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THE IMPACT OF A POVERTY SIMULATION ON BACCALAUREATE NURSING STUDENTS’ ATTITUDES

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THE IMPACT OF A POVERTY SIMULATION ON
BACCALAUREATE NURSING STUDENTS’ ATTITUDES

By

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SCHOLARLY PROJECT

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THE IMPACT OF A POVERTY SIMULATION ON BACCALAUREATE NURSING STUDENTS’ ATTITUDES

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POVERTY AND NURSING

ABSTRACT

THE IMPACT OF A POVERTY SIMULATION ON BACCALAUREATE NURSING STUDENTS’ ATTITUDES

By
Kristen L. Smith

Poverty is an ongoing issue in the United States, with major implications for the health of U.S. citizens. In order to provide compassionate care, nurses must understand their own attitudes towards those living in poverty. The purpose of this study was to evaluate for possible changes in attitudes towards poverty in junior level BSN students after a poverty simulation intervention. Participants were surveyed using the Yun and Weaver’s Short Form Attitudes towards Poverty (SFATP) tool, which looks three factors of poverty attitudes: personal deficiency, stigma, and structural perspective.

The Adult Learning Theory provided the theoretical framework for the study. This theory focuses on four components of the adult learner: adults need to be a part of the teaching, immediate relevance to one’s life/job is needed, the experience provides learning, adult learners will be able to feel like they are solving the problem.

Results were analyzed using independent t-test analysis, after completion of questionnaires called the Short Form Attitudes towards Poverty (SFATP) survey. No statistical significance was found when comparing control and intervention groups with the smaller student participant numbers in this study. However, when comparing a larger cohort of students, significant changes in attitudes were seen in the areas of Stigma and Structural Perspectives. Recommendations for further research include ongoing data collection with a larger group of participants as well as analysis of Qualitative data.
This scholarly project is dedicated to my parents, Wayne & Effie Jussila, who inspired me to work hard yet have grace and integrity.
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PREFACE

The costs covered in this project has been underwritten by an institutional grant from Northern Michigan University.
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SYMBOLS AND ABBREVIATIONS

Licensed Practical Nurse (also known as Licensed Vocational Nurse) ..................... LPN
United States of American ............................................................................................ USA
Institute of Medicine ...................................................................................................... IOM
Bachelor Degree in Nursing ............................................................................................ BSN
Master Degree in Nursing ............................................................................................... MSN
Doctor of Nurse Practice ................................................................................................. DNP
Registered Nurse Certified .............................................................................................. RNC
Reform Organization of Welfare ..................................................................................... ROWEL
National League of Nursing ............................................................................................ NLN
Missouri Association for Community Action .................................................................. MACA
Adult Learning Theory ..................................................................................................... ALT
Henry J. Kaiser Family Foundation ................................................................................. KFF
Short Form Attitudes towards Poverty ........................................................................... SFATP
Institutional Review Board .............................................................................................. IRB
Learning Management System ....................................................................................... LMS
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Chapter One

Introduction

Poverty is an ongoing issue in the United States, with major implications for the health and well-being of persons living in it. The United States poverty rate in 2016 was 12.7 percent, which equates to 40.6 million people living in poverty (United States Census Bureau, 2017). People who are working minimum wage jobs and even those working multiple jobs may still be living in poverty as the poverty threshold is classified as a family of four living on about $24,000 (Poverty USA, 2018). Seniors who are living on fixed incomes could be struggling to buy food, pay their bills, and obtain medical care. Children may not be receiving dental or medical care, may not attend school, or even have the food they need to grow properly. No matter what age, socioeconomic status affects daily health, access to healthcare, as well as mortality (Noone, Gubrud-Howe, & Mathews, 2012). Chetty et al. (2016) reported a 10-15 year gap in life expectancy between the 1% richest and 1% poorest in the United States. For men, the gap was larger at 14.6 years than women who averaged a 10.1-year difference.

Everyone has preconceived thoughts about what it means to live in poverty. If healthcare providers do not understand poverty, they might not be able to effectively plan and provide care for patients (Cervantez-Thompson, Emrich, & Moore, 2003). For example, nurses care for extremely sick patients from a variety socioeconomic statuses including at or below the poverty line. As nurse educators, how do we teach our students to realize what those living in poverty face on a daily basis? Simply lecturing on this difficult topic might not be enough to emote self-examination and attitude change towards the reality of the situation. One solution is to use simulation in order to provide
an engaging and active learning experience. There is evidence in the literature that such experiences can influence students’ understanding of those living in poverty (Noone et al., 2012).

**Use of Simulation to Impact Attitudinal Changes**

Simulation is widely used in nursing education as an active learning instructional method. Jeffries (2005), defined simulation as, “activities that mimic the reality of a clinical environment and are designed to demonstrate procedures, decision-making, and critical thinking through techniques such as role playing and the use of devises such as innovative videos or mannequins” (p.2). This type of learning activity is particularly rich for adult students who learn best by being engaged in a problem-solving activity that requires active participation and mimics real life (Cioffi, Purcal, & Arundell, 2005; Maas & Flood, 2011).

Simulation can enhance students’ ability to “respond appropriately when confronted with subsequent situations in clinical practice” (Kelly, Forber, Conlon, Roche, & Stasa, 2014, p. 724). For example within the simulation experience, the educator can assist the student in learning how to communicate with patients of different ages, care for patients with developmental delays, work with patients from different cultures, or work within an interdisciplinary team. Students who participate in a poverty simulation may have a better understanding of those living in poverty and the health issues that goes along with it (Noone et al., 2012). Nursing instructors need to provide simulation experiences for students that challenge their perceptions and attitudes, which may translate into producing safer and more effective practitioners.
Clinical Problem

University students, who are often from middle to upper class, may have preconceived thoughts or viewpoints about poverty based on where they grew up, family of origin beliefs, and media influences (Vandsburger, Duncan-Daston, Akerson, & Dillon, 2010). These preconceptions and attitudes could influence how they respond when encountering patients living in poverty. Attitudes of nurses are key to effective nursing care; an empathetic attitude regarding those living in poverty is essential in order to provide effective care to this population and achieve positive outcomes (Cervantez-Thompson et al., 2003). Nurse educators need to encourage nursing students’ to examine their beliefs related to poverty, within an overall program curriculum, in order to clarify and expand learning as necessary. This self-awareness is one step to help ensure that graduates are prepared to effectively care for patients living in poverty.

Purpose of Project

The purpose of this scholarly project was to explore nursing students’ attitudes before and after a poverty simulation. A quasi-experimental method was used to compare a control group to an intervention group using a pre-test post-test design. Participants in each group were junior level nursing students who were in a baccalaureate program at a mid-sized rural public university. Students were required to work through poverty scenarios as members of an assigned family unit living the experience of poverty. The aim was to explore if a poverty simulation intervention in which students experienced the problems of living in poverty first-hand affected the attitudes of nursing students towards people living in poverty.
Theoretical Framework

Adult learning theory (ALT) or andragogy, developed by Knowles in 1984, was used for this study as it emphasizes the need to place the student in the center of a learning experience. The focus for an adult learner is much different than that of a child learner, as adults require an education to be personally relevant to what they will be doing in the future (Billings & Halstead, 2012). ALT also connects the learner’s cognitive level with previous life experiences (Pappas, 2013). The adult learner believes that the role of the teacher is that of facilitator or mutual participant and not the teller of all that is right (Bastable, 2008). Thus, the role of the nurse educator has evolved from simply imparting knowledge to interacting with the students in a learner-centered environment where the learning is active rather than passive (Fay, Selz, & Johnson, 2005). Simulation experiences allow the adult learner to actively participate and use previous knowledge to help solve the scenario’s problems that are relevant to future practice while interacting in the simulated environment.

Significance to the Discipline

Society as a whole has preconceived attitudes toward people living in poverty. Nursing students are no different, but it is important for them to explore these beliefs and stereotypes. “Attitudes of nurses are key to how they respond” to future clients that are living in poverty (Cervantez-Thompson, 2003, p 27). Nurse educators and practitioners also need to be cognizant that unconscious biases can be role modeled and emulated by new nurses (Doherty, 2016; Jack, Hamshire & Chambers, 2017).
A simulation experience has rich learning potential for educators, practitioners, and students alike. In particular, debriefing the experience (Doherty, 2016) allows for participants to scrutinize beliefs about stereotypical behavior of those living in poverty. A sentinel Institute of Medicine (IOM) report warned health care providers that a multitude of complex factors influence clinical decisions regarding patient care and provided evidence that unconscious beliefs result in unequal treatment for patients of different races and ethnicities (Nelson, 2003). This report has challenged healthcare providers to strive for equity in healthcare practices through awareness of potential hidden biases.

Significance to Future Patient Populations

Nursing faculty need to remember that “today's students are tomorrow's practitioners” and it is our responsibility to make sure that education is up-to-date with the healthcare industry (Jose & Dufrene, 2014, p. 550). Students today must learn an enormous amount of information with fewer clinical hours due to changes in the curriculum and the health care environment (Maas & Flood, 2011). As professional nurses, they will need to maintain the safety of their patients while managing complex equipment, accurately administering medications, and monitoring lab studies and other test results (Benner, Sutphen, Leonard, & Day, 2010).

The new nurse graduate will perform these skills while working in diverse settings and with individuals of differing socio-economic classes and cultures. Nursing education needs to go beyond the lectures and PowerPoints to help students make the connections between classroom knowledge and actual patient care. Instructors need to provide learning situations that are transformational and allow for enlightenment.
(Patterson & Hulton, 2011). The use of a poverty simulation allows students to briefly live the typical life experiences of an individual in poverty and encourages them to examine possible stigmas that influence their beliefs and affect nursing practice.

**Summary**

This scholarly project implemented a widely used purchased simulation experience titled “The Poverty Simulation” to examine if an active learning experience based on adult learning theory impacted any change in nursing student attitudes towards people living in poverty. Chapter 2 will include information about poverty in the United States and examine previous studies regarding poverty research and nursing or healthcare groups. Further exploration of adult learning theory and the use of simulation as a form of active learning will be discussed. Lastly, *The Poverty Simulation* will be described and how it was utilized for this project explained.
Chapter Two

Poverty

The Social Security Administration defines poverty based on a range of income cutoffs or thresholds (Poverty USA, 2018). Variables considered include family size, sex of the head of household, and number of children under 18 years old. The poverty threshold for a family of four in 2016 was $24,563 (United States Census Bureau, 2017). Meyers (2014) notes that over 15% of Americans live below the federally defined poverty level with children being more likely than adults to be poverty-stricken. Factors that impact the risk of living in poverty include low education, occupation, gender, race, and the number of working members in a family.

According to the United States Census Bureau (2017), a large number of families with children in the United States live in economic distress. Poverty determines the family’s ability to provide shelter, food, and medical care to its members; it also affects the families’ capacity to function (Conger, Ge, Elder, Lorenz, & Simons, 1994). Previous studies have shown a relationship between the damaging effects of low-income life and stress levels on families, which negatively affected healthy functioning and parenting styles (Vandsburger et al., 2010). Gallo and Matthews (2003) believed that living in poverty actually decreases reserve capacity, which brings individuals more rapidly to the brink of stress and the inability to cope.

Attitudes Toward Poverty

According to Reid & Evanson (2016), “Poverty is one of the most significant social determinants of health, and as such, it is imperative that nurses have an
understanding of the impact that living in poverty has upon one's life and health” (p. 130). Crumley (2018) asserts there are many public stereotypes, stigmas, or attitudes associated with social status. These attitudes result in unconscious discriminatory practices towards certain populations (Crumley, 2013).

*The United States Office of Disease Prevention and Health Promotion (2018) calls for consideration of personal, social, economic, and environmental factors because all are necessary determinants for a healthy lifestyle according to the Healthy People 2020 document. Due to people’s own upbringing and beliefs, it can be very challenging to change someone’s attitudes (Cherry, 2018). An individual’s attitude toward a subject is a learned behavior, possibly from positive or negative experiences or things they were taught as a child. Some psychologists go onto say that, an attitude may contain different components: cognitive (the person’s thoughts), affective (how the person feels about the subject matter), and behavioral (how the attitude influences the person’s behavior) (Cherry, 2018).*

**Previous Studies on Poverty**

There is a paucity of research regarding poverty and the education of healthcare professionals. Blair, Brown, Schoepflin, & Taylor (2014) surveyed social work student participants (n=301) using a pre and post questionnaire as well as a focus group to obtain data on attitude and belief changes towards people in poverty. Results indicated that increasing students’ exposure to people living in poverty was associated with enhanced understanding of the realities they face and subsequent increased willingness to work with and help those living in poverty. Psychologists, especially behaviorists would consider this a type of conditioning; placing students in poverty environments allows
them to gain the experience needed to psychologically learn how to help this population (Caulfield & Woods, 2013). This experience is essential in the realm of social work and psychology, which depend upon students realizing how stereotypes and erroneous beliefs can seriously impede the support or help given to clients living in poverty.

Vandsburger and colleagues (2010) did a study of social work students (n=134 pre-test and n=101 post-test) during a poverty simulation. Their hope was to find a shift in attitudes, thoughts, and beliefs through the experience (Vandsburger et al., 2010). The researchers believed their statistical analysis did show a change in feelings about poverty but not necessarily thoughts about poverty (Vandsburger et al., 2010).

**Nursing and Poverty**

As members of the health care team, nurses are also called to assess and understand the impact that socioeconomic stress has on systemic and individual health. Nurses work with patients and families from all socio-economic areas and they need to be cognizant of discrimination, injustice, or negative attitudes (Vandsburger et al., 2010). Traditional Bachelor of Science in nursing (BSN) students are often from the middle or upper class, and for the most part, have little experience with poverty and struggling to make ends meet (Hensley, 2013). Lacking such personal experience, nursing students often develop unrealistic ideas or beliefs about those dealing with these issues (Vandsburger, et al., 2010). This lack of understanding or ability to empathize could hinder the student’s future capacity to provide effective care as a professional nurse (Blair, et al., 2014).
The Code of Ethics for Nurses (ANA, 2015) states nurses must practice with compassion and respect all individuals. Nurses have the obligation to be free of prejudices, as everyone is entitled to respect and dignity no matter what socio-economic background, spiritual beliefs, or lifestyle they have. Nurses must be able to understand and work with all individuals in order to provide the services that they need and are entitled to. Being able to understand poverty facets will enable the student nurse to optimize patient care from all aspects whether emotional, physical, or social. Nursing interventions then focus on what feasibly aligns with the patients care and not on unrealistic goals or treatments that the patient would not be able to carry out (Crumley, 2013). For example, nurses can help with referrals to shelters for sleeping and food, to health departments for immunizations and exams or procedures, and to centers or programs that will assist with teaching on medications and nutrition (Henry J. Kaiser Family Foundation [KFF], 2018). Nurses can also help to shape policies on medical bill regulation, housing, education, hunger, and quality of life (KFF, 2018).

The National League of Nursing (NLN) states that it is the nurse educators’ responsibility to create the environment for learning and the desired student outcomes (NLN, 2005). Nurse faculty are charged to provide a safe and supportive environment, while creating a climate of trust and mutual respect that will enable student empowerment (Billings & Halstead, 2012). One strategy to create such an environment is the use of simulation.

**Simulation**

Simulation is a type of active or engaged learning, defined as students actively participating in the learning process and not just being bystanders or listening to the
instructor lecture (Vandsburger et al., 2010). As Nevin and colleagues state, simulation “enabled students to enjoy the process of developing critical thinking skills, integrating theory and practice, and critically reflecting on their performance both individually and as a team” while being in a safe environment (2014, p. 159). Nevin and colleagues (2014) studied third year undergraduates (n=134) by having them complete a questionnaire about simulation to achieve their data. Simulation immerses the students in the chosen environment and situation in order to see how the individual can navigate through that world.

In fact, Reid and Evanson (2016) found that role-playing during simulation challenges the individuals’ assumptions as well as skills, emotions, and knowledge of the subject matter. These authors looked at different poverty tools that could be used, both in and out of the classroom. Items like The Poverty Simulation, Second Life (an online version of an avatar in poverty), and Development MONOPOLY (a form of the game MONOPOLY that is focused more on poverty) were all introduced to examine how they could be woven into individual nursing curricula (Reid & Evanson, 2016). Their beliefs are that some form of poverty simulation should be in each program due to the experiences that the student gains and then can later integrate into their patient care (Reid & Evanson, 2016). These encounters have the potential to improve new graduate nurses’ job competencies by allowing them to experience and practice skills in a variety of environments, potentially decrease new graduate nurses’ stress levels, and improved patient outcomes (Smith, 2013).
The Poverty Simulation

The Missouri Association for Community Action (MACA) currently owns the rights to a pre-developed simulation product entitled “The Poverty Simulation”. The program was originally “developed in 1997 by the Reform Organization of Welfare (ROWEL) Education Association of Missouri” (Vandsburger, et al., 2010, p. 301). MACA (2017) primarily used The Poverty Simulation to increase the knowledge and understanding of the experience of poverty within their community. Their goal was to show participants what it was like to walk a month in the shoes of a low-income family. The Poverty Simulation is available to others as a kit purchased from MACA at their website http://www.communityaction.org/povertysimulations/.

During The Poverty Simulation, every participant receives a name and becomes a family member in one of the scenario families. Each family has their own resources, which may or may not include income from employment, benefits, transportation, household items, social security, and financial aid. Over 3-4 hours, the experience simulates a month-long scenario; the participants will need to feed their families, go to work, pay bills, attend school, and keep their families going. There are agencies available that the students may actually visit, including social services, a homeless shelter, daycare services, bank, interfaith services, hospital, pawnshop, school, quick cash, and the community action agency. This simulation activity takes the students through a scenario of living in a low-income situation. As Billings & Halstead (2012) stated, simulation allows for the transfer of information to reality as well as encourages reflection and the ability to change attitudes.
Use of Simulations and Student Attitudes toward Poverty

Limited research is available in the literature on simulation and the effect on students’ attitudes related poverty. Noone and colleagues (2012)-reported that their experimental group gained a better understanding of what those living in poverty face on a daily basis. The researchers used the Attitudes towards Poverty Short Form (ATPSF) to compare two groups of students. Their study involved baccalaureate nursing students in their junior year of the program \((n = 178)\), with 103 in an experimental group and 75 in the control group (Noone et al., 2012). Noone and colleagues explained that the post-survey showed “more positive attitudes” toward those living in poverty (2012, p 617). The researchers concluded that the participants overall realized the relationship between poverty and healthcare status and that the poverty simulation was engaging for the students.

In another study, Patterson and Hulton, stated that the poverty “simulation experience can be a positive impetus for lifelong learning and civic engagement” (2011, p 143). They used a mixed-method design with a convenience sample of senior level undergraduate nursing students for their intervention \((n = 43)\). Also utilizing the ATPSF for a pre and post-test analysis of attitudes towards poverty, the researchers found that the students’ stigma about those in poverty showed a statistically significant change \((p = <0.02)\) (Patterson & Hulton, 2011). They also viewed The Poverty Simulation as an effective active learning strategy to teach about poverty (Patterson & Hulton, 2011).

Similar changes in perceptions were reported in a study by Yang, Woomer, Agbemenu, & Williams (2014), who found that individuals had greater empathy towards those in poverty and were more mindful about making community referrals for those who
needed them. Yang and colleagues studied senior level BSN nursing students \((n = 199)\). They held The Poverty Simulation with pre/post tests using the same ATPSF questionnaire and saw a significant change in attitudes of 62 participants who answered yes to the question of volunteering with services for the poor in the future (Yang et al., 2014).

Johnson and colleagues (2015) were concerned that the traditional lecture-style of teaching was not adequate for helping students understand the determinants of health and challenges faced by those experiencing poverty. These instructors created their own mini poverty simulation along with some course/book work in order to expose students in their undergraduate nursing program to different situations. Although they did not use a survey to collect quantitative data, they retrieved feedback in the form of journaling which showed their poverty simulation was a positive experience where the students could learn firsthand what many clients experienced everyday (Johnson et al., 2015).

**Adult Learning Theory**

This project used adult learning theory as a framework to study a teaching methodology aimed at facilitating traditional BSN students to gain a better understanding of what the poor deal with in their daily lives. The goal was to provide a realistic simulated experience that might potentially encourage a change in students’ attitudes towards those in poverty. A definition of learning is a change in behavior or knowledge that results from an experience (McEwen & Wills, 2014). Learning is different for each individual, depending on the way they think or their internal programing.
Another term for adult learning theory (ALT), or the teaching of adults, is andragogy (Bastable, 2008). Knowles suggested four principles of ALT as listed below (Pappas, 2013):

1. Adults need to be a part of the planning and evaluation of the teaching.
2. There needs to be immediate relevance to the adults’ life/job.
3. The experience, whether good or bad, provides the learning.
4. Adult learners are not as interested in the content as they are at solving the problem.

ALT believes that adults are self-directed and need to discover things for themselves; they may need guidance at times but should be allowed to make mistakes and learn in their own way (Pappas, 2013).

Adult learning theory changes the role of the faculty member from imparting knowledge to interacting with the students in a learner-centered environment where the learning is active rather than passive (Fay, Selz, & Johnson, 2005). Thus, the role of the faculty in an adult learning environment is to produce a safe and supportive environment, while creating a climate of trust and mutual respect that will enable student empowerment (Billings & Halstead, 2012). Empowering students to better understand the experiences of those living in poverty and the use of available resources could potentially help them in their future nursing careers.

According to Kasl and Yorks (2016), the adult learner brings his or her own experiences to the learning arena. These experiences, and the reflection of those experiences, will form different thoughts or beliefs about a subject. When looking at
ALT and the adult learner, Kasl and Yorks (2016), also believed that significant learning needs to incorporate multiple ways of realizing and that debriefing contributes considerably to the learning process. This reflection process fosters learning as well as helps students develop clinical thinking and the ability to transfer new knowledge to other situations (Reid & Evanson, 2016). It can be particularly effective when there is diversity within a debriefing group as students will hear differing views and be able to compare and contrast opinions and feelings (Kolbe, Marty, Seelandt, & Grande, 2016).

Adult learners come with life experiences and are motivated to learn; because of this, simulation is a valuable type of instruction (Gatti-Petito et al., 2013). Using a simulation intervention allows the nurse educator to move students through all the learning stages (Simulation Powered Learning, 2018). Students use their own experiences to navigate through active learning environment and then are required to participate in a debriefing discussion that requires reflection (Rutherford-Hemming, 2012).

**Summary**

A review of the literature supports exploring the use of the Poverty Simulation as an active learning strategy designed to impact nursing students’ perceptions of the experience of living in poverty (Johnson et al., 2015; Noone et al., 2012; Patterson & Hulton, 2011; Yang et al., 2014). Chapter Three will include information describing the research design, participants, setting, and instrumentation. The data collection and analysis methods will also be outlined in the following chapter.
Chapter Three

This section will cover the research design including the students surveyed, participants involved, and the intervention. The chapter will also discuss the reason for the study as well as the instruments utilized.

The Research Study

This research investigated whether student attitudes towards people living in poverty were influenced by participation in the Poverty Simulation. The project involved two cohorts of BSN students, enrolled in a pediatrics clinical course, who participated in the Poverty Simulation in order to advance their critical thinking abilities and potentially change their attitudes regarding those living in poverty. The research project was granted expedited approval from the University’s internal IRB board, which included approval for analysis of reflective homework assignments. This project is a part of a larger multiple year research study (HS16-716, Appendix A).

The Poverty Simulation was an interprofessional collaboration that included faculty from nursing (both baccalaureate of science in nursing [BSN] and licensed practical nursing [LPN] programs), education, business, social work, and speech/language and hearing at a medium sized public university located in the rural mid-western United States. The group of faculty facilitators called themselves the Poverty Simulation Team. The funding for the poverty simulation kit and the start of the project came from a university internal grant.
Design

The Poverty Simulation research was a quasi-experimental, posttest design. The purpose of this type of experiment is to investigate a possible cause-and-effect relationship between an independent variable or intervention and one or more dependent variables for a group of individuals (Burns & Grove, 2009). An experimental group was compared to a control group without the intervention.

The data was quantitative in nature due to the posttest. Qualitative analysis of the reflective homework assignment was beyond the scope of this project and will be analyzed more thoroughly when multiple-year research data collection is completed. However, the preliminary results offer a small measure of qualitative insight.

The Poverty Simulation

The intervention for the study was participation in the Poverty Simulation experience itself. The students in the experimental group were required to attend the Poverty Simulation as part of their pediatric clinical course experience. They were able to choose the time/date of their simulation out of two to three possible dates each semester. The participants signed up for the simulation via a learning management system (LMS) scheduler. The simulation was a mandatory part of the student’s pediatric clinic hours, in a required course during the 3rd semester of the BSN program. The Poverty Simulation experience included debriefing and usually lasted approximately three hours.

Meeting rooms were reserved on campus for the simulation to take place. A diagram with the room set-up was sent to the building services/banquet personnel to help with the arrangement of the chairs/tables (Appendix B). The set-up included large tables
around the perimeter of the room along with seating for each agency in the simulation.

Twenty-six small clusters of chairs in the center of the room were set-up for the families. At one end of the banquet room was a large table with water and cookies that were purchased with the grant and helped to keep the participants and volunteers fueled. The Poverty Simulation kit is designed to run a simulation with 40 to 88 participants in each session.

After the set-up was completed, the volunteers arrived before the participants to familiarize themselves with their roles in the simulation. The Poverty Simulation requires approximately 20-30 volunteers each session and included community nursing clinic students (fourth-year), university faculty, social work students, and community volunteers. During the simulation, there were community agencies where volunteers ‘worked’ and interacted with the participants in the simulation. Poverty simulation agencies included the bank, grocery store, pawnshop, utilities, hospital/doctor’s office, social services, school/daycare, police station, and the community action agency.

When the participants arrived for the simulation, they signed in, were directed into the room, and handed a nametag with their new identity for the simulation. Each individual could be a parent from a family, an older teen trying to go to college, a young child attending school, or an elderly individual. They could be a part of a larger family or living alone. These simulation identities were part of the Poverty Simulation kit and were randomly assigned. After they were handed their identity, the students were told to find their family name among the designated clusters of chairs in the center of the room.

Each family was given a packet of information that detailed their economic information: if they had a home/were homeless, if they had a job, if they owned a car, or
needed to take public transportation, and how many family members were in the home. Each family had directions for the simulation that were specific to their family: for example, they needed to pay their rent, feed their family, send their children to school, and deal with life challenges. The simulation time was divided into four 15-minute sessions; each 15 minutes represented living a week in poverty. After each 15-minute session, there was a 5-minute weekend for the family to regroup and discuss what they needed to do for the next week.

During the poverty simulation, there were ‘luck of the draw’ cards which were distributed randomly; the card could be positive like finding money on the ground, or negative, like having one’s car stolen. These ‘luck of the draw’ cards provided a realistic dimension to the simulation, as the participants experienced unplanned events which could really happen in life and allowed them to be able to deal with their changing family circumstances. During the introduction, students were reminded that although the simulation could feel like a game, they needed to take things seriously as if they are ‘walking in the shoes of poverty’. They were also informed that some of their fellow students might actually be experiencing poverty in their daily lives.

**Debriefing**

Once the simulation was over, the Poverty Simulation Team began the debriefing process. At first, students were encouraged to talk within small groups about their ‘families’ and their roles in their family. Then students were lead through a debriefing by a faculty member using suggested questions-included in the Poverty Simulation kit. These questions included: did the families all eat during their month in poverty, did anyone do anything illegal, or did they all work? (See Appendix C for the list of...
suggested debriefing questions). Following debriefing, each faculty member asked for a participant to volunteer to be the spokesperson for their group, to share their experiences with the participants at large.

Students who volunteered as agency workers also participated in the debriefing process with a faculty member. During the time that the groups were debriefing, the lead investigator debriefed the volunteers. The volunteers also designated a spokesperson to share what they experienced from the agencies’ perspective during the simulation. For example, the volunteers where encouraged to share what they observed the participants do or not do as well as discuss their feelings during the simulation.

At the end of the poverty simulation, the participants were informed that an educational simulation is confidential and the experience and debriefing should not be shared with others. Students were reminded of the reflection homework assignment and were encouraged to share more of their feelings in the written paper. Students were also encouraged to complete the survey that would be emailed near the end of the semester. The simulation concluded with a brief summary about the purpose of the project.

Participants

The participants in the study were recruited from two cohorts of baccalaureate students nurses enrolled in a required pediatric clinical course during consecutive semesters (fall and winter semester). Students in the winter semester had participated in the Poverty Simulation as part of their clinical experience and were named Class 1 (the experimental group). Students in the Fall semester did not participate in The Poverty
Simulation as part of their clinical experience and were named Class 2 (the control group).

To promote the study and recruit participation in the online survey, all of the students in the two cohorts were sent invitations via email by the principal investigator, at the end of the third nursing semester for a posttest. Each email invitation discussed the purpose of the study and provided a link to the questionnaire. The posttest questionnaire included informed consent statements regarding the data security and students needed to agree to participation before they could begin answering questions. The posttest survey was completed near the end of the semester.

The convenience sample size was approximately 80 students enrolled in a required pediatric clinic courses, during their junior year (third semester) of the BSN program. Inclusion criteria was therefore that each student was in the BSN program and had previously completed nursing prerequisite coursework. All participants were 18 years old or older, and no one received compensation for their participation. Although the students were part of a course, they were not required to complete the online surveys and therefore this could be considered exclusion criteria.

**Instruments**

The survey questions used were designed to identify participant demographics (gender, age, ethnicity, and marital status) as well as collect basic information such as:

- Financial status
- Political beliefs
- Religious preference
The survey also used the Yun and Weaver (2010) Short Form on Attitudes towards Poverty (SFATP) survey designed to assess attitudes toward those in poverty (Appendix D). The SFATP questionnaire contains 21 items, scored based on a 5-point Likert scale from Strongly Agree [1] to Strongly Disagree [5] (Yun & Weaver, 2010). Within the tool there are three factors measuring attitudes towards those living in poverty: Factor 1 is called “Personal Deficiency” and includes seven questions, and Factor 2 is related to “Stigma” and has eight questions. The questions for both factors are designed to result in higher points with favorable attitudes. Factor 3, “Structural Perspective” consists of six questions. The questions in Factor 3 are designed to result in lower points with favorable attitudes. Therefore, the scores for Factor 3 were reverse scored (Yun & Weaver, 2010).

Examples of some of the questions from this tool include:

- Poor people are different from the rest of society.
- Poor people are dishonest.
- Children raised in welfare will never amount to anything.
- Unemployed poor people could find jobs if they tried harder.
- Welfare makes people lazy.
- If I were poor, I would accept welfare benefits.

The SFATP was adapted from the original Atherton’s 37-item assessment (Yun & Weaver, 2010). Permission to use the Short Form of Attitudes towards Poverty (SFATP) was obtained from Yun (Appendix E). The SFATP survey has shown a high level of consistency with a range of 0.87 to 0.89 (Yun & Weaver, 2010). Convergent validity with the original Atherton’s assessment was established through correlation analysis (r =
Yun and Weaver (2010) explained that this was further validated by independent \( t \)-tests and correlational analyses.

Students who participated in the poverty simulation were also required to write a reflective response that would be submitted to their clinic instructor. Student reflective papers offered an opportunity for further insight although the qualitative data has not been formally analyzed at this time. The reflective response was a mandatory part of the clinic course therefore was completed by all students. Students were instructed to journal about their experience after simulation and then submit the assignment to their clinical instructor. The reflective piece was intended to encourage students to share their feelings towards those living in poverty and whether they felt like their thoughts or attitudes had changed. All of the reflective assignments were informally reviewed and themes were tentatively identified. A word cloud was created using a commercial software program to give visual representation to these themes; the more frequent the word occurred, the larger the word is represented in the cloud (Appendix F & Figure 6). As stated previously, this was an exploration into the qualitative data and plans for future analysis are being discussed.

**Data Analysis**

SPSS software was utilized for data analysis of the completed post-questionnaires. The quantitative exploration included frequencies of demographic data and independent \( t \)-tests. Independent \( t \)-tests compared the two groups or sets of data. The independent \( t \)-test is different from a regular \( t \)-test in that the two samples may not be identical, or may include a different population of individuals (Pallant, 2013). In this project, the independent \( t \)-test was used to compare the posttests for Class 1 and Class 2.
Further analysis was completed by combining survey results from three semesters of post-tests and separating the results into groups who had the intervention (Poverty Simulation – Class 1) and those who did not (the control group – Class 2), this was from a self-identified question on whether they participated in a poverty simulation.

In summary, this chapter has discussed the research design, participants, the simulation intervention, questionnaire, and plan for data analysis. Chapter 4 will describe the results of the project including demographic data as well as analysis of $t$-tests. The chapter will also identify strengths and limitations of the research design, and implications for nursing as well as recommendations for future research.
Chapter Four

In Chapter 4, the results of this scholarly project include the students’ demographic data, independent t-test findings, and analysis of the data will be reported. The chapter will also identify strengths and limitations of the research project, implications for nursing practice and nursing education, as well as recommendations for future research.

Results

This scholarly project aimed to understand the attitudes of BSN students towards people living in poverty and whether or not a poverty simulation could influence said attitudes. In particular, two cohorts of BSN students enrolled in a junior level pediatric course were surveyed. Class 1 (the intervention group) consisted of students who had participated in the Poverty Simulation. Class 2 (the control group) consisted of students who had not participated in the Poverty Simulation. The two classes were examined according to student demographics and independent samples t-tests were used to compare mean scores of:

- Class #1 post-intervention (posttest) attitudinal scores on the Short Form of Attitudes towards Poverty (SFATP) scale (Yun & Weaver, 2010) which includes three factors: “personal deficiency, stigma, and structural perspective”
- Class #2 posttest attitudinal scores on the three factors of the SFATP scale

After concluding the first analysis it was recognized that there were some discrepancies in students self-report of Poverty Simulation participation. A third semester of student data was added to the first two classes. The results were combined,
then divided into two groups, based on student self-identification of Poverty Simulation participation. The two groups were compared using the independent samples t-tests. All statistical tests were performed at a 0.05 level of significance.

**Demographics**

This poverty simulation study included 71 students from two separate classes in the BSN program. Of these 71 students, not all had participated in the Poverty Simulation itself (41 students, $n=41$ or 56%) so the data was compared looking at those without the intervention with those who participated in the simulation (31 students, $n=31$ or 44%). Of these participants, 67 were female (94%) and four were male (6%). As shown in the chart below, the two groups were similar with 30 females in one group and 37 in the other (see graphs below).
The age of the participants varied from 18 to 54 years old but the majority of those in this BSN study were in the age group 18 – 24 years old (59 students, \( n=59 \), 83%). To see the comparison of ages for the two groups, see the chart below. One noted

*Figure 1. Gender by Class*
The majority of students were Caucasian (67 students, n=67, 94%) with the second largest group identifying themselves as Native American (3 students, n=3, 4%). In addition, one student identified himself/herself as Asian. No students identified themselves as African American, Hispanic, or unidentified. The sample population was mainly single (61 students, n=61, 86%) with the next identified as either married or divorced (9 students, n=9, 13%) and one participant did not identify marital status.

Religious preference was the next descriptive statistic characteristic. The majority of the students identified as Christians (51 students, n=51, 72%), with the next largest group identified as unaffiliated (13 students, n=13, 18%). The remaining seven students (n=7, 10%) were in the identified categories of Hinduism, Islamic Religion, Traditional, and Other.
The students lived in varying demographic areas: 14 \((n=14)\) lived in an urban area, 24 \((n=24)\) suburban and 33 \((n=33)\) rural. Comparisons of the two classes are seen in Figure 3 below.

**Figure 3. Comparison of Living Situation**

Students further characterized themselves into three different political parties: 16 \((n=16)\) conservative, 29 \((n=29)\) as liberal and 22 \((n=22)\) as independent. The chart below depicts the comparison of Class 1 and Class 2 for their political affiliation.
The students also ranked their financial stability from very secure to very insecure. Class 1 had a wide range of rankings while Class 2 ranked from secure to insecure (see Table 1 for this breakdown).
Table 1. Personal Rating of Financial Stability

<table>
<thead>
<tr>
<th>Personal Rating of Financial Stability</th>
<th>Class 1 (n=40)</th>
<th>Class 2 (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Secure</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Secure</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Somewhat Secure</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Somewhat Insecure</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Insecure</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Very Insecure</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Furthermore, the students identified their income ranges as starting under $20,000 and increasing past $150,000. (Note: some may have identified family or household income range.) The differences in identified class income can be seen in Figure 5 below.

Figure 5. Income
When asked ‘Have you ever been hungry because you or your family did not have enough money for food?,’ Five students from Class 1 (n=5, 12.5%) and five from Class 2 (n=5, 16%) answered ‘yes’, so there are similar group comparisons. Participants were also asked if they knew of friends/family that had ever used social services, been hungry due to lack of money, and/or had lived in an economically challenged area, 83% (n=40) of the Class 1 and 74% (n=31) of Class 2 responded affirmatively. The students were also asked to identify if they had traveled to an underdeveloped country. Class 1 answered 19 yes (n=40, 48%) and 12 yes (n=31, 39%) in Class 2. This question was chosen to look at to grasp how many students may have been previously exposed to those living in poverty.

**Attitudes Analysis**

As previously described, there were 71 students in this study, divided into two classes then listed as Class 1 and Class 2. An independent samples t-test was used to analyze for possible differences between the two groups of students (Class 1 and Class 2). The independent-samples t-test was conducted to compare scores for the three factors that comprise the SFATP survey: Personal Deficiency, Stigma, and Structural Perspective.
Comparing mean scores for Class 1 and 2 over the three factors indicates that means were lower for Personal Deficiency (Class 1 $M = 4.07, SD = .55$; Class 2 $M = 3.88, SD = .43$), were higher for Stigma (Class 1 $M = 3.12, SD = .66$; Class 2 $M = 3.23, SD = .71$) and were lower for Structural Perspective (Class 1 $M = 2.6, SD = .46$; Class 2 $M = 2.47, SD = .66$). The desired response for Personal Deficiency and Stigma would be for the mean to be higher, whereas for Structural perspective a decrease in score would be considered an improvement in attitudinal response. The next step in the analysis was to determine if these changes were significant by comparison of means using an independent-samples $t$-test (see Table 3 for results).
Table 3. Comparison of Class 1 and Class 2

<table>
<thead>
<tr>
<th>Levine’s test for equality of variances</th>
<th>$F$</th>
<th>Significance</th>
<th>$t$</th>
<th>$df$</th>
<th>Significance (two tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal deficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.058</td>
<td>.310</td>
<td>1.240</td>
<td>42</td>
<td>.222</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.669</td>
<td>.418</td>
<td>-.544</td>
<td>42</td>
<td>.589</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural perspective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.409</td>
<td>.242</td>
<td>.718</td>
<td>42</td>
<td>.477</td>
</tr>
</tbody>
</table>

The Levine Test for Equality of variances was not statistically significant; therefore, equal variances were assumed. Comparing the two classes revealed no significant differences between Class 1 and Class 2 for the three factors: Personal Deficiency ($p = .222$ two tailed), Stigma ($p = .589$ two tailed), or Structural Perspectives ($p = .477$ two tailed).

Following completion of the analysis for the two classes of data, it was recognized, that some students may have participated in a Poverty Simulation at some other time. For example, they may have attended a poverty simulation while attending another university that could possibly alter the results of our initial findings. Therefore, an additional analysis was completed. For the second analysis, three semesters of student posttest surveys, completed at the end of the students’ third nursing semester (junior pediatric course) were combined and then separated into two groups based on students’ self-reports of whether or not they had previously participated in a Poverty Simulation ($n=83$). These students had also either participated or not participated in the poverty simulation but were not in the two classes we had initially
chosen to study. The aim of including more in the study groups was to determine if a larger number of students would alter the numbers to show significant findings.

Group 3 (the control group, $n = 62$) was composed of those who indicated no previous participation in any poverty simulation. Group 4 was used to label the experimental group ($n = 21$), composed of students’ who self-identified participation in the Poverty Simulation. All surveys were analyzed using an independent-samples $t$-test to compare means for each factor on the Short Form of Attitudes towards Poverty (SFATP) scale (Yun & Weaver, 2010) between those who indicated they had participated in a poverty simulation versus those who indicated they had not participated in a poverty simulation. Table 4 displays the results of mean counts for the groups.

**Table 4. Three semesters of students self-identifying as not participating in the Poverty Simulation (Group 3) or participating in the Poverty Simulation (Group 4).**

<table>
<thead>
<tr>
<th></th>
<th>$N$</th>
<th>$M$</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal deficiency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>3.9631</td>
<td>.6081</td>
<td>.07732</td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>3.8707</td>
<td>.36113</td>
<td>.07881</td>
</tr>
<tr>
<td><strong>Stigma</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>2.8488</td>
<td>.76727</td>
<td>.09744</td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>3.3333</td>
<td>.66888</td>
<td>.14596</td>
</tr>
<tr>
<td><strong>Structural perspective</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>2.7984</td>
<td>.59302</td>
<td>.07531</td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>2.4444</td>
<td>.66528</td>
<td>.14518</td>
</tr>
</tbody>
</table>

Comparing mean scores for Group 3 (no = control) and Group 4 (yes = experimental) over the three factors indicated that means for the experimental group were lower for Personal Deficiency (Group 3 $M = 3.96$, $SD = .60$; Group 4 $M = 3.87$, $SD = .36$), were higher for Stigma (Group 3 $M = 2.84$, $SD = .76$; Group 4 $M = 3.33$, $SD = .66$)
and were lower for Structural Perspective (Group 3 $M = 2.79, SD = .59$; Group 4 $M = 2.44, SD = .66$). The next step was to analyze if these mean differences approached or reached significance. The desired response for Personal Deficiency and Stigma would be for the mean direction to increase, whereas for Structural Perspective a decrease in score is considered an improvement in attitudinal response. Table 5 presents the independent-samples $t$-test conducted between Groups 3 and 4.

Table 5. Three semesters of students self-identifying as not participating in the Poverty Simulation (Group 3) or participating in the Poverty Simulation (Group 4).

<table>
<thead>
<tr>
<th></th>
<th>Levine’s test for equality of variances</th>
<th>$F$</th>
<th>Significance</th>
<th>$t$</th>
<th>$df$</th>
<th>Significance (two tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal deficiency</td>
<td>Equal variances assumed</td>
<td>.9707</td>
<td>.003</td>
<td>.656</td>
<td>81</td>
<td>.514</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>.837</td>
<td>59.086</td>
<td>.406</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma</td>
<td>Equal variances assumed</td>
<td>.523</td>
<td>.472</td>
<td>-2.579</td>
<td>81</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-2.761</td>
<td>39.244</td>
<td>.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural perspective</td>
<td>Equal variances assumed</td>
<td>.000</td>
<td>.987</td>
<td>2.292</td>
<td>81</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>2.164</td>
<td>31.467</td>
<td>.038</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Levine Test for Equality of variances was not statistically significant; therefore, equal variances were assumed. There was no significant difference noted in the factor of Personal Deficiency ($p = .514$). There was a significant difference noted in the factor of Stigma between those who indicated they had not participated in the Poverty Simulation ($M = 2.84, SD = .76$) and those who indicated they had participated in the Poverty Simulation ($M = 3.33, SD = .66$; $t(81) = -2.57, p = .012$, two-tailed). There was also a significant difference noted in the factor of Structural Perspective between those who indicated they had not participated in the Poverty Simulation ($M = 2.79, SD = .59$) and those who indicated they had participated in the Poverty Simulation ($M = 2.44, SD = .66$).
.66; \( r(81) = 2.29, p = .025 \), two-tailed). This is a reverse scored item, so a lower mean would be a more positive finding.

*For the significant findings, the magnitude of the difference in the means was calculated using an online calculator at [https://www.uccs.edu/lbecker/](https://www.uccs.edu/lbecker/). For the factor of Stigma the effect size was large (Cohen’s \( d = 0.9 \)), and for the factor of Structural Perspective the effect size was moderate (Cohen’s \( d = 0.5 \)).*

**Discussion**

Overall, the demographic data sets from the two classes in the first analysis were very similar. When comparing the two classes for the three SFATP factors (Personal Deficiency, Stigma, and Structural Perspective), no significant differences were found. Interestingly both groups reported five students who had experienced hunger and the majority of both groups indicated they knew a friend or family member who had received help due to financial issues. Combined, close to half of the participants had traveled to a developing country. These results indicate that these two classes may have had participants who already understood issues of poverty and therefore did not show much of a change in the questionnaires. It is possible that previous experiences with poverty may have been a confounding variable in the study. It is also possible that the survey may not be sensitive enough to measure small changes in attitude.

In the second analysis involving an examination of three semesters of data for students all at the same level of education (junior level pediatric course), results did reach significance in the areas of Stigma and Structural Perception. As the effect sizes were large and moderate, it does suggest that the Poverty Simulation may have had a positive effect on some of the participants’ attitudes towards people living in poverty.
The factor of Stigma includes items that ask the participant how much they agree with statements such as: there is a lot of fraud with welfare recipients; some poor people live better lives than I do, and welfare moms have babies to get more money. The large positive effect size in this area suggests an increased awareness of those participating in the Poverty Simulation that it is much more difficult and complex to be able to live in or escape poverty than they previously thought. Students participating in the Poverty Simulation had to face multiple challenges with few resources in order to successfully remain in housing and feed their families.

The area of Structural Perspective includes items that ask the participants how much they agree with statements such as: people are poor due to circumstances beyond their control, society has a responsibility toward those in poverty, and poor people are discriminated against. Since the questions in Structural Perspective probe the students to reflect on global concepts, having a moderate change in a more agreeable direction in this area was highly favorable. These findings may be due to previous education on the subject of poverty in liberal education classes or within the nursing curriculum itself. It may also be related to the discussions that took place during the debriefing portion of the Poverty Simulation.

The only factor that did not achieve significance in change of attitude was Personal deficit. Items included in the personal deficit area ask participants if they believe: poor people are dishonest, poor people act differently than the rest of the population, children raised in poverty will not amount to anything, and poor people have a lower intelligence than the rest of the population. One possible explanation for this might be that many students realized how difficult it was to survive on a weekly basis on
such a limited income. This resorted to changes in their problem solving and behavior patterns but may have actually made them resort to poor choices during the simulation and therefore, participants may have felt that those in poverty also had to make poor decisions to get through difficulties. As Reid & Evanson (2016) had found in their study, not only can the Poverty Simulation increase the students’ knowledge of those living in poverty but it can change their attitude about the struggles of poverty.

**Strengths of Research**

The Poverty Simulation allowed the students to walk in someone else’s shoes for a short period and see what those in poverty deal with on a daily basis. For junior level students, the data indicates that student understanding and attitudes towards those living in poverty changed to be more empathetic. This could help them become better caregivers and provide more focused and appropriate nursing care to people living in poverty.

Participants were also assigned a qualitative reflective piece with open-ended response areas. Although this was not a qualitative study, preliminary analysis examining comments added to the conversation of the value of the Poverty Simulation in changing attitudes. Some of these comments as well as the discussions in the debriefing enlightened the researchers to the value of the experience. This is a preliminary reporting of a larger study and the results will help provide guidance for the ongoing research. A sample of the words and phrases identified from these reflective pieces are presented in the word cloud below (Figure 6).
Limitations of Project

The major limitation of this scholarly project was the sample size of $n=71$ for the class 1 and class 2 comparison. The time frame of the study did not allow for further recruitment of participants. As participation was voluntary, some students who experienced the simulation but did not fill out surveys. Finding a way to encourage more participation could have increased the possibility of finding more significant findings.

Another limitation was that the participants were mostly female (94%) and Caucasian (94%), although for comparisons, it was a strength that the two groups were similar. There was some mix of different ethnicities but having a larger number of other ethnicities or races could alter the results. In addition, as mentioned earlier the majority of the students were traditional college students and fell into the age category of 18 – 24
years old (83%). Studying a group of students with more life experience might yield different results.

Qualitative data was included in the comment section of the questionnaire but were beyond the scope of the analysis of the project. Adding a full qualitative analysis of the research has potential for discovering additional perceptions regarding attitudes towards people living in poverty. Finally, since all of these students were juniors in the BSN nursing program, they had likely encountered patients living in poverty during their clinical experiences before participating in the simulation. In addition, the students may potentially be more caring individuals since they went into a caring profession, which emphasizes empathy for all individuals regardless of socioeconomic status.

**Implications for Nursing Practice and Education**

Nursing is a caring profession, which requires the ability to meet the needs of a multitude of different individuals. Being able to see what it is like to live in poverty and experience the related daily struggles, may enable nurses to better understand and care for their patients. Nurses need to be able to see where a patient is at and take them or help them to the next level of health and wellness. Individuals are at different levels of understanding in terms of being able to work on their health and well-being. For example, if someone does not know where they are going to sleep that night, the nurse will not have success teaching them about nutritional choices and the medications they need to buy.

As mentioned previously, adult learners bring their previous experiences along with their current knowledge to the learning environments. Providing the adult learner
with a simulation experience creates a new perspective that could help foster a change in attitude. The Poverty Simulation as a teaching tool created an experience of active engagement and learning for the adult learners in this project.

**Recommendations for Research**

These findings are the preliminary results from an ongoing study. Future analysis will provide a larger, more diverse sample size and include qualitative findings. Correlation between multiple variables has the potential of adding more knowledge about attitudes towards people living in poverty. Replicating this study in different areas of the country would be a recommendation in order to assess attitudes by region. Being in different regions of the country could allow for a varying number of other ethnicities, nationalities, and religions. In addition, doing this study on a larger scale or with experienced nurses who are returning to school for their masters or doctoral degrees could provide additional insight into nurses’ attitudes about people living in poverty.

**Conclusion**

The purpose of the study was to evaluate the use of the Poverty Simulation with students in the BSN program, as a method to change attitudes towards those living in poverty. Overall, students seemed to enjoy the simulation and verbalized that it helped their understanding of patient care and the patient’s perspective. Research in nursing education has indicated that the Poverty Simulation can have an impact on students’ attitudes towards different situations and individuals and that simulation is an effective means of teaching adult learners about concepts within the nursing curriculum. Therefore, the use of the Poverty Simulation as an active learning strategy can make a
significant impact on nursing students’ perceptions of living in poverty (Johnson et al., 2015; Noone et al., 2012; Patterson & Hulton, 2011; Yang et al., 2014). Further research on the attitudes towards the impoverished will help the nursing profession as a whole better understand and implement tailored interventions for those living in poverty. Simulation as a teaching tool, in the nursing curriculum, is a growing entity and further research is needed to see how this enhances student learning and translates into professional practice.
References


approach with the use of high fidelity simulation equipment. *Nurse Education in Practice, 14*(2), 154-159. https://doi.org/10.1016/j.nepr.2013.07.008


Yang, K., Woomer, G. R., Agbemenu, K., & Williams, L. (2014). Relate better and judge less: Poverty simulation promoting culturally competent care in community health

http://dx.doi.org/10.1016/j.nepr.2014.09.001


Retrieved from https://journals.iupui.edu/index.php/advancesinsocialwork
Appendix A

Signed copies to follow via campus mail.

Memorandum

TO: Terry Delpier
   Nursing Department

DATE: January 26, 2016

FROM: Rob Wixen, Ph.D.
      Assistant Provost/IRB Administrator

SUBJECT: IRB Proposal HS16-716
   IRB Approval Dates: 1/25/2016-1/25/2017**
   "Undergraduate Student Attitudes Towards Poverty"

The Institutional Review Board (IRB) has reviewed your proposal and has given it final approval. To maintain permission from the Federal government to use human subjects in research, certain reporting processes are required.

A. You must include the statement "Approved by IRB: Project # HS16-716" on all research materials you distribute, as well as on any correspondence concerning this project.

B. If a subject suffers an injury during research, or if there is an incident of non-compliance with IRB policies and procedures, you must take immediate action to assist the subject and notify the IRB chair (dereande@nmu.edu) and NMU’s IRB administrator (rwixen@nmu.edu) within 48 hours. Additionally, you must complete an Unanticipated Problem or Adverse Event Form for Research Involving Human Subjects.

C. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant.

D. If you find that modifications of methods or procedures are necessary, you must submit a Project Modification Form for Research Involving Human Subjects before collecting data.

E. If you complete your project within 12 months from the date of your approval notification, you must submit a Project Completion Form for Research Involving Human Subjects. If you do not complete your project within 12 months from the date of your approval notification, you must submit a Project Renewal Form for Research Involving Human Subjects. You may apply for a one-year project renewal up to four times.

NOTE: Failure to submit a Project Completion Form or Project Renewal Form within 12 months from the date of your approval notification will result in a suspension of Human Subjects Research privileges for all investigators listed on the application until the form is submitted and approved.

All forms can be found at the NMU Grants and Research website:
http://www.nmu.edu/grantsandresearch/node/102

Amanda Wixen
Graduate Assistant
Grants and Contracts Office
Northern Michigan University
906-227-2437
MEMORANDUM

TO: Terry DePiero
   Nursing Department

CC: Kristen Smith, Jaime Crabb, Ally Vander Klok, Ryan Borges
    Nursing Department
    Judy Kusanochar
    Education, Leadership, and Public Service
    Michael Crum
    School of Business
    Lori Nelson
    Speech, Language, and Hearing Sciences

FROM: Robert Wima, Ph.D.
   Assistant Provost/IRB Administrator

DATE: March 24, 2016

RE: Modification to HS16-716
   IRB Approval Dates: 1/25/2016-3/24/2017**
   Proposed Project Dates: 1/26/2016-3/23/2017
   "Undergraduate Student Attitudes toward Poverty"

Your modification for the project "Undergraduate Attitudes toward Poverty" has been approved under the administrative review process. Please include your proposal number (HS16-716) on all research materials and on any correspondence regarding this project.

Any additional changes or revisions to your approved research plan must be approved by the IRB prior to implementation. Unless specified otherwise, all previous requirements included in your original approval notice remain in effect.

If you complete your project within 12 months from the date of your approval notification, you must submit a Project Completion Form for Research Involving Human Subjects. If you do not complete your project within 12 months from the date of your approval notification, you must submit a Project Renewal Form for Research Involving Human Subjects. You may apply for a one-year project renewal up to four times.

NOTE: Failure to submit a Project Completion Form or Project Renewal Form within 12 months from the date of your approval notification will result in a suspension of Human Subjects Research privileges for all investigators listed on the application, until the form is submitted and approved.

If you have any questions, please contact me.
Appendix B

Community Action Poverty Simulation (Full Simulation 80 Participants)
(This setup assumes you are using dolls in the infant/toddler roles)

- Teacher's desk
- College
- Social Service Receptionist
- Caseworker #1 and #2
- Waiting Room
- Inter-Faith Services and Child Care
- Homeless Shelter
- Families S/H/S/T Start here—have 6 extra chairs here
- Food—A-Rena Super Center & Bank
- Employer
- General Hospital
- Community Action Agency
- 3 groups of 5
- 8 groups of 4
- 7 groups of 3
- 2 groups of 2
- 2 groups of 1
- 4 homeless families
- Add a chair to families G-H-I-J and O-P-Q-R if you are not using dolls
- Jail
- Big Dave's Pawn Shop
- Friendly Utility Company
- Podium & Mike
- Director
- Quik Cash
- Sweeney Mortgage & Realty

Reproduced with permission from the National Association for Public Health \& Human Services.
Appendix C

Community Action
Poverty Simulation

SMALL GROUP DISCUSSION

Please use the following questions as a guide to discussion. You won’t have time to thoroughly discuss all of them. Don’t forget to designate one person from your group to give a two- to three-minute summary of your discussion when we reconvene as a community. At the beginning of the summary that person should briefly describe your common family profile.

1. What happened to your families during this month in poverty?
   For example, did you:
   • Pay the rent?
   • Keep the utilities on?
   • Buy the required foods each week?
   • Make loan payments?
   • Get evicted?
   • Neglect your children?
   • Cheat, steal money, or do something else illegal?
   • Improve your situation during the month?
   • Look for a job?
   • Help each other out?

2. How were the experiences and outcomes of families in your group alike? Different?

3. What feelings did you experience during your month in poverty? How did you feel about yourself? Why did you feel that way? How did those of you who were children feel?

4. How did other people respond to your needs? How did you feel about their response?

5. Did your attitudes change during the month? If so, how?

6. What insights or conclusions have you come to about the life experience of low-income families?
Appendix D

Short Form Attitudes towards Poverty

<table>
<thead>
<tr>
<th>ATP 21-item Short Form</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor people are dishonest.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Poor people are different from the rest of society.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Children raised on welfare will never amount to anything.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Poor people act differently.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Most poor people are dirty.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Poor people generally have lower intelligence than nonpoor people.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I believe poor people have a different set of values than do other people.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Welfare makes people lazy.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>An able-bodied person collecting welfare is ripping off the system.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Unemployed poor people could find jobs if they tried harder.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Poor people think they deserve to be supported.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Welfare mothers have babies to get more money.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Some “poor” people like better than I do, considering all their benefits.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>There is a lot of fraud among welfare recipients.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Benefits for poor people consume a major part of the federal budget.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>People are poor due to circumstances beyond their control.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Society has the responsibility to help poor people.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Poor people are discriminated against.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>People who are poor should not be blamed for their misfortune.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>If I were poor, I would accept welfare benefits.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>I would support a program that resulted in higher taxes to support social programs for poor people.</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>

Factor 1 = Personal Deficiency  
Factor 2 = Stigma  
Factor 3 = Structural Perspective
Appendix E

Permission to use Short Form of Attitudes towards Poverty

Terry Delpier

From: Sung Hyun Yun <yshshy@uwindsor.ca>
Sent: Monday, March 9, 2015 9:34 AM
To: tdepler@nmu.edu
Subject: Re: Request to use Poverty Scale
Flag Status: Flagged
Categories: CTL Event

Dear Dr. Delpier,

I give you my permission to use the short form ATP scale.

Good luck,

Sincerely,

Sung Hyun Yun, Ph.D., MSW
Associate Professor
School of Social Work
University of Windsor
401 Sunset Avenue
Windsor, Ontario N9B 3P4
(519) 243-3000 ext. 3076
yshshy@uwindsor.ca

The information in this email is directed in confidence solely to the person(s) named above and may contain confidential and/or privileged material. This information shall not otherwise be distributed, copied or disclosed. If you have received this email in error, please notify the sender immediately via return email and destroy the original message. Thank you.

---

Drs. Yun and Weaver

I believe the ATP would be a valuable component of my research and I am writing to ask permission to use your tool in my research.

I am in the process of designing a research study about the attitudes of nursing students towards poverty. In my review of the literature, I learned of your work to develop the Attitude Toward Poverty [ATP] Short form. My long term plan is to conduct a series of studies on student attitudes. Another goal is to have an interdisciplinary component to a later study, which would potentially include other departments such as Social Work, Education, and Speech and Hearing.

Thank you for your consideration.

Terry Delpier

Terry Delpier, DNP, RN, CPNP
Professor
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1401 Presque Isle Ave.
Marquette, MI 49855
tdepler@nmu.edu
Appendix F

Word Cloud