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Nursing Students Attitudes Towards Patients' with Disabilities

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Nursing Students Attitudes Towards Patients' with Disabilities

by

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A Thesis
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ABSTRACT

Attitudes have been found to impact the quality of healthcare provided to patients. Nursing students are individuals that will eventually care for and impact the livelihood of all individuals including those with disabilities. Measurements of attitudes among nursing students serves to evaluate the efficacy of nursing curriculums regarding disability and determines if revision is needed to better promote healthcare administration for the patient with a disability. This study utilized the Scale of Attitudes Toward Disabled Persons (SADP) to measure attitudes among nursing students enrolled in a baccalaureate nursing program at a Southeastern University. The mean score from participants was 108.49 ± 15.26. This score was found to be equivalent to other scores from the U.S. in the past 20 years, and lower than scores from the Netherlands. There was no statistically significant demographic variable, and further research is encouraged to improve the quality of healthcare provided to individuals with disabilities.

Keywords: Disability, Nursing, SADP, Attitudes, Students, Patients

DEDICATION

This honors thesis is dedicated to my brother, who has taught me to appreciate and respect others regardless of their differences.

ACKNOWLEDGEMENTS

I would like to thank three very important individuals for assisting me with the completion of this project. The first is Dr. Elizabeth Tinnon, who served as my thesis advisor and really kicked off this project by explaining to me exactly what I could expect when formulating my process and as well as for me helping me find the tool I utilized. Another individual who proved invaluable was Dr. Rebecca Holland, who helped me with all miscellaneous/troubleshooting as well as teaching me how to use Qualtrics. Finally I would like to thank Dr. Melissa Kossman, who aided with the entire data analysis portion of this project especially with statistics. I would also like to thank all professors who graciously allowed me to reach out to their students during classtime as a part of my recruitement efforts.

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LIST OF ABBREVIATIONS

SADP	Scale of Attidues Towards Disabled Persons
ADA	Americans with Disabilities Association
IRB	Institutional Review Board

CHAPTER 1: INTRODUCTION

Disability proves inescapable within society regardless of medical intervention and advancement, with 15% of the population being disabled (Shakespeare 2017). According to the ADA, disability is defined in the following "A physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment" (ADA). Quality healthcare, as well as most aspects of livelihood, is directly impacted by the attitudes and perceptions of disability among society and healthcare professionals (Adamakidou, Fouka, Govina, Kalemikerakis, Plakas, Polikandrioti, & Vasilopoulos 2020). The provision of accessible and quality healthcare from professionals in the health setting is a pertinent concern.

Stigma is a highly variated concept, through which multiple definitions have accumulated over time. According to Barré and others, Stigma encompasses discrimination that denies an individual social acceptance, reduces opportunities, and denies equality based on inferiority (Barré, Dovidio, Earnshaw, Logie, Simbayi, Stangl, and van Brakel 2019). Stigma negatively impacts individuals living with disabilities and their livelihood. Individuals living with disabilities face multiple barriers within healthcare including discrimination, negative attitudes, and communication deficits (Shakespeare 2017). Associated with the stigmatization of disability, the preconceived notions and attitudes of healthcare professionals serves to impact the quality of care provided. Although the definition of attitude has been described in multiple formats one crucial variation is presented in the following as, "the degree of positive or negative affect associated with some psychological object" (Edwards 1983). This is accurately represented within the SADP tool utilized as it specifically denotes both positive and

negative statements presented to participants. The significance of attitude holds weight in the ideology that attitude influences behavior. Attitudes, both positive and negative, can serve to influence the provision of quality care.

Positive attitudes among nursing students would serve to further improve care provided to patients with disabilities. To substantiate the need for curriculum alterations regarding nursing students' attitudes, data evaluating and analyzing these students' attitudes is needed. In the original publication, a tool titled the Scale of Attitudes toward Disabled Persons was disseminated to both undergraduate and graduate students through an anonymous questionnaire (Antonak 1982). This tool includes 24 items used to rank and evaluate the subjects' attitude and perception of individuals with disabilities (Antonak 1982).

Among nursing students, a measurement of attitudes towards patients with disabilities is important in determining areas of either success or deficit in established nursing curriculums regarding care of the patient with a disability. This study serves to collect data regarding the attitudes of nursing students enrolled in a Baccalaureate program at a southeastern university in the United States. The revision and improvement of nursing curriculum regarding evidence-based practice and current data serves to directly impact healthcare outside of the educational setting. Data collected from this study will serve to advocate for healthcare equality and equity among patients living with disabilities, as well as identify further pertinent areas of research

CHAPTER II: REVIEW OF LITERATURE

Cognitive, or intellectual disabilities, are defined in the following as, “a condition characterized by significant limitations in both intellectual functioning and adaptive behavior, that originates before the age of 22” (American Association of Intellectual and Developmental Disabilities 2022). Specifically, approximately 10% of the U.S. population among all age groups is living with a cognitive disability (Cyrus, Griffin-Blake, Hollis, & Okoro 2018). The prevalence of cognitive disability within the populations supports a demand for properly educated nurses regarding care for the patient with a disability.

Literature pertaining to the topic of patients with disabilities, specifically intellectual and developmental, and their perception regarding the healthcare setting is astoundingly negative (Hahn 2003). Multiple concerns have been expressed by patients with cognitive disabilities relating to treatment, consent, and communication within the healthcare setting (Hahn 2003). Individuals with developmental disabilities, as well as other disabilities, require above-average healthcare due to disability related complications (Archer, Boyd, Kates, Lidster, Moores, & Stobbes 2015). One such study conducted within a healthcare facility in Birmingham, UK found that positive attitudes were correlated with positive emotions (Lewis & Stenfert-Kroese 2010). This study was distributed to nursing staff across two facilities, and compounded responses from Registered Nurses, Nursing Assistants, and a Student Nurse (Lewis & Stenfert-Kroese 2010). It was suggested that less positive attitudes may be correlated with a decrease in quality of care (Lewis & Stenfert-Kroese 2010).

Nursing staff experience attributably fewer positive attitudes regarding care for the patient with an intellectual disability compared to those with physical disabilities (Lewis & Stenfert-Kroese 2010). Implications have been made that this adversely interacts with healthcare quality (Lewis & Stenfert-Kroese 2010). An explanation for the prevalence of these negative attitudes among nursing staff can be attributed to perceptions that the patient with an intellectual disability would, in essence, prove more difficult to care for (Lewis & Stenfert-Kroese 2010). For instance, the patient will most likely be separated from the general care setting, uncooperative, and aggressive or easily distressed (Lewis & Stenfert-Kroese 2010). In combination with these factors, it was also found within this study that nurses claim they would be more inclined to avoid invasive procedures, fail to inquire about pain, and refrain from taking time to properly explain procedures to patients with intellectual disabilities (Lewis & Stenfert-Kroese 2010). Regarding these findings, nurses also reported they were underprepared with skills and training to handle the patient with an intellectual disability (Lewis & Stenfert-Kroese 2010). This bias found within nursing staff regarding the care of a patient with a disability, including the disparities dependent on the specific disability, serve only to negatively impact the achievement of health equity.

A crucial area of study different than that of nursing staff, is that of nursing students. The perceptions of nursing students on the care for patients with disabilities, is an important trend to note, considering nursing students eventually become registered nurses. Conclusions drawn from these areas of study provide implications for revision on nursing curriculum. One study utilizing the SADP found that Dutch nursing students held a particularly positive perception on patients with disabilities, and in comparison, these

scores were higher than those of U.S. nursing students (Burger, Dannenberg, Rasker, Taal, & Ten Klooster 2009). This serves to imply that variations among nursing curriculums and/or societal bias does impact the perception of nursing students among these minority populations.

Another study from Turkey found that a third of nursing students had high stigma tendencies when dealing with disabled children in the clinical setting (Sahin, Sen, & Onan 2020). The sample of this study included 211 nursing students enrolled in a baccalaureate program; and used a questionnaire with a stigma scale to gather data (Sahin, Sen, & Onan 2020.) An interesting aspect of this conclusion found that a major issue cited by students was a communication difficulty/deficit during the provision of care (Sahin, Sen, & Onan 2020.) When considering studies conducted within the United States, it has been distinctly found that nursing undergraduate students are at a greater risk for holding negative attitudes towards persons with disabilities (Palmer & Tervo 2004). This study was conducted in South Dakota and surveyed 338 healthcare students, with the largest sample population consisting of nursing students (Palmer & Tervo 2004). Comparison between nursing, medical, and other allied health students were made by comparing mean scores from multiple tools including the SADP. An implication was made that nursing students may have held more negative attitudes due to negative experiences that occurred in the clinical setting with patients who have disabilities (Palmer & Tervo 2004). This highlights a trend regarding scores in the United States when compared to other programs internationally.

It has been found that there are high amounts of variation among nursing curriculums pertaining to education and exposure to patients with intellectual or cognitive

disabilities (Cashin, Eagleson, Iacono, Lennox, Salomon, Trollor, & Turner 2016). Findings in this study were concluded from a two-phase national audit conducted in Australia among nursing content (Cashin et al. 2016). Multiple pieces of evidence were used to make this conclusion of high variation including that less than half of the institutions audited provided content on intellectual disability (Cashin et al. 2016). An inference could be drawn that a substantial amount of Australian nursing students received no education on intellectual disability due to this finding (Cashin et al. 2016) This inconsistency, as well as other societal factors, can be used to explain how attitudes differ in students within nursing curriculums across the globe. Another study conducted in Greece with 368 nursing student participants found that semester progression improved attitudes, indicating that exposure and education served as a positive influence (Adamakidou et al. 2020). Increasing exposure and awareness within nursing curriculum to disability would serve to increase positive attitudes among nursing students (Adamakidou et al. 2020).

It is suggested that negative attitudes are correlated to a lack of formal education on disability, placing strain on nurses who are caring for patients with disabilities (Auberry 2018). Lack of exposure in the healthcare setting to individuals with intellectual or cognitive disabilities is also related to negative attitudes including low confidence (Cashin et al. 2016). Implications of these findings could be used to deduce curriculum revision for all disability, nonspecifically cognitive and intellectual disabilities. Negative attitudes serve to deprive individuals with disabilities of access to quality healthcare and inclusion (Sahin, Sen, & Onan 2020). In contrast to the prevalence of negative attitudes, positive attitudes among healthcare professionals could potentially improve the care for

individuals with disabilities (Adamakidou, Fouka, Govina, Kalemikerakis, Plakas, Polikandrioti, & Vasilopoulos 2020).

Disability is inescapable, and patients with disabilities oftentimes require crucial medical care. The perceptions of both healthcare professionals, students, and individuals with disabilities are pertinent in evaluating the provision of healthcare and treatment. Patients with intellectual and developmental disabilities have particularly negative perceptions of the healthcare setting; and nursing staff have been found to have negative perceptions regarding the care for a patient with an intellectual disability (Hahn 2003; Lewis & Stenfert-Kroese 2010). This finding also presents itself among nursing students regarding stigma and attitude (Palmer & Tervo 2004; Sahin, Sen, & Onan 2020). The SADP, or Scale of Attitudes Toward Disabled Persons, is a 24-item tool that was used to evaluate a multidimensional measure of attitudes held towards disabled persons in this study (Antonak 1982). An evaluation of nursing students' attitudes towards patients with disabilities serves to provide evidence promoting either the sustenance or revision of nursing curriculum.

CHAPTER III: METHODOLOGY

The model of design selected for this study is descriptive and quantitative. This design allows for exploration and gathering of data regarding the characteristics of people and groups using numerical values (Gray & Grove 2018). A strength of this design is that no intervention is required, and therefore the collection and analysis of data is simple and allows for future research to be conducted. A weakness of this design is that because no intervention is involved, no testing is performed asides from the collection and analysis of data regardless of altering variables.

In this study, a 24-item tool titled the Scale of Attitudes Toward Disabled Persons was used to collect and interpret data collect from a sample of 140 undergraduate students enrolled in a baccalaureate nursing program. According to the developer Richard Antonak this scale was developed to provide a brief, easy, and reliable multidimensional measure of attitudes toward disabled persons as a group (Antonak 1982). This instrument contains 24 items and provides both an overall and three subscale scores (Antonak 1982). The tool was adapted to include person-first language, as this is the commonly accepted and correct terminology when discussing disability. In 2004, Palmer & Tervo conducted a study with 338 health professional students using the SADP and found it to have a Cronbach's α of 0.8764 (Palmer & Tervo 2004).

The population for this study consists of nursing students enrolled in a baccalaureate program at a southeastern university. Sampling criteria included participants over the age of 18 and enrolled within a nursing program at a southeastern university. Sampling methods included convenience sampling. This will include face-to-face recruitment as well as digital recruitment in the form of emails and incentive offerings. A weakness

within this design is that all participants come from a singular university, and it does not examine the perspectives of nursing students on a large scale. A strength within this study is that the data collected will adequately reflect nursing education within a singular university, providing implications for the pertinence of exposure to disability within a sole curriculum when compared to other curriculums.

Qualtrics, an online survey software, was the setting selected for this study. A strength of this setting includes that all data will be digitally recorded and protected privately through a reputable organization. This serves to protect personal information and data effectively as opposed to handwritten surveys. A weakness within this setting is digital dissemination is easily overlooked by participants via the online format.

Ethical considerations included containing IRB approval prior to conducting research. This research was approved, and the IRB number is IRB-21-319. The questionnaire was anonymously conducted and gathered. Data and personal identifiable information were protected, and anonymity was maintained throughout the continuation of the study. All personally identifying information was kept confidential and protected under password protected computers.

CHAPTER IV: DATA ANALYSIS

This study analyzed the responses of 140 undergraduate nursing students enrolled in a baccalaureate program. Analysis of this study provided evidence of internal reliability, and this is shown through the statistical value of Cronbach's Alpha. The generalized α for this study, as represented in table 1, is equivalent to 0.799. The initial α for the SADP tool, from its original publication, is $\alpha = 0.876$ (Antonak 1982). In terms of this statistical value, a α ranging from 0.7-0.8 proves satisfactory when comparing groups (Altman & Bland 1997).

The framework of this tool includes that it can be scored differently, providing the same results only shifted either right or left linearly while maintaining equivalence. Whilst taking the questionnaire in this study, participants were scored based on how they answered certain statements that were predetermined to be either positive or negative. Responses on the SADP are formatted in a 6-point Likert-format scale, with no neutral option provided (Antonak 1982). In this tool, participants can choose from a total of 6 responses, ranging from "I disagree very much" indicating a -3, to "I agree very much" or a +3 (Antonak 1982). In this study, respondents received a score ranging from a -72 to a +72. Any negative score indicated an overall negative attitude, and a positive score indicated an overall positive score. The mean score for this study is represented in table 1, as a value of 36.49 ± 15.26.

The original publication and other interpretations of this tool added a constant of 72 to the response summations, to score the responses in the direction of a positive attitude ranging from 0-144 (Antonak 1981). This allows for accurate statistical analysis

regarding score comparisons. When comparing these results to other studies, a constant of 72 will be added to the mean score to permit proper comparison.

Considering the nature of the tool utilized, an exploratory factor analysis can be utilized to determine the validity of the SADP within this study (Chan & Idris 2017). After conducting an exploratory factor analysis, it was possible to determine the internal reliability or consistency of the tool within both subsects of positive and negative statements. In this study the positive and negative factor analysis are represented in table 1 and are considered to be satisfactory and respectable (Altman & Bland 1997).

Mean ± SD	Median (IQR)	Total Cronbach's Alpha	Positive Factor Analysis	Negative Factor Analysis
36.49 ± 15.26	38.5 (26, 46.75)	α = 0.799	α = 0.708	α = 0.707

Table 1: Statistical Results and Validity

Multiple demographics were analyzed within the administration of this questionnaire. The demographic questions asked pertained to gender, academic semester, and relation to an individual with a disability. Any correlations and values have been examined statistically and both semester and relation to an individual with a disability are represented in table 2. The demographic question pertaining to relation to an individual with a disability was found to be statistically insignificant. This was found utilizing the Mann-Whitney U test and yielded a score of P = 0.504. Significance is considered present

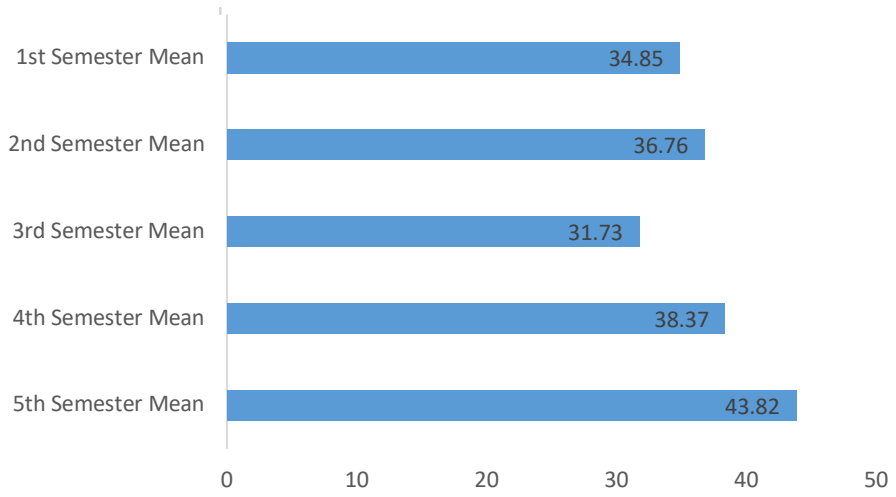
in studies where P = <0.05 (Karadamitriou, Knox, & Marshall 2018). Correlation between scores and academic semester, 1-5, was also evaluated and was determined also to be statistically insignificant. A Kruskal-Wallis Test was conducted and found a P-value of 0.420. The significance level of a Kruskal-Wallis test is considered to be <0.05 (Kováč, Ostertag, & Ostertagova 2014). Gender was not evaluated statistically due to a large discrepancy between the number of participants within each identity, even though this discrepancy is considered normal within the nursing profession (Sommer, Sundus, Younas, & Zeb 2019).

Relative with Disability (Mann-Whitney U Test)	Semester (Kruskal-Wallis Test)
P = 0.504	P = 0.420

Table 2: Statistical Analysis of Results by Demographics

`The program examined was a 5-semester program, and scores were evaluated in relation to progression throughout the program. As represented in the chart below, there was a slight consecutive increase in scores throughout progression in the program. Although it was found that there is no statistical significance related to semester progression and relation to an individual with a disability, this does not discredit the possibility of clinical significance.

Graph 1: Mean Scores of Students by Semester



CHAPTER V: DISCUSSION

This study exclusively examined a singular university, and no interventions were tested. Knowledge is a factor that may have impacted scores, specifically among participants who are either related to individuals with a disability or have received extensive education on disability. Nursing students, due to education throughout the curriculum, understand that there are multiple invisible disabilities that the normal population may not consider. According to the Invisible Disabilities Association, invisible disabilities are defined as "a physical, mental or neurological condition that is not visible from the outside, yet can limit or challenge a person's movements, senses, or activities" (Invisible Disabilities Association 2021). It may be implied that nursing students would be more inclined to state they are related to an individual with a disability due to this knowledge of invisible disability, whereas individuals outside of healthcare may only consider congenital and physical disabilities. This serves as a limitation considering this study did not delineate between specific disabilities. Limitations also exist when it is considered that unique bias may be held towards specific disabilities while this study inquired about disability in general. In this study, conclusions cannot be drawn regarding attitudes towards specific disabilities. These specific limitations incur that more academic research needs be conducted within this area of study.

Statistical analysis within this study found insignificance regarding demographic correlations, but comparison to other studies that have utilized the SADP may yield speculative conclusions. The original publication of this tool resulted in a mean score of 121.51. When comparing scores to this study, there was found to be a 10.72% decrease in positive attitudes. In fact, most other studies that have utilized this tool have scored

relatively lower in comparison to the original publication, with the original study being published in 1982. One study conducted in the United States on healthcare professional students found their mean to be 108.67, which is 10.57% lower than the original publication (Palmer & Tervo 2004). A Dutch study given to nursing students resulted in a mean of 111.87, which is a 7.94% decrease in comparison (Burger et al. 2009). These findings indicate that attitudes may have shifted since the formation and publication of this tool, or that there are external factors related to this finding.

One implication for an increase in scores from the 1980's when compared to modern day is political in nature. The Disability Rights Movements occurred in the United States approximately throughout the 1970's into the 1990's (Scotch 1989). It is to be assumed that this political movement affected the attitudes and opinions of citizens heavily, with the Americans with Disability Act being successfully passed in 1990 (Cook 1991). Active political movements as well as legal progression surrounding individuals with disabilities likely affected the mindset of young collegiate students, which was the sample of the original publication of this tool (Antonak 1981). Disability rights is no longer in the forefront of the mind within the generalized population, which may justify this apparent decrease in attitudes.

When comparing scores from this study to others there appears to be relatively no increase in attitudes throughout the progression of time. The mean of this study appears nearly identical to the mean of another U.S. study conducted in 2004, with only a 0.17% difference calculated from the mean of scores (Palmer & Tervo 2004). Another study conducted in the Netherlands stated that their scores proved slightly higher than those of their U.S. counterparts, and the research presented in this study continues to validate this

statement (Burger et al. 2009). Within this study there was found to be a 3% decrease in the mean score when compared to the Dutch study.

There are multiple factors that may explain the difference in scores between the United States and the Netherlands. It could be considered that it may be caused by the progressive nature of the Netherlands with concepts such as universal healthcare and physician-assisted suicide (Bidgood, Clarke, Daley, and Gubb 2013; Termination of Life on Request and Assisted Suicide Act 2001). Policies regarding these topics stand to indicate that, during comparison to the United States, the Netherlands presents as more progressive regarding most topics, and this may indicate why attitudes appear higher.

Comparison of these scores appears to present data that there has been little or no progression among the attitudes of healthcare/nursing students throughout the past 17 years in the United States. It has been found in other studies that having a relative with a disability has not proven statistical significance (Palmer & Tervo 2004, Burger et al. 2009). Age was also found to be statistically insignificant within the SADP in another study in 2009, which is a finding this study continues to validate (Burger et al. 2009). These findings, however, do not discredit clinical significance.

The comparisons of these scores within both the United States and the Netherlands have all proven slight in nature. It is crucial to note that these differences may be caused by error within margin. Although these differences have been slight, it is still important to evaluate why they have occurred. More importantly, understanding the differences in thought that have yielded these results aids in the progression of positive attitudes towards individuals with disabilities.

Statistical significance pertains to the probability of results occurring by chance, and thus determining whether there is indeed a cause and effect (Buyse, Pramesh, & Ranganathen 2015). In comparison, clinical significance refers to the size of an effect regardless of statistical findings, and what precisely this means to the subjects of a study (Buyse et al. 2015). Although the findings of the demographic correlations within this study were found to be statistically insignificant, the findings may still prove meaningful clinically. Semester progression, albeit not statistically significant, still may have an impact on the attitudes nursing students hold toward individuals with disabilities. Nursing curriculum serves to educate students on disabilities, and this has been proven to improve attitudes (Emrich, Moore, & Thompson 2003). The mean scores per semester slightly increased in correspondence to progression throughout the nursing program. Similar logic can be implied to relation with an individual with a disability. Individuals that have more exposure to individuals with disabilities prove to have more positive attitudes afterwards (Barr & Bracchitta 2012). This implies that there is relevance to an increase in positive attitudes with education, knowledge, and exposure.

Attitudes effect the livelihoods of individuals living with disabilities, as this also can influence the quality of the healthcare they receive (Adamakidou et al. 2020). Considering disability is prevalent within society, it is crucial to ensure quality healthcare is provided to all individuals. Stigma, and negative attitudes, impact individuals with disabilities in multiple facets of life (Shakespeare 2017). Healthcare is one such industry where disadvantageous factors can heavily impact livelihood and life.

Curriculum, particularly healthcare curriculum, serves to educate students on how to properly care for all patients. Individuals with disabilities are no exception to this

objective. Improvement and development of nursing curriculum could benefit the experiences and livelihood of patients with disabilities (Hahn 2003). This ideology has been tested and education about individuals with disabilities proves to improve attitudes among nursing students (Emrich et al. 2013). One study found that after implementing a disability-oriented teaching program scores on the SADP increased 74.88% among healthcare students (Ahmad, Nagaraj, Reddy, Rengaramanujam, Silvian, & Tedla 2021). This study among many others serve to imply that education and exposure increase positive attitudes. Curriculums for nursing students are constantly under development to incorporate evidence-based practice. Further development to include both education about and exposure to individuals with disability among nursing curriculum would serve to improve the provision of health equity.

New research concerning bias, stigma, and attitudes amongst the vast differentiations of disability should be conducted. This would help to determine if there are discrepancies among attitudes dependent on disability type, and aid in discovering if there is a specific cause. More current research within the United States across multiple universities would provide information on if attitudes are affected by location. This study serves to encourage further research to answer questions that were unable to be addressed.

CHAPTER VI: CONCLUSION

Results from this study indicate that nursing student's attitudes from a southeastern university in the United States are lower than those from students in the Netherlands and nearly equivalent to other U.S. results from students in the past. Demographic correlations between semester progression and relation to an individual with a disability proved statistically insignificant. Demographic differences may prove to impact clinical significance. Regarding care for the patient with a disability, further research and improvements in the quality of education offered are encouraged.

APPENDIX A: INFORMED CONSENT FORM

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INSTITUTIONAL REVIEW BOARD

STANDARD (ONLINE) INFORMED CONSENT

STANDARD (ONLINE) INFORMED CONSENT PROCEDURES
• ***Use of this template is optional.*** However, by federal regulations (45 CFR 46.116), all consent documentation must address each of the required elements listed below (purpose, procedures, duration, benefits, risks, alternative procedures, confidentiality, whom to contact in case of injury, and a statement that participation is voluntary). Last Edited July 7th, 2021

Today's date: 8/03/21		
PROJECT INFORMATION		
Project Title: Nursing Students' Attitudes Towards Patients with Disabilities		
Principal Investigator: Sonny Miles	Phone: 601-500-0752	Email: sonny.miles@usm.edu
College: Nursing and Health Professions	School and Program: Professional Nursing Practice	

RESEARCH DESCRIPTION

1. **Purpose**:
   Purpose of this study is to collect data regarding Nursing Student's attitudes and perceptions of disabled patients. This data will allow for conclusions to be drawn regarding the revision or effectiveness of current nursing curriculum.

2. **Description of Study:**
   [Describe the experimental procedure(s), including duration, amount of time required of the participants, number of participants, restrictions on normal activities, invasive techniques, etc.]

3. **Benefits:**
   Participants will be eligible through agreement for participation within the study to receive financial compensation via Amazon Gift Cards.

4. **Risks:**
   There are minimal to no risks associated with particpation in this resarch study

5. **Confidentiality:**
   Names and email addresses will be collected during the study, and this will solely be used to provide incentives and compensation to participants if they choose to participate. Survey data will be stored on research team members' university-issued computers/laptops. These computers/laptops are password protected, allowing only the owner to access the stored data. Once the study is completed and the data is no longer needed, it will be deleted from researchers' computers/ laptops.

6. **Alternative Procedures:**
   There are no alternative procedures.

7. **Participant's Assurance:**
   This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

   Any questions about this research project should be directed to the Principal Investigator using the contact information provided above.

CONSENT TO PARTICIPATE IN RESEARCH

I understand that participation in this project is completely voluntary, and I may withdraw at any time without penalty, prejudice, or loss of benefits. Unless described above, all personal information will be kept strictly confidential, including my name and other identifying information. All procedures to be followed and their purposes were explained to me. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. Any new information that develops during the project will be provided to me if that information may affect my willingness to continue participation in the project.

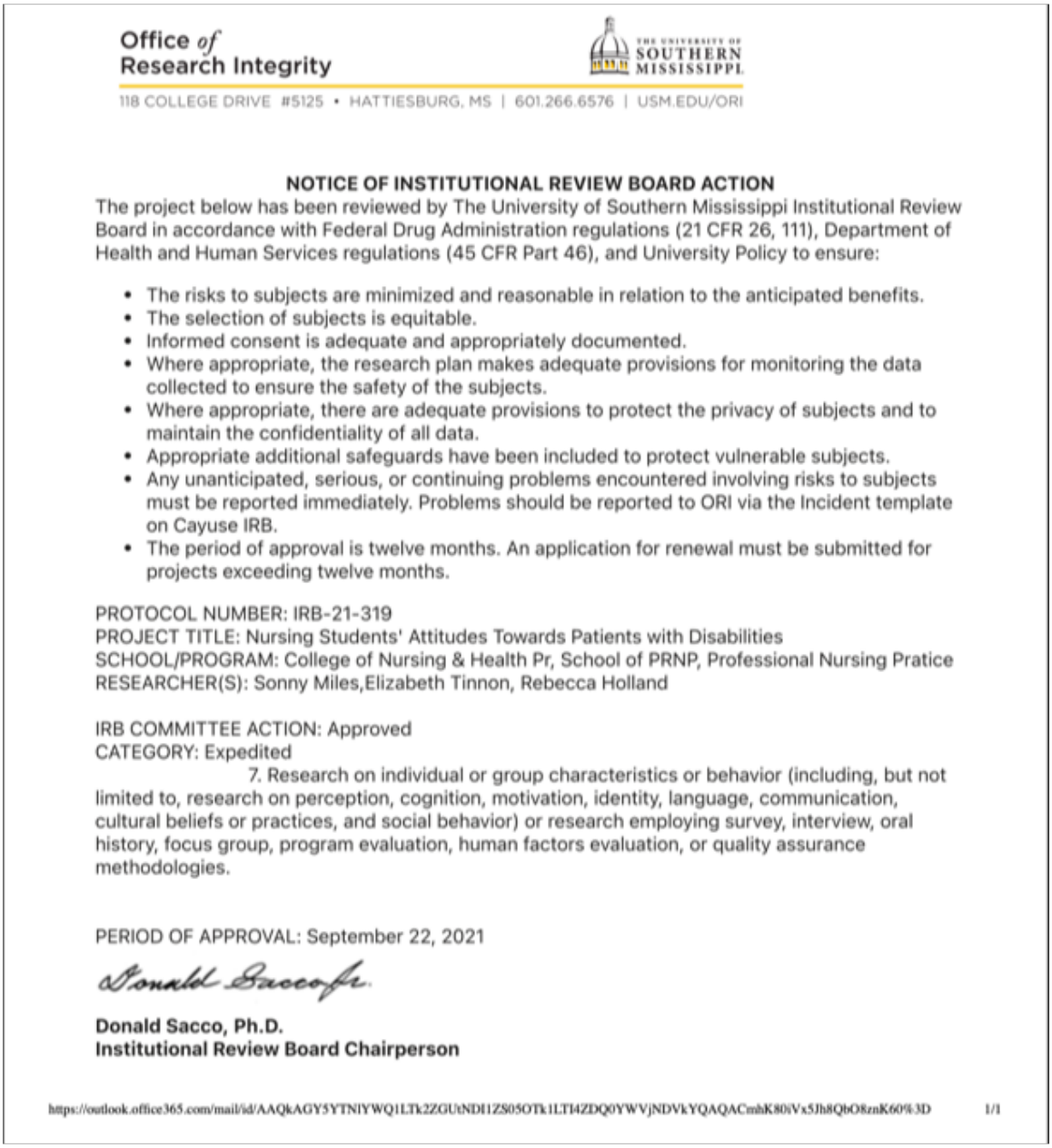
(Include the following information only if applicable. Otherwise delete this entire paragraph before submitting for IRB approval:) The University of Southern Mississippi has no mechanism to provide compensation for participants who may incur injuries as a result of participation in research projects. However, efforts will be made to make available the facilities and professional skills at the University. Participants may incur charges as a result of treatment related to research injuries. Information regarding treatment or the absence of treatment has been given above.

CONSENT TO PARTICIPATE IN RESEARCH

By clicking the box below, I give my consent to participate in this research project. ***If you do not wish to participate in this study, please close your browser now.***

☐ Yes, I consent to participate.

APPENDIX B: IRB APPROVAL LETTER



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-21-319
PROJECT TITLE: Nursing Students' Attitudes Towards Patients with Disabilities
SCHOOL/PROGRAM: College of Nursing & Health Pr, School of PRNP, Professional Nursing Pratice
RESEARCHER(S): Sonny Miles,Elizabeth Tinnon, Rebecca Holland

IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited
7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

PERIOD OF APPROVAL: September 22, 2021

Donald Sacco Jr.

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

https://outlook.office365.com/mail/id/AAQkAGY5YTNlYWQ1LTk2ZGUtNDI1ZS05OTk1LTI4ZDQ0YWVjNDVkYQAQACmhK80iVx5Jh8QbO8znK60%3D 1/1

APPENDIX C: QUESTIONNAIRE (SADP BY RICHARD ANTONAK)

Item	Statement
1.	The disabled should not be provided with a free public education.
2.[a]	Disabled people are not more accident prone than other people.
3.	A disabled individual is not capable of making moral decisions.
4.	The disabled should be prevented from having children.
5.[a]	The disabled should be allowed to live where & how they choose.
6.[a]	Adequate housing for the disabled is neither too expensive nor too difficult to build.
7.	Rehabilitation programs for the disabled are too expensive to operate.
8.	The disabled are in many ways like children.
9.	The disabled need only the proper environment and opportunity to develop and express criminal tendencies.
10.	Disabled adults should be involuntarily committed to an institution following arrest.
11.[a]	Most disabled people are willing to work.
12.[a]	Disabled individuals are able to adjust to life outside an institutional setting.
13.[a]	The disabled should not be prohibited from obtaining a driver's license.
14.	Disabled people should live with others of similar disability.
15.[a]	Zoning ordinances should not discriminate against the disabled by prohibiting group homes in residential districts.
16.[a]	The opportunity for gainful employment should be provided to disabled people.
17.	Disabled children in regular classrooms have an adverse affect on other children.
18.	Simple repetitive work is appropriate for the disabled.
19.	The disabled show a deviant personality profile.
20.[a]	Equal employment opportunities should be available to disabled individuals.
21.[a]	Laws to prevent employers from discriminating against the disabled should be passed.
22.	The disabled engage in bizarre and deviant sexual activity.
23.[a]	Disabled workers should receive at least the minimum wage established for their jobs.
24.[a]	Disabled individuals can be expected to fit into our competitive society.

Note: *Italicized numbers indicate the highest factor loading of each item.*
[a]*Agreement with these items is scored as a favorable attitude.*

REFERENCES

Adamakidou, T., Fouka, G., Govina, O., Kalemikerakis, I., Plakas, S., Polikandrioti, M., & Vasilopoulos, G. (2020). Nursing Students' Attitudes towards People with Disabilities. *International Journal of Caring Sciences*, *13*(1), 480.

Ahmad, I., Alahmari, K. A., Nagaraj Kakaraparthi, V., Reddy, R. S., Rengaramanujam, K., Silvian Samuel, P., & Tedla, J. S. (2021). Effect of Disability-Specific Education on Student Attitudes Toward People With Disabilities. *Health Education & Behavior*, 1090198121995774.

American Association of Intellectual and Developmental Disabilities. (2022). *Definition of intellectual disability.* https://www.aaidd.org/intellectual-disability/definition

Altman, D. G., & Bland, J. M. (1997). Statistics notes: Cronbach's alpha. Bmj, 314(7080), 572.

ADA. *Information and Technical Assistance on the Americans with Disabilities Act.* United States Department of Justice Civil Rights Division. https://www.ada.gov/ada_intro.htm

Antonak, R. F. (1982). Development and psychometric analysis of the Scale of Attitudes Toward Disabled Persons. *Journal of Applied Rehabilitation Counseling*, *13*(2), 22-29.

Archer, T., Boyd, K., Kates, N., Lidster, N., Moores, G., & Stobbe, K. (2015). Presence with purpose: attitudes of people with developmental disability towards health care students. Medical education, 49(7), 731-739.

Auberry, K. (2018). Intellectual and developmental disability nursing: current challenges in the USA. *Nursing: Research and Reviews*, *8*, 23-28.

Barr, J. J., & Bracchitta, K. (2012). Attitudes toward individuals with disabilities: The effects of age, gender, and relationship. *Journal of Relationships Research*, *3*, 10-17.

Barré, I., Dovidio, J. F., Earnshaw, V. A., Logie, C. H., Simbayi, L. C., Stangl, A. L., & van Brakel, W. (2019). The health stigma and discrimination framework: a global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. *BMC medicine*, *17*(1), 1-13.

Bidgood, E., Clarke, E., Daley, C., & Gubb, J. (2013). Healthcare systems: the Netherlands. *London: Civitas Health Unit*.

Burger, G., Dannenberg, J. W., Rasker, J. J., Taal, E., & Ten Klooster, P. M. (2009). Attitudes towards people with physical or intellectual disabilities: nursing students and non-nursing peers. *Journal of advanced nursing*, *65*(12), 2562-2573.

Buyse, M., Pramesh, C. S., & Ranganathan, P. (2015). Common pitfalls in statistical analysis: Clinical versus statistical significance. *Perspectives in clinical research*, *6*(3), 169.

Cashin, A., Eagleson, C., Iacono, T., Lennox, N., Salomon, C., Trollor, J. N., & Turner, B. (2016). Intellectual disability health content within nursing curriculum: An audit of what our future nurses are taught. *Nurse Education Today*, *45*, 72-79.

Chan, L. L., & Idris, N. (2017). Validity and reliability of the instrument using exploratory factor analysis and Cronbach's alpha. *International Journal of Academic Research in Business and Social Sciences*, *7*(10), 400-410.

Cook, T. M. (1991). The Americans with Disabilities Act: The Move to Integration. *Temp. LR*, *64*, 393.

Cyrus, A. C., Griffin-Blake, S., Hollis, N. D., & Okoro, C. A (2018). Prevalence of disabilities and health care access by disability status and type among adults—United States, 2016. Morbidity and Mortality Weekly Report, 67(32), 882.

Edwards, A. L. (1983). *Techniques of attitude scale construction*. Ardent Media.

Emrich, K., Moore, G., & Thompson, T. L. C. (2003). The effect of curriculum on the attitudes of nursing students toward disability. *Rehabilitation Nursing*, *28*(1), 27-35.

Gray, J. R., & Grove, S. K. (2018). *Understanding Nursing Research E-Book: Building an Evidence-Based Practice*. Elsevier Health Sciences.

Hahn, J. E. (2003). Addressing the need for education: curriculum development for nurses about intellectual and developmental disabilities. *Nursing Clinics*, *38*(2), 185-204.

Invisible Disabilities Association. (2021, January 6). *What is an invisible disability?* https://invisibledisabilities.org/what-is-an-invisible-disability/

Karadimitriou, S. M., Knox, C., & Marshall, E. (2018). Mann-Whitney U test.

Kováč, J., Ostertag, O., & Ostertagova, E. (2014). Methodology and application of the Kruskal-Wallis test. In *Applied Mechanics and Materials* (Vol. 611, pp. 115-120). Trans Tech Publications Ltd.

Lewis, S., & Stenfert-Kroese, B. (2010). An investigation of nursing staff attitudes and emotional reactions towards patients with intellectual disability in a general hospital setting. *Journal of Applied Research in Intellectual Disabilities*, *23*(4), 355-365.

Palmer, G., & Tervo R. C. (2004). Health professional student attitudes towards people with disability. *Clinical rehabilitation*, *18*(8), 908-915.

World Federation Right to Die Societies (2020). *Dutch law on Termination of life on request and assisted suicide (complete text).* https://wfrtds.org/dutch-law-on-termination-of-life-on-request-and-assisted-suicide-complete-text/

Sahin, O. O., Sen, G. K., & Onan, N. (2020). Stigma Tendencies of Nursing Students Towards Children With Disabilities: A Cross-Sectional Study. *International Journal of Caring Sciences*, *13*(3), 1563.

Scotch, R. K. (1989). Politics and policy in the history of the disability rights movement. The Milbank Quarterly, 380-400.

Shakespeare, T. (2017). *Disability: the basics*. Routledge.

Sommer, J., Sundus, A., Younas, A., & Zeb, H. (2019). A mixed methods review of male nursing students' challenges during nursing education and strategies to tackle these challenges. *Journal of Professional Nursing*, *35*(4), 260-276.