive Gerontology Nursing in the context of the growing population of Filipinos aged 60 years old and above.

Since the World Health Organization (WHO) announced the 2019 Corona Virus Disease (COVID-19) as a global health crisis and the Philippine government declared the country under a state of public emergency in March 2020, measures were implemented to mitigate the disease transmission that included classes suspension and implementation of flexible learning in higher education institutions. This has limited the conduct of face-to-face classes with guidelines that vary according to the current Alert Level System of an area. During the data collection, Metro Manila was under Alert Level 1, which allows limited face-to-face classes according to Commission on Higher Education (CHED) – Department of Health (DOH) Joint Memorandum Circular (JMC) No. 2021-001. Based on the later CHED-DOH JMC No. 2021-004, the conduct of limited face-to-face classes is within the discretion of Higher Education Institutions (HEIs). At the time of data gathering, the research site had still not been initiating face-to-face classes, and they were still preparing its facilities for its gradual reopening. With these, this research study was conducted via the online platform (Zoom) for the Experiential Ageing Simulation; and Google Forms for completing questionnaires. The school administration allowed the proponent to have a quick face-to-face meeting with the participants to distribute seminar-workshop kits while strictly adhering to the current minimum health protocols at that time and in accordance with CHED Memorandum Order No. 1 Series of 2022.

Chapter II THEORETICAL BACKGROUND

Review of Related Literature

The following electronic databases were searched: PubMed / NCBI / NIH, MEDLINE, and Google Scholar. Official Government websites of the Philippine Statistics Authority, Commission on Higher Education, and Department of Social Welfare and Development were also explored. Keywords and subject headings used to identify relevant articles included “nursing students’ attitudes,” “nursing students,” “senior sensitivity,” “elderly in the Philippines,” “older adults,” “nursing curriculum,” “learning,” “attitude formation,” “affective domain,” “caring for older people,” “attitudes toward older people” and “ageism.” Studies that reported findings pertinent to this research study were included for review.

The present study focuses on the effects of an Experiential Ageing Simulation (4-hour Senior Sensitivity Workshop simulating the common aging-related sensory changes and experiences of people 60 years old and above) toon the attitudes toward older people among the 4th year BS Nursing Students.

The rapidly growing population of older people (people aged 60 years and above) for this research study in the Philippines impacts the healthcare system and the nursing profession. Most of the older people have at least one (1) chronic disease, making them one of the major consumers of healthcare services, including nursing services. Due to the population trend in the country and globally, research on aging in the Philippines has recently gotten national attention. The country’s population is considered an ‘ageing population’ (at least 7% of the total population are 60 years old and above). So, with the ongoing increase in the population of older people, it is apparent that in any field of nursing or line of business that nurses are deployed, encounters with older adults inevitably happen. Whether a nurse works in a hospital, community health clinics, academe, or BPO

set-up, gerontology care is a skill that is required on a day-to-day basis. With the older adults' special needs from age-related changes in vision, hearing, and perception, not to mention all the emotional decline due to experienced losses and chronic diseases, it could be challenging for young nurses to understand and connect with the older adults.

Attitudes toward older adults are a crucial part of caring for this age group because caring starts from within the heart and mind of the nurse. Positive attitudes radiate positive nursing care and actions. Lack of understanding, connection, and education about ageing and older people are some reasons for negative attitudes toward older people (Rush et al., 2017) among nursing students and nurses. Negative attitudes hinder the delivery of quality care, specifically for the elderly.

Gerontology Nursing is a physically and emotionally demanding subspecialty in Nursing. Despite the growing population of older Filipinos, Gerontology Nursing is a neglected field (de Guzman et al., 2009). The fast rate of population growth of Filipino older adults and the shortage of nurses trained in Gerontology nursing and willing to care for older adults could be devastating to the country's healthcare system.

Fostering positive attitudes among nursing students toward older people through innovative approaches, such as Experiential Ageing Simulation, is essential to advance Gerontology Nursing practice and the Nursing profession. This research study intends to determine if Experiential Ageing Simulation, as a strategy to promote positive attitudes to elderly care, has an effect to the nursing students' attitudes toward patients in the older adults age group.

Older Adults in the Philippines

The Philippines has over 109 million inhabitants (Philippine Statistics Authority, 2020), with over 9% of the total population 60 years old and above (Commission on

Population and Development, 2021). Currently, the percentage of younger Filipinos compared to senior citizens is greater, just like in other developing countries' age structures. A country's population can be considered aging if more than 7% of the total population is 60 years old and older (Philippine Statistics Authority, 2019). The population growth rate among older adults is more rapid than the total population's growth. According to the Philippine Statistics Authority (PSA) (2019), the population of older adults is the fastest growing population sector, with the trend expected to hold in the future. In 2020, 9.07% of the Philippine population are senior citizens (Commission on Population and Development, 2021). The World Prospects projects that by the year 2050, older people in the Philippines are expected to comprise at least 16% of the total population (HelpAge International, 2019).

The increasing population growth rate among older Filipino people is influenced by the changing age structure resulting from fertility decline. These phenomena lead to "smaller proportions of children and larger proportionate shares of older people in the population" (UN Department of Economic and Social Affairs, 2013). The fertility rate in the Philippines is still within the 3% range per annum but is expected to decrease from 1.73 to 2.31 in 2030-2040, while life expectancy is placed at 72.49 (Antonio, 2015). Another major factor in the population increase in this age group is the aging of baby boomers. They were the people born right after World War II when there was a population influx globally.

In 2019, the life expectancy of Filipinos was sixty-seven (67) years for males and seventy-five (75) years for females (Badana, 2018). According to Help Age Global Network (2019), females are projected to expect an increase of 4.0 years in life expectancy and males an increase of 4.7 years in life expectancy by 2030. Advances in Philippine Public Health that eliminated many illnesses that previously caused untimely

death to affect the expected improvement in Filipino life expectancy. Increasing life expectancy at age 60 suggests the improving longevity of older Filipinos. Female older adults live longer but spend a greater part of their remaining life in an inactive state relative to males. According to the 2010 Philippine Census, 19% of older Filipinos have at least one activity of daily living (ADL) difficulty.

Health insurance coverage among Filipino older adults remains low, particularly among females (PSA, 2019). Only 12% of female older adults have insurance coverage, while 19% of male older adults have. Older cohorts also have lower insurance coverage compared to younger cohorts. 10% of the older Filipinos aged 80 and above have insurance coverage, while 17% of aged 60-69 years old have. Thus, the unmet needs for health services among older Filipinos remain substantial.

According to the Philippine Department of Social Welfare and Development (DSWD) (2019), over 30% of older people live in poverty, or almost three million senior citizens (60 years old and above). While the estimated number of indigent Filipinos aged 65 and above in the Philippines is around 940,000. A senior citizen is considered indigent as *“any elderly who is frail, sickly, or with disability, and without pension or regular source of income, compensation or financial assistance from his/her relatives to support his/her basic needs, as determined by the Department of Social Welfare and Development (DSWD) in consultation with the National Coordinating and Monitoring Board (NCMB).”* (Expanded Senior Citizens Act of 2010).

The latest World Social Protection Report 2017-19 also revealed that less than 40% of Filipinos beyond the statutory pensionable age in the country receive an old-age pension, whether contributory, noncontributory, or both. Economically, older Filipinos have low income and assets, with many of them, specifically women depending on their children for economic support. This finding is echoed by HelpAge International (2016),

stating that over 50% of Filipinos beyond the pensionable old age get no form of pension. Some earn their livelihood from still working and pension (government and Social Security). At the same time, a number do not have any source of income and rely solely on family members for support: one in four elderlies had a son or a daughter working abroad that sent them money regularly. An unintended consequence of such an arrangement is that older persons are also expected to assist in rearing the grandchildren as the latter's parents leave the house to work locally or abroad (Cruz, 2019).

Due to the physiological and anatomical changes related to aging, the elderly has special needs unique from other age groups. These special needs are due to aging-related sensory changes, such as visual and hearing changes and challenges. Some older people experience cognitive changes and other aging-related experiences, such as losses from different areas of life that happen during a short period. Many suffer from partial or permanent disabilities (poor eyesight, hearing, immobility, and certain diseases). Also, most older people have at least one chronic condition. Thus, this age group tends to need more healthcare services compared to other patient age groups.

Attitudes of Nursing Students Toward Older Adults

Attitude is a settled means of thinking, perceiving, evaluating, and judging a person, an object, or a situation, which can be negative, positive, or impartial. Attitude is a fundamental part of Nursing as it reflects the nurse's behavior and care delivery. A positive attitude improves the relationships between healthcare professionals and older people patients. Education, experience in elderly care, and demographics emerged as factors affecting nurses' attitudes (Rush et al., 2017).

Previous research studies cited in this paper that explored nursing students' attitudes toward older adults were mostly international; very few similar studies in the Philippines were known to the researcher during the study.

Most nursing students have negative attitudes about older people, according to a study in Poland by Strugala et al. (2016). Physical and mental stereotypes of the elderly are usually deleterious. Negative attitudes among nurses were attributed to older people's traits and the perceived intensity of care needed; these negative attitudes are reflected in the quality of care delivered. Most of the nurses and nursing students perceived older adults as intolerant, weak, demented, lonely, and having decreased mental abilities, according to a scoping review by Abudu-Birresborn et al. (2019) among nurses and nursing students' attitudes toward older people in lower and middle-income countries that included Nigeria; Brazil; Asian countries including China, Sri Lanka, Thailand, and the Philippines; and Middle Eastern countries including Israel, Turkey, and Jordan. In this study, challenges in communication and the burden of caring for older people were identified by nursing students as influences for their negative attitudes toward the elderly.

A study in Israel by Haron et al. (2013) revealed that nursing students do not want to work in Geriatric Care Settings. In a research study by Shortreed (2015) in the USA, nursing students consistently preferred to care for population groups other than older adults. Nursing students with previous experience caring for older people may lean towards caring for the elderly compared to those with no related practice. The study showed multiple regression analysis revealed that the factors affecting a nurse's work preference in favor of gerontology were a positive attitude toward the elderly, the nurse's education about aging, and previous experience in older people's care. In a study by de Guzman (2013) in the Philippines, inaccurate perceptions and stereotypes about older people lead Filipino nursing students not to prefer to take care of the elderly.

It is assumed that student nurses who have attended a gerontology nursing program will have an enhanced education and positive attitude in providing specialized nursing care in health promotion and enable independence among the elderly. Assessing

the attitudes and knowledge of student nurses will recognize possible erroneous beliefs regarding older people (Mathhos et al., 2017).

While education on elderly care fosters positive attitudes toward older people, international research studies revealed that student nurses' general knowledge of elderly care is inadequate. Student nurses reported challenges and barriers to providing care for older people were limited theoretical and procedural knowledge in working with older adults and lack of education (Abudu-Birresborn, 2019). In the Philippines, Gerontology Nursing is included in the BS Nursing curriculum as Nursing Care Management 114 – Care of Older Adults with two-lecture units and one Clinical Related Learning Experience (RLE) unit (CHED Memorandum Order No. 15, 2017). Studies conducted outside the Philippines revealed that although gerontological concepts were integrated throughout the four-year curriculum of the BS Nursing program, over half of the nursing students state that they lack exposure to information about older adults (Shortreed, 2015).

A negative attitude toward older adults is a factor that decreases the quality of health services provided by healthcare workers, according to a study by Yazici et al. (2016) in Turkey. Thus, attitude plays a significant role in the care outcomes delivered to the patients.

The Bachelor of Science in Nursing Program

Bachelor of Science in Nursing (BSN) is a 4-year program that consists of general education and professional courses. Professional courses emphasize nursing concepts with corresponding related learning experiences (RLE). This program includes an intensive nursing practicum to the required competencies for an entry-level nurse in health facilities or community settings. The program aims to produce nurses capable of providing safe, humane, quality, and holistic care to individuals of varying age, gender, and health-illness status; healthy or at-risk families, population groups, and community;

singly or in collaboration with other healthcare providers to promote health, prevent illness, restore health, alleviate suffering, and provide end-of-life care (CHED Memorandum Order 15, Series of 2017).

The three primary roles of a professional nurse, according to the National Nursing Core Competencies of 2012, include an assumption of roles on (i) client care, (ii) leadership and management, and (iii) research. For the provision of client care, the nurse shall be able to utilize the nursing process in caring for mothers, newborns, children, adolescents, adults, and older adults, family, community, population groups, and persons with special needs.

In the current BSN Curriculum prototype of the Commission on Higher Education (CHED), Gerontology Nursing is included as NCM 114 – Care of Older Adult, with two lecture units and 1 RLE unit. This course is taken in the program's first semester of 3rd year. This course deals with concepts, principles, theories, and techniques in caring for older adults. Nursing students are expected to perform holistic nursing care for older persons in wellness and chronic illness utilizing the nursing process.

A study conducted in the United States of America by A. Koehler et al. (2016) showed that a stand-alone course in geriatric nursing significantly increased the students' positive perceptions of working with older adults after the course. However, other studies also conducted outside the Philippines revealed that although gerontological concepts were integrated throughout the four-year curriculum of the BS Nursing program, over half of the nursing students state that they lack exposure to information about older adults (Shortreed, 2015). In an integrative review by Garbrah et al. (2017) on multinational literature, nursing students' disinterest in geriatric nursing as a career option is due to insufficient positive experiences with older adults before and during nursing. The study also showed that the nursing curriculum also supports the perception of modern nursing

as more 'technical,' focusing on acute and critical care. No similar studies were conducted in the Philippines to the knowledge of the proponent at the time of the research study. In a study by de Guzman (2013) in the Philippines, inaccurate perceptions and stereotypes about older people lead Filipino nursing students not to prefer to take care of the elderly.

Learning and Attitude Formation

Learning is defined as the transformation in the behavior of a human being because of previous experience (Gandhi & Mukherji, 2020). Attitude is learned, and attitude formation is influenced by experiences, perceptual biases, and observation from other person's perspectives, associations, and personalities. Factors such as cognition, emotions, environment, and previous experiences play a crucial part in one's comprehension, acquisition, and retention of knowledge, skills, or attitudes. Some of the widely accepted theories of learning are (1) behaviorism, in which learning happens through linking stimuli and responses, (2) cognitivism, in which learning is believed to occur through internal information processing instead of purely reacting to an external stimulus, (3) constructivism, which states that learning outcome is achieved by adapting new information based on one's previous experiences, (4) connectivism, which states that learning occurs with the formation of connections between person, and (5) humanism, which states that learning is an innate desire among humans primarily to achieve self-actualization (Gandhi & Mukherji, 2020).

Learning or developing attitudes is addressed by the Affective Domain of Bloom's Taxonomy, published in 1965. The Affective Domain of Bloom's Taxonomy was created to provide a system of categories of learning attitudes to aid in designing and assessing learning outcomes (Orgill & Nolin, 2020). This domain is categorized into five subdomains (i) Receiving, (ii) Responding, (iii) Valuing, (iv) Organization, and (v) Characterization. The Affective Domain has a hierarchal structure, and the subdomains are organized from

more straightforward feelings to increasing complexity. This structure is grounded on the principle of internalization, in which a person's affect/attitude passes from the general awareness level up to the level that it is internalized and constantly controls one's behavior (Orgill & Nolin, 2020).

Experiential Ageing Simulation aims to provide a first-hand experience to nursing students in the daily lives of older people. That experience is expected to positively affect the students' attitudes toward the elderly. Attitude formation and its resulting future behavior are strongly predicted when a person has a direct experience with a situation or an object that affects the attitude (Glasman, & Albarracín, 2006). Experiential Ageing Simulation has a cognitive-emotional impact that provides a meaningful learning experience. A learning experience with cognitive-emotional impact is identified by learners as being relevant and as a meaningful learning experience (González-Ceballos, Palma, Serra & Esteban-Guitart, 2021).

Caring for Older Adults in the Filipino Culture

Filipinos remain committed to their familial duty toward their older adults (Abalos et al., 2018) as the Philippines has a family-oriented society. The 1987 Philippine Constitution states that "it is the duty of the family to take care of the elderly members while the State may design programs of social security for them." High respect for the elderly and "*utang na loob*" (debt of gratitude) are part of Filipino culture and translates to families taking care of their older adults (Cruz et al., 2019). This reflects on the data from the Philippine Census of Population 2015 that 99.8% of the senior citizens belong to the household population, and only 0.2% belong to the institutional population. Commitment to family/informal caregiving manifests in Filipino culture and being unable to provide care or other resources to older adults in the family is considered shameful (Badana, 2018).

Ageism

Ageism is prejudice about an aging individual; it does exist in the Philippines. Although Filipino culture involves respect and a caring attitude for the elderly, ageism persists (Magtubo, 2017). “Ageism” is a word coined by Robert Butler in 1969 that means “discrimination against people based on age” (Online Etymology Dictionary, 2021). It is described as prejudice or discrimination based on an individual’s age. Ageism encompasses the idea that an older adult is ugly, bad-tempered, and ill, which can cause bias. Ageism makes younger people separate themselves from older adults, protecting them from their fear of aging and death. Thus, ageism makes it easier to ignore older adults’ needs in society and negatively affects their physical and psychological health (Butler, 1975, 2009; Burnes et al., 2019). Ageism is younger people’s defense mechanism against dealing with the imminent threat of frailty and death. These negative stereotypes act as a buffer so that younger persons are not distressed about their inevitable destiny. Nursing students need to view aging positively to be able to deliver effective care for the group of older people.

Experiential Ageing Simulation (Senior-Sensitivity Workshop)

Enriching positive attitudes of nursing students toward older people and geriatric care is vital in producing senior-sensitive nurses. Bamakan et al.’s (2021) research study revealed that aging simulation activities create opportunities for the nursing students’ growth of attitudinal skills, empathy for older people, and their beliefs.

Experiential Ageing Simulation is a two to four-hour program that includes experiential simulation of common age-related changes and challenges experienced by older adults daily. It contains visual simulation & medication management, hearing loss simulation, simulation of common losses experienced by older adults, and other age-related changes. This short course is usually designed to improve a person’s awareness

of usual physical changes and health changes related to increasing age and chronic illnesses based on experiential learning to deliver better and compassionate care to older adults. Participants must “actually experience” some of the daily struggles, discomforts, and common sensory declines associated with aging. Tools are used to fast-track the aging process and let the participants understand how older people may strive with their day-to-day activities. Tools contain visual simulator glasses that mimic cataracts, diabetic retinopathy, glaucoma, macular degeneration, and other eye conditions. Tools to simulate loss of dexterity, hearing loss, and other age-related changes are also used to provide the participants with experiential learning.

Among nursing students, ageing simulation exercises have proven to be effective in fostering positive attitudes toward the elderly ($p < 0.05$) in a study conducted in Portugal by Fernandes, Couto, and Afonso (2018). In a research study in France by Perot et al. (2020), the aging-simulation experience among healthcare professionals increased their knowledge of gerontology care, limitations related to advancing age, and their outlooks regarding the experience of such limitations. In another study conducted by Kleszynski et al. (2018) among medical students in the United States of America (USA) on the effects of experiential ageing simulation among medical students, ninety-five percent (95%) of the participants either agreed or strongly agreed that the experiential simulation helped them to gain a better understanding on how it feels to undergo the process of ageing with health changes; ninety-two percent (92%) felt that the activity would help them become a better healthcare provider for the elderly patients, and ninety-four percent (94%) reported that the activity advanced their knowledge about age-related changes.

In a study conducted in the USA by Yelland and Piper (2019) among medical students and in France by Perot et al. (2020) among healthcare professionals, experiential ageing simulation increased awareness and sensitivity to sensory and

functional decline related to the process of ageing, increased compassionate interaction with and support older adults with the identified age-related changes and debilities.

Ageing sensitivity training utilizing simulated or mock cases of some common health conditions related to increasing age was well-accepted by healthcare-related students and positively affected their perceptions and insights of the aging process. This short course also significantly improves empathy and attitudes toward older people among healthcare students in a study conducted in the USA by Chen et al. (2015) and Hong (2014).

Younger people frequently have trouble comprehending what it means for older people to undergo sensory losses and functional status changes (World Health Organization, 2020). In addition, healthcare professionals working with the elderly are not fully conscious of the common functional and sensory difficulties experienced by elderly patients (Perot et al., 2020). Thus, innovative teaching strategies, such as the experiential ageing simulation activity, can enable this awareness and sensitivity to the daily hurdles experienced by elderly patients (Perot et al., 2020) that can lead to improved outcomes of care delivered to older adults.

Kogan's Attitudes Toward Older People (KATOP) Scale

Accurately assessing nursing students' attitudes toward older people is vital, given that attitudes affect the quality of care delivered to this patient age group. Kogan's Attitudes Toward Older People (KATOP) Scale is a specialized evaluation tool that can accurately evaluate attitudes toward the elderly. Nathan Kogan first developed KATOP Scale in 1961. The tool has been the major evaluation tool internationally used to assess attitudes toward older people. It was created during the period when ageism, stereotypes, and discrimination against older people in America were observed (Kogan, 1961). The original KATOP scale remained the most used tool for this measurement, even though

revisions to the scale and translations to other languages were noted in the past years. According to Kogan, the tool evaluates older people's attitudes by measuring norms and individual differences. KATOP scale achieves this by assessing the “residential aspect of old people’s lives, vague feelings of discomfort and tension in the presence of old people, qualities of old people, and interpersonal relations across age generations” (Kogan, 1961). The items dealt with matters about the residence, cognition, degree of dependence, appearance, personality, nature of interpersonal relations across generations, the extent of variance among older people, and the amount of feelings and discomfort the participant feels in the presence of older people.

It is a 34-item tool with half of the items negatively worded while the other half positively worded. The tool utilizes a 6-point Likert scale (1-strongly disagree; 6-strongly agree). The responses are added after the negative statement items are reversed coded; thus, total scores range from 34–204, with 102 considered a neutral score. Higher scores mean more positive attitudes, while lower scores tell the otherwise (Kogan, 1961; Alquwez et al., 2018).

Synthesis

The Philippine population is considered an ‘aging population,’ and the older adult age group is the country's fastest-growing population, according to the Philippine Statistics Authority (2019). This trend in population growth determines what nursing professionals and other healthcare professionals must be trained on to take care of the population's complex needs. However, it is concerning that with the fast growth of the older adult population, social interest taken in them is slowly progressing. Also, there is not much Philippine-based research on aging among Filipinos. The aging process in the Philippines is commonly observed from the direct interface with the older Filipinos by the family members and the surrounding community.

With older adults having at least one chronic illness and their vulnerability to infections due to decreased immune response, it is anticipated that there will be a significant increase in the utilization of healthcare services from this age group. As healthcare issues are at a higher rate in this population group, the need for nurses in the near future will increase. A nursing workforce with the competency to provide care for a country's ageing population is vital to warrant the stability of the healthcare system.

International literature reviewed revealed that effective care for older people is influenced by the nurse's attitudes, gerontology education, and experience in caring for elderly patients. Thus, fostering a positive attitude in working with aging people is crucial. Studies revealed that student nurses had negative views, false impressions of the aging process, and misconceptions regarding gerontology care. Student nurses perceived caring for older people as a "*burden*." Most nurses stereotypically classify older adults as weak, demented, intolerant, and with decreased mental abilities. In addition, negative attitudes toward older people can decrease the quality of health services delivered to the elderly (Yazici, 2016). Research studies also showed that working with older people is the least career preference for student nurses after graduation.

Although Filipino culture has strong family ties and respect for older people, ageism persists in the Philippines. Ageism can cause harm to a person's mental, emotional, and physical well-being. Ageism makes younger people classify themselves separately from older adults. This can happen everywhere, including in healthcare facilities. For example, a healthcare worker, like a nurse, may talk to the companion instead of the patient. Also, an older adult may see a doctor or nurse for valid medical concerns. Still, their concerns might be rejected as healthcare professionals might perceive these concerns as "*just signs of aging*." As a result, older adults may also dismiss their health concerns, thinking these are a normal part of the aging process. These

examples of ageism become common that older people accept this as new normal that growing old comes with unavoidable debilitations. Ageism could also affect the number of nurses available and willing to care for the growing number of older adult patients.

Looking at the bright side, learning that negative attitudes exist among student nurses toward older people could serve as a foundation for developing interventions to modify their attitudes with respect to aging and caring for older adults. Students must improve their attitudes toward older people and gerontology care. Hence, nursing students should be provided with a gerontology program that fosters positive attitudes toward the elderly. Student nurses with positive attitudes toward older people were more willing to work with patients from this age group than those with negative attitudes (Abudu-Birresborn, 2019).

Diversified teaching and training approaches are critical to developing positive student nurses' attitudes toward older people and geriatric care. Teaching approaches like aging simulation activities help student nurses in the educational processes encompassing attitudinal skills and creating empathy (Bamakan et al., 2021). As nursing students are the future of the nursing profession, it is essential to promote positive attitudes toward older adults through innovative gerontology nursing strategies, such as Experiential Ageing Simulation. It is an effective didactic instrument to promote awareness and sensitivity among health professionals about common difficulties related to increasing age. This sensory activity lets healthcare professionals put themselves in the shoes of elderly patients and have a first-hand experience of age-related problems (Perot et al., 2020). Younger people often have trouble understanding what the sensory losses and declines in functional status mean to the elderly (World Health Organization, 2020). Thus, aging simulation exercises can promote active student participation, which benefits their learning.

A scale with acceptable reliability and validity has to be utilized to evaluate the attitudes toward aging and older people among student nurses. Kogan's Attitudes Toward Older People Scale has been determined in multiple international studies to be reliable and valid. This scale can be utilized to accurately evaluate nursing students' attitudes toward aging and older people.

Senior sensitivity means being aware of clues to a senior's sensory, cognitive and physical limitations while promoting independence. Experiential Ageing Simulation is a short course in Gerontology that focuses on simulating common sensory changes and daily challenges experienced by older adults to better understand this age group's special needs. The program aims to foster insights into the life of an older adult, enhance sensitivity to older adults' special needs and convey a positive perspective about caring for seniors. Thus, this program may be promising in advancing gerontology nursing practice.

With the Philippine and global population trends, future nurses must be prepared to care for older people. Student nurses, as the future of the nursing profession, need to be equipped with the knowledge, skills, and attitudes to successfully satisfy vital roles in responding to the population's future health demands. Current population trends (rapid growth of older adults, aging of baby boomers, and increasing life expectancy) tell us what the nursing profession should be like to cope with the healthcare demands of the population. Nurses shall be ready to take care of older adults who are primarily female, with special needs, and with at least one chronic illness, which may be poor, uninsured, living in poverty, with low literacy levels, and delayed health-seeking behavior.

As nurses' attitudes toward older adults affect the quality of care that nurses provide, identifying strategies to foster positive attitudes of student nurses toward older adults is crucial for the nursing practice. Through aging simulation activities, Experiential

Aging Simulation is currently gaining attention in Gerontology as an approach to fostering positive attitudes toward older adults. Thus, the experiential ageing simulation could pose a desirable effect on attitudes toward older people among 4th year BS Nursing students, who are the profession's future.

Theoretical Framework

Attitude is an acquired feeling learned through direct experience, observational learning, or acquisition of knowledge (Devaine & Daunizeau, 2017; Finch, 2012). It is a settled way of perceiving or feeling about a person, an object, or a situation, and it could be positive, negative, or neutral. Attitude is a state of mind that translates into how humans behave, make decisions, and perform their actions.

Attitude is vital in nursing as it improves the quality of care delivered to the patients. The literature reviewed is consistent in that positive attitudes enhance the quality of care and the relationship between the nurse and the patient. In contrast, negative attitudes decrease the quality-of-care nurses provide. Attitude plays a crucial role in care outcomes, which is the heart of nursing. With the transitioning of the global and local populations to 'aging,' it is concerning that international research studies demonstrate that nurses and student nurses usually have negative attitudes toward older adults and elderly care. Even in the Philippines, where respect for the elderly is part of the culture, negative prejudice and stereotypes toward older people still exist and persist (Magtubo, 2016).

Works of the literature revealed that teaching strategies in Gerontology Nursing are recommended to foster positive attitudes among student nurses toward elderly care. One of the emerging training strategies in geriatric nursing is experiential ageing simulation, wherein the younger people are allowed to experience the typical age-related changes and challenges of older people so that they can gain insight and a better understanding of the special needs of this age group. Sensitivity to the special needs of

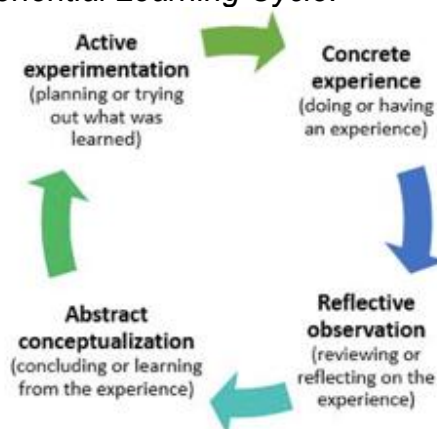
older adults is a positive attitude that nurses should have to be able to authentically connect with these patients and deliver the highest quality of care possible.

David Kolb's Experiential Learning Theory

This research study is guided by David Kolb's Experiential Learning Theory, an educational theory developed in 1984. The theory proposes that experience is vital in learning as it occurs through discovery and active participation. Kolb defined learning as "the process whereby knowledge is created through the transformation of experience" (Kolb, 1984).

Kolb's Experiential Learning Theory proposes that learning follows a four-stage cycle (see Figure 1) and as learners progress through these stages to complete a cycle resulting in transforming their experiences into knowledge or achieving learning outcomes. The theory is based on the idea of converting experience into knowledge. The learner can incorporate new experiences or observations with their current understanding. Experience is fundamental to this theory as it is viewed as a process of changing or transforming something (Kolb, 1984). This model recognizes that for an experience to be considered learning, any transformation must be made from it.

Figure 1
Kolb's Experiential Learning Cycle.



Source: Kurt S. (2020)

Stage 1: Concrete Experience

The Learning Process Cycle of Kolb's Experiential Learning Theory starts with a **Concrete Experience**. It could be an entirely new experience, or a previous experience being reimagined. In this stage, the learner shall be engaged in a task or an activity. The theory states that 'involvement' is the key to learning. Active engagement in a task is crucial to the acquisition of new understanding. In this study, the participants will enter the first stage of the cycle by exposing them to experiential aging simulation activities such as wearing sensory simulators to mimic age-related changes in the elderly.

Stage 2: Reflective Observation

Following a learner's active engagement in the concrete experience, the learner does a **Reflection** on the activity. In this stage of the learning cycle, the learner discusses the experience with others and asks questions. During this stage, communication plays an essential role in allowing the learner to recognize any incongruity between the experience and their understanding. During the experiential ageing simulation, the participants will enter this stage by having them discuss their feelings with the group about their experience in each simulation activity.

Stage 3: Abstract Conceptualization

This step in the learning cycle is where the learner considers the experience or activity sensible. **Drawing conclusions** based on the experience is attempted by the learner through reflection on existing knowledge. Movement from reflective observation to abstract conceptualization happens when a learner begins to classify concepts and make conclusions based on the activity or the new experience. In this study, the participants will move to this stage by encouraging them to interpret the experience and make comparisons to the new understanding of the idea.

Stage 4: Active Experimentation

This is the **Testing** stage in the learning cycle where the learner applies the conclusions to new experiences. The learner can predict, analyze tasks and make plans for the acquired learning in the future. Through having the learner apply the acquired knowledge into practice and show its relevance to their life, retention of the new learning is likely.

With Kolb's Experiential Learning Theory being cyclical, learners can go into the process at any stage in the cycle. The cycle must be entirely completed to warrant effective learning. Every step of the cycle is dependent on the others, and completion of all stages is required to develop new knowledge or change the learner. For this study, the participants will move to this stage by having them determine senior-sensitive actions based on the new experience that they can apply in real life.

This research study is grounded in this theory in a way that the conduct of Experiential Ageing Simulation will utilize the concepts of experiential learning to affect the students' attitudes toward older people to be more positive. Kolb's theory suggests that effective learning happens when a learner undergoes these four stages. During the experiential ageing simulation, all four stages of learning will be encompassed as detailed in each stage. The students' experience during the experiential ageing simulation will be expected to bring about positive change to their perceived attitudes toward the elderly.

Bloom's Taxonomy

Since this research study explores the effect of a brief teaching strategy on the attitudes of nursing students toward older people, the Affective Domain of Bloom's Taxonomy was used to determine the learning outcomes evaluated in this study. Bloom's Taxonomy was developed by Benjamin Bloom in 1956 and was published as a type of learning outcomes and objectives classification. It is one of the major theoretical

frameworks for learning commonly applied in instructional design. Bloom's taxonomy identifies three (3) domains of learning:

1. **Cognitive Domain:** It deals with the knowledge, comprehension, and critical thinking of a given subject matter.
2. **Affective Domain** defines how humans react emotionally and their ability to empathize. It targets the awareness and growth in attitudes, feelings, and emotions.
3. **Psychomotor Domain:** It deals with skill-based learning.

The **Affective Domain** defines the way humans react emotionally and their ability to empathize. It targets the awareness and growth in attitudes, feelings, and emotions. It has a hierarchal structure with five (5) subdomains that are organized from more straightforward feelings to increasing complexity (see Figure 2, the hierarchal structure of Bloom's Affective Taxonomy). The structure is based on the principle of internalization, in which one's attitude passes from the general awareness level up to the level that it is internalized and constantly controls one's behavior (Orgill & Nolin, 2020).

Figure 2

Bloom's Affective Taxonomy



1. **Receiving** is the lowest level of the affective domain. It is merely the awareness of feelings and emotions. It includes paying passive attention and being conscious of ideas' presence. No learning can occur without having the learners pass through this level. Examples of this level include attentive listening, watching a film, or listening to a lecture.
2. **Responding**. The second level of this domain involves actively participating in the learning process. In this level of learning, the learner reacts to a stimulus. Examples of activities in this level include participating in a conversation or group discussion, giving a presentation, complying with procedures, or following directions.
3. **Valuing** is the capability to perceive the worth of something and express it. It concerns the worth one attaches to a specific piece of information. Examples of activities in this level include making a proposal, supporting ideas to increase proficiency, or coordinating leaders on possible issues.
4. **Organizing** involves framing different values, information, and ideas together and associating them with existing beliefs to bring them into an internally consistent philosophy. It is the ability to create a unique value system.
5. **Characterizing** is the highest level of the affective domain that deals with internalizing values. It means acting consistently according to the set of values and letting them control or guide your behavior.

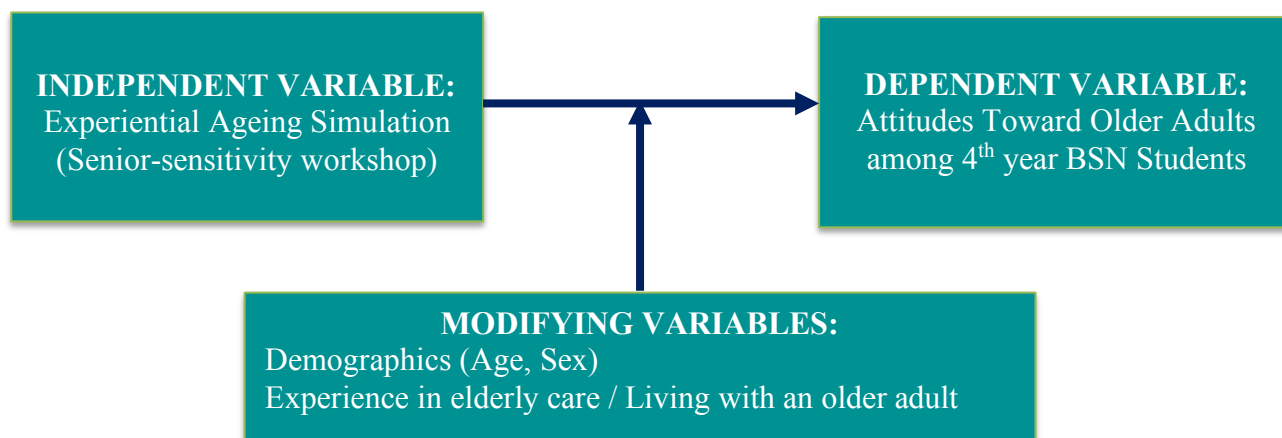
Since the research intervention in this study is a short course with the posttest delivered right after the intervention, the attitude measured in this research study was on the 'Responding Level.' Participating in the group conversation, giving reflections, complying with learning procedures, and answering questionnaires during Experiential Ageing Simulation are indicators of meeting learning objectives at this level. As the research intervention aims to foster insights into older adults' lives and gain awareness

and a better understanding of their special needs, evaluating the participants' attitudes on this level will be appropriate.

Conceptual Framework

Figure 3

Conceptual Framework of the Study



Note. This figure demonstrates the relationship among the study variables: (1) Independent Variable- Experiential Ageing Simulation; (2) Dependent Variable - Attitudes toward older people; and (3) Modifying Variables.

This research study focused on Experiential Ageing Simulation as the independent variable; and the attitudes toward older people as the dependent variable. Attitude (**Dependent Variable**) is a crucial aspect of nursing as it directly affects the behavior and actions of a nurse in delivering care. Based on international studies in western and Asian countries, the majority of nursing students have negative attitudes toward the elderly and elderly care. Ageism and stereotypical assumptions about older people are some factors that influence negative attitudes toward older people. Most nursing students and nurses perceive older adults as intolerant, weak, demented, lonely, and having decreased mental abilities (Abudu-Birresborn, 2019). In addition, challenges in communication and the perceived burden of elderly care were identified by nursing students as influences for their

negative attitudes toward older adults. Literature revealed that diverse teaching strategies could foster positive attitudes toward older people among nursing students. One of the strategies to promote positive insights toward elderly care that is gaining popularity in geriatrics is Experiential Ageing Simulation (Senior Sensitivity Workshop).

Experiential ageing simulation (**Independent Variable**) was conducted among 4th-year nursing students to improve a person's awareness and understanding (Responding Level of Bloom's Affective Domain Taxonomy) of common changes related to increasing age and health changes related to chronic diseases based on experiential learning. This short course uses tools to fast-track the aging process and lets the participants understand how older people may strive with their day-to-day activities and the challenges they confront as they move through the health care system. Gaining better insights into the lives of older adults may influence a young nurse's attitudes toward older people and help deliver high-quality and compassionate care to older adults. Thus, the experiential ageing simulation could positively affect attitudes toward older people among 4th-year BS Nursing students, who are the profession's future. The **Modifying Variables**, which include demographic information such as age and sex; and experience in elderly care or living with an elderly in the place of residence, are demonstrated using a straight line to convey how these may affect the independent variable and dependent variable.

Operational Definition of Terms

1. **Attitude-** A settled way of thinking or feeling about someone or something, typically reflected in a person's behavior (Oxford English Dictionaries, 2021), and is learned either through direct experience or observational learning (Finch, 2012). In this study, attitude is measured using (i) **Kogan's Attitudes Toward Older People (KATOP) Scale** and (ii) **Work Preference Ranking**. Specifically, the findings from using these

tools were observed on the *'Responding' level of Bloom's Affective Domain Taxonomy*.

- i. For the KATOP Scale, a score of 102 is considered a neutral attitude; scores higher than 102 reflect positive attitudes, while scores below 102 reflect negative attitudes toward older people. The tool evaluates attitudes by measuring norms and individual differences by assessing the "residential aspect of old people's lives, vague feelings of discomfort and tension in the presence of old people, qualities of old people, and interpersonal relations across age generations" (Kogan, 1961).
 - ii. Attitude is also reflected in how the participants accomplish the Work Preference Ranking Form; ranking age groups of patients from most preferred to least preferred work preference indicates positive to negative attitudes.
2. **Work Preference** – This is the career path or choice of the nursing students after graduation. In this study, work preference is categorized into seven (7) patient groups according to their age brackets, namely (i) newborns, (ii) infants and children, (iii) adolescents, (iv) young adults, (v) adults, (vi) older adults ages 65-85 and (vii) older adults aged 85 and above. Ranking of the groups' work preferences will be considered as a reflection of their attitudes toward the patient age groups. The most preferred group is the age group the participants have the most positive attitudes toward, and the least preferred patient age group is the group the participants have the least favorable attitudes toward.
3. **Responding Level** - The second out of 5 hierarchical levels of Bloom's affective domain define how people learn involving emotions and attitudes. This level is committed to defining learning as evidenced by actively responding to a phenomenon or ideas. Participating in the group conversation, giving reflections, complying with learning

procedures, and answering questionnaires during Experiential Ageing Simulation are indicators of meeting learning objectives at this level.

4. **Older People / Adults** – chronological age 60 and above (World Health Organization, 2020).
5. **Senior sensitivity** - being aware of clues to a senior's sensory, cognitive, and physical limitations while promoting independence.
6. **Experiential Ageing Simulation*** is a 2 to 4 hours program that includes simulation of common age-related changes and daily challenges experienced by older adults. Tools are used to fast-track the aging process and help the participants understand how older people face their day-to-day challenges and the challenges they face as they move through the health care system.

**The terms “Experiential Ageing Simulation” and “Senior Sensitivity Workshop” are used interchangeably in this study.*

7. **BSN Student**—A Bachelor of Science degree in a nursing student enrolled in a 4-year baccalaureate degree program at a senior college or university.
8. **4th year BSN Student**—A Nursing student currently enrolled in an undergraduate baccalaureate nursing degree in either the first or second semester of their 4th year in the program.
9. **Demographics** are “characteristics or attributes of subjects that are collected to describe the sample, which commonly includes age, sex, etc. (Grove, Gray, & Burns, 2015).
 - i. **Age** refers to the number of years lived from the time of birth.
 - ii. **Sex** refers to the state of being male or female.
10. **Experience in elderly care** – refers to previous involvement in caring for an older adult, including living with an older adult in the place of residence. Specifically for this study, experience in elderly care means any of the following:

- i. Actively taking care of an elderly relative for at least six months that range from assisting with activities of daily living to active involvement in the health management of the relative;
- ii. Related Learning Experience. Having been assigned to take care of elderly clients during the practicum for at least one semester; and
- iii. Paid private duty with an elderly for at least six months.

Hypothesis

There is a significant improvement in the attitudes toward older people among 4th Year B.S. Nursing Students after participating in the Experiential Ageing Simulation.

Chapter III

RESEARCH METHODOLOGY

Research Design

A **Quantitative Research using a Quasi-Experimental, One-group Pretest-Posttest Design** was utilized for the study (see Figure 4 for the diagram of the research design).

The general objective of this research study is to determine the effect of a 4-hour Senior Sensitivity Training Workshop (experiential ageing simulation) on the attitudes toward older people among the 4th year BS Nursing Students. Mainly for this study, the **target population** was the graduating Nursing Students of a public university in Marikina City, who have completed the first three years in BS Nursing, have rotated to different areas in their related learning experience, and have had knowledge in adult health that integrates gerontology care.

Quasi-Experimental; One-group Pretest-Posttest Design is appropriate for the research study because to answer the research problem in the study, the cause-effect relationship needs to be determined by manipulating the **independent variable (Experiential Ageing Simulation)** and its effects on the **dependent variable (Attitudes Toward Older Adults)**.

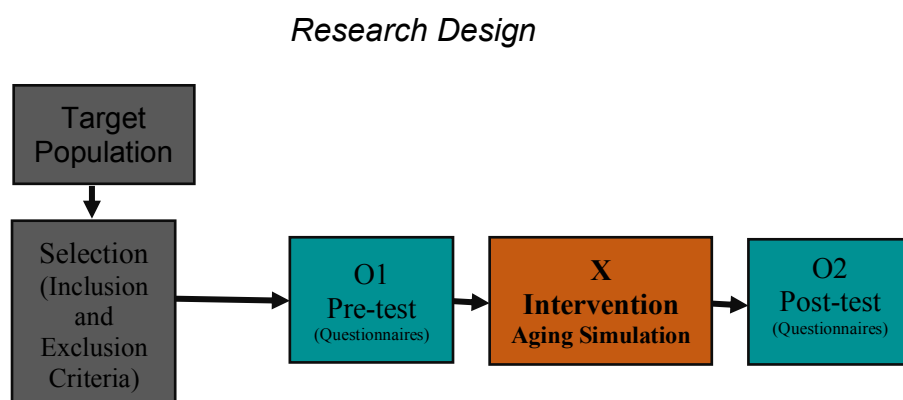
Several international studies that explored the effect of experiential aging simulation on the attitudes toward older people of healthcare professionals and nursing students included the works of Fernandes et al. (2019) in Portugal; Perot et al. (2020) in France; Kleszynski et al. (2018) in the USA; Chen et al. (2015) in the USA; and Hong (2014) in the USA. All these studies' posttests were conducted right after the experiential

aging simulation, and significant improvements in the attitudes toward older people were noted. Thus, the effect of the current research intervention poses a dramatic change in the participants' perceived attitudes. As the effect of the research intervention is expected to be remarkable based on previous studies, the post-test for this research study was done right after the intervention. Since the intervention is a short course with the posttest delivered right after the intervention, the attitude measured in this research study was on the **'Responding Level' of Bloom's Affective Domain Taxonomy**. The Affective Domain defines the way humans react emotionally and their ability to empathize. It targets the awareness and growth in attitudes, feelings, and emotions. As the research intervention, Experiential Ageing Simulation intends to foster insights into the lives of older people and gain consciousness and a better understanding of their special needs; evaluating the attitudes of the participants in this taxonomy level is appropriate.

As this study aims to test a brief teaching intervention, with baseline perception toward older adults to be obtained a few days before the intervention and the posttest data to be collected immediately after it, it would be reasonable to infer that the research intervention is the most plausible explanation for the learning. This makes the Quasi-Experimental, One-group Pretest Posttest Design best suited for the study.

The intervention used in the study was Experiential Ageing Simulation (a 4-hour Senior Sensitivity Training Workshop), simulating the common age-related sensory changes among older people). The samples were asked to attend the seminar-workshop and accomplish the **Kogan's Attitudes Toward Older People (KATOP) Scale** and **Work Preference Ranking Form** before and after the Training Workshop.

Figure 4



Note. Figure 4 illustrates the research design for this study, which is Quantitative Research using a Quasi-Experimental, One-group Pretest-Posttest Design.

Research Variables

Independent Variable: Experiential Ageing Simulation (4-hour Senior-Sensitivity Workshop)

For the independent variable, Experiential Ageing Simulation was conducted among the participants. This short course aims to foster insights into the daily lives of older people by using tools to simulate aging so younger people can gain better insights on common health changes related to increasing age and chronic illnesses based on experiential learning. It includes visual simulation & medication management, hearing loss simulation, simulation of common losses experienced by older adults, and other age-related changes.

Dependent Variable: Attitudes toward Older People

The dependent variable in this research study is the attitudes toward older adults. This variable was measured by the completion of the participants of Kogan's Attitudes Toward Old People (KATOP) scale and Work Preference Ranking Form with different patient population groups. Specifically, the students' attitudes measured were on the 'Responding' level of Bloom's Affective Domain Taxonomy since the intervention is a brief teaching strategy. The posttest was conducted immediately after the intervention.

Modifying Variables

- 1. Age of the participants.** Standardization of conditions and background of the participants is essential to ensure the accuracy of research study results. Participants in this study were within the same age group (Youth) as defined by the World Health Organization (WHO). WHO defines 'Youth' as the age group 15-24. Adult nursing students (18 years old) participated in the study. Limiting the subjects by age is essential in obtaining a non-bias measurement of young people's attitudes toward older adults. Students older than 24 years old, such as 'second-courses,' may have extremely different attitudes toward older people compared to the target population, thus affecting the causal relationship of the independent and dependent variables.
- 2. Other demographic information,** such as age and sex, were considered as these may affect the relationship between the independent and dependent variables. In a study by Rush (2017), demographics were identified as factors affecting nurses' attitudes.
- 3. Experience in elderly care/living with an older adult –** Experience in elderly care is a major factor affecting nurses' attitudes toward older people (Rush et al., 2017). Nurses with geriatric education and experience caring for older adults tend to have a more positive attitude toward older people.

Potential Extraneous Variables

The following are potential extraneous variables that were controlled to ensure the validity of the research design:

- 1. Previous attendance to a similar workshop with experiential ageing simulation.** This extraneous variable can affect the study's cause-effect relationship between the Independent and Dependent Variables. Suppose a subject already attended a similar

training program. In that case, their attitudes toward older people may have reached their peak positivity toward older adults, and the intervention in this research study may have little to no effect on the dependent variable. Thus, the result of this research could be altered. To address this potential extraneous variable, inclusion criteria should incorporate a stipulation limiting the participants to those with no previous exposure to a similar workshop type.

2. **Attendance of a subject to an advanced Gerontology Nursing Course.** Keeping the characteristics of the research subjects is very important to ensure the accuracy of the study findings. For this research study, the samples are from a population of 4th-year nursing students with similar education based on the Commission on Higher Education's (CHED) BS Nursing curriculum prototype that integrates geriatric nursing into the curriculum. Attendance to an advanced Gerontology Nursing Course may affect the study results; the effect of the intervention on the dependent variable may not be accurately captured. Literature has shown the impact of education on the attitudes toward older people; thus, an advanced geriatric course outside CHED's recommended curriculum may already affect a participant's attitudes toward older people. To address this potential extraneous variable, inclusion criteria also incorporated limitations on the subject matter of the participant's previous education (especially advanced education).

Sampling Design

The **Target Population** for the research study was the currently enrolled 4th Year BS Nursing Students in a Public University in Marikina City, male and female, who had not attended a similar workshop on Senior-Sensitivity and had not had previous advanced training and certification in Gerontology Nursing. The total population of 4th-year nursing students in the public university in Marikina City was N = 66. From that population, the

total number of nursing students who are eligible based on the inclusion and exclusion criteria was $N = 57$. The total number of students who consented to participate was $N = 51$. Since the total number of the target population is small, all of the eligible students, based on the inclusion and exclusion criteria; and consented to participate in the study, were included in the study to come up with accurate inferences of the population. This population was chosen for the purposive convenience and proximity of the researcher, given the current pandemic situation and the limitation of face-to-face activities in accordance with CHED-DOH Memorandum Circular 2021-01. The **Accessible Population** was the entire target population. The **Sample** for this research from which the data was collected and analyzed were those selected based on the identified eligibility (inclusion and exclusion criteria). The **Sample Size** for the study was based on the significance level (set at 0.05 p-value), power of greater than 80%, and effect size. With a relatively small target population, all students who met the inclusion criteria and consented to participate in the study were included.

Inclusion And Exclusion Criteria

The **Inclusion Criteria** for the research study are the following:

- a. Currently enrolled 4th Year BS Nursing Student (first or second semester)
- b. Male or Female
- c. No previous attendance to a similar workshop on experiential ageing simulation
- d. No advanced training or certification in Gerontology Nursing beyond Commission on Higher Education's BS Nursing recommended curriculum.

The **Exclusion Criteria** for the research study are the following:

- a. Experience in performing paid private caregiving jobs to an elderly client for at least six months.

- b. Vision conditions such as retinopathy, macular degeneration, tunnel vision, complete blur, and other related conditions.
- c. Clinically diagnosed to have hearing impairment/hearing loss.
- d. A foot injury or related conditions such as neuropathy.

Research Setting

All individuals in the target and accessible population of 4th-year nursing students in a public university in Marikina City that was eligible based on the inclusion and exclusion criteria and consented to participate in the research study were included. This public university is the first city government-funded university in Marikina City, Philippines, and was established by Ordinance No. 015 Series of 2003. It is the only school in Marikina City that offers BS Nursing and caters to educational services for Marikina residents and neighboring provinces.

The research study took place on an online platform (Zoom) for the conduction of the intervention (Experiential Ageing Simulation); and the use of Google Forms for the participants' accomplishment of the pre-test and post-test questionnaires. Initial meeting with the eligible participants was conducted via Zoom that included discussion and signing of informed consent and accomplishment of the pretest. Those who consented to participate were scheduled for a face-to-face distribution of seminar kits. The face-to-face distribution was done at their school as permitted by the school and college of nursing administration, strictly observing minimum health protocols and the current guidelines of DOH, CHED, and IATF at that time. Experiential Ageing Simulation was conducted three days after the pretest, during the students' class hours that the College of Nursing permitted the research proponent to utilize. The participants were given 10-15 minutes to complete the forms in the Google Forms that included (1) the demographic information form, (2) the KATOP scale, (3) a form for the students to rank populations for their work

preference, and (4) open-ended questions. The initial accomplishment of the KATOP Scale was considered the pre-test. The participants were then scheduled to participate in a 4-hour Experiential Ageing Simulation that the research proponent conducted via live video conference. After the intervention, the KATOP scale was accomplished for the posttest.

The Experiential Ageing Simulation Training / Workshop utilized in this study was based on the aging simulation activities conducted by Medicare Advantage Companies to their new hire employees and their clients that belong to the young adult age group, as well as on the World Health Organization's Normal Ageing and Communication Training (2020). Medicare Advantage is a type of health insurance in the United States that provides coverage to people aged 65 and above. Employees in a Medicare Advantage company deal with older adults daily, encouraging them to adopt senior-sensitive behaviors. Senior Sensitivity workshops in many countries promote empathy toward older people. Specifically, some activities conducted in this workshop were a simulation of common visual changes among older people, a simulation of hearing impairment associated with aging, a reflection on expected losses experienced by older people, and discussions about older adults' status in the Philippines and other age-related conditions. Although these workshops are gaining attention for their effectiveness in senior sensitivity as supported by international pieces of literature and are being utilized by educational institutions, especially in healthcare, these workshops are not routinely conducted in nursing classes in the Philippines.

Research Instrument and Tools

It is established that the nursing students' attitudes toward older people are essential for the quality of care delivered to this age group; thus, a specialized tool that can precisely evaluate nursing students' attitudes toward older people is of utmost

importance. The tools used in this research study for the assessment of the attitudes towards older adults among 4th year BS Nursing students were (i) **Kogan's Attitudes Toward Older People (KATOP) Scale** and (ii) **Work Preference Ranking Form** with open ended questions regarding their reflections.

Kogan's Attitudes Toward Older People (KATOP) Scale

KATOP Scale has been the major evaluation tool internationally used to assess attitudes toward older people since Nathan Kogan first used it in 1961. The original KATOP scale remained the most commonly used tool for this measurement, even though revisions to the scale and translations to other languages were noted in the past years. According to Kogan, the tool evaluates attitudes towards older people by measuring norms and individual differences. KATOP scale achieves this by assessing the "residential aspect of old people's lives, vague feelings of discomfort and tension in the presence of old people, qualities of old people, and interpersonal relations across age generations" (Kogan, 1961). The items dealt with matters about residence, cognition, degree of dependence, appearance, and personality, nature of interpersonal relations across generations, the extent of variance among older people, and the amount of feelings and discomfort the participant feels in the presence of older people.

The KATOP scale comprises thirty-four (34) statements resembling the six-point Likert scale split into seventeen (17) positive and seventeen (17) negative statements about older people. It expresses attitudes ranging from "Strongly Agree" to "Strongly Disagree," determining the extent of positive or negative attitudes. Positive statements are listed in the odd-numbered items, while Negative statements are in the even-numbered items. Regarding the scale structure, positive statements are marked from left to right as 1-2-3-4-5-6; while negative statements are marked from right to left as 6-5-4-3-2-1. The scores for each item will be summed together for the total score; the lowest

possible score is 34, and the highest possible score is 204. A score of 102 will be considered a 'neutral' attitude toward older adults. A high score obtained from the scale reflects a positive attitude toward the older adults. Regarding the usual time spent in accomplishing the scale, participants usually spend 10-15 minutes answering all the 34 items in the tool.

Numerous researchers have established its reliability. The KATOP has repeatedly been determined to be reliable since Kogan (1961) reported the reliability of the original version of the scale. Validity and reliability have been demonstrated in previous international validation studies conducted among college students. In a research study in Turkey (Kilic & Adibelli, 2011) on Nursing Student's attitudes toward older adults, the research revealed that Cronbach's Alpha Reliability Coefficient for Kogan's Attitude towards Old People Scale was 0.81 and was deemed highly valid and reliable for student nurses. A Chinese study on KATOP's reliability and validity (Chi-Hua et al. 2009) showed that all of the 34 items on the scale have significant item-to-total correlations ($p < .05$). In the said study, two factors were extracted, which are 'Prejudice' and 'Appreciation.' Prejudice and Appreciation factored over 33% and 21% of the variance. The Cronbach's alpha was 0.82 for the full scale (0.83 for Prejudice and 0.81 for Appreciation). Stability was determined to be 0.86 for Prejudice and 0.91 for Appreciation. In a research study by Runkawatt et al. (2016) on the Validity and Reliability of KATOP Scale among Nursing Students in Southeast Asia, reliability results revealed Cronbach's Alpha of 0.68-0.71 for the full scale in 3 Southeast Asian countries; thus, KATOP scale has an acceptable level of reliability and validity for nursing students in Southeast Asia. Another study in Saudi Arabia demonstrated that the computed Cronbach's alpha for the entire scale was 0.89, making it valid and reliable for nursing students. An issue with its validity and reliability is that the tool has been tested outside the Philippines. Thus, the cautious interpretation of

the tool should be given much attention to keep its context considering the Filipino Culture described in the proposed research problem.

Work Preference Ranking and Personal Reflection Forms

Response to Work Preference Ranking Form with Personal reflections was also analyzed to determine the nursing students' attitudes toward older people. In the Work Preference Form, seven (7) different population groups of patients are listed for the participants to rank in order of their work preference. The populations listed are Newborns, Infants/Children, Adolescents, Young Adults, Adults, Adults ages 65-85, and Adults > 85. Respondents rank the patient groups from one (1) to seven (7), with 1 as their most preferred patient group and 7 as their least preferred. Work Preference Ranking will also be considered as an indicator of how favorable or not the respondents' attitudes toward people is, with Rank 1 as the patients that the respondents have the most favorable attitudes toward and Rank 7 as the patients that the respondents have the least favorable attitudes toward. To elicit further information about the participants' attitudes toward older people, open-ended questions were also included to obtain their reflections. These questions ask about the factors for choosing to rank 1 and 7; and the factors that might increase their interest in caring for older adults.

Method and Procedure of Data Collection

The Data Collection Method utilized in the research study was "Questionnaires and Surveys / Interviews." Kogan's Attitudes Toward Older People (KATOP) Scale and Work Preference Ranking Form were utilized to obtain and analyze the participants' responses. Pre-test and Post-test results were compared and analyzed. Data collection was obtained before and after the Experiential Ageing Simulation.

Intervention Protocol

1. Before the implementation of the study, an application was submitted to the Ethics Review Board (ERB) of 'Amang' Rodriguez Memorial Medical Center (ARMMC). Once approval was granted, the data collection process was initiated.
2. Permission from the Dean of the College of Nursing of the research site and other required stakeholders was secured.
3. A convenience sample was recruited from the 4th year students in the BSN nursing program from a State University in Marikina City. Eligible participants were determined through the rosters of 4th-year BS nursing students in the research setting.
4. The research proponent coordinated with a designated faculty member, the research coordinator of the College of Nursing, and submitted this intervention protocol and the ERB approval for their review. The faculty/research coordinator initially approached the eligible students and introduced them to the study. The faculty member requested the students' participation.
5. A 10-15 minute video conference was set with the prospect participants and the research proponent. The research proponent explained to the students the significance of the study, time commitment, and expectations of them during the study. It was clear that participation would be voluntary and that declining participation would not affect the students' course grades. The prospects electronically signed informed Consent via Google Forms. To encourage participation, students who would choose to participate in the research study should have an opportunity into a drawing for gift cards that would be done after the post-test.
6. An online link (Google Forms) to the pre-test survey was sent to the nursing students via their email addresses. Questionnaires include (1) the KATOP scale and (2) the Work Preference Ranking Form with reflections and open-ended questions.

7. Students who chose to participate in the study continued by completing the online forms.
8. Senior sensitivity sensory simulator kits were delivered to the participants within 1-2 days from the conduct of the pretest. During training kits distribution, CHED, DOH, and IATF already allowed limited face-to-face classes in Metro Manila. With the permission of the school and the College of Nursing administration, the students were scheduled to pick up the kits at the school, following the minimum health protocols at that time. The following, as approved by ERB, served as a guide for the proponent in determining how the training kits will be distributed:
 - a. If CHED and DOH would release a new joint memorandum circular to permit limited face-to-face classes at the time of research, the kits will be delivered to the school for the students to pick up, provided this shall coincide with their scheduled face-to-face class.
 - b. If face-to-face classes are still prohibited during the conduct of this study, the home addresses of the participants will be obtained for the delivery of senior-sensitivity sensory simulators.
9. A schedule was set for the Experiential Ageing Simulation and the post-test. The workshop was conducted via live video conference (Zoom) within three days from the recruitment date to allow delivery of the sensory simulators to the participants. The participants were informed that they should attend the workshop in a room conducive to learning without the presence of any other individuals, as companions may affect the perceived attitude.
10. Interventions during the Experiential Ageing Simulation:
 - a. Before the start of the workshop, the participants were reminded to be in a room conducive to learning without any companion, as this may affect the perceived attitude.

- b. Discussion: The age wave of older adults in the Philippines and the current situation of Filipino Seniors
- c. Discussion: Health and Ageing Facts
- d. Experiential Simulation: Common losses experienced by older adults
 - i. The participants were instructed to write down five (5) most important things or persons in their lives on each card in the training kit. They were then asked to lay the cards on a table with the right side down. The facilitator directed them to pick one card, crumple it and throw it on the floor. They were asked to imagine having just lost that person or thing. Some participants were asked how they felt about the imagined loss.
 - ii. The facilitator told the participants to imagine that three (3) months later, they have barely had a chance to deal with the last loss; another loss will happen. The participants were again asked to pick another card, crumple it, throw it to the floor, and imagine that they had just lost that thing/person. This step was repeated until all the cards were crumpled and thrown.
 - iii. The facilitator revealed the main takeaway in the activity: older people experience losses over a very short period. These losses can include loved ones, loss of work, loss of independence, loss of social networks, sensory loss, and health and memory loss. The participants were instructed to reflect on how older adults feel and realize that it may be why older people have mood issues that make them difficult to deal with at times.
- e. Experiential Simulation: Vision Experience through visual simulators
 - i. Yellowing of the lenses

1. Participants were asked to wear eyeglasses with yellow lenses. They were asked to look at the PowerPoint presentation in pastel colors, mostly blue and green hues. They were asked to determine the colors of the presentation. Then, they were instructed to remove the eyeglasses and check if they got the color identification correctly.
 2. They were then instructed to wear the eyeglasses again. Still, this time they were directed to also wear gloves (to simulate peripheral neuropathy and loss of dexterity as experienced by older adults with diabetes). The participants were asked to look at photos of medicine pills and identify the colors of the pills as if they were sorting the medications. The participants were then instructed to remove the visual simulators and check if they correctly visually sorted the medications by color.
 3. The facilitator emphasized the major takeaway of the activity: vision changes impair an elderly's perception of color, leading to medication errors at home. It was stressed that medication instructions for older people should not be based on the color of the pills to prevent errors and hospitalizations.
- ii. Macular degeneration – The participants were asked to wear visual simulators mimicking the vision of a patient with macular degeneration. Random participants were asked to describe the visual experience and their realizations after experiencing this vision.
 - iii. Glaucoma - Visual simulators mimicking the vision of a patient with glaucoma were worn by the participants. Some of them were asked to

describe the visual experience and their realizations after experiencing this vision.

- iv. Diabetic retinopathy - The participants were asked to wear diabetic retinopathy visual simulators. Some participants were asked to describe the visual experience and their reflections about it.
- v. Cataracts - The participants were asked to wear cataract visual simulators. Random participants were also asked to describe their visual experiences and realizations.

1. The participants were instructed to choose a visual simulator from ii-v simulators and were asked to wear it. They were directed to fill out a mock hospital form in the training kit. The form has a small font size (less than 12) with many fields to accomplish.
2. The facilitator pretended to be a nurse who hurried up the participants to complete the forms.
3. After the activity, pointers on helping older adults successfully accomplish forms were given to the participants to reflect senior sensitivity.

f. Experiential Simulation: Hearing experience

i. Presbycusis

1. Participants were asked to wear earplugs in the training kit to simulate presbycusis.
2. The facilitator asked the participants to spell out in writing the words that were mentioned. The facilitator covered his mouth and crumbled papers during the activity making it more challenging for the participants to spell the words. They then checked their work after the exercise.

3. Pointers were then given to the participants to effectively communicating with older people with presbycusis.

g. Experiential Simulation: Diabetic neuropathy

- i. Participants were instructed to put some raw corn kernels (included in the training kit) inside their shoes and walk around their place for about 5 minutes.
- ii. After 5 minutes, the participants were asked to join back to the video conference and asked how their feet felt.
- iii. After 5 minutes of walking with raw corn kernels in their shoes, the expected mild tingling and numbness of the feet were described as the sensation that older people with diabetic neuropathy experience.

h. Discussion: Memory and Cognitive difficulties

- i. Discussion: Nursing interventions to address the typical age-related changes and challenges. The participants were asked to identify senior-sensitive actions that they can apply in future encounters with older people.

j. Debriefing

11. The participants accomplished Kogan's Attitudes Toward Older People (KATOP) Scale **IMMEDIATELY AFTER** Senior-Sensitivity Workshop (Experiential Ageing Simulation). This was done via Google Forms.

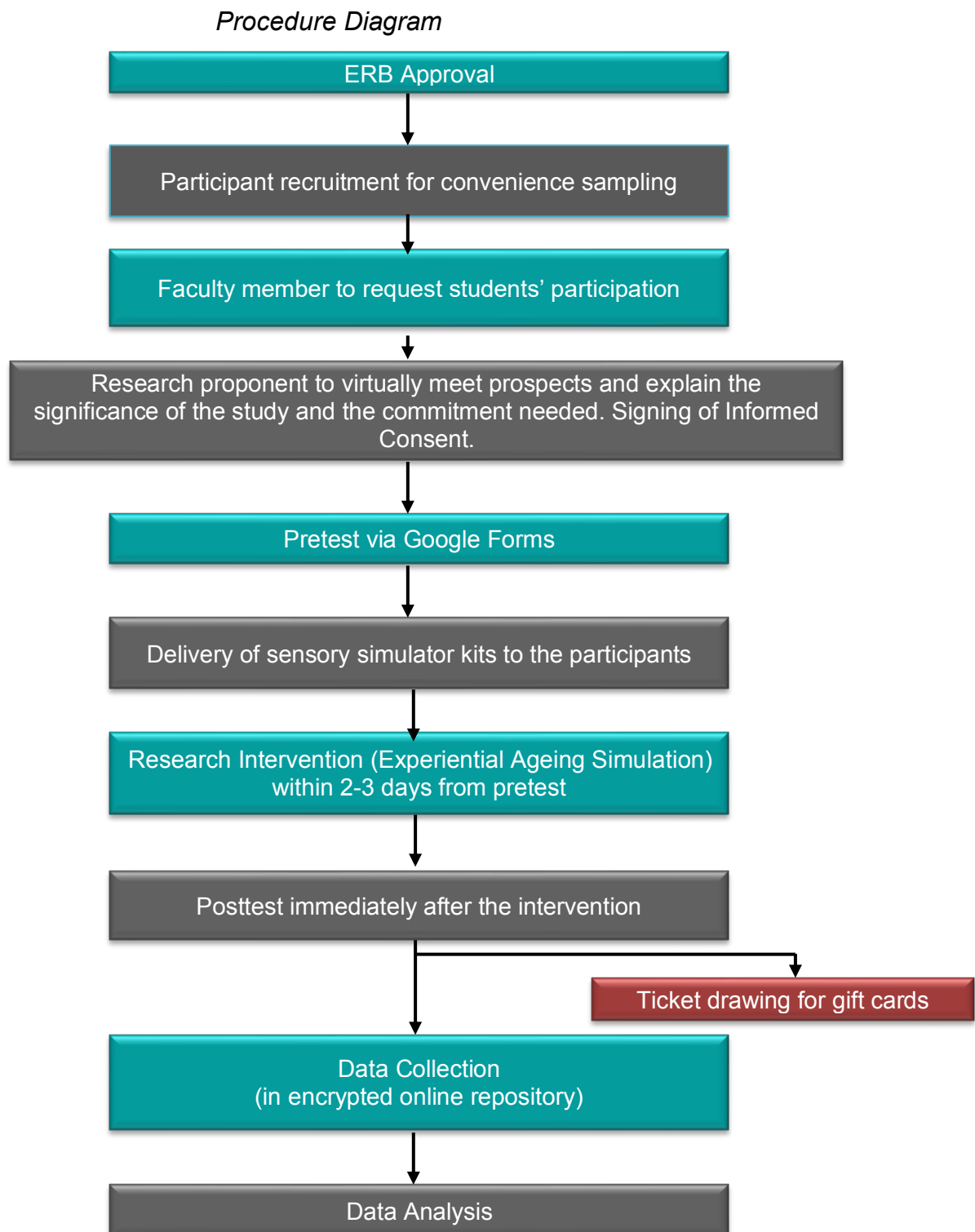
12. After all the accomplished forms were submitted online, ticket drawing for the gift card was carried out through a 5-minute live video conference. The winners of the draw received their gift cash via a mobile wallet application.

13. The Fidelity of the study protocol was maintained by securely saving the data collected in an encrypted online repository that can be made accessible to authorized UPOU personnel for auditing or validation. Online Survey platform was programmed to

ensure that the participants accomplish required fields before they can submit the forms.

14. The collected data shall remain in a password-encrypted online repository for a maximum period of 5 years; and may be accessed during the data entry process.

Figure 5



Plan for Data Analysis and Interpretation

Prior to analyses of data, the assumption for normality and homogeneity of data was checked first using the Shapiro-Wilk test and Levene's Test, respectively. The rule of thumb follows that if the p-value is greater than 0.05, the following assumptions are met. This entails that data observed normal distribution and equal variances, thus that they are safe to compare.

Analyses of Data were done using JAMOVI Version 2.2. It is an easy-to-use, free, intuitive open-source software for statistical data analysis built upon 'R.'

For this study, a comparison of means was utilized using Parametric Tests, obtaining measures from the same group of people:

1. **Paired t-test** was used for the Nursing Students who attended Experiential Ageing Simulation (Intervention) – before and after the intervention; and

For the **Paired t-test**, the before-and-after the program/workshop data (Attitudes Toward Older People Scale) was analyzed through (*Inferential*):

- i. Calculation of differences between rating scales of pre and post-tests
- ii. Calculation of **mean** difference (*Descriptive Analysis*)
- iii. Calculation of the **standard deviation** of the differences, and use this to calculate the standard error of the mean difference (*Descriptive Analysis*)
- iv. Calculation of t-statistic
- v. Calculation of the p-value for the paired t-test and conclusion that significant difference exists if the p-value is less than 0.05 (level of significance).

The paired t-test was carried out in **JAMOVI** following the procedure.

- Analyses
- T-Tests
- Paired Samples T-Test

— Choose the difference variable as the Test Variable and click OK.

2. **Descriptive statistics** (mean and standard deviation) were utilized in analyzing the Work Preference Ranking, in which the students would rank different patient groups based on age from one to seven, with a lower score indicating their most preferred areas to work. Summation of scores according to patient age groups was done, with the lowest sum considered the participants' most preferred age group.

3. **Moderator analysis** was conducted to determine whether differences between the effect of experiential ageing simulation through the students' attitudes toward older people are moderated by age, sex, and experience in elderly care. Analyses were done using JAMOVl.

3.1 **For Age.** One-Way ANOVA test was utilized.

Procedure follows:

- Analyses
- One-way ANOVA
- Placing the Dependent variable (KATOP)
- Placing the Grouping variable (Age)
- Assume Equal Variances (Fishers')
- Choose Descriptive Table and,
- then, Results copied from the Output Pane

3.2. **For Sex.** Independent Samples T-Test was used.

Procedure follows:

- Analyses
- T-Tests
- Choose Independent Samples T- Test
- Placing the Grouping variable (Sex)
- Student's T-Tests

- Choose Mean Difference (95% confidence interval), Cohen's D effect size, Descriptives and plots and,
- then, results were copied from the Output Pane

3.3 For Experience in Elderly Care (with or without). Independent Samples T-Test was used.

Procedure follows:

- Analyses
- T-Tests
- Choose Independent Samples T- Test
- Placing the Grouping variable -**Experience in Elderly Care (with or without)**
- Student's T-Tests
- Choose Mean Difference (95% confidence interval), Cohen's D effect size, Descriptives and plots and,
- then, results were copied from the Output Pane

Ethical Considerations

Ethical issues were highly considered for the conduct of the study as research participants were entitled to the protection of certain rights. These included beneficence, non-maleficence, respect for human dignity, self-determination, privacy, anonymity & confidentiality, and fair treatment.

Beneficence was highly considered. The welfare of the research participants was always respected. Conscious effort during the study was taken to do only what would be good for the participants. A conscious effort was also observed to ensure that ***any harm would be minimized and benefits would be maximized.*** **Non-maleficence was another ethical issue that was considered.** Respect for the participants' health and rights was promoted. Strategies to prevent any harm and discomfort (physical, emotional,

social, or financial) were observed by demonstrating participant-sensitive attitudes (empathy, sensitivity, etc.). Sensitivity to emotional aspects of this study, specifically the questions on the research tool, was considered during the pre-test and post-test. The researcher remained virtually via Zoom during the questionnaire administration to assess any emotional effect of the questions among the participants. Another important ethical consideration that was strictly adhered to during the research was **respecting the participants' right to protection from exploitation**. Participants were assured that their participation and information would not be used against them.

In the research study, **Respect for Human Dignity** was also on top of ethical considerations. The autonomy **of the participants was observed**. The right to self-determination was of utmost importance in the study. Participants were treated as autonomous individuals capable of controlling their actions. They were informed that they could voluntarily decide whether to participate without risk of prejudicial treatment. It was emphasized to the participants that they have the right to ask questions, refuse to provide information, and opt to withdraw from the research study at any time. It was strictly observed that the research premise was free from coercion, like any threat or factor that could induce force into participation. The participants' **right to full disclosure** was also highly considered in this research study. The following were emphasized among the prospect participants: (1) the nature of the study, (2) their right to refuse participation, (3) the responsibilities of the research proponent, and (4) the possible risks and benefits. **Informed consent and participant authorization** was secured prior to the conduct of the research. Participants were provided with adequate information about the research; their full understanding was ensured, and their right to decline or participate voluntarily was protected. The following important details were included in the informed consent and were discussed among the participants: their status as a participant in a research study,

the study goals, the type of data that would be collected from them, the intervention protocol, the nature of commitment, the inclusion and exclusion criteria, the potential benefits and risks, the confidentiality clause, voluntary consent, their right to withhold and withdraw information and the researcher's contact information, as well as the contact information of the Ethics Review Board Chair.

Justice was also highly considered for this research study. The right to fair treatment was observed to ensure justice was within the research premise. Inclusion and exclusion criteria were strictly adhered to in selecting participants regardless of their social and economic status to prevent exploitation and discrimination of vulnerable groups. Persons who declined to participate or withdraw from the study were treated non-prejudicial. The persons who declined and voluntarily participated were all treated with respect in their individual beliefs, habits, lifestyles, backgrounds, and cultures. It was emphasized that their decision to participate or not would not affect their academic grades. They were always treated tactfully and courteously. It was also stressed among the participants that their ***right to privacy would be maintained continuously***. All confidential information will be kept in the strictest confidence. Adherence to ***the Philippine Data Privacy Act of 2012*** was also considered of utmost importance. Anonymity was observed during the processing of information. Any personal and unique personal information was kept in a secured drive that was not accessible to the public.

Ethics was also strictly embedded into the research design. The setting for the study is identified to protect against participant discomfort. The ***study intervention*** (experiential ageing simulation) is designed to maximize good and minimize harm. The intervention might be withdrawn or altered in the presence of possible harm brought about by the intervention. With the ***research sampling***, biases were prevented in the selection of participants through the use of inclusion and exclusion criteria. With the ***data collection***,

efficiency was highly observed to minimize participant burden. The information collected was kept in secured physical storage and secured information system. Strict adherence to laws protecting personal information, like the Philippine Data Privacy Act, were observed. The participants' identities were also protected in reporting the research findings. Any individually identifiable information was excluded from the research reports.

In **Obtaining Ethical Approval from Ethics Review Board**, the following were conducted:

1. The protocol for the intervention and the research proposal approved by UPOU and the Research Committee of ARMMC was submitted to the Review Board.
2. The following documents were also provided: Written informed consent forms, subject recruitment procedures, written information furnished to the subjects, information about compensation to the subjects, the research proponent's updated curriculum vitae, and any other documents the Review Board needed to fulfill its responsibilities.
3. Accomplished Application Forms for Ethical Review were also forwarded to Ethics Review Board.
4. As this study involves intervention to human participants, the proponent underwent a short course on 'Good Clinical Practice' as required by ARMMC ERB.

Chapter IV

RESULTS AND DISCUSSIONS

The general objective of this research study is to determine the effect of Experiential Ageing Simulation (4-hour Senior Sensitivity Workshop simulating the common aging-related sensory changes and experiences of people 60 years old and above) on the attitudes (responding learning level) toward older people among 4th year BS Nursing Students.

The analysis is presented and arranged according to the objectives of the study. This chapter discusses the findings and interprets the results of the study as to the perception of older people before and after participation in the experiential ageing simulation and the significant difference in the attitudes of the nursing student-respondents when their profile in terms of age, sex, and experience were taken as test factor.

The Difference in the Attitudes Before and After the Intervention

1. On the significant difference in the attitudes (Responding level) toward older people of 4th year BS Nursing students

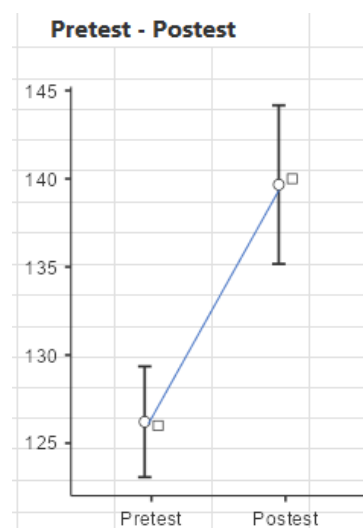
a. Kogan's Attitudes Toward Older People (KATOP) Scale

The assumption for normality and homogeneity of data was first checked using Shapiro-Wilk test and Levene's test, respectively. As a general guideline, if the p-value is greater than 0.05, then normality assumptions are met. It implies that data observed normal distribution and equal variances and that they are safe to compare (see Appendix M for the results of Assumption Tests for Normality and Homogeneity of Data).

Table 1*Group Descriptive Before and After the Research Intervention*

	N	Mean	Median	SD	SE
Pretest	51	126	126	11.4	1.60
Posttest	51	140	140	16.4	2.29

The descriptive statistics in Table 1 show an increase in the mean attitudes toward older people of 4th year BS Nursing students following the Senior Sensitivity training workshop. The KATOP pretest of student-respondents revealed a mean score of 126, which significantly increased in the post-test with a mean score of 140, representing a more positive attitude toward older adults after the Experiential Ageing Simulation. Given the high range that KATOP scores can turn (from 34 to 204 points) and the small population of this study, the high standard deviation in the results (11.4 in pretest and 16.4 in the posttest) is acceptable and justified. Moreover, normality test showed normal distribution of data.

Figure 6*Average KATOP Scores Before and After the Intervention*

Note. Figure 6 illustrates the increase in the group's average KATOP Scores before and after the research intervention, as represented by circles in the plot. The group's median scores, represented by square boxes, can be seen very close to the mean scores, which implies equal data distribution.

This result is in line with an international study by Sari et al. (2020) that revealed significant improvement in the mean scores of nursing students on the KATOP scale after wearing aging simulators. This is also consistent with the results of other international studies that examined the effect of this type of intervention among nursing students and other healthcare professionals that revealed a positive impact of experiential ageing simulation on the attitudes toward older people after exposure to the intervention (Fernandes, Couto & Afonso, 2018; Perot et al., 2020; K. Kleszynski et al., 2018; Bamakan et al, 2021; Yelland & Piper, 2019; Chen et al., 2015; & Hong, 2014; Kingston, et al., 2021). Thus, ageing simulation is an effective education strategy that improves students' attitudes toward the elderly.

Although an increase in the participants' mean scores was observed, their pretest score (126) is above the neutral score of 102, which reflects their attitudes toward older people score in the positive spectrum of the scale. This may be attributed to the Filipino culture of having high respect for the elderly and “*utang na loob*” (debt of gratitude); it reflects in families taking care of their older adults (Cruz et al. 2019). The Filipino culture also configures how younger people view aging with the expectation of providing informal caregiving to their older family members, and not being able to do so is regarded as shameful (Badana & Andel, 2018).

Table 2

Significant Difference in the Students' Attitudes Before and After the Intervention

Paired Samples T-Test		Student's t statistic	df	p	Mean difference	SE difference	Effect Size (Cohen's d)
Pretest	Posttest	-6.98	50	< .001	-13.5	1.93	-0.978 (Large)

This shows that there is a significant difference in the attitudes (Responding Level) toward older people of 4th year BS Nursing students before and after the Senior Sensitivity Training Workshop as reflected in the $t(50) = -6.98$, $p\text{-value} < 0.001$, with a mean difference of 13.5. Cohen's d (0.978) states that this is a large effect.

Since the post-test was delivered three days after the pretest and right after the intervention, the researcher infers that experiential ageing simulation is the reason for the increase in the KATOP scores of the BS Nursing students, as indicated in the results presented. Significant improvement in the participants' attitudes toward older adults increased their awareness of age-related sensory changes and declines in the older people's functional abilities and improved their insight on effective communication, interaction, and the degree of assistance for older people with identified age-related declines.

The above results correspond with international studies that tested the effect of experiential ageing simulation among nursing students and other healthcare professionals. In a study conducted in Portugal by C. Fernandes, G. Couto, and A. Afonso (2018) among nursing students, ageing simulation exercises have been proven to be effective in fostering positive attitudes towards the elderly ($p < 0.05$). This is also parallel with the findings of a research study conducted in France by Perot et al. (2020) that revealed that aging-simulation experience among healthcare professionals increased their knowledge of gerontology care, limitations related to advancing age, and their outlooks regarding the experience of such limitations. This result also aligns with the findings of another study by K. Kleszynski et al. (2018) among medical students in the United States of America (USA). In the said study on the effects of experiential ageing simulation among medical students, ninety-five percent (95%) of the participants either agreed or strongly agreed that the experiential simulation helped them to gain a better understanding of how it feels to undergo the process of ageing with health changes; ninety-two percent (92%) felt that the activity would help them become

a better healthcare provider for the elderly patients, and ninety-four percent (94%) reported that the activity advanced their knowledge about age-related changes. Several other international studies also revealed that this short course significantly improves empathy and attitudes toward older people among nursing and other healthcare students (Bamakan et al, 2021; E. Yelland and J. Piper, 2019; A. Chen et al., 2015; and S. Hong, 2014). Aging simulation activities as a teaching strategy help student nurses in the educational processes encompassing attitudinal skills and creating empathy (Bamakan et al., 2021). Also, in a mixed-method systematic review by P. Kingston et al. (2021), twenty-three (23) studies were reviewed about ageing simulation health and social care education and revealed that experiential ageing simulation has a predominantly positive impact on the student's attitudes toward older people.

b. Work Preference Ranking

Along with the KATOP Scale, nursing students also ranked various patient age groups according to their work preferences. The respondents were also asked to answer open-ended questions to capture their comments and reflections. Descriptive statistics express the mean and standard deviation for the total sample (see Table 3). Nursing students ranked the patient age groups from one (1) to seven (7), with a lower score representing their most preferred age group to work with; and the higher score representing their least work preference (see Table 4 for Summary of Work Preference Ranking).

Table 3

Group Descriptive for Work Preference Ranking

Group	N	Mean	Sum	SD
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Newborns	Pretest	51	4.59	234	2.36
	Posttest	51	4.57	233	2.27
Infants and Children	Pretest	51	3.94	201	1.94
	Posttest	51	4.22	215	1.97
Adolescents	Pretest	51	3.65	186	1.75
	Posttest	51	4.78	244	1.51
Young Adults	Pretest	51	3.04	155	1.83
	Posttest	51	4.20	214	1.61
Adults	Pretest	51	3.78	193	1.74
	Posttest	51	4.24	216	1.93
Adults aged 65-85	Pretest	51	3.98	203	1.95
	Posttest	51	2.65	135	1.73
Adults aged >85	Pretest	51	5.00	255	1.85
	Posttest	51	3.27	167	2.05

Table 4 shows a summary of work preference ranking of student-respondents during pretest and post-test. Results revealed that during the pretest, student-respondents ranked *young adults* as their *number one work preference*, and the least preference was those adults above 85 years old. On the other hand, the post-test revealed a drastic shift in the participants' work preference for adults aged 65-85, ranked number one (1); followed by those adults above 85 years old, ranked number two (2); and the least was adolescents as rank number seven (7).

Table 4

Summary of Work Preference Ranking

Work Preference	Work Preference Ranking
The Effect of Experiential Ageing Simulation on Attitudes toward Older People...	

	PRETEST	POSTTEST
Newborns	6	6
Infants / Children	4	4
Adolescents	2	7
Young Adults	1	3
Adults	3	5
Adults aged 65-85	5	1
Adults >85	7	2

In the pretest, the participants ranked caring for older adults as their least preference despite having a positive KATOP score of 126, which was higher than the neutral score of 102. This indicates that although the group's KATOP score was high, their Work Preference Ranking suggests that they do not prefer taking care of older adults after they graduate, thus an unfavorable attitude toward older people. This finding is consistent with the results from a study conducted in Malaysia by Elias, Jaafar, and Pien, (2020) that despite the nursing students' good attitude scores toward older adults, working in an elderly care setting is not their first career preference post-graduation. This could be attributed to the close cultural concept of elderly perception between these two countries in Southeast Asia. The result of the work preference ranking is consistent with an integrative review of twenty-four (24) international studies about nursing students' unwillingness to work in a geriatric setting (Dai, Liu, Ju, & Yang, 2021). The integrative review revealed that nursing students ranked caring for older adults the lowest compared to younger age groups. It is also consistent with other research findings that nursing students do not consider caring for older adults a career path after graduation (Koskinen, et al., 2022; Okuyan, 2020; Alotaibi, 2018).

During the pretest, the factors indicated by the respondents in ranking their preferred patient groups were:

1. **Ease of communication** - Some respondents commented that younger people are easier to handle as they easily follow commands, learn faster than older adults, and communicate smoothly.

2. **Perception of Elders' Attitude** - Some commented that older people is their least preferred group because elders tend to be irritable, unpleasant, and hard to please.

3. **Experience** - Some respondents indicated that they rank the patient groups according to their exposure and knowledge in caring for each group.

4. **Intensity of care requirement** - Some respondents commented that caring for an older adult can be physically demanding compared to younger age groups; thus, older adults are more difficult to take care of.

5. **Chosen Career Path** - Some respondents commented that they least preferred older adults because they have chosen pediatrics as their career path.

Furthermore, unfavorable attitudes toward older people were evident in their pretest responses as some students commented that for them to consider gerontology nursing, older people must have a pleasant and positive attitude and be cooperative to the care plan. Statements like this show lack of senior sensitivity and empathy. This further supports that nursing students' attitudes toward older people were leaning toward being unfavorable before the experiential ageing simulation. This result could be attributed to the traits and characteristics of the participants that they all belong to the same age group. Thus, their viewpoints about taking care of older people could be similar.

In the posttest, a drastic shift in the participants' work preference ranking was observed to be more favorable towards older people. Most participants commented that Experiential Aging Simulation affected how they ranked their preferences. The following is a summary of their comments about the seminar-workshop:

1. Empathy for the elderly was felt during Experiential Ageing Simulation –

Some respondents indicated that after having a firsthand experience of the common sensory changes and challenges experienced by older people, they were able to understand the older people more and they realized the elders need more care, love, and compassion from younger people.

2. Additional knowledge on aging and older people - Some participants commented that they gained insights into the lives of older people and knowledge about the aging process, making their ranking favorable to older people. Some added that learning the common medical conditions and how they may feel made them more comfortable handling older people.

3. Increased interest in geriatric nursing - Some respondents further commented that after the experiential aging simulation, they gained more interest in taking care of older adults. Learning senior sensitivity through experiential learning made them more interested in gerontology nursing.

This study reveals that Experiential Ageing Simulation positively affects the Work Preference Ranking of 4th-year nursing students. This result parallels a study by Fernandes, Couto, and Afonso (2019) that showed significant improvement in the work preference among student nurses before and after aging simulation activity. This is also in line with the study conducted in the US by Koehler et al. (2016) that students' work preference was modified to be more favorable to caring for older adults after exposure to a stand-alone geriatric program. This further support the finding that attitude can be modified by enhancing awareness about the unique needs of older people through experiential ageing simulation.

c. Synthesis of Findings on the Significant Difference in the Students' Attitudes

The results of this study revealed a significant difference in the attitudes (Responding Level) toward older people of 4th year BS Nursing students before and after the Senior Sensitivity Training Workshop. There was a significant improvement in the attitudes toward older people scores after attending the experiential ageing simulation. Although the group's pretest score was observed in the positive spectrum of the scale in the pretest, they nonetheless ranked taking care of older people as their least work preference, thus an indication of an unfavorable attitude toward older people. The results of work preference ranking also revealed an extreme shift in their preference. During the pretest, they initially ranked older people as their least preferred patient group. In contrast, on the post-test, their ranking shifted favorably to the older people age group as their most preferred patient group to work with after graduation. With the post-test conducted three days after the pretest and right after the intervention, the researcher infers that the nursing student's exposure to experiential ageing simulation explains the improvement in their attitudes toward older people.

The attitudes measured in experiential ageing simulation were observed on the 'Responding Level' (2nd level out of 5) of Bloom's Affective Taxonomy. The following learning outcomes observed during the study were: (i) nursing students actively participated in experiential ageing simulation, (ii) they shared their experience through group discussions, (iii) they imparted their reflections about the simulation activities, (iv) they followed all the learning procedures, and (v) they answered the required questionnaires.

Although Experiential Ageing Simulation is a short course, the participants identified the course to be a meaningful learning experience and relevant. With the activities that mimic age-related difficulties of older people, the participants recognized

the content of the course to be effective despite its short duration. This can be attributed to its cognitive-emotional impact as nature of experiential learning (González-Ceballos, Palma, Serra, J. & Esteban-Guitart, 2021). Moreover, Experiential Ageing Simulation is considered an empathy-based intervention as it promotes empathy to improve attitude. In a systematic review and meta-analysis conducted by Martínez-Arnau, et al. (2022), a strong significant effect on the attitudes of healthcare students was observed for empathy-based interventions like experiential ageing simulation. In addition, empathy-based interventions are the most effective strategies to improve students' attitudes toward older people (Martínez-Arnau, et al., 2022). Having experienced the physical limitations, sensory difficulties, and emotional losses of older people through simulation activities, nursing students better understand the special care, help, and communication needed by the elderly (Sari et al., 2020; Demirtas, & Basak, 2021).

The students' feedback that experiential ageing simulation is an effective learning experience can be explained by the nature of activities in this workshop based on David Kolb's Experiential Learning Theory, the theoretical basis of this study. The activities of the research Experiential Ageing Simulation allowed the participants to go through the four stages of Kolb's Experiential Learning Cycle for effective learning. First, the participants went to the first stage of the cycle, Concrete Experience, by having them wear sensory simulators to mimic age-related changes of the elderly (visual simulators, hearing simulator, common losses simulation); second, they went through the next stage, Reflective Observation, by having them discuss with the group their feelings about the new experience; then they were let to go through the next stage that is Abstract Conceptualization in which they were encouraged to interpret the experience and make comparisons to the new understanding of the idea. Lastly, they went through the last

stage of the cycle, Testing, and they were asked to identify senior-sensitive actions that they can apply in real life based on the new experience.

The Difference in the Attitudes in Terms of Modifying Variables

2. On the significant difference in the attitudes toward older people among 4th Year BS Nursing students in terms of:

a. Age

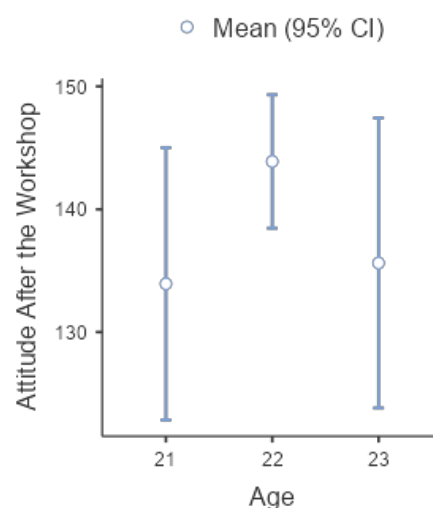
Table 5

Posttest Group Descriptives According to Age

	Age	N	Mean	SD	SE
Attitude After the Workshop	21	15	134	20	5.17
	22	28	144	14	2.65
	23	8	136	14.1	4.99

Figure 7

Posttest KATOP Means According to Age



The descriptive statistics above suggest that 4th year BS Nursing students under Age 22 have the highest attitude after the workshop of M=144; other age groups scored lower with M=134 for ages 21 years old and M=136 for ages 23 years old. Since KATOP scale

scores have a high range, from 34 to 204, and with the small population of this study, the high standard deviation in the results is acceptable and justified. Besides, normal distribution of data has been tested and homogeneity of variances was determined to be equal (see Appendix M for the results of Assumption Tests for Normality and Homogeneity of Data).

Table 6

Test of Significant Difference in the Students' Attitudes in Terms of Age

One-Way ANOVA (Fisher's)				
	F	df1	df2	p
Attitude After the Workshop	2.19	2	48	0.123

The One-way ANOVA table, ($F(2,48)=2.19$, $p = 0.123$) suggests no significant difference between the attitude after the senior sensitivity workshop in terms of the age group. This can be attributed to the characteristic of the participants that they all belong to the same age group, 'Youth', as defined by the World Health Organization (2020). This result is similar to the conclusions from the study conducted in Portugal by Fernandes, Couto, and Afonso (2019), which revealed that age is not a predictor of student nurses' attitudes toward older people. This is also consistent with the study by Bamakan et al (2021) among nursing students showing that age is not a significant factor that determines the attitudes toward older people among the participants in this age group.

b. Sex

To determine the difference in the attitudes toward older people between male and female; before and after the intervention.

Table 7

<i>Group Descriptive According to Sex</i>					
	Sex	N	Mean	SD	SE
Attitude Before	Male	10	126	13.1	4.13
	Female	41	126	11.2	1.75
Attitude After the Workshop	Male	10	135	15.7	4.97
	Female	41	141	16.5	2.57

The descriptive statistics suggest an increase of 9 points (Mbefore = 126, Mafter = 135) in the Male attitude mean after the workshop lesser than the reflected increase of 15 points (Mbefore = 126, Mafter = 141) in the Female attitude mean.

Table 8*Test of Significant Difference in the Students' Attitudes in Terms of Sex*

Independent Samples T-test								
		Statistic	df	p	Mean difference	SE difference		Effect Size
Attitude before	Students' t	-0.188	49.0	0.0852	-0.766	4.08	Cohen's d	- 0.0663
Attitude after the Workshop	Students' t	-1.115	49.0	0.270	-6.427	5.77	Cohen's d	- 0.3931

However, this recorded increase was not significantly different, as shown in the Independent Samples t-test with a p-value of 0.852 before the intervention and a p-value of 0.27 after the intervention. The effect size also reflects a small Cohen's d of 0.0663 before and 0.3931 after. Thus, there is no significant difference in the attitudes toward older people between male and female, before and after the intervention. This result is consistent with a study in Portugal by Fernandes, Couto, and Afonso (2019) among nursing students, which showed that sex is not a predictor of student nurses' attitudes toward older people. This result also aligns with a study by Shortreed (2015) in the United States of America that revealed no significant difference between male and female attitudes toward older people based on their scores on the KATOP Scale. Additionally, this also corresponds to the findings

of an international study among nursing students by Bamakan et al (2021) and Elias, Jaafar, and Pien (2020) that revealed sex is not a significant factor that affects the attitudes toward older people.

c. Experience in elderly care

To determine the difference in the attitudes toward older people between students with experience in elderly care and those who do not have.

Table 9

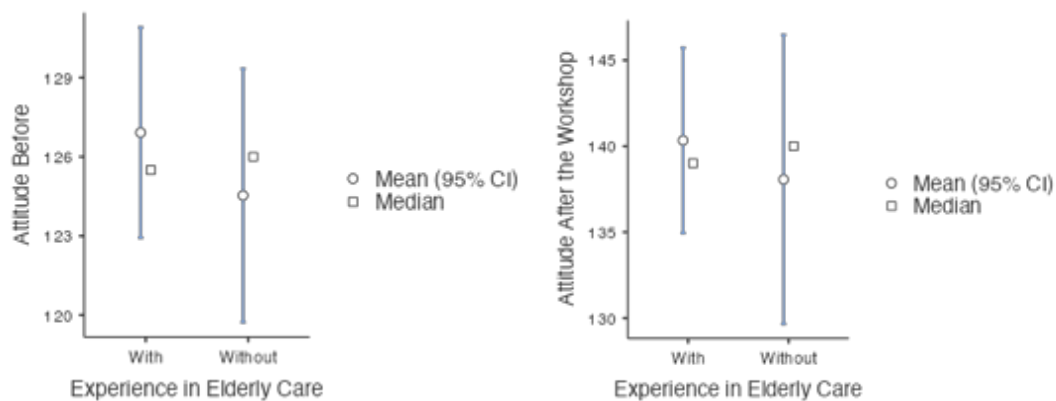
Group Descriptive According to Experience in Elderly Care

	Group	N	Mean	Median	SD	SE
Attitude Before	With	36	127	126	12.2	2.04
	Without	15	125	126	9.50	2.45
Attitude after the Workshop	With	36	140	139	16.5	2.75
	Without	15	138	140	16.61	4.29

The descriptive statistics suggest that those with elderly care experience have higher attitude than those without elderly care experience as reflected in the table (Before M_{with} =127, M_{without} = 125 and After M_{with} = 140, After M_{without} = 138).

Figure 8

KATOP Means According to Experience in Elderly Care



The majority of the participants have experience in taking care of older people (36 out of 51 participants) as defined in this study, including (i) having actively taken care of a relative for at least six months with tasks ranging from assisting on activities of daily living to active involvement on health management of the relative; (ii) Related learning experience- having been assigned to take care of elderly clients during the practicum for at least one semester; and (iii) Paid private duty with an elderly for at least six months. Of the 36 participants with experience in elderly care, 83% defined their experience as having actively taken care of a relative elder, 11% as related learning experience, and 6% as private duty.

The students with experience in elderly care have slightly higher scores than those without experience. This could be attributed to Filipinos having high respect for the elderly and observing “*utang na loob*” (debt of gratitude). It is also part of Filipino culture to be committed to their familial duty toward their elderlies (Abalos et al., 2018), and it reflects in families taking care of their own older adults (Cruz et al., 2019). The Philippine culture forms the perspectives of Filipino families toward aging with informal caregiving for the elder kin as an expectation among the family members (Badana & Andel, 2018). Even the 1987 Philippine Constitution states that ‘it is the duty of the family to take care of the elderly members while the State may design programs of social security for them.’ As reflected in the Philippine Census 2015, 99.8% of senior citizens belong to the household population, and only 0.2% belong to the institutional population. Commitment to family/informal

caregiving manifests among Filipino families and being unable to provide care or other resources to older adults in the family is considered shameful (Badana & Andel, 2018).

Table 10

Test of Significant Difference in the Students' Attitudes in terms of Experience in Elderly Care

Independent Samples T-test								
		Statistic	df	p	Mean difference	SE difference		Effect Size
Attitude before	Students' t	0.0674	49.0	0.503	2.38	3.54	Cohen's d	0.207
Attitude after the Workshop	Students' t	0.446	49.0	0.657	2.27	5.08	Cohen's d	0.137

However, this recorded difference is not significant shown in the p-value of 0.503 before the intervention and p-value of 0.657 after the intervention in the independent t-test table. Furthermore, the effect size also reflects a small Cohen's d of 0.207 before and 0.137 after the research intervention. This has the same results as the study in Portugal conducted among nursing students by Fernandes, Couto, and Afonso (2018), which showed that experience in elderly care is not a variable that significantly affects the student nurses' attitudes toward older people. However, the result in this study is in contrast with the findings from other international studies that showed that experience in elderly care, including experience with community elderly and older relatives, affects the attitudes toward older people to be more positive (Rush et al., 2017; López-Hernández, Martínez-Arnau, Castellano-Rioja, Botella-Navas, & Pérez-Ros, 2021, and, Shortreed, 2015).

The difference in the results could be attributed to the small population of this study. Although this study showed that students with experience in elderly care have slightly higher

scores on the KATOP Scale compared to those who do not have experience, these are not statistically significant in this sample.

Chapter V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

The study was conducted to determine the effect of experiential simulation (Senior Sensitivity Workshop) on the attitudes (Responding Learning Level) toward older people among 4th-year BS Nursing students and to determine the significant difference in the attitudes toward older people in terms of age, sex, and experience.

Quantitative Research using a Quasi-Experimental, One-group Pretest-Posttest Design was utilized for the study.

The intervention used in the study is Experiential Ageing Simulation (a 4-hour Senior Sensitivity Training Workshop simulating the common age-related sensory changes among older people). The samples were asked to attend the seminar-workshop. They were asked to accomplish **Kogan's Attitudes Toward Older People (KATOP) Scale and the Work Preference Form** before and after the Training Workshop. For this study, a comparison of means was utilized, obtaining measures from the same group of people: **Paired t-test** was used for the Nursing Students who attended Experiential Ageing Simulation (Intervention) – before and after the intervention. **Independent t-test and one-way ANOVA** were used to analyze modifying variables.

The **Target Population** for the research study is the currently enrolled 4th Year BS Nursing Students in a Public University in Marikina City, male or female, have not attended a similar workshop on Experiential Ageing Simulation, and have not had previous advance training and certification in Gerontology Nursing. The total population of 4th-year nursing students is N=66, with the total number of eligible individuals as N=57 based on the inclusion and exclusion criteria. Eligible individuals (based on inclusion criteria, exclusion criteria, and

those who consented to participate in the study) were included. The total sample for this study is N=51.

Summary

KATOP results indicated that there is a significant difference in the attitudes toward older people of 4th year BS Nursing students before and after the Senior Sensitivity Training Workshop as reflected in the $t(50) = -6.98$, $p\text{-value} < 0.001$, with a mean difference of 13.5. Cohen's d (0.978) states that this is a large effect. The results show an increase in the mean attitudes toward older people of 4th year BS Nursing students following the Senior Sensitivity training workshop. Work Preference Ranking results indicated that there was a significant shift of the nursing students' preference in favor of older adults after attending experiential ageing simulation. They initially ranked older adult age group as their least preference during the pretest, however it drastically changed in the post-test when they ranked older adults as their preferred patient group to work with. During the pretest, the nursing students indicated the following as factors for choosing ranks one and seven: (i) ease of communication, (ii) perception of elder's attitude, (iii) personal experience, (iv) intensity of care requirements, and (v) chosen career path. Some pretest responses from the participants also showed unfavorable attitude toward older people as some of them commented that they might consider gerontology nursing if older adults will be more pleasant, will have positive attitude and will be cooperative to the care plan. On the other hand, during the posttest, the participants identified more positive attitudes toward older people as reflected on their work preference ranking. Some of the comments from the respondents after the workshop include: (i) empathy for the elderly was felt during experiential ageing simulation, (ii) additional knowledge about aging and older people was attained, and (iii) there was an overall increase in interest on geriatric nursing after the intervention.

In terms of *age*, the descriptive statistics suggest that 4th year BS Nursing students under Age 22 have the highest attitude after the workshop. Furthermore, as seen in the One-way ANOVA table, ($F(2,48)=2.19$, $p = 0.123$) suggest no significant difference between the attitude after the senior sensitivity workshop in terms of the age group. The characteristic of the respondent that they all fit in the same age group, 'Youth' as defined by the World Health Organization (2020), could be the ground for this result.

In terms of *sex*, the descriptive statistics suggest an increase of 9 points ($M_{\text{before}} = 126$, $M_{\text{after}} = 135$) in the Male attitude mean after the workshop lesser than the reflected increase of 15 points ($M_{\text{before}} = 126$, $M_{\text{after}} = 141$) in the female attitude mean. However, this recorded increase was not significantly different as shown in the Independent Samples t-test with a p-value of 0.852 before the intervention and a p-value of 0.27 after the intervention. The effect size also reflects a small Cohen's d of 0.0663 before and 0.3931 after. Thus, there is no significant difference in the attitudes toward older people between male and female, before and after the intervention.

In terms of *experience*, the descriptive statistics suggest that those with elderly care experience have higher attitude than those without elderly care experience (Before $M_{\text{with}} = 127$, $M_{\text{without}} = 125$ and After $M_{\text{with}} = 140$, $M_{\text{without}} = 138$). However, this recorded difference is not significant, as shown in the p-value of 0.503 before the intervention and p-value of 0.657 after the intervention in the Independent T-test Table. Also, the effect size reflects small Cohen's d of 0.207 before and 0.137 after the research intervention.

Conclusions

Based on the findings of the study, the following conclusions are derived:

The positive effects of Experiential Ageing Simulation on students' attitudes towards older people provided valuable insights and information that helped students be more

introspective and self-critical of their own beliefs and better recognize that age neglect is an important and serious social problem. The use of experiential ageing simulation was demonstrated to be an effective teaching strategy in developing positive attitudes toward older persons.

Age, sex, and experience in elderly care are not significant factors in the attitudes of BS Nursing students toward older persons. As other research findings revealed that experience in elderly care is a substantial factor in having more positive attitudes toward older people, this study reduces the claim in this sample that experience is a significant factor in nursing students' attitudes. Although this study revealed that nursing students with elderly care experience have slightly higher scores on the KATOP Scale compared to those who do not have experience, these are not statistically significant in this sample.

The participants in this research had positive attitudes toward older people before the intervention based on the KATOP Scale. Although their pretest scores showed positive attitudes before the intervention, they initially ranked caring for 'Adults aged 85 and above' as their least work preference.

The aging-simulation experience modifies student-respondents on their work preference ranking as presented in the preceding table and complemented by their reflections and comments about their experience. The work preference of the students shifted favorably to caring for older adults after their exposure to experiential ageing simulation.

Experiential Ageing Simulation is identified by student nurses to be a meaningful learning experience and relevant, despite its short duration. This can be attributed to the nature of experiential ageing simulation allowing the participants to go through the four cycles of Kolb's Experiential Learning Theory for an effective learning to occur.

The attitudes formed in this study were observed on the 'Responding Level' of Bloom's Affective Taxonomy. Indicators of learning outcomes met were: (i) active

The Effect of Experiential Ageing Simulation on Attitudes toward Older People... 83

participation in experiential ageing simulation, (ii) participating in group discussions, (iii) sharing their reflections about the simulation activities to the group, (iv) following learning procedures, and (v) answering the required questionnaires.

Recommendations

1. With the continuously aging population that the Philippines is facing, it is suggested that Nursing Schools may adopt experiential ageing simulation as a short course as part of the Geriatric Nursing topic to prepare nursing students before getting exposed to bedside care to be more empathetic to the special needs of older adults, this may lead to a higher quality of care delivered to the patients.
2. Bachelor's degree programs should continue providing nursing students clinical experience with older people, specifically in nursing homes, to increase their interest in working in the field of geriatric care.
3. It is suggested that professional values be taught and courses on values be added to the curriculum to improve the students' attitudes towards older people and lessen ageist attitudes.
4. Health institutions and private organizations that commonly deal with older adults may also adopt Experiential Ageing Simulation as part of the new-hire training for new employees that belong to the 'young' age group. Other young individuals may also benefit from gaining insight into the lives of older people from this type of workshop, thus affecting their interaction and service delivery to the older people age group.
5. For future research regarding this topic, some recommendations include (i) using a larger sample population for replication of the study; (ii) exploring the attitudes toward older people of other young age groups beyond the age limits in this study; and (iii) exploration of additional factors that may affect attitudes toward older people such as the cultural background.

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Appendices

APPENDIX A

Ethics Review Board Form



Republic of the Philippines
Department of Health
'AMANG' RODRIGUEZ MEMORIAL MEDICAL CENTER
Sumulong Highway, Sto. Niño, Marikina City, Philippines 1800
Email Address: amangrod@yahoo.com / Website: www.armmc.doh.gov.ph
Tel. Nos. (+632) 941-5854 & (+632) 948-1263
"PHIC Accredited"



ETHICS REVIEW BOARD (Comm. Form 2.02)

February 23, 2022

VLADIMIR T. MILAOR, RN
Principal Investigator

RE: PROTOCOL EVALUATION

Dear Mr. Milaor,

We wish to inform you that the ARMMC-ERB has reviewed your protocol and has granted its approval for implementation, to wit:

ARMMC-ERB Protocol No:	TP-2022-02-00
Sponsor Protocol No:	N/A
Research/Project Title:	The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students
Approval Date:	February 22, 2022
Expiration Date:	February 21, 2023
Type of Approval:	☐ Expedited ☐ Full Review

Please be reminded that after this approval, the following are your responsibilities:

1. This approval expires on the date indicated above. For renewal, submit to us a Progress Report every six months/year (use *Form 3.05*);
2. Inform the ERB of any modifications or changes in the research design which affect human participants, or changes in consent documents, prior to implementation (use *Form 3.03*);
3. Report to us any protocol deviation / violation (use *Form 3.07*);
4. Submit SAE (*serious adverse event*) and SUSAR (*suspected unexpected serious adverse reaction*) reports within seven days of the occurrence of the event (use *Form 3.02*);
5. Upon completion of the study, inform us in writing by submitting a Final Accomplishment Report (*Form 3.06*);

You are to comply with all international and national guidelines and regulations, and abide by the principles of good clinical practice and ethical research.

For your information and guidance.

FROILAN JACINTO R. OBILLO, MD, FPCP
Chairperson, Ethics Review Board

APPENDIX B

Approval Letter for Proposal Implementation



Republic of the Philippines
Department of Health
'AMANG' RODRIGUEZ MEMORIAL MEDICAL CENTER
Sumulong Highway, Sto. Niño, Marikina City, Philippines 1800
Tel. Nos. (+632) 8941-5854 & (+632) 8948-1263



RESEARCH AND DEVELOPMENT OFFICE APPROVAL LETTER FOR PROPOSAL IMPLEMENTATION (Comm. Form 3)

December 29, 2021

VLADIMIR MILAOR, RN
Principal Investigator
Master of Arts in Nursing
University of the Philippines

Re: Review of:

ARMMC-RC# 2021-021-V02

Sponsor Protocol Code:

Dear Mr. Milaor,

We wish to inform you that the ARMMC-Research Committee has approved your research proposal for implementation, pending action of the ARMMC-Ethics Review Board:

Research/Project Title:	<i>"The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students"</i>
Approval Date:	December 28, 2021
Expiration Date:	December 28, 2022
Type of Approval:	Expedited Full Review

Please be reminded that after this approval, the following are your responsibilities:

1. This approval expires on the date indicated above. For renewal, submit a Progress Report every six months (use Form PF04);
2. Inform the RDO of any modifications or changes in the research design (use Amendment Form PF05);
3. Upon completion of the study, inform us in writing by submitting a Final Accomplishment Report (Form PF06);
4. You are to comply with ARMMC policies toward research.
5. You are likewise to comply with all national research guidelines and regulations, abide by the principles of ethical research and avoid research misconduct.

Very truly yours,

THEODOR S. VESAGAS, MD, FPCS, FAFN, IFAANS

Chair

ARMMC-Research Development Office

Appendix C

Certificate of Good Clinical Practice



Appendix D



Informed Consent Form

Informed Consent

University of the Philippines Open University

This informed consent form is for 4th year BS Nursing Students of Pamantasan ng Lungsod ng Marikina and who I am inviting to participate in my research entitled **“The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students”**

Name of Principal Investigator: Vladimir T. Milaor, RN

Contact number of Principal Investigator:

Name of Organization: University of the Philippines Open University

Name of Project: Thesis N300

This Informed Consent Form has two parts:

- Information Sheet (to share information about the study with you)
- Certificate of Consent (for signatures if you choose to participate)

Name and Contact Number of Ethics Review Board of ARMMC:

Froilan Jacinto R. Obillo, MD, FPCP

Chair, ARMMC-ERB

941-5854 loc. 266

Part I: Information Sheet

Introduction

I am Vladimir T. Milaor, taking master's degree in Nursing. I am doing research on the effect of experiential ageing simulation on the attitudes toward older people among senior nursing students.

I am going to give you information and I would like to invite you to be part of my research. Before you decide, you can talk to anyone you feel comfortable with about the research. This consent

form may contain words that you do not understand. Please ask me to stop as we go through the information, and I will take time to explain.

Purpose of the research

This research study aims to explore the effect of a 4-hour Senior Sensitivity Training Workshop (simulating the common age-related sensory changes among older people) to the attitudes toward older people (60 years old and above) among the 4th year BS Nursing Students. The intent of this study is to determine how the attitudes of the graduating nursing students will be affected by experiencing the common sensory changes and challenges experienced by older adults.

Type of Research Intervention

This research will involve your participation in being a learner about senior-sensitivity. It involves wearing sensory simulators (visual, hearing, etc) that mimic the common age-related sensory changes with the main goal of gaining better understanding on how older people experience daily life.

Participant Selection

You are being invited to take part of this research because you are qualified based on inclusion and exclusion criteria of this study who can contribute much to our understanding and knowledge about how Experiential Ageing Simulation will affect students' attitudes toward older people.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, your grades and how you will be treated by the proponent will not be affected.

Procedures

We are asking you to help me learn about the effect of Experiential Ageing Simulation on the attitudes of students toward older adults. I am inviting you to take part in this research project. If you accept, you will participate in Experiential Ageing Simulation. During the learning session, you will be asked to wear sensory simulators that will mimic the common sensory experiences of

older adults with the main goal of fostering better insights to the lives of the elderly by having you experience first-hand the common challenges that they face on a daily basis. Before and after the experiential learning session, you will be asked to complete Kogan's Attitudes Toward Older People Scale. At the end of this learning session, 3 participants will be receiving a 500-peso gift card each through random draw.

Duration

The Experiential Ageing Simulation will take 3-4 hours, that will happen during your school hours that the College of Nursing will permit to be utilized for this research project. This will take place via online platform (Zoom or Google Meet for the learning session; and Google Forms for the accomplishment of questionnaire). You may ask questions as you wish.

Risks

At some points during the workshop, you will be asked to wear visual simulators (that mimics vision of people with cataracts, retinopathy, glaucoma, macular degeneration, and yellow lenses), hearing simulator (ear plug to mimic hearing loss) and you will be asked to step and walk on raw corn kernels for a few minutes to mimic neuropathy. During the times that sensory simulators are worn, it is expected that you will experience slight visual, hearing, and sensory discomfort with the aim of just mimicking the common experiences of older people and develop empathy for them. These slight discomforts will be temporary and is expected to be limited only during the times that the simulators are worn; and shall immediately disappear upon removal of the simulators. There are no known risks to the participants who have joined similar workshops done previously by the researcher and other facilitators internationally.

Should the temporary discomforts from participating with the activities persist after the removal of the simulators and should you experience adverse events related to your participation in this workshop, you will be assisted by the researcher in seeking medical and/or psychological support from ARMMC Department of Family and Community Medicine and/or ARMMC Department of Psychiatry.

Benefits

This research study may benefit nursing students through exposure to experiential learning that may help you be more senior-sensitive and aware to the special needs of older clients, thus making you more ready to face the country's aging population.

As older adults face daily challenges of age-related physical changes, diseases and the functional decline and losses, they need nursing care that responds to their special needs. Older people may benefit from the findings of this research study by being the direct recipient of senior-sensitive nursing care. Higher quality of care delivered to them may be expected in facilities where senior-sensitivity is being practiced.

This research study is expected to contribute to the body of Geriatric Nursing literatures especially in the Philippines and to advance the Nursing Practice, as well. This will provide information on how this emerging teaching strategy, experiential ageing simulation, will affect the attitudes of nursing students, particularly the Filipinos.

Confidentiality

The research being done may draw attention, but we will not be sharing information about you to anyone outside of the research team. The information that will be collected from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will seal that information. It will not be shared with or given to anyone except the researcher who will have access to the information.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so and choosing to participate will not affect your grades. You may stop participating in the intervention, but I will give you an opportunity at the end of the program to review your remarks.

Contact Information

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Investigator, please contact the ARMMC-ERB through the contact information on the first page.

Part II: Certificate of Consent

I have been invited to participate in research about The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students.

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant: _____

Signature of Participant: _____

Date: _____

Print name of Witness: _____

Signature of Witness: _____

Relationship to subject: _____

Date: _____

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1. _Participation in Senior Sensitivity Workshop (experiential ageing simulation)
2. _Accomplishment of Kogan's Attitudes Toward Older People Scale

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Signature of Researcher /person taking the consent: _____

Date: _____

Appendix E

Questionnaire: Kogan's Attitudes Toward Older People (KATOP) Scale

THE RESEARCH TOOL: KOGAN'S ATTITUDES TOWARD OLD PEOPLE SCALE

Directions: Choose the LETTER on the scale following each statement, according to the following key, that is closest to your opinion of old people.

KEY:

Strongly Disagree	Slightly Disagree	Disagree	Agree	Slightly Agree	Strongly Agree
A	B	C	D	E	F

1. It would probably be better if most old people lived in residential units with people their own age.

A	B	C	D	E	F
---	---	---	---	---	---

2. It would probably be better if most people lived in residential units with younger people.

A	B	C	D	E	F
---	---	---	---	---	---

3. There is **something different** about older people; it's hard to find out what makes them tick.

A	B	C	D	E	F
---	---	---	---	---	---

4. Most old people are really no different from anybody else; they're as easy to understand as younger people.

A	B	C	D	E	F
---	---	---	---	---	---

5. Most old people get set in their ways and are unable to change.

A	B	C	D	E	F
---	---	---	---	---	---

6. Most old people are capable of new adjustments when the situation demands it.

A	B	C	D	E	F
---	---	---	---	---	---

7. Most old people would prefer to quit work as soon as pensions or their children can support them.

A	B	C	D	E	F
---	---	---	---	---	---

8. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.

A	B	C	D	E	F
---	---	---	---	---	---

9. Most old people tend to let their homes become shabby and unattractive.

A	B	C	D	E	F
---	---	---	---	---	---

10. Most old people can generally be counted on to maintain a clean, attractive home.

A	B	C	D	E	F
---	---	---	---	---	---

Strongly Disagree	Slightly Disagree	Disagree	Agree	Slightly Agree	Strongly Agree
A	B	C	D	E	F

11. It is foolish to claim that wisdom comes with age.

A	B	C	D	E	F
---	---	---	---	---	---

12. People grow wiser with the coming of old age.

A	B	C	D	E	F
---	---	---	---	---	---

13. Old people have too much power in business and politics.

A	B	C	D	E	F
---	---	---	---	---	---

14. Old people should have power in business and politics.

A	B	C	D	E	F
---	---	---	---	---	---

15. Most old people make one feel ill at ease.

A	B	C	D	E	F
---	---	---	---	---	---

16. Most old people are very relaxing to be with.

A	B	C	D	E	F
---	---	---	---	---	---

17. Most old people bore others by their insistence on talking "about the good old days."

A	B	C	D	E	F
---	---	---	---	---	---

18. One of the most interesting and entertaining qualities of most old people is their accounts of their past experiences.

A	B	C	D	E	F
---	---	---	---	---	---

19. Most old people spend too much time prying into the affairs of others and giving unsought advice.

A	B	C	D	E	F
---	---	---	---	---	---

20. Most old people tend to keep to themselves and give advice only when asked.

A	B	C	D	E	F
---	---	---	---	---	---

21. If old people expect to be liked, their first step is to try to get rid of their irritating faults.

A	B	C	D	E	F
---	---	---	---	---	---

22. When you think about it, old people have the same faults as anybody else.

A	B	C	D	E	F
---	---	---	---	---	---

Strongly Disagree	Slightly Disagree	Disagree	Agree	Slightly Agree	Strongly Agree
A	B	C	D	E	F

23. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.

A	B	C	D	E	F
---	---	---	---	---	---

24. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.

A	B	C	D	E	F
---	---	---	---	---	---

25. There are a few exceptions, but in general most old people are pretty much alike.

A	B	C	D	E	F
---	---	---	---	---	---

26. It is evident that most people are very different from one another.

A	B	C	D	E	F
---	---	---	---	---	---

27. Most old people should be more concerned with the personal appearance; they're too untidy.

A	B	C	D	E	F
---	---	---	---	---	---

28. Most old people seem quite clean and neat in their personal appearance.

A	B	C	D	E	F
---	---	---	---	---	---

29. Most old people are irritable, grouchy, and unpleasant.

A	B	C	D	E	F
---	---	---	---	---	---

30. Most old people are cheerful, agreeable, and good humored.

A	B	C	D	E	F
---	---	---	---	---	---

31. Most old people are constantly complaining about the behavior of the younger generation.

A	B	C	D	E	F
---	---	---	---	---	---

32. One seldom hears old people complaining about the behavior of the younger generation.

A	B	C	D	E	F
---	---	---	---	---	---

33. Most old people make excessive demands for love and reassurance than anyone else.

A	B	C	D	E	F
---	---	---	---	---	---

34. Most old people need no more love and reassurance than anyone else.

A	B	C	D	E	F
---	---	---	---	---	---

Appendix F

Participant's Demographic Data Form

Demographic Data

1. What is your gender?
A. Male B. Female
2. What is your age? _____ (write in age)
3. Have you previously attended Senior-sensitivity or other similar courses that include experiential ageing simulation?
A. YES B. NO
4. Have you taken advanced Gerontology Nursing class (separate subject from adult health topics)?
A. YES B. NO
5. Have you cared for older adults before? If so, in what capacity? (circle yes or no and write in response to the most recent experience)
A. YES B. NO

_____ Cared for an older adult relative
_____ Related Learning Experience
_____ Private Duty
_____ Other _____ (Please specify)

Kindly indicate details of experience here:

Appendix G

Ranking of Work Preference Form

Work Preference Ranking

1. After graduation, which population of patients would you prefer to work? Kindly rank the following according the order of your preference. Rank 1 for your highest preference and 7 for your least preference.

_____ Newborns
_____ Infants/Children
_____ Adolescents
_____ Young Adults
_____ Adults
_____ Adults ages 65-85
_____ Adults > 85

Please answer the following question(s):

2. What are the factors for choosing your rank 1 and your rank 7 above?
3. What factors would increase your interest in caring for older adults?
4. Have your ideas changed about working with older adults over the course of your baccalaureate education? If so, why?

Appendix H



Intervention Protocol

**University of the Philippines
Open University**

Master of Arts in Nursing

Project Title: The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior Nursing Students

Project Director/Principal Investigator: **Vladimir T. Milaor, RN**

Contact number of Principal Investigator: **0998-987-1885**

Name of Organization: **University of the Philippines Open University**

INTERVENTION PROTOCOL

1. Before the implementation of the study, application shall be submitted to the Ethics Review Board (ERB). Once approval is granted, the data collection process shall be initiated.
2. Permission from the Dean of the College of Nursing and other required stakeholders will be secured.
3. A convenience sample will be recruited from the 4th year students in the BSN nursing program from a State University in Marikina City. Eligible participants shall be determined through the rosters of 4th year BS nursing students in the research setting.
4. The research proponent shall review this study and the ERB approval with at least one (1) nursing faculty via video conference who shall initially approach the eligible students and introduce them to the study. The faculty member shall initially request the students' participation.
5. A 10-15 minutes video conference with the prospect participants and the research proponent shall be set. The research proponent shall explain to the students the significance of the study, time commitment and expectations of them during the study. It shall be made clear that the participation will be voluntary and that declining to participate would not affect the students' course grades. Informed Consent shall be electronically signed by the prospects via Google Forms. To encourage participation, students who will choose to participate in the research study shall have an opportunity into a drawing for gift cards that will be done after the post-test.
6. Online link (Google Forms) to the pre-test survey shall be sent to the nursing students via their email addresses. Questionnaires shall include (1) the demographic information form, (2) the KATOP scale, (3) a form for the students to rank populations for their work preference and (4) open-ended questions.
7. Students who will choose to participate in the study shall continue by completing the online forms.
8. Senior sensitivity sensory simulator kits will be delivered to the participants within 1-2 days from the conduct of pretest.
 - a. If CHED and DOH would release a new joint memorandum circular to permit limited face-to-face classes at the time of research, the kits will be delivered to the school for the students to pick up, provided this shall coincide with their scheduled face-to-face class.
 - b. If face-to-face classes are still prohibited during the conduct of this study, home addresses of the participants will be obtained for the delivery of senior-sensitivity sensory simulators.
9. Schedule shall be set for the Experiential Ageing Simulation and the post-test. The workshop shall be conducted via live video conference within 2-3 days from recruitment date to allow delivery of the sensory simulators to the participants. The participants will be informed that they shall attend the workshop in a room conducive for learning without the presence of any other individuals, as companions may affect the perceived attitude.
10. Interventions during the Experiential Ageing Simulation:
 - a. Before the start of the workshop, the participants will be reminded to be in a room conducive for learning without any companion, as they may affect the perceived attitude.
 - b. Discussion: Age wave of Older Adults in the Philippines and the current situation of Filipino Seniors
 - c. Discussion: Health and Ageing Facts
 - d. Experiential Simulation: Common losses experienced by older adults
 - i. The participants will be instructed to write down five (5) most important things or persons in their lives on each of the card in the training kit. They will then be asked to lay down the cards on a table with the right side down. The facilitator will direct them to pick one card, crumple it and throw on the floor. They will be asked to imagine that

- they have just lost that person or thing. Some participants will be asked on how they felt about the imagined loss.
- ii. The facilitator will tell the participants to imagine that three (3) months later and they have barely had a chance to deal with the last loss, another loss will happen. The participants will again be asked to pick another card, crumple it, throw it to the floor and imagine that they have just lost that thing / person. This step will be repeated until all the cards are crumpled and thrown.
 - iii. The facilitator will reveal the main takeaway in the activity that older people experience losses over a very short period of time. These losses can include loved ones, loss of work, loss of independence, loss of social networks, sensory loss, health and memory loss. The participants will be instructed to reflect on how older adults feel and have them realize that it may be the reason why older people have mood issues that make them difficult to deal with at times.
- e. Experiential Simulation: Vision Experience through visual simulators
- i. Yellowing of the lenses
 1. Participants will be asked to wear eyeglasses with yellow lenses. They will be asked to look at Power Point presentation with pastel colors, mostly of blue and green hues. They will be asked to determine the colors on the presentation. Then, they will be instructed to remove the eyeglasses and check if they got the color identification correctly.
 2. They will then be instructed to wear the eyeglasses again, but this time they will be directed to also wear gloves (to simulate peripheral neuropathy and loss of dexterity as experienced by older adults with diabetes). The participants will be asked to open a medicine pill bottle included in the kit containing candies of various colors, mostly pastel. They will be directed to pour out all the contents of the medicine bottle on the table and imagine that the candies are actual medicines. They will be asked to sort the candies by color and check their work once they are done.
 3. The facilitator will emphasize the major takeaway of the activity that vision changes impair an elderly's perception of color that can lead to medication errors at home. It will be emphasized that medication instructions to older people shall not be based on the color of the pills to prevent errors and hospitalizations.
 - ii. Macular degeneration (Use of visual simulators / eyeglasses with lenses mimicking this condition)
 - iii. Glaucoma (Use of visual simulators)
 - iv. Diabetic retinopathy (Use of visual simulators)
 - v. Cataracts (Use of visual simulators)
 1. The participants will be instructed to choose a visual simulator from ii-v simulators and they will be asked to wear it. They will be directed to fill-out a mock hospital form in the training kit. The form will have small font size (less than 12) with a lot of fields to accomplish.
 2. The facilitator will pretend to be a nurse who hurries up the participants in completing the forms.
 3. After the activity, pointers on helping older adult successfully accomplish forms will be given to the participants to reflect senior sensitivity.
- f. Experiential Simulation: Hearing experience
- i. Presbycusis
 1. Participants will be asked to wear ear plugs included in the training kit to simulate presbycusis.
 2. The facilitator will ask the participants to spell out in writing the words that will be mentioned. The facilitator will cover his/her mouth and crumple papers during the activity making it more challenging for the participants to spell the words. They will then check their work after the activity.
 3. Pointers will then be given to the participants on effectively communicating with older people with presbycusis.
- g. Experiential Simulation: Diabetic neuropathy
- i. Participants will be instructed to put some raw corn kernels (included in the training kit) inside their shoes and walk around their place for about 5 minutes.
 - ii. After 5 minutes, the participants will be asked to join back to the video conference and ask how their feet feel.

- iii. The expected mild tingling and numbness of the feet after 5 minutes of walking with raw corn kernels in their shoes will be described as the sensation that older people with diabetic neuropathy experience.
 - h. Discussion: Memory and Cognitive difficulties
 - i. Discussion: Nursing interventions to address the common age-related changes and challenges
 - j. Debriefing
11. The participants shall accomplish Kogan's Attitudes Toward Older People (KATOP) Scale IMMEDIATELY AFTER the conduct of Experiential Ageing Simulation. This shall be done via Google Forms.
 12. After all the accomplished forms are submitted online, ticket drawing for the gift card shall be carried out through a 5-minute live video conference. The winners of the draw shall receive their gift cards / vouchers through their email addresses.
 13. Fidelity of the study protocol shall be maintained by securely saving the data collected in an encrypted online repository that can be made accessible to authorized UPOU personnel for auditing or validation. Online Survey platform shall be programmed to ensure that required fields are accomplished by the participants before they can submit the forms.
 14. The collected data shall remain in password-encrypted online repository; and may be accessed during the data entry process.

Appendix I

Permission Letter to Conduct Nursing Research Study

March 9, 2022

To: **Jacqueline M. Calaycay, MAN, MSN, RN**

OIC – Dean, College of Health Sciences Pamantasan ng Lungsod ng Marikina

Dr. Kristy Aireen G. Reamillo

Director, Research and Extension

Subject: Permission to conduct a nursing research study

Dear Dean Calaycay,

I hope this email finds you well.

I would like to reconnect with you regarding my request last year to conduct a research study that would involve your 4th year nursing students as participants. This had been delayed due to the encountered challenges in securing ethics review approval prior to the conduct of the study. Fortunately, I finally got an Ethics Review Board Approval from 'Amang' Rodriguez Memorial Medical Center (ARMMC), where I currently work as a nurse.

I am writing you today to seek renewal of your permission to conduct this study for my Master of Arts in Nursing thesis. Let me re-acquaint you with the major details of my study; it is entitled "The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among Senior BSN Students". The study aims to determine the effects of senior sensitivity workshop to the students' attitudes toward the elderly. As the nursing students will be facing an aging population after they graduated, it may benefit them through exposure to this learning strategy that may help them improve their sensitivity to the special needs of older people and provide better care among clients from this age group.

I hope that your office would allow me to recruit 4th year nursing students (ages between 19-24). My paper has undergone major revisions since the last time we connected - with the research design revised to be Quasi-Experimental. So I would need participation from ALL of the students who will meet the inclusion and exclusion criteria. The following are expected from the participants:

1. Attendance to a 15-20 minutes session for signing of Informed Consent and Accomplishing Pre-test.

2. Attendance to a 2-3 hours Senior Sensitivity Seminar-workshop via Zoom, including Posttest. This will be scheduled 2-3 days after the pretest to allow delivery of the training kits to the students.

To encourage participation, three (3) gift cards worth P500 will be drawn at the end of the research post-test.

If you, and their schedule would allow, I plan to conduct the study in the first and second week of April 2022. I would be glad to discuss the Intervention Protocol with you or with a staff that you will delegate to assist me in recruitment.

Attached are the ERB Approval and Intervention Protocol for your perusal.

Your approval to conduct this study will be greatly appreciated. Should you have further questions, I will be glad to give you a call or you may contact me at my email address: vladimir.milaor@upou.edu.ph or my mobile number 09989871885.

Thank you very much!

Sincerely,

Vladimir Milaor, RN

Student, Master of Arts in Nursing
University of the Philippines, Open University

Appendix J

Granted Permission Letter to Conduct Research Study

RE: Request to conduct a nursing research study

Eric Rosales <erosales@plmarchs.com>

Wed, Mar 9, 2022 at 10:35 PM

To: "vladimir.milaor@upou.edu.ph" <vladimir.milaor@upou.edu.ph>

Cc: "Jacqueline M. Calaycay" <jcalaycay@plmarchs.com>, "Kristy Aireen Reamillo (via Google Drive)" <reamillok@gmail.com>

Good day! Sorry for replying at this late hour. Thank you for your interest to conduct your study in our institution and I appreciate you sending the enclosed documents for review.

May I ask if you need an initial meeting with our level 4 students? When would be your suggested date?

Best,

JOHN ERIC D. ROSALES, RN, RM, LPT, MAN, PhD (c)
HIV /AIDS Counselor
TeamSTEPPS 2.0 Master Trainer

Chairperson

Department of Nursing Research
Philippine Nurses Association Inc.

Member

Membership Involvement Committee - Phi Gamma Chapter
Sigma Theta Tau International Honor Society of Nursing

Faculty / Research Coordinator / Level 4 Coordinator

College of Health Sciences - Pamantasan ng Lungsod ng Marikina

PLMar College of Health Sciences - Confidentiality Notice

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Vlad Milaor <vladimir.milaor@upou.edu.ph>

Thu, Mar 10, 2022 at 11:52 AM

To: Eric Rosales <erosales@plmarchs.com>

Cc: "Jacqueline M. Calaycay" <jcalaycay@plmarchs.com>, "Kristy Aireen Reamillo (via Google Drive)" <reamillok@gmail.com>

Hi Sir Rosales,

Thank you for your response and for accommodating my request.

Will the first week of April work for you and the students? I am thinking to

conduct the first meeting (Signing of Informed Consent and Pretest), between April 4-8, 2022. This would take about 15-20 minutes. Then the second meeting will be the Experiential Ageing Simulation and posttest (about 2-3 hours), 3 days after the pretest. I am amenable to any date that would work best for you in the first or even the second week of April. These are proposed to take place on Zoom platform, unless PLMar, CHED and IATF would allow face-to-face sessions. Kindly advise.

May I ask for the total number of 4th year BSN students at PLMar?

I would also like to ask a favor from your team to initially identify prospects who will attend the first meeting based on the inclusion and exclusion criteria below:

Inclusion Criteria:

- A. Currently enrolled 4th year BSN students
- B. Male or female
- C. No previous attendance to similar workshop on aging simulation
- D. No advance training on Gerontology Nursing beyond the CHED's recommended curriculum

Exclusion Criteria:

- A. Experience in paid private caregiving job to an elderly
- B. Vision conditions such as retinopathy, glaucoma, macular degeneration, cataract and related conditions.
- C. Clinically diagnosed to have hearing impairment
- D. Foot injury or related conditions such as neuropathy.

Please let me know should you need further information from my end. I would be glad to attend to a call, video conference or a personal meeting with you should you require one.

Thank you so much!

Sincerely,

Vladimir Milaor, RN
Student - Master of Arts in Nursing
University of the Philippines - Open University
[Quoted text hidden]

Eric Rosales <erosales@plmarchs.com>

Thu, Mar 10, 2022 at 2:13 PM

To: Vlad Milaor <vladimir.milaor@upou.edu.ph>

Cc: "Jacqueline M. Calaycay" <jcalaycay@plmarchs.com>, "Kristy Aireen Reamillo (via Google Drive)" <reamillok@gmail.com>

We have a total of 66 level 4 students enrolled for this current semester. I would suggest that the initial meeting should be conducted via online platform since we have not started our Limited Face to Face classes yet.

Will inform our students regarding this and I will get back to you as soon as possible.

Best,

Previous Permission from the College Dean:

From: CHS Nursing Department Administrator nursingadmin@plmarsha.com
Subject: Re: Permission to conduct a nursing research study
Date: March 8, 2021 at 12:01 PM
To: Vlad Milaor vladmira.milaor@upou.edu.ph



Hi Vlad,

You were endorsed by a friend and also a UERM Alumni Mr. Gene Asuncion. 😊 I would gladly be of help in the completion of your Research Study. 😊

May I clarify that you intend to conduct the survey between May-July? If you want to conduct your study using our students, I think you need to know that we are currently following an August to May Academic Calendar and that I only have 26 4th Year BS Nursing Students. You may want to consider adjusting your timeline since the end of May will be a very busy month for our Graduating Students 😊 Or If this can be done later after their graduation (June 12), I can maybe assure their commitment to you. 😊 Let me know your take on this 😊 Thank you!



Jacqueline M. Calaycay, RN, MSN, MAN
OIC-Dean, College of Health Sciences

Pamantasan ng Lungsod ng Marikina
College of Health Sciences

March 8, 2021

To: **Jacqueline M. Calaycay, MAN, MSN, RN**

OIC – Dean, College of Health Sciences

Pamantasan ng Lungsod ng Marikina

Thru: **Dr. Kristy Aileen G. Reamillo**

Director, Research and Extension

Subject: Permission to conduct a nursing research study

Dear Dean Calaycay,

Good day!

I am writing to request permission to conduct a research study among 4th year BS Nursing Students at PLMAR, tentatively between the months of May – July 2021. I am currently enrolled in the Master of Arts in Nursing Program at the University of the Philippines – Open University, and I am in the process of writing my master's Thesis. The study is entitled The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among 4th Year B.S. Nursing Students.

I hope that your office will allow me to recruit 4th year Nursing Students (between the ages 19-24) from the school to anonymously complete a questionnaire online that includes an evaluation of their attitudes toward older people; this might take 10-15 minutes to complete. The participants will be randomly assigned equally into control and intervention groups. **The participants will attend a 2-hour live video seminar-workshop (Senior-sensitivity workshop)** that includes experiential simulation of the common age-related changes. It focuses on experiential simulation of the common sensory changes and other experiences of older adults with the aim of having younger people gain insight on the daily challenges among elderly and have better understanding on the special needs of older adults and lead to high quality of care provided to this patient group. As the Philippine population is expected to transition to 'ageing population' between the years 2025-2030 (Philippine Statistics Authority, 2019), it is crucial to evaluate the nursing students' attitudes toward older people as they the future of the nursing profession who will be confronted with the demand of caring for older adults during their practice. Interested students, who volunteer to participate, will be given a consent form for them to sign online. To encourage participation, three (3) gift cards worth P500 will be drawn at the end of the research post-test.

If approval is granted, participants will complete the survey on an online platform, during the class hours that you will permit for the conduct of the research. **The entire process should take no longer than 15 minutes for the pre-test; and 3 hours for the Experiential Ageing Simulation and post-test.** The survey results will be pooled for the thesis project and individual results of this study will remain confidential and anonymous. Should this study be published, only pooled results will be documented. No costs will be incurred by either your school/center or the individual participants.

Your approval to conduct this study will be greatly appreciated. Should you have further questions, I will be glad to give you a call or you may contact me at my email address: vladimir.milaor@upou.edu.ph or my mobile number .

If you agree, kindly reply via email a signed letter of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your institution.

Sincerely,

Vladimir Milaor, RN

Student, Master of Arts in Nursing

University of the Philippines, Open University

Appendix K

Permission Letter to Use an Existing Evaluation Tool

On Thu, Feb 11, 2021 at 4:23 AM Vladimir Milaor <vmilaor@icloud.com> wrote:
February 11, 2021

To: Department of Psychology
The New School for Social Research
80 Fifth Avenue, 7th floor
New York, NY 10011

Attention: MS. JANIERA WARREN
Department Secretary

Subject: Seeking permission to use Kogan's Attitudes Toward Older People Scale

Dear Ms. Warren,

I am a Master of Arts in Nursing student from University of the Philippines – Open University writing my thesis titled The Effect of Experiential Ageing Simulation on the Attitudes Toward Older People Among 4th Year B.S. Nursing Students, under the direction of my thesis adviser, Rita Ramos, RN, MAN, who can be reached at rita.ramos@upou.edu.ph.

I would like your permission to use the Kogan's Attitudes Toward Older People (KATOP) Scale in my research study. I would like to use and print your survey under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through my e-mail: vladimir.milaor@upou.edu.ph

Hoping for your kind consideration.

Sincerely,

VLADIMIR T. MILAOR, RN
Student – Master of Arts in Nursing
University of the Philippines - Open University

Appendix L

Granted Permission to Use Evaluation Tool

From: Janiera Warren WarrenJ@newschool.edu
Subject: Re: Permission to use Kogan's Attitudes Toward Older People Scale
Date: February 11, 2021 at 11:37 PM
To: Vladimir Milaor vmilaor@icloud.com

Dear Vladimir Milaor:

Dr. Nathan Kogan (now deceased) granted permission to students to use his instrument, as needed. His tool is now in the public domain and permission is no longer required for its use.

Best,
Janiera Warren
Department Secretary

Appendix M

Assumption Tests for Normality and Homogeneity of Data

Prior to analyses of data, assumption for normality and homogeneity of data was checked using Shapiro-Wilk test and Levene's Test, respectively. Rule of thumb follows that if p-value is greater than 0.05, then the following assumptions are met. This entails that data observed normal distribution and equal variances, that they are safe to compare. This document shows the results of Shapiro-Wilk Test and Levene's Test for this study.

1. On the significant difference in the attitudes (Responding level) toward older people of 4th year BS Nursing students

Table M1

Normality Test for the Attitudes Pre-and Posttest

Normality Test (Shapiro-Wilk)				
			W	p
Pretest	-	Posttest	0.993	0.994

Note. A low p-value (less than 5%) suggests a violation of the assumption of normality

The assumption check of normality using Shapiro-Wilk ($p=0.994$) is not significant suggesting that the pairwise differences before and after the senior sensitivity training are normally distributed, therefore the assumption is not violated.

On the significant difference in the attitudes toward older people among 4th Year BS Nursing students in terms of:

a. Age

Table M2

Normality Test for the Attitudes in Terms of Age

Normality Test (Shapiro-Wilk)		
	W	p
Attitude After the Workshop	0.962	0.102

Note. A low p-value (less than 5%) suggests a violation of the assumption of normality

The assumption check of normality using Shapiro-Wilk ($p = 0.102$) is not significant suggesting that the differences in the age group after the senior sensitivity workshop are normally distributed, therefore the assumption is not violated.

Table M3

Homogeneity of Variances Test for the Attitudes in Terms of Age

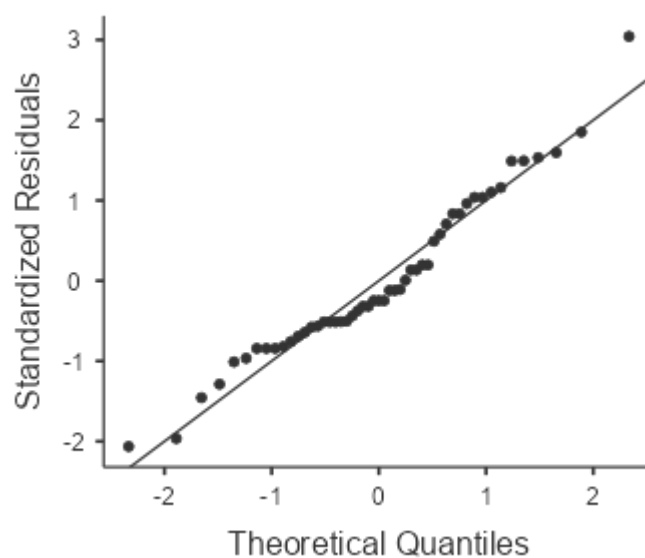
Homogeneity of Variances Test (Levene's)				
	F	df1	df2	p
Attitude After the Workshop	1.53	2	48	0.228

Note. A low p-value (less than 5%) suggests a violation of the assumption of equal variances

Further, Levene's test shows that homogeneity of variance is not significant. This means that variances in the different age groups in terms of the attitude after the senior sensitivity workshop are equal, which further implies no differences between age groups.

Figure M1

QQ Plot of Posttest Data According to Age



The Q- Q plot above shows that the data appear to be normally distributed and linear.

b. Sex.

To determine the difference in the attitudes toward older people between male and female; before and after the intervention.

Table M4

Normality Test for the Attitudes in Terms of Sex

Normality Test (Shapiro-Wilk)		
	W	p
Attitude Before	0.963	0.116
Attitude After the Workshop	0.984	0.733

Note. A low p-value (less than 5%) suggests a violation of the assumption of normality

The assumption check of normality using Shapiro-Wilk (p before =0.116; p after = 0.733) is not significant suggesting that the differences, before and after the senior sensitivity workshop are normally distributed, therefore the assumption is not violated.

Table M5

Homogeneity of Variances Test for the Attitudes in Terms of Sex

Homogeneity of Variances Test (Levene's)				
	F	df1	df2	p
Attitude Before	0.0274	1	49	0.869
Attitude After the Workshop	0.0499	1	49	0.824

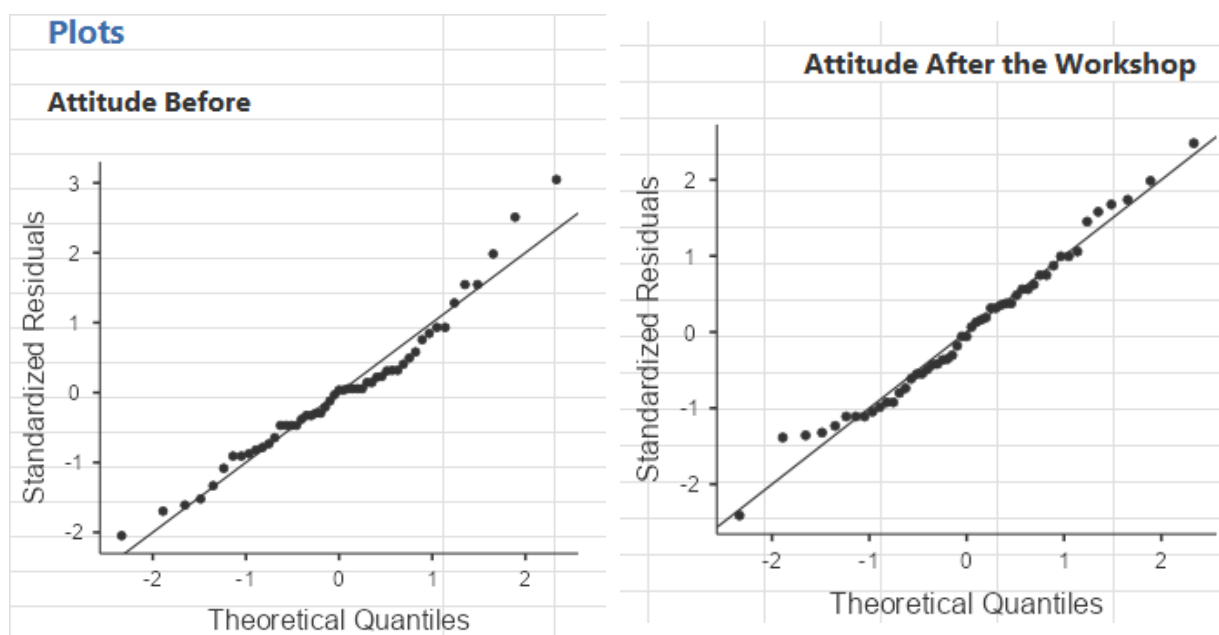
Note. A low p-value (<5%) suggests a violation of the assumption of equality of variance

Levene's test shows that homogeneity of variance is not significant (P before = 0.869; p after = 0.824). This means that variances in the different sex classes in terms of the attitude before

and after the senior sensitivity workshop are equal, which further implies no differences between sex.

Figure M2

QQ Plot of Pre-and Posttest Data According to Sex



The Q- Q plot shows that the attitude before and after the workshop data appear to be normally distributed and linear.

c. Experience in elderly care

To determine the difference in the attitudes toward older people between students with experience in elderly care and those who do not have.

Table M6

Normality Test for the Attitudes in Terms of Experience in Elderly Care.

Normality Test (Shapiro-Wilk)		
	W	p
Attitude Before	0.968	0.185
Attitude After the Workshop	0.986	0.802

Note. A low p-value suggests a violation of the assumption of normality

The assumption check of normality using Shapiro-Wilk (p Before = 0.185; p After = 0.802) is not significant suggesting that the differences, in the attitudes toward older people between students with experience in elderly care and those who do not have, before and after the research intervention, are normally distributed, therefore the assumption is not violated.

Table M7

Homogeneity of Variances Test for the Attitudes in Terms of Experience in Elderly Care

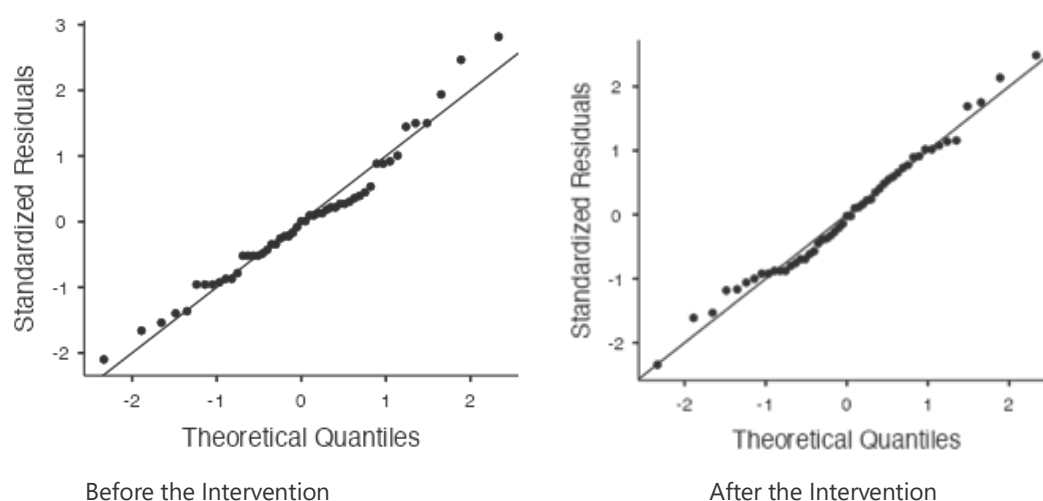
Homogeneity of Variances Test (Levene's)				
	F	df	df2	p
Attitude Before	0.6040	1	49	0.441
Attitude After the Workshop	0.0678	1	49	0.796

Note. A low p -value suggests a violation of the assumption of equal variances

Levene's test shows that homogeneity of variance is not significant (p Before = 0.441; p After = 0.796). This means that variances in the attitudes toward older people between students with experience in elderly care and those who do not have are equal, which further implies no differences between the elderly care experience.

Figure M3

QQ Plot for Pre-and Posttest Data According to Experience in Elderly Care



The Q- Q plot shows that the attitudes toward older people between students with experience in elderly care and those who do not have data, before and after the workshop, appear to be normally distributed and linear.

Appendix N

Documentation Photos



Image 1. PREPARATION. Researcher's mother, who is also a senior citizen, assisting in assembling the Experiential Ageing Simulation kits.

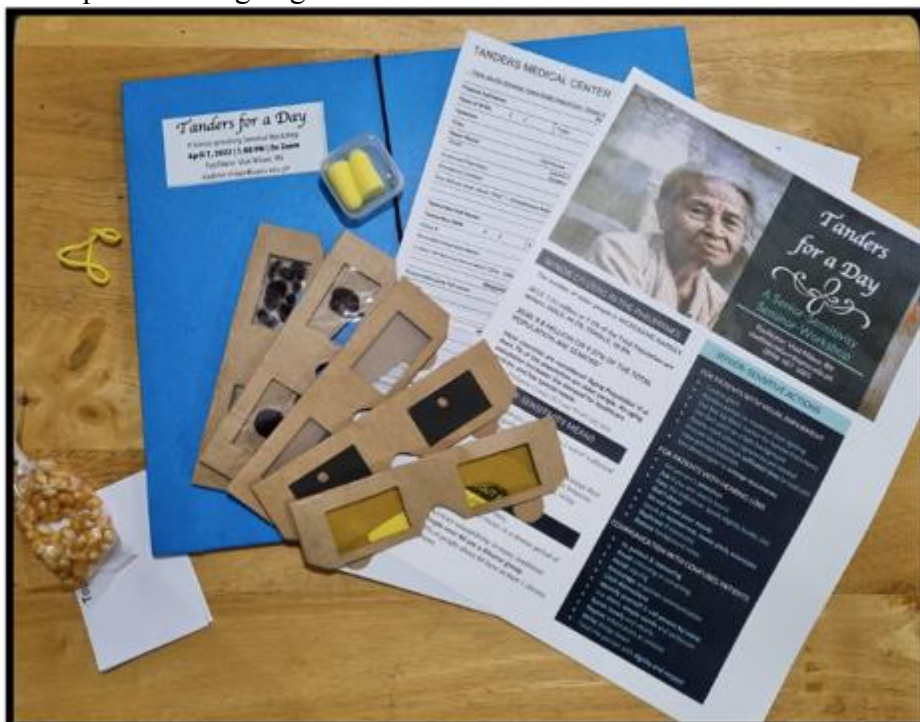


Image 2. THE EXPERIENTIAL AGEING SIMULATION KIT. Visual, hearing, and other sensory simulators, as well as handouts were included in the kit.

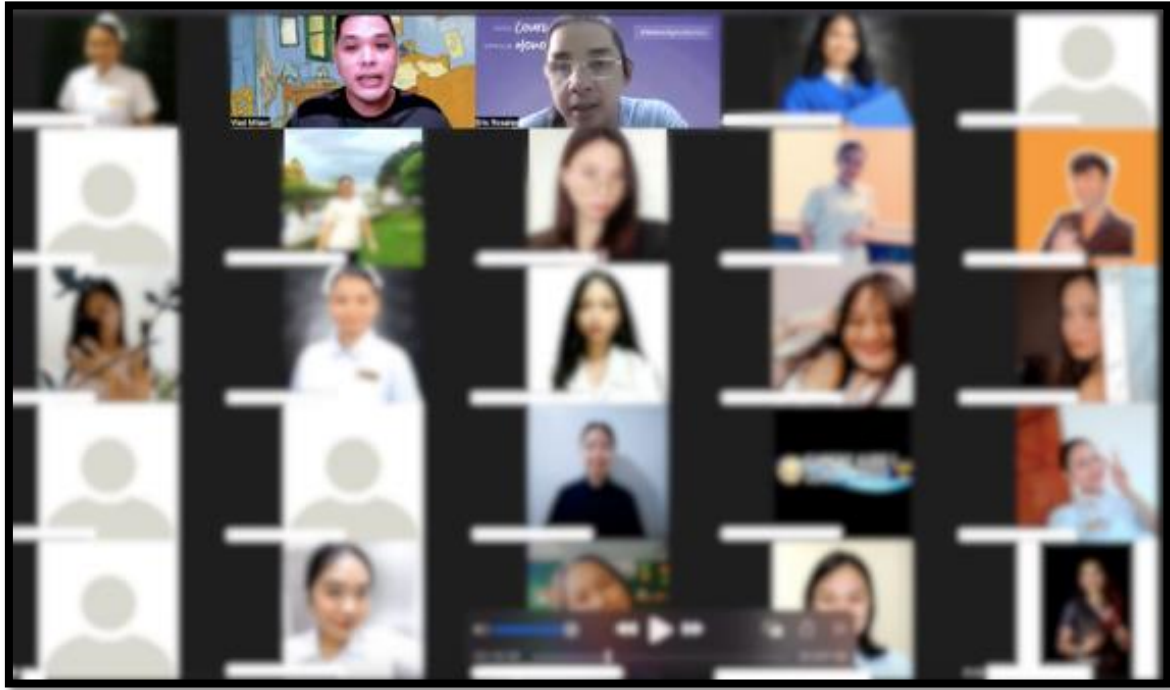


Image 3. RECRUITMENT. Initial meeting via Zoom with the target population joined by Mr. Eric Rosales, Research Coordinator of Pamantasan ng Lungsod ng Marikina. Mr. Rosales previously requested their students' participation in accordance with the Intervention Protocol.



Image 4. RECRUITMENT. The Researcher presenting the invitation to participate in the study to the target population via Zoom.

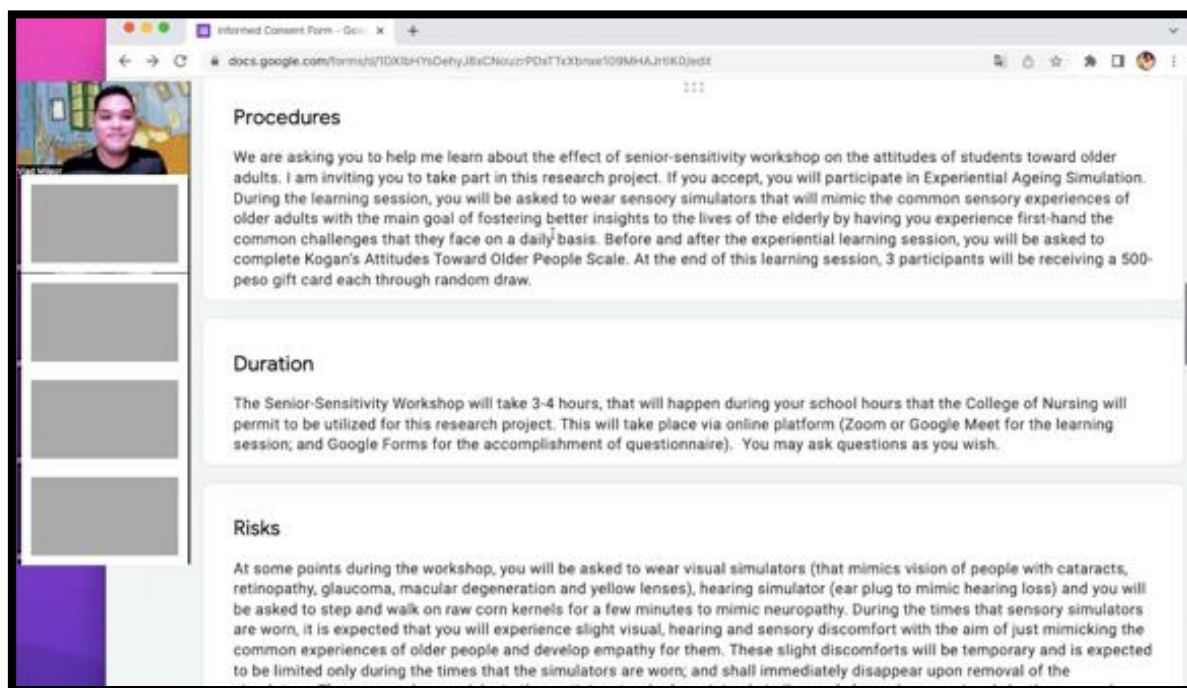


Image 5. INFORMED CONSENT DISCUSSION. The researcher discussing the Informed Consent Document among the target population. An opportunity to ask questions was given to the attendees prior to signing the consent.

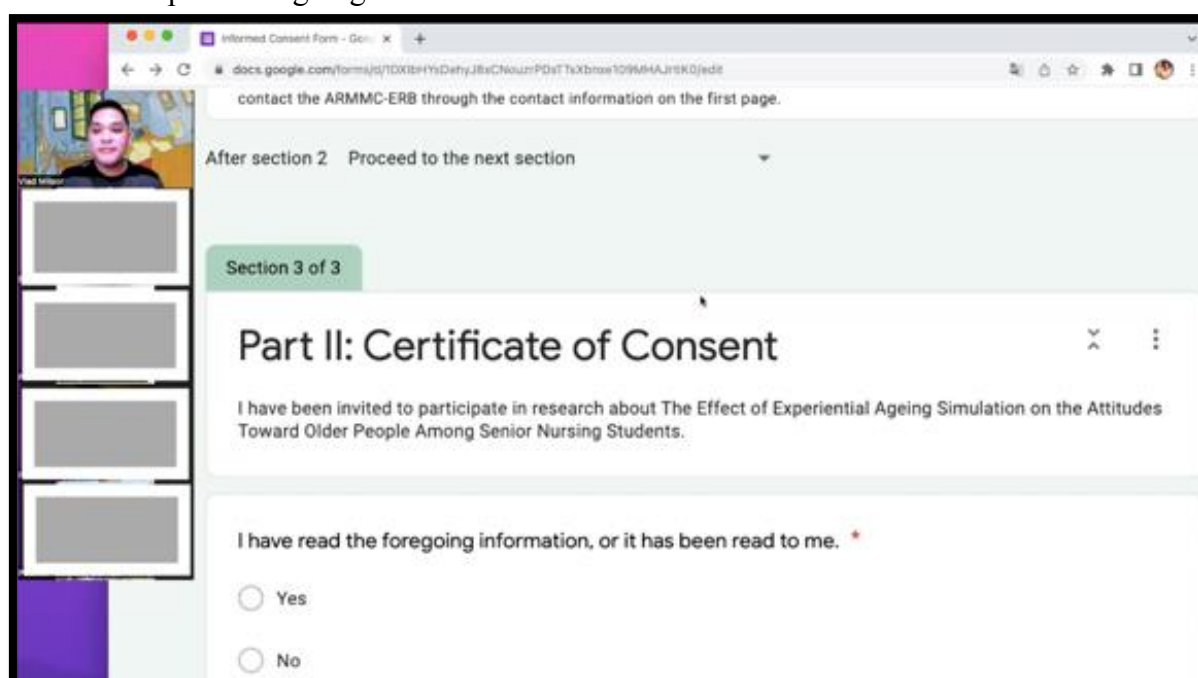


Image 6. SIGNING OF INFORMED CONSENT. The participants signing the informed consent via Google Forms.



Image 7. DISTRIBUTION OF EXPERIENTIAL AGEING SIMULATION KITS. Face-to-face distribution of seminar kits in small batches of participants in their school as approved by the School Administration, observing current health protocols. The researcher providing instructions to the participants in preparation for the upcoming virtual seminar-workshop.



Image 8. DISTRIBUTION OF EXPERIENTIAL AGEING SIMULATION KITS TO THE PARTICIPANTS.



Image 9. Another batch of participants received their Experiential Ageing Simulation kits.



Image 10. Another batch of participants received their Experiential Ageing Simulation kits.



Image 11. The researcher providing further instructions during the distribution of Experiential Ageing Simulation kits.



Image 12. The researcher and some of the participants during the distribution of seminar-workshop kits.

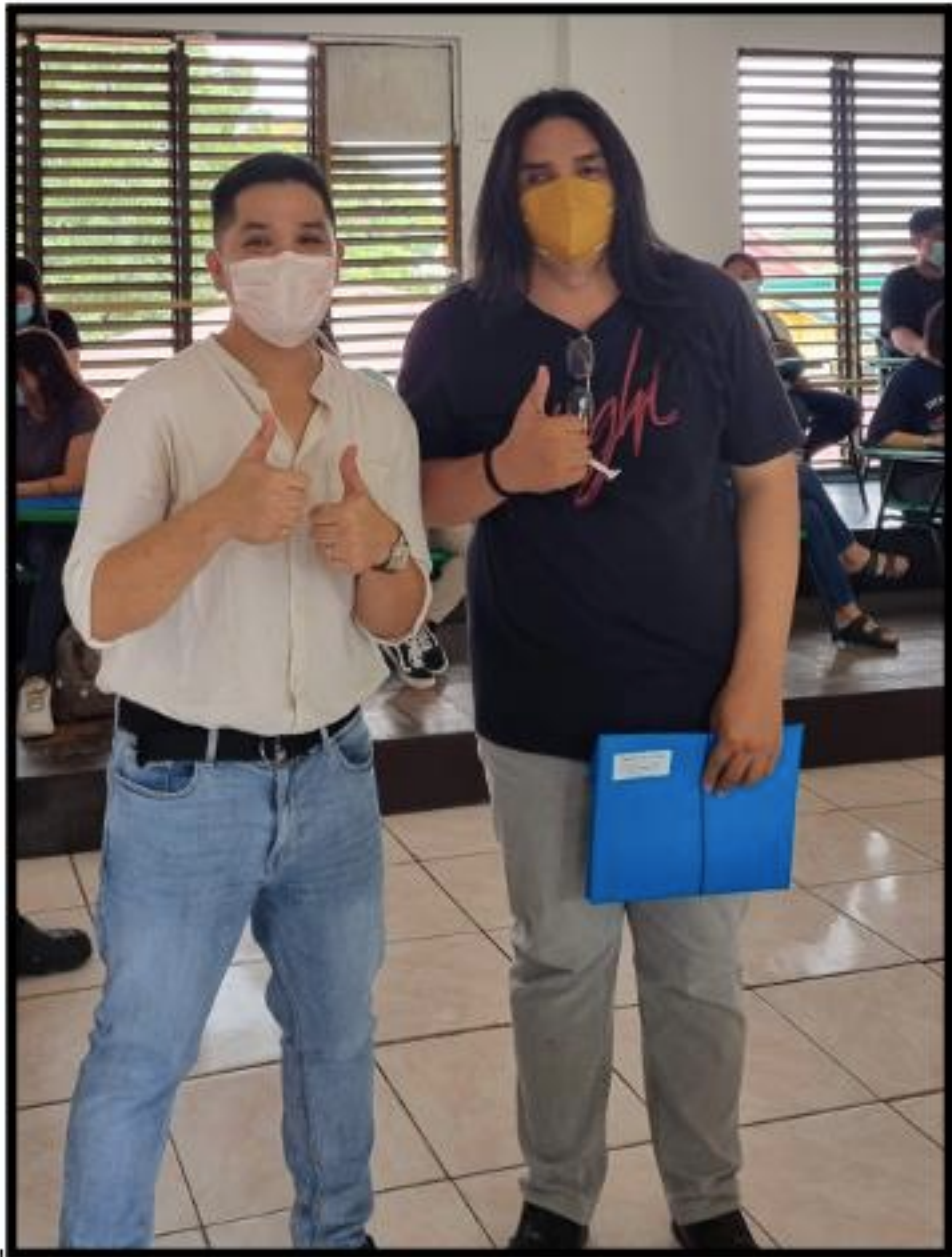


Image 13. The researcher with Mr. Eric Rosales, Research Coordinator of College of Health Sciences of Pamantasan ng Lungsod ng Marikina.

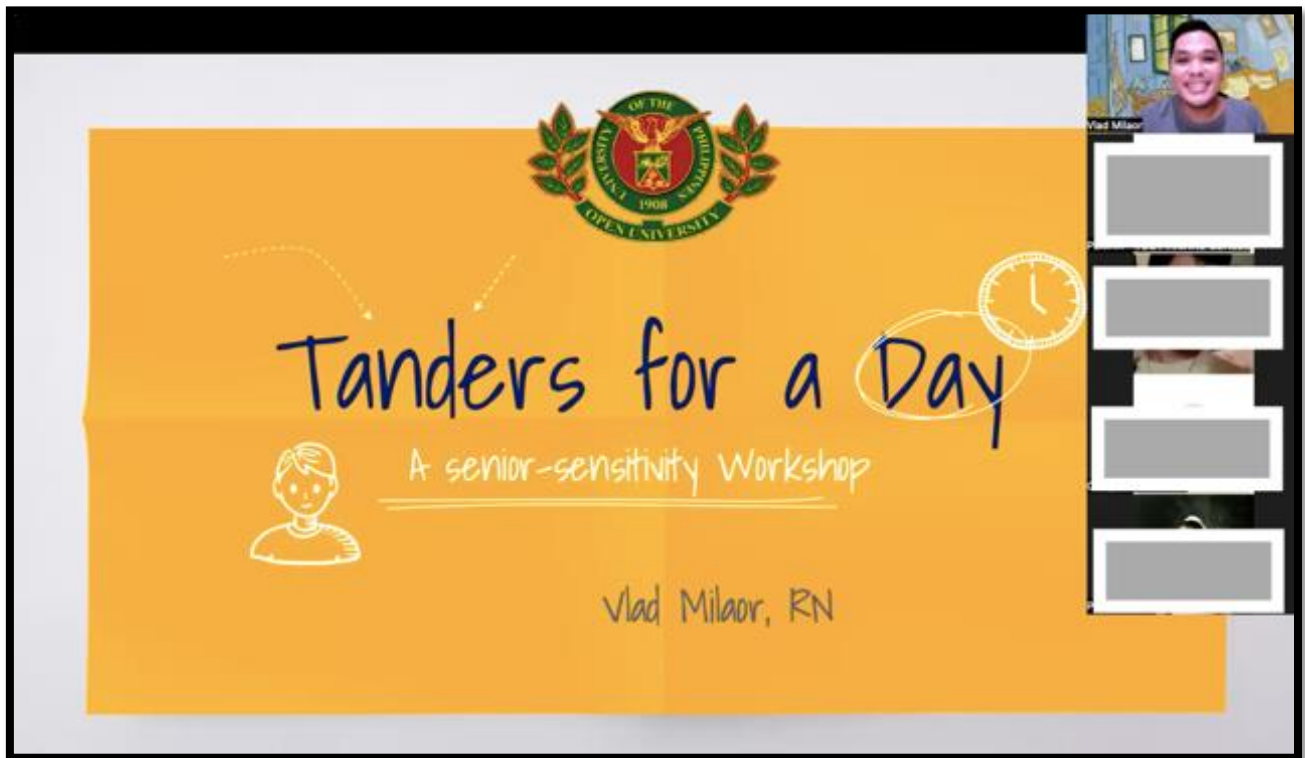


Image 14. EXPERIENTIAL AGEING SIMULATION CONDUCTED VIA ZOOM. The Researcher welcoming over 50 participants who attended the seminar-workshop.

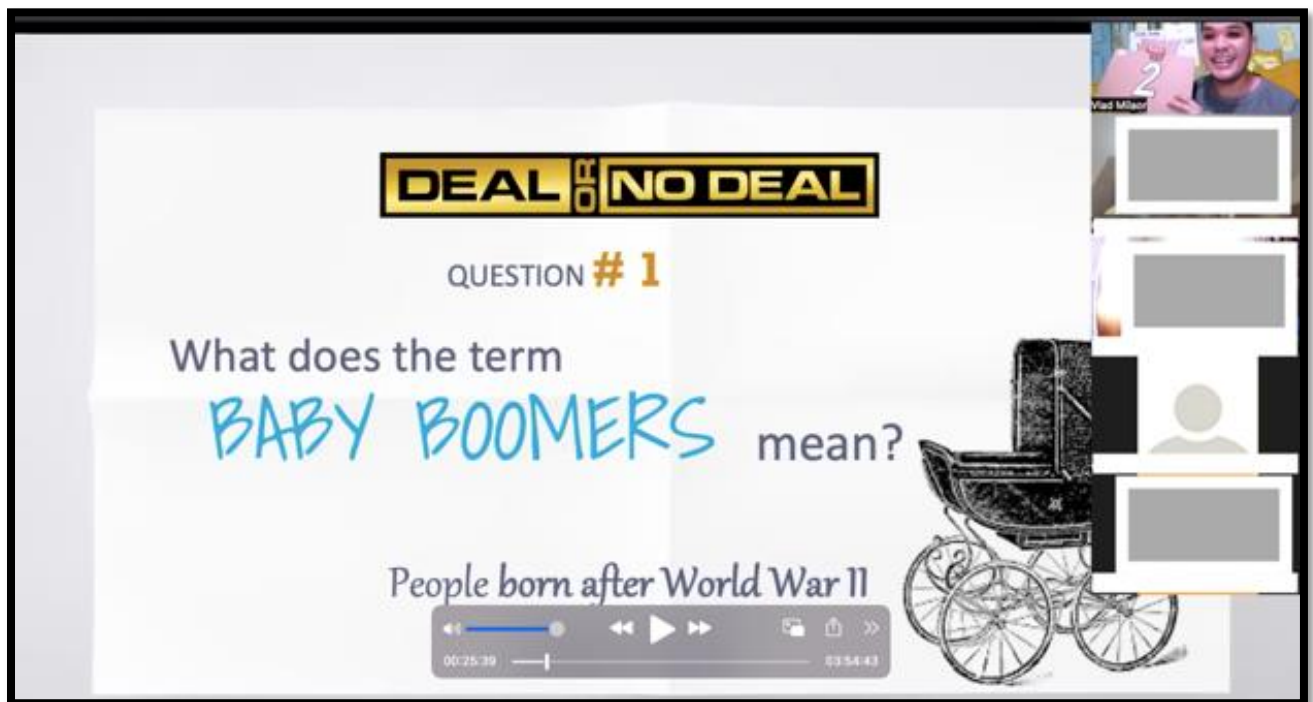


Image 15. EXPERIENTIAL AGEING SIMULATION CONDUCTED VIA ZOOM. The researcher setting the group's mood through a diagnostic quiz in a gamified format.



Image 16. EXPERIENTIAL AGEING SIMULATION. The participants are wearing visual simulators to mimic the common visual changes experienced by older adults.

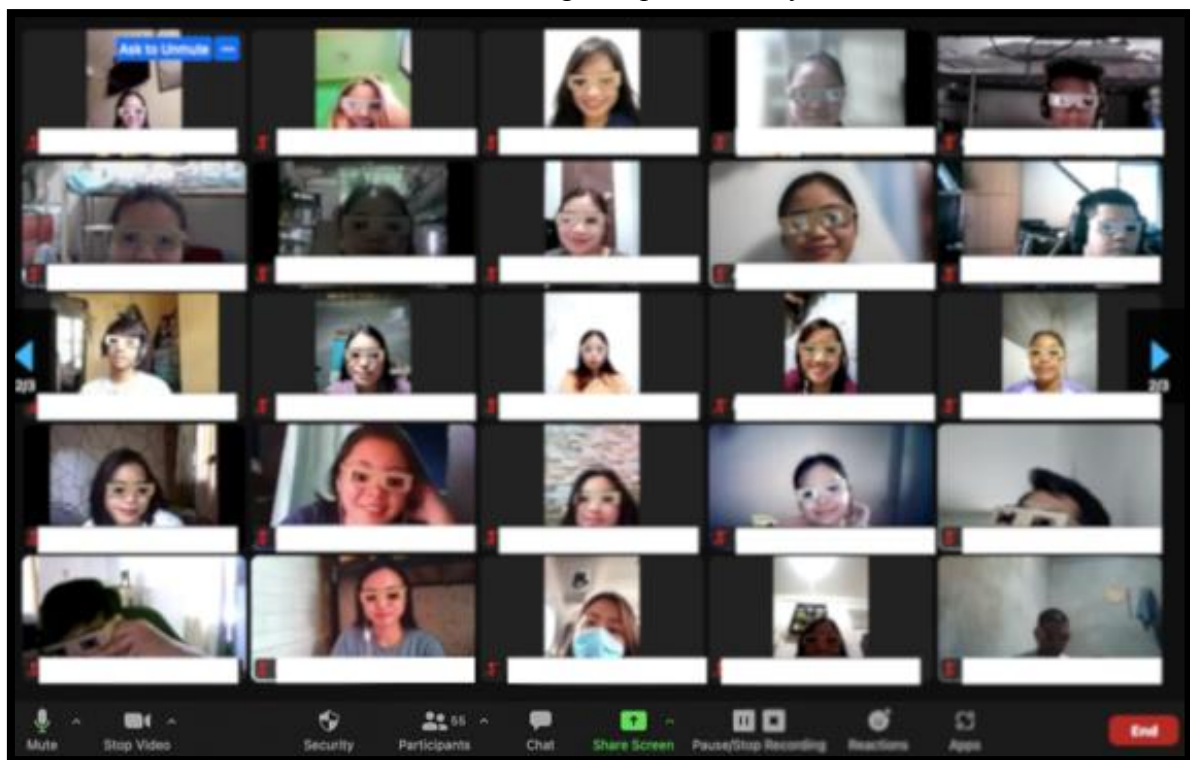


Image 17. EXPERIENTIAL AGEING SIMULATION. Another set of participants are wearing visual simulators to mimic the common visual changes experienced by older adults.

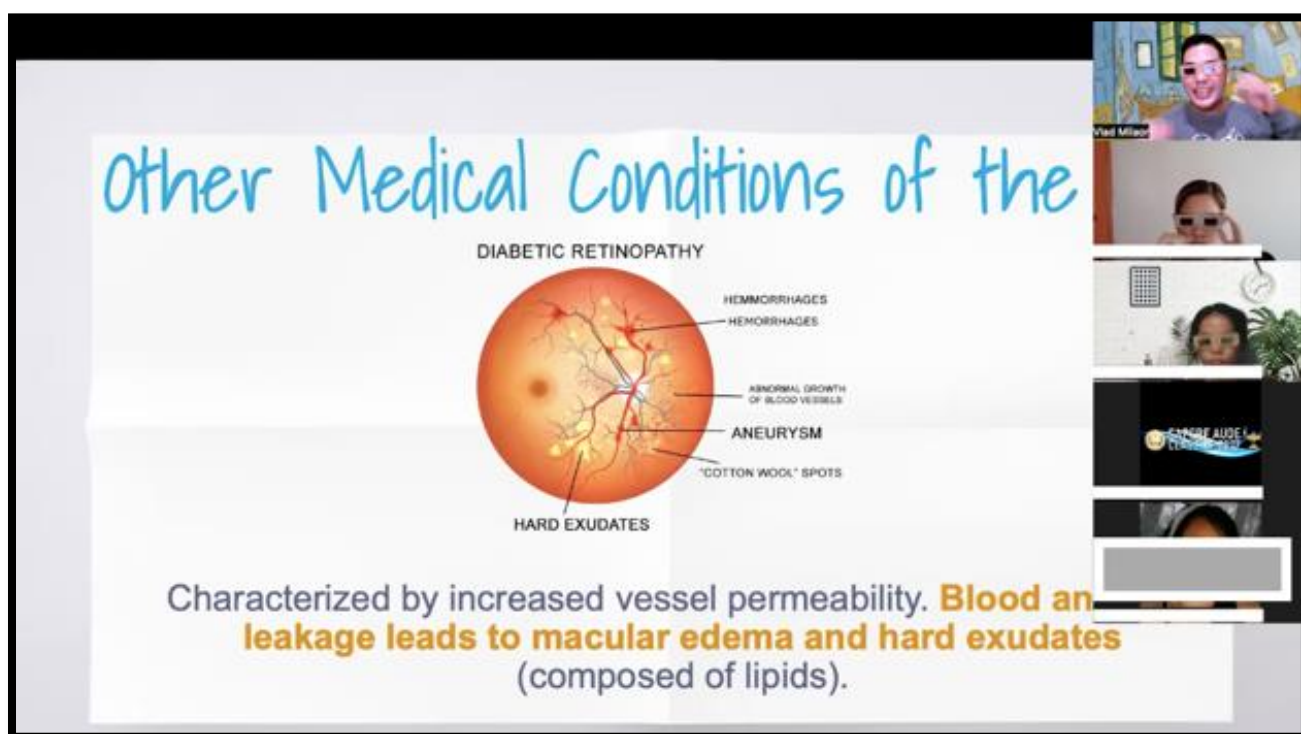


Image 18. EXPERIENTIAL AGEING SIMULATION. Discussion of pathophysiology of common visual challenges experienced by older adults.

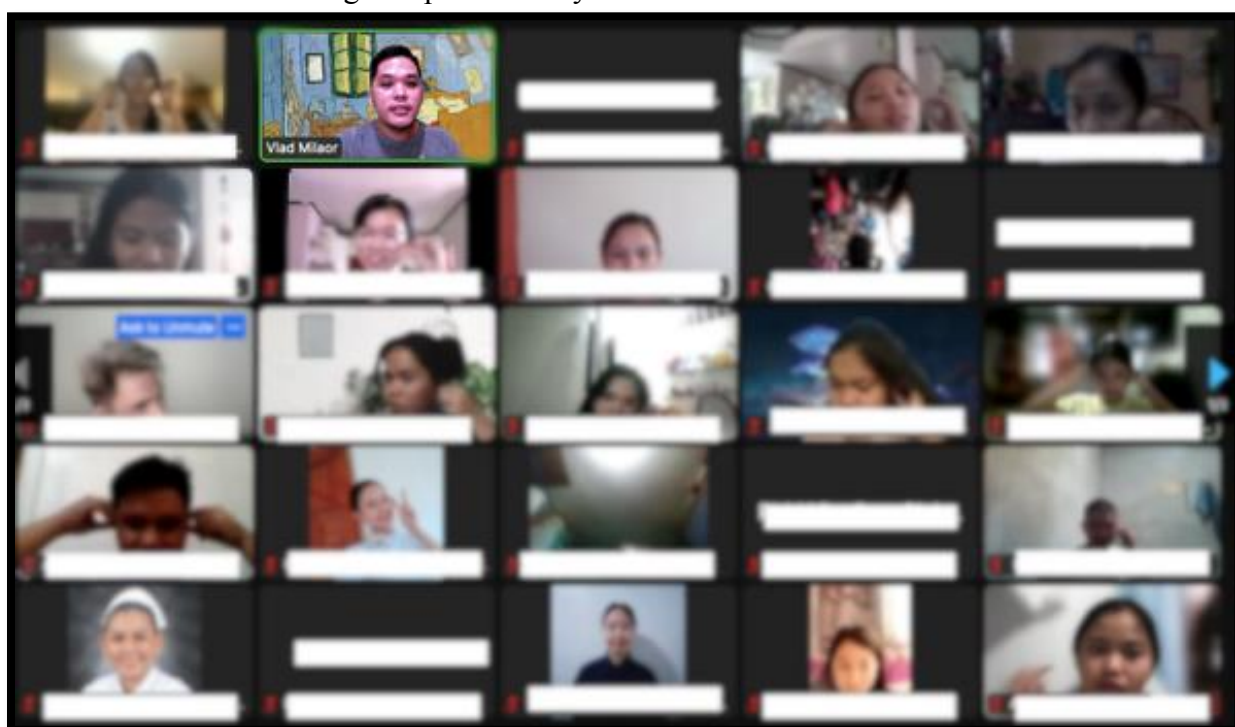


Image 19. HEARING EXPERIENCE. Participants were asked to wear ear plugs to mimic presbycusis, an age-related hearing loss.



Image 20. GROUP DISCUSSION. Participants sharing their insights about the sensory experiences.

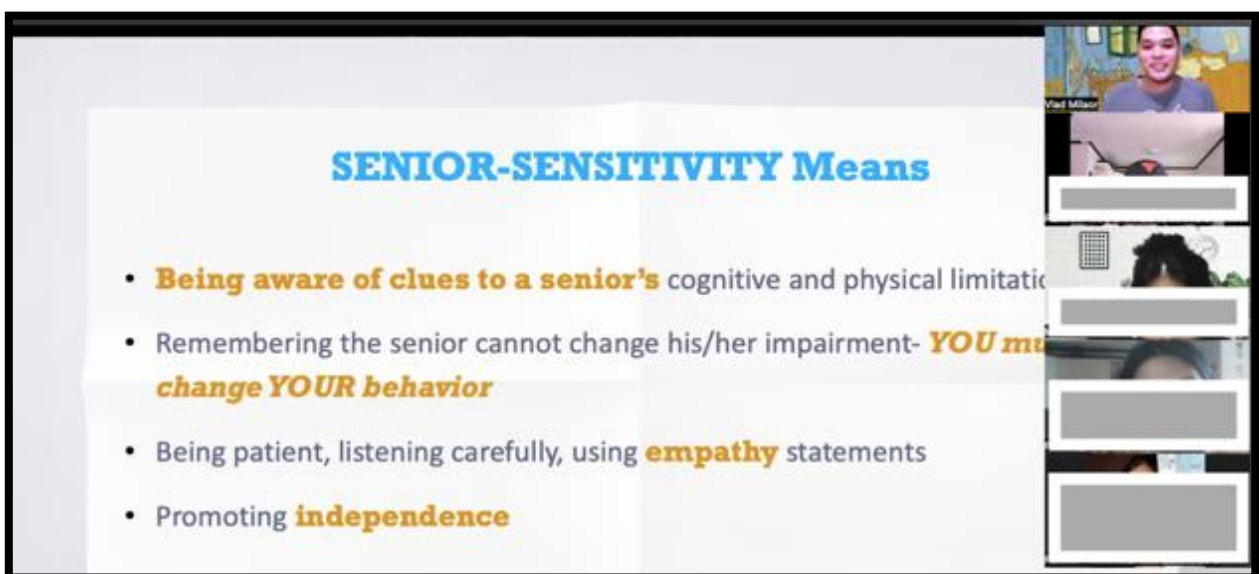


Image 21. WRAPPING-UP. The researcher facilitating a debriefing after all the important topics were covered and necessary experiential aging simulation activities were conducted.

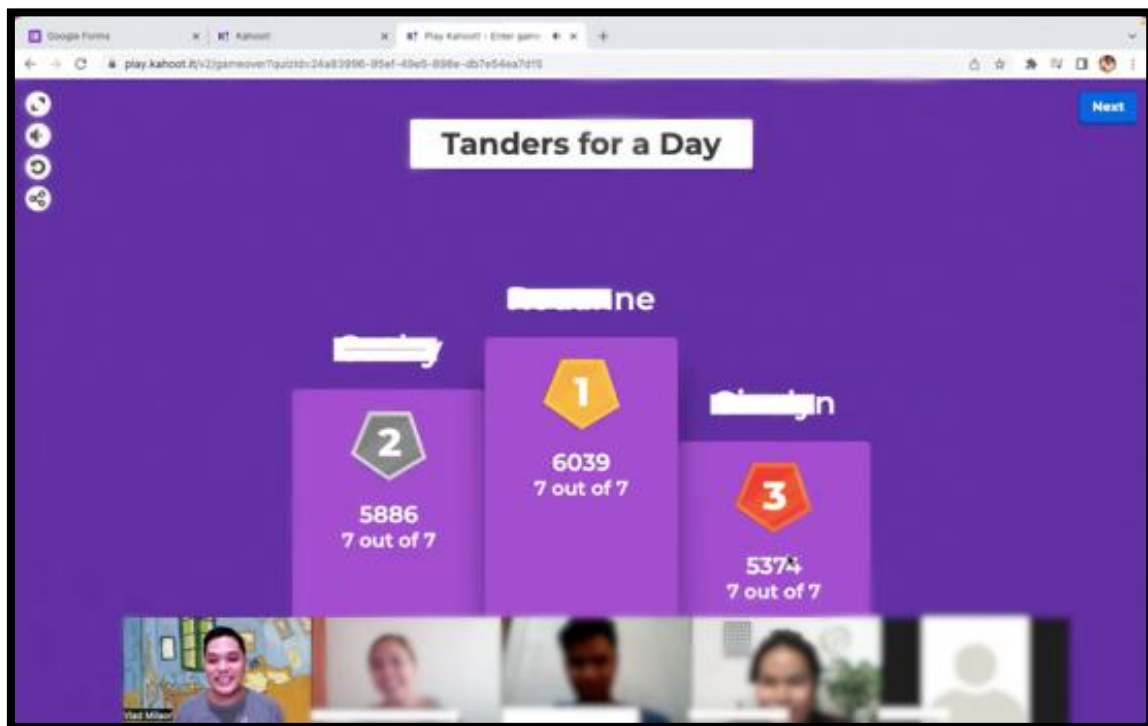


Image 22. QUIZ. Interactive quiz was conducted via Kahoot! to gauge the participants' post-seminar knowledge.

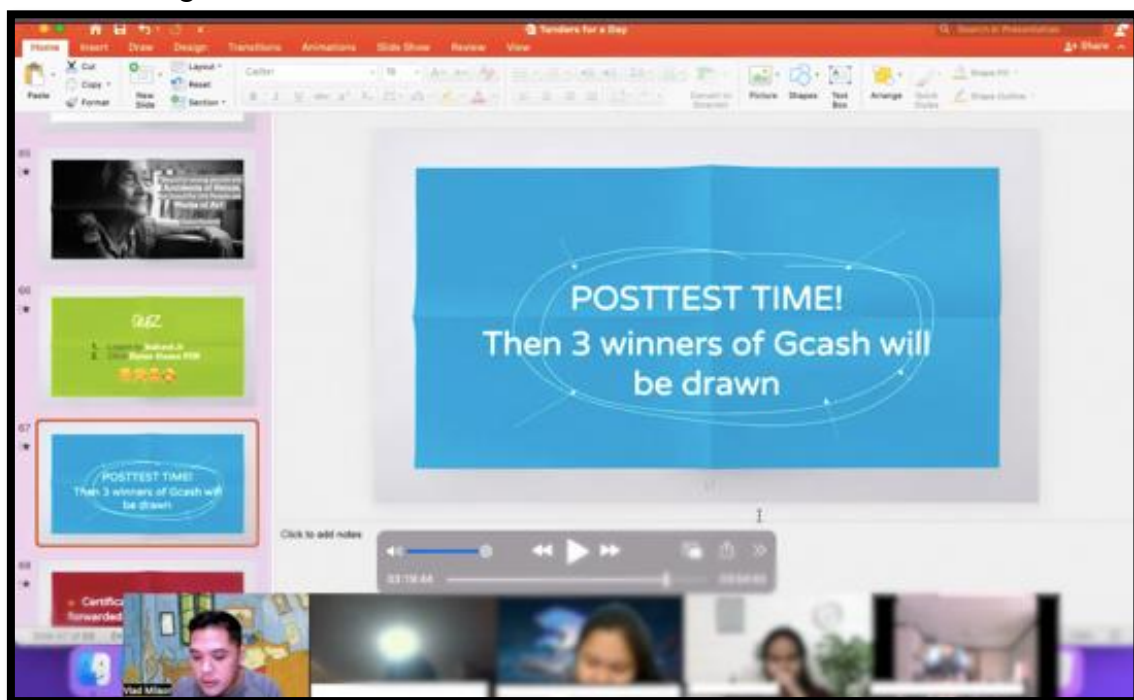


Image 23. POSTTEST AND DRAWING OF GIFT CASH WINNERS. Research Tool was accomplished by the participants via Google Forms then drawing of 3 gift cash winners were done according to the intervention protocol.



Image 24. BEHIND THE SCENES. Researcher's station during the Experiential Ageing Simulation.



Image 25. BEHIND THE SCENES. The researcher during the 5-minute break, when the participants were asked to walk on raw corn kernels to simulate peripheral neuropathy.

Appendix O

Proponent's Curriculum Vitae



VLADIMIR T. MILAOR, RN
PROONENT – MA NURSING
UNIVERSITY OF THE PHILIPPINES –
OPEN UNIVERSITY

To be able to integrate and apply the acquired knowledge and skills from MA Nursing Program to my role as a researcher and to contribute to nursing knowledge through the utilization of Nursing Research principles.

SKILLS

- Knowledgeable and able to perform nursing practices and principles.

WORK EXPERIENCE

NURSE II • ‘AMANG’ RODRIGUEZ MEMORIAL MEDICAL CENTER • MARCH 16, 2022 - PRESENT

Sumulong Highway, Marikina City, Philippines

- Provides guidance and support for ward staff
- Ensures care is provided to patient in accordance with the appropriate professional and hospital standards
- Monitors and evaluates performance of nursing staff and professional staff in providing patient care.
- Maximizes the education and development of staff and self.
- Promotes, monitors and participates in all quality improvement activities.
- Manages all treatment and care related resources in effective and cost efficient manner.
- Performs other related functions such as direct nursing care, medication administration, records maintenance and care coordination with other sections of the hospital.

NURSE I • ‘AMANG’ RODRIGUEZ MEMORIAL MEDICAL CENTER • FEBRUARY 1, 2021 – MARCH 15, 2022

Sumulong Highway, Marikina City, Philippines

- Performs direct nursing care procedures, which includes bedside nursing, hygiene, pre- and post-operative nursing care, as well as admission and discharge duties
- Administers medications (oral, parenteral, NGT, rectal, topical, etc.) as ordered by the Physician, starting an IV line and providing IV therapy, performing BLS/ACLS, basic EKG Reading, administering blood transfusion, providing oxygen therapy, providing wound care, etc.
- Maintains records reflecting patient condition, medication and treatment.

- Coordinates with other sections of the hospital regarding patient care.

EMERGENCY DEPARTMENT NURSE • MARIKINA VALLEY MEDICAL CENTER (TERTIARY HOSPITAL) • MARCH 2020 – JANUARY 2021

Sumulong Highway cor. Aguinaldo St., Marikina City, Philippines

- Ensures safe and effective holistic care for patient groups.
- Responsible for the management of a group of patients, ensuring emergency care is delivered and maintained at high standard.
- Daily nursing routine includes intravenous therapy, fluid management, blood transfusion, administration of medications, nutritional assessment, urethral catheterization, etc.
- Independent assessing, planning, implementing, and evaluating pathways of care for patients and work with multidisciplinary team.

CLINICAL TRAINER FOR MANAGED CARE PROGRAMS • GENFINITY PHILIPPINES, INC. • AUG 2017 – MARCH 2020

5F V Corporate Center, 125 Leviste St, Makati City
(02) 925-9405

Nursing CPD Instructor for Senior Sensitivity Training

- Provides PRC-accredited CPD Course on senior-sensitivity to registered nurses.

Managed Care Programs: Hospital Utilization Management (UM)

- Trains, supervises and monitors nurses in preparation for Utilization Management including efficiently reviewing medical records, summarizing pertinent information, utilizing evidence-based clinical guidelines to determine medical necessity of treatment requests and provide sound clinical rationale to support the determination.

SENIOR CLINICAL TRAINER • MEDICALL PHILIPPINES, A COGNIZANT COMPANY • DECEMBER 2010 – JANUARY 2017

18/20 Upper McKinley Rd, Taguig City (02) 976-2270

Managed Care Programs: Quality Management (MEDICARE Advantage Plan Grievance and Appeal Reviews); Utilization Review Program (Workers Compensation and Group Health.

- Trains, supervises and monitors nurses in preparation for Nursing Informatics Programs mostly dealing with **Medicare Clients (65 years old and above)**

OTHER CLINICAL EXPERIENCE

EMERGENCY ROOM NURSE • ALABANG MEDICAL CENTER • FEBRUARY 2008 – APRIL 2009

- Ensures safe and effective holistic care for patient groups.
- Responsible for the management of a group of patients, ensuring emergency care is delivered and maintained at high standard.
- Independent assessing, planning, implementing, and evaluating pathways of care for patients and work with multidisciplinary team.

EDUCATION

MA NURSING (ONGOING) • UP OPEN UNIVERSITY • 2010- PRESENT

Major in Adult Health Nursing

BS NURSING • NATIONAL UNIVERSITY MANILA • 2005-2007 Third and Fourth Year College.

BS NURSING • PERPETUAL HELP COLLEGE OF MANILA • 2003- 2005

First and Second Year College.

References available on request.