

IDENTIFYING AND EXPLORING ALABAMA NURSING STUDENTS' ATTITUDES
TOWARD CARING FOR PEOPLE LIVING WITH HIV: AN EXPLANATORY
SEQUENTIAL MIXED METHODS STUDY

by

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ABSTRACT

The aim of this study was to identify the attitudes of nursing students in Alabama toward people living with the Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS), and then further explore how specific attitudes impact students' willingness to care for people living with HIV/AIDS (PLWH). In addition, influence on attitudes based on differences in socio-demographic characteristics were investigated. Exploration into students' perceptions regarding how close others would view them if they were to care for PLWH, and students' perceptions of how their communities, religion, and nursing education have influenced their attitudes were also performed. A sequential mixed methods study examined the attitudes of senior level students (n=36) from one Baccalaureate of Science in Nursing (BSN) and three Associate Degree in Nursing (ADN) programs. Students completed the HIV/AIDS Provider Stigma Inventory (HAPSI) using Awareness and Acceptance scales to identify stigma related tendencies, and a socio-demographic questionnaire via online survey. Findings were further explored using individual semi-structured telephone interviews with students (n=9) who completed the online survey. Descriptive statistics and themes suggest that nursing students in Alabama carry generally positive attitudes and a willingness to care for PLWH, and the attitudes of close others have no influence on their own attitudes or willingness to care for this population. However, underlying stigmas were found to be associated with lifestyle factors associated with HIV transmission. There were significant differences found between White and non-White nursing students on both Acceptance and overall HAPSI scale scores, indicating more

stigmatizing tendencies toward PLWH among white students. There were differences in Awareness scores between male and female nursing students, with males scoring higher indicating more stigma related tendencies. Themes revealed through interviews suggest that nursing students have concerns about lacking HIV knowledge and experience in caring for PLWH. However, students revealed that education within their respective nursing programs had increased some HIV knowledge. Both nursing education and religious faith had influence on students' compassionate attitudes toward caring for PLWH, despite underlying stigma. Theory of Reasoned Action provided a frame work for understanding attitudes and willingness to care, and how these attitudes are influenced by students' behavioral beliefs and normative beliefs. Findings revealed in this study may assist nurse educators in developing curriculum which focuses on both psychosocial and physical aspects of caring for PLWH.

Keywords: people living with HIV/AIDs, nursing students, attitudes, nursing education, HIV/AIDS Providers Stigma Inventory.

LIST OF ABBREVIATIONS AND SYMBOLS

ADN	Associates Degree of Nursing
AIDS	Acquired Immunodeficiency Virus
BSN	Baccalaureate of Science in Nursing
HIV	Human Immunodeficiency Virus
HAPSI	HIV/AIDS Provider Stigma Inventory
PLWH	People living with HIV/AIDS
TRA	Theory of Reasoned Action
<i>M</i>	Mean
<i>SD</i>	Standard Deviation
N	Sample

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CHAPTER I:
INTRODUCTION

Background and Problem

In the decades since the first Acquired Immunodeficiency Syndrome (AIDS) cases were reported in Los Angeles and New York City in 1981, the Human Immunodeficiency Virus (HIV) epidemic has changed, with the South now experiencing the greatest burden of HIV infection, illness, and deaths of any U.S. region (CDC, 2016). This change in the HIV epidemic is due to the disproportionate cases of HIV per capita in the South. While incidences are lower nationwide, the HIV cases reported are geographically concentrated in the southern states, including Alabama (Southern HIV/AIDS Strategy Initiative [SASI], 2016; Sprague & Simon, 2014). Due to the disproportionate cases, more current studies are needed to reflect the current attitudes of nursing students within the region. This is imperative, since there are reported negative attitudes of healthcare workers within the Southern U.S. toward caring for people living with HIV/AIDS (PLWH) (Stinger et al., 2016). Given the Deep South's unique culture, which is imbedded in greater conservatism on moral and religious issues (Baunach & Burgess, 2013; Lichtenstein, 2003), more current studies are needed to identify attitudes while exploring how these factors may affect the attitudes of nursing students. This is vital since PLWH report barriers in healthcare related to negative stigmatizing attitudes of healthcare workers, including nurses (UNAIDS, 2016; Menefee, 2012).

Over the past decade, studies that reflect nursing students' attitudes towards PLWH, and who attend nursing programs in the Deep South have not been reported (Carney, Werth, & Martin, 1999), and no studies were found that included nursing students within Alabama. This is a concern because nurses play an important role in the care for PLWH and require attitudes toward caring that promote high quality and effective care to PLWH. Identifying the attitudes of nursing students is vital, because they are the future faces of nursing on the frontlines of our healthcare system. Attitudes of healthcare professionals in relation to HIV is an important determinant of their willingness to care and the quality of care they will render to PLWH across healthcare settings. It is important to understand nursing attitudes toward PLWH, because the educational preparation of nurses has been known to affect these attitudes, and the effectiveness of the care provided to this population (Mythili, Vijayalakshmi, Sailaxmi, & Rama, 2015).

Hence, the aim of this current study was to identify and explore the attitudes of nursing students' in Alabama toward caring for PLWH. Since studies including nursing students from other U.S. regions and international regions depict conflicting outcomes regarding students' attitudes toward PLWH (Carney et al., 1999; Cornelius, 2006; Earl & Penney, 2003; Relf, Laverriere, Devlin, & Salerno 2009; Peate, Souminen, Valimaki, Lohrmann, & Muinonen, 2002; Pickles, King, & Belan, 2012; Ouzouni & Nakakis, 2012; Qu, Zhang, Guo, & Sun, 2009; Stavropoulou et al., 2011; Valois, Turgeon, Godin, Blondeau, & Cote, 2001; and Veeramah, Bruneau, & McNaught, 2008). For example, descriptive quantitative studies performed by Veeramah et al. (2008) and Peate et al. (2002) found that nursing students had overall positive attitudes in caring for this population. Contradictory to these findings, other researchers reported nursing students from different regions, including students from rural settings within the United

States (U.S.) as having negative attitudes in caring for this population (Cornelius; 2006, Earl & Penny, 2003; Relf et al., 2009). These studies highlight the importance of research focused on identifying and exploring attitudes of nursing students within Alabama.

Additionally, with an increased prevalence of HIV in the South region, including Alabama, addressing nursing students' attitudes toward caring for PLWH is vital, because these future health professionals will be responsible for caring for this population across the healthcare spectrum (ADPH, 2014; CDC, 2016; Reif et al., 2017). Therefore, the question stands: Do nursing students from Alabama carry positive and caring attitudes that promote quality and effective care to PLWH? Research on this topic is warranted because the leading contributor to the delay of care and adherence to antiretroviral therapy (ART) regimes are linked to negative attitudes of healthcare workers, including nurses (Worthington et al., 2016).

According to the National HIV/AIDS Strategy (2015, [NHAS]), to reduce stigma and eliminate discrimination associated with HIV, there is a call for research to measure and address stigma in the community and healthcare systems. As part of the healthcare system, nurses play an important role in reducing health barriers for PLWH by providing supportive quality care that will improve health outcomes for PLWH (UNAIDS, 2016). This is fostered by reducing stigma and discrimination among providers in healthcare (NHAS, 2015; UNAIDS, 2016). To support these strategies at the local level, this current study sought to identify nursing students' attitudes and explore how these attitudes are influenced by the beliefs and perceived social norms that are unique to the Deep South, particularly in Alabama. The outcomes of this research are essential for informing nursing education in ways that will help better prepare students for professional practice encounters with PLWH. It is imperative that future nurses within the state receive

educational preparation, which reinforces effective and quality care for PLWH. Part of providing quality care includes nurses' having positive attitudes that foster safe and ethical treatment to reduce healthcare barriers for PLWH.

This current study focused on identifying and exploring attitudes of nursing students in Alabama to provide a deeper understanding of attitudes. In this study, the researcher identified attitudes through the use of quantitative methods, and then explored these attitudes more in depth with individual semi-structured interviews. The aim was to uncover attitudes that derive from beliefs that may be driven by stigma, which may affect nursing students' intentions in caring for PLWH. Ajzen's (1985) Theory of Reasoned Action (TRA) served as a framework and lens for understanding the outcomes of this study.

Purpose of the Study

The purpose of this sequential explanatory mixed methods study was to identify and explore the attitudes and perceptions of nursing students in Alabama toward caring for PLWH, and also explain how nursing students' attitudes may be influenced by different socio-cultural factors. "Attitudes" is defined as viewpoints developed through personal experiences and beliefs that may influence the willingness in caring for PLWH (Jennings, 2017). The outcomes of this research have practical, theoretical, and personal implications. At the *practical level*, this research provided data on the attitudes of nursing students in Alabama that can be used to inform nursing education to influence and nurture positive and caring attitudes toward this population. At the *theoretical level*, this research bridges gaps in the literature on this issue, relative to Alabama, and provides a foundation of data to aid future studies on this phenomenon. At the *personal level*, this research served as a means to explore attitudes to identify awareness of

students' own attitudes, acceptance level of students toward caring for PLWH. This research also serves to build upon existing perceptions pertaining to how attitudes can affect a nursing student's willingness to care for PLWH, whether positive or negative.

Research Questions

The following research questions originate from existing literature surrounding this phenomenon and the researcher's own professional experiences. These questions were explored to address the gap relative to the phenomena in the Deep South region. In identifying and exploring attitudes of Alabama nursing students toward caring for PLWH, the TRA constructs—*behavioral beliefs* and *normative beliefs* were used as a framework and a lens for analyzing the answers to the following four research questions. The qualitative questions presented are to support and overlap the quantitative questions, by providing a means for studying this topic using a mixed methods approach to explore more deeply the attitudes of nursing students and factors leading to certain attitudes in caring for PLWH.

Quantitative Questions

1. Do nursing students carry stigmatizing attitudes toward caring for PLWH?
2. Are there differences in specific attitudes of nursing students toward caring for PLWH based on the following characteristics: (a) Age; (b) Race/Ethnicity; (c) Gender; (d) Religion; (e) Knowing someone with HIV/AIDS; (f) Ever cared for someone with HIV/AIDS; (g) Community setting the student was raised in: urban, suburban, or rural; (h) The community setting the student currently lives in: urban, suburban, or rural; or (i) Level of degree student is obtaining, i.e. Associates of Nursing (ADN) or Bachelor of Nursing (BSN)?

Qualitative Questions

1. How do nursing students' attitudes affect their willingness to care for PLWH?
2. How do nursing students perceive how others will view them if they were to provide care to PLWH?

Rationale for Quantitative and Qualitative Questions

Quantitative question 1 identified attitudes of nursing students toward caring for PLWH. *Quantitative question 2* provided insight into how different sociodemographic characteristics may influence attitudes. *Qualitative question 1* provided a deeper understanding about connections between students' attitudes and the willingness to care for PLWH. While *qualitative question 2* provided insight into whether a student's level of willingness to care may be influenced by how they perceive others' opinions toward them in caring for PLWH.

Assumptions

Student nurses' sociocultural experiences and level of HIV/AIDS knowledge will have an impact on the attitudes they carry toward caring for PLWH. Negative attitudes will affect the students' willingness to care for this population, and positive attitudes will increase students' ability to care for PLWH. Students, who perceive that others will judge them negatively, will depict less willingness to care for this population. Likewise, students who state others will perceive them in a positive manner will depict more willingness to provide care to PLWH.

Theoretical Perspective

Pragmatic Worldview

The inquiry worldview (philosophical world view) is a basic set of beliefs that guide actions and a general orientation about the world and nature of research (Creswell, 2013). The

inquiry used for this research study followed a pragmatists worldview. This philosophical assumption set the underpinnings of this explanatory sequential mixed methods study and helped to define the researcher's position within the study. Pragmatism is not committed to any one system of philosophy, which applies to mixed methods research that draws liberally from both quantitative and qualitative assumptions (Creswell, 2013). This study helped broaden the understanding of individual perspectives from nursing students that cannot be captured through quantitative and qualitative methods alone. Use of mixed methods assisted in answering the research questions and provided a more holistic perspective pertaining to how attitudes direct willingness to care for PLWH. It also provided understanding in regard to beliefs that affect attitudes toward caring behaviors that are influenced by experiences within the participant's community, religion, and nursing education.

Theory of Reasoned Action

Ajzen and Fishbein's Theory of Reasoned Action (TRA) was used as a lens and framework for understanding attitudes and beliefs and interpreting the outcomes of this study. This theory originates from the field of psychology and behavioral health (University of Twente [UT], 2017). TRA has provided a theoretical framework for previous studies in nursing education focused on attitudes of students related to HIV (Cornelius, 2006; Valois et al., 2001), and professional nurses in performing specific skills (Kamunge, 2013). This theory provides a basis for defining attitudes needing to be changed. TRA also provides a basis for examining relationships between beliefs, attitudes, and behavioral intents of students (Valois et al., 2001). Additionally, TRA provides insight into how intended actions and behaviors toward caring for PLWH are shaped by subjective norms (personal experiences) within a person's socio-cultural

sphere. Subjective norms relate to a person's social pressure to comply with social norms, or other people views and attitudes.

The basic tenets of TRA are that attitudes, and motivation influence intended behavior. Attitudes and behavior are interrelated. In the case of this proposed study, attitudes were explored in nursing students to identify how attitudes affect behaviors toward caring for PLWH. This theory postulates intent as the most important determinant of a person's behavior (University of Twente, 2017). The constructs of TRA are behavioral beliefs and normative beliefs:

Behavioral beliefs. These beliefs are concerned with the consequence of performing a certain behavior or *attitude toward the behavior* (Ajzen, 1985; Valois et al., 2001).

Normative beliefs. These beliefs are the measurement of an individual's perceptions of how people they care for will view the behavior in question--known as *subjective norm*, or how likely they are to conform to these views (University of Twente, 2017).

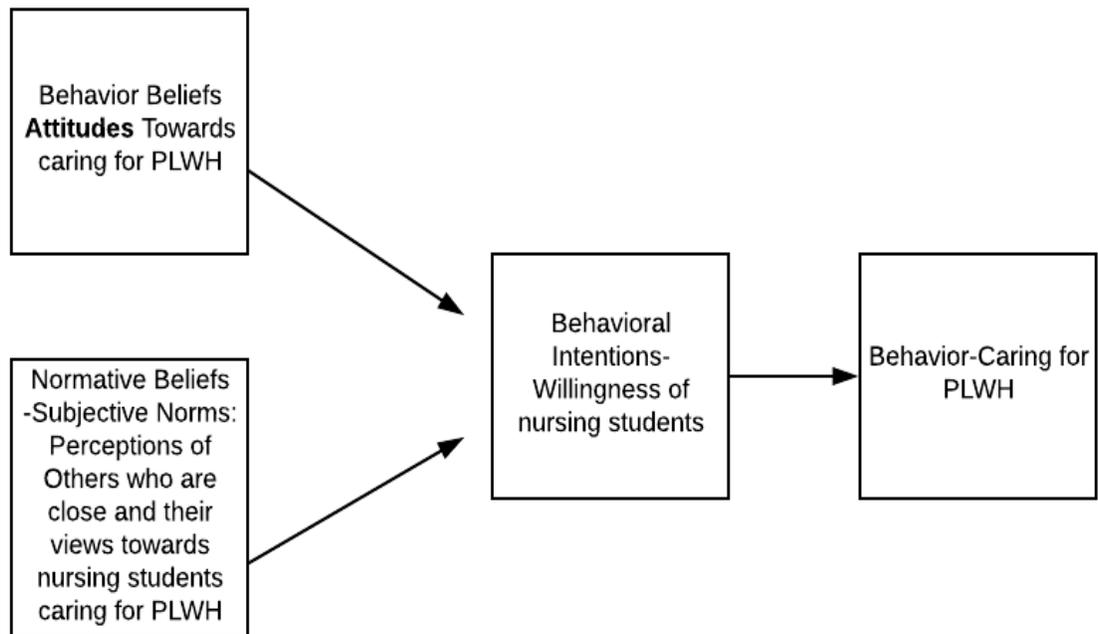


Figure 1. Adaptation of the Theory of Reasoned Action.

In this study, TRA provided a framework and lens for understanding how students’ attitudes and willingness to care for PLWH are related. TRA also provided a lens for understanding how positive or negative influences from subjective norms may impact attitudes and their decision-making in caring for PLWH.

Significance of the Study

The significance of this study is that it provides insights regarding current attitudes of nursing students in Alabama toward caring for PLWH. An exploration of a students’ perspectives toward thinking about caring for this population helped provide a deeper understanding of attitudes. This study helps bridge the gap in the literature on this phenomenon from Alabama and adds to the existing body of research on this topic. It also provides current data for future larger studies exploring attitudes of students related to caring for this population.

Finally, this study may inform future nursing education and curriculum development in ways that will help build positive and caring attitudes among students.

Summary

Given the disproportionate cases of HIV in the South region, including Alabama, more recent studies are needed to reflect the current attitudes of nursing students within this region to identify stigma related attitudes that can be carried into their professional practices. This is imperative, because nursing students from the U.S. South, including Alabama, have been underrepresented in studies pertaining to this phenomenon (Carney et al., 1999; Cornelius; 2006). Therefore, this current study addresses this imperative using an explanatory sequential mixed methods research design to identify and explore the attitudes of nursing students in Alabama toward caring for PLWH. This study assisted in determining attitudes of nursing students within the state, and also made connections between the influence community culture, religion, and nurse education on nursing students' attitudes and willingness to care for PLWH. This study also helped to bridge the gap in existing literature on this issue related to nursing students' attitudes and provides a foundation for future research pertaining to this topic. In addition, outcomes from this study can serve to inform nursing education in ways that will aid nursing students' in building positive and caring attitudes toward PLWH.

Definition of Terms

Attitude: viewpoints developed through personal experiences and beliefs that influence behavior.

Associates Degree in Nursing: a two- to three-year degree in nursing with focus in physical and social sciences, and nursing concepts for foundational practice. Also known as an associate of science in nursing or associates in applied science in nursing.

Baccalaureate of Science in Nursing: a four-year degree majoring in nursing with a focus on physical, social sciences, behavioral sciences, community health, evidence-based research, and management.

Behavior Beliefs: attitudes and beliefs toward behaviors.

Normative Beliefs: measurements of an individual's perceptions of how people they care for will view the behavior in question.

Stigma: a strong feeling or disapproval about particular circumstances, personal qualities, or characteristics.

Subjective Norms: social pressures or influences to perform or not to perform a behavior; based on conforming to others' views.

CHAPTER II: LITERATURE REVIEW

The following databases were utilized for the literature review: CINAHL, ProQuest, PubMed, Cochrane Database, and state and national health databases. Search terms were HIV epidemiology and the Deep South, HIV rates, HIV and AIDS education, attitudes and HIV stigma, nursing student attitudes, faculty attitudes and HIV, HIV nursing curriculum, HIV/AIDS stigma, and attitudes of health professionals and HIV. This literature search revealed a number of references that are presented in seven categories to reflect pertinent literature for this study. Those categories are HIV surveillance, HIV related stigma, health disparities and HIV, attitudes of healthcare professionals, nursing students' attitudes, impact of nursing education on students' attitudes, and nurse faculty attitudes.

HIV Surveillance

To provide a deeper understanding of the importance of this current study, the focus on current data related to HIV is initially required. Despite scientific advances and emerging trends found through ongoing research, HIV/AIDS remains a global epidemic and no cure exists. This disease affects 36.7 million people worldwide and 1.8 million new infections were reported in 2016 (UNAIDS, 2016). There are 19 million people living with HIV who are unaware of their status (UNAIDS, 2016). In Western and Central Europe and North America there were 2.1 million PLWH, and there were 73,000 new HIV infections in these regions in 2016 (UNAIDS,

2016). According to the Centers for Disease Control (CDC, 2016), an estimated 44% of all people living with an HIV live in the Southern U.S, which only accounts for one-third (37%) of the overall U.S. population. HIV diagnosis rates for people living in the South are higher than Americans overall (CDC, 2016).

In the decades since the first HIV cases were reported in Los Angeles and New York City in 1981, the HIV epidemic has shifted, with the South now experiencing the greatest burden of HIV infection, illness, and deaths of any U.S. region (CDC, 2016). Reif, Whetten, Wilson, and Gong (2012) identified the most targeted states for increased HIV infection and death rates, as being in the southern states of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and East Texas. These states are classified as targeted states due to other poor health indicators, which are coupled with disproportionate rates of HIV (Reif et al., 2012). Only 22% of the U.S population falls within the Deep South states; however, 35% of new HIV infections are found here (Reif et al., 2012). In Alabama, by the end of 2014, there were 5,480 PLWH in the state and 45% of people living with this disease had progressed to stage three AIDS infection (ADPH, 2014). Alarmingly, there are PLWH in every county in Alabama (ADPH, 2014). Therefore, due to disproportionate HIV cases in the south, including Alabama, future nurses should be prepared for the unique challenges PLWH face, including HIV related stigma and health disparities.

HIV Related Stigma

There are a number of diseases that are stigmatized--mental disorders, venereal diseases, leprosy, and certain skin diseases, in addition HIV and AIDS (Sartorius, 2007). People who have such diseases are discriminated in the health care system and in their communities. People living

with stigmatized illnesses usually receive much less social support than those who have non-stigmatizing illnesses. Additionally, PLWH may have difficulties in organizing their life if their disease has caused impairment that can lead to disability and handicaps (Sartorius, 2007).

Santong (1989) expressed, in *Illness as Metaphor and Aids and its Metaphors*, there is a public notion that people who have contracted HIV are judged more harshly, because this is a disease brought on by oneself and the disease is easily viewed as punishment for being promiscuous, specific sexual practices, and drug use. Like syphilis, AIDS resulting from HIV infection, carries with it phobias and fear of contamination within the general population in greater proportions, which affects already stigmatized groups (Santong, 1989). PLWH experience multiple layers of stigma: external stigma within the general population, internal stigma from how they will be viewed or treated by others, and other social stigmas related to race, sexuality, and other lifestyle factors. These stigmas can be aggravated by the societal views and conservative beliefs that are carried by many communities in the Deep South region. This type of stigma is reflective of the stigma among pastors who were unaware of their underlying stigma when discussing their willingness to be involved in HIV prevention activities within rural southern communities (Aholou, Cooks, Murray, Sutton, Gual, Gaskins, & Foster, 2016). While this previous statement is not directly related to nurses, it is noteworthy since nurses, just like pastors, are important community members who PLWH can rely on for both moral and spiritual support. The Deep South's cultural differences with greater conservatism on moral, religious, and political issues may produce distinct forms of stigma and prejudices that can lead to negative health consequences for PLWH (Lichtenstein, 2003). Moral effects on stigma are important for understanding stigma related attitudes, which impacts PLWH and their willingness to seek

healthcare. It is also important to understand how stigma is utilized as a method of social control in local communities (Lichtenstein, 2003).

Furthermore, demographics are significant considering social stigmas related to race and sexual orientations are coupled with HIV stigma, leading to increased health disparities among these groups. Results from an HIV stigma study conducted in the Deep South indicated substantial HIV related stigma in the region (Reif, Wilson, & McAllester, 2017). The impact of HIV in the South varies by race, with African Americans being severely affected. Rates of Black men and women account for 54% of new HIV diagnosis, and of all Black MSM diagnosis in 2014, more than 60% were living in the South (CDC, 2016). While the epidemic in the South is primarily urban, the Deep South states have a greater number of new diagnoses in suburban and rural areas than anywhere else in the country (CDC, 2016). HIV positive individuals (n=201) who took part in a survey study reported high levels of stigma and discrimination experiences, along with significant self-perceptions of community HIV stigma, disclosure related stigma, and internalized stigma. Of participants who responded, 62% reported stigma as being multi-layered, being they reported more than one type of stigma in addition to HIV stigma. The most commonly reported stigmas were related to race and sexual orientation (Reif, et al., 2017).

Health Disparities and HIV

In the Deep South we face the following challenges in addressing the HIV epidemic: limited access to healthcare services and limited specialized workforce in caring for PLWH; in addition to negative attitudes toward routes of transmission of HIV (Baunach & Burgess, 2013; CDC, 2016). These challenges lead to decreased quality of care due to limited access to healthcare providers, higher levels of poverty due to feelings of isolation and internalized stigma

of PLWH themselves, and the external stigmas toward HIV in rural communities (Menefee, 2012). Additionally, the structural barriers of poverty and poor health infrastructure prevent people from receiving needed treatments. Poverty and poor health infrastructure lead to decreased healthcare access, and the presence of stigma affects the person's networks and relationships resulting in decreased social support within their communities (Menefee, 2012). This discourse is further fueled by silence and distrust among PLWH towards their respective communities (Menefee, 2012).

To understand the HIV epidemic in the Deep South, the overall general health of the region must be brought to the forefront to examine HIV in the context of the health rankings of the region (Menefee, 2012). When compared with other areas of the United States, the Deep South ranks poorly on many health indicators in addition to AIDS incidence (Menefee, 2012). For instance, when analyzing Alabama's overall health rating, it was found that the state is ranked 47th out of 50 in poor health ratings, and has one of the poorest ratings for premature deaths, heart disease, and diabetes. Alabama also ranks 48th in Chlamydia cases. In addition to Alabama's poor health rank, the state also ranks 30th in the nation in having limited access to primary health care providers (United Health Foundation, 2015). This is important because PLWH are living longer and may also deal with other complex disease processes that result in even poorer health outcomes that are left untreated due to poor access to healthcare. In addition, poverty is also an indicator of access to health services for PLWH. Increased levels of poverty in the Deep South not only limit the ability of individuals to access health care, but also limits the ability of states in the Deep South to distribute the financial resources necessary to provide adequate HIV and AIDS prevention and treatment (Reif, Geonnotti, & Whetten, 2006).

Providing prevention and treatment in the Deep South is further complicated by the fact that these states have a large proportion of their population living in rural areas compared with the other Southern states (Reif et al., 2005).

Attitudes of Healthcare Professionals

Stigmatizing attitudes and discrimination among healthcare professionals are also key barriers to both the delivery of quality care and the utilization of care by community members (Stavropoulou et al., 2011; UNAIDS, 2016). A total of 1,101 health providers participated in a voluntary, anonymous survey where demographic characteristics, individual attitude, and perceived social norms toward PLWH, discrimination intent at work, general prejudicial attitude, and knowledge on HIV and AIDS were measured (Li, Lee, Thammawilaya, Jiraphongsa, & Rotherman-Borus, 2009). Participants who demonstrated a similarity between their personal views and what they thought most people in society believe were less likely to face discrimination by other healthcare professionals. However, multiple logistic regressions revealed that participants who were younger, or reported personal contact with PLWH, and carried accepting attitudes toward PLWH, were more likely to be discriminated against among other healthcare professionals (Li et al., 2009).

To add to this discourse, a recent study of 641 healthcare workers in Alabama and Mississippi, conducted by Stringer et al. (2016) identified 89% of clinical staff endorsed discriminating attitudes and few participants reported having HIV training. In addition, 91% of healthcare workers who worked in rural clinics also endorsed stigmatizing attitudes (Stringer et al., 2016). Stinger et al.'s study highlights the importance of exploring attitudes among nursing students in Alabama to inform nursing education in ways that will help students build positive

and caring attitudes for practice encounters with this population. This study also confirms that lack of HIV education in nursing programs can perpetrate fear among students and lead to stigmatizing attitudes that can be carried into his or her professional nursing practice (Frain, 2017). Negative attitudes of nurses toward PLWH leads to poor quality of nursing care for this population (Pickles, King, & Belan, 2009).

Nursing Students' Attitudes

Existing studies that have explored attitudes of student nurses toward caring for PLWH are conflicting. Both positive and negative attitudes have been reported in studies related to attitudes among students toward caring for PLWH. However, most studies found in the literature search suggest students carry negative attitudes toward caring for this population. The following studies discussed in this section revealed that negative attitudes stem from fear of contagion, lack of knowledge, and how they perceive others will view them if they care for PLWH. All are issues that can contribute to unethical nursing practices in caring for this population when it relates to the rights of autonomy, confidentiality, and informed decision-making.

A descriptive study performed by Veeramah et al. (2008) found that senior nursing students and student midwives felt they did not have the educational preparation to care for the physical and psychological needs of PLWH, but all had the willingness to care, which is suggestive of positive attitudes. This finding echoes an earlier study revealing positive attitudes toward caring for PLWH (Peate et al., 2002). In contrast, other research surrounding this phenomenon indicated nursing students from different countries and regions of the U.S., including the South region, have negative attitudes toward caring for this population (Cornelius; 2006, Earl & Penny, 2003; Relf et al., 2009). Similarly, in a comparative study of American

nursing students and Turkish nursing students, Atav, Sendir, Darling, and Acaroglu (2015) revealed that American students exhibited less compassion toward PLWH and exhibited more professional resistance in referring HIV patients to trained specialists. These attitudes are similar to those discovered by Relf et al. (2009), who revealed that nursing students' attitudes and beliefs about HIV care were not reflective of the ethical practice standards of the nursing profession. Students' were less likely to protect a patient's rights to confidentiality and autonomy: the right to informed consent, and the right to refuse treatments and procedures (Relf et al., 2009).

In addition, a study by Cornelius (2006) revealed that nursing students from Virginia also perceived disease contagion as a major factor that significantly correlates with nursing students' willingness to care, heightened anxiety, and limited knowledge to providing care to PLWH. Similar findings were reported in other studies related to the knowledge, perceptions, and attitudes (Arora, Jyoti, & Chakravarty, 2014; Atav et al., 2014; Herr et al., 2012; Qu et al., 2009). In addition, negative attitudes not only stem from fear of disease contagion, but also from how students perceive others will view them if they care for PLWH. Oliver and Dykeman (2003) reported in their study that nursing students' anxiety levels were not related to personal attitudes toward caring for PLWH. Instead, the researchers' found that anxiety among students, toward caring for PLWH, was due to fear of rejection by family and friends for providing care to this population (Oliver & Dykeman, 2003). Emotional stress caused by prejudice-based attitudes toward PLWH was noted to impede communication between nursing students and PLWH (Stavropoulou et al., 2011).

Surprisingly, Pickles et al. (2009) reported there were no significant differences in attitudes of students based on age, gender, previous HIV education, or previous experience in caring for PLWH. However, the researchers identified significant differences in attitudes based on country or region of citizenship (Pickles et al., 2009). This information suggests future research be broadened to include nursing students from multiple regions and counties within Alabama, to explore differences that may be affected by varying sociocultural aspects of students.

Impact of Nursing Education on Student Attitudes

Although Pickles et al. (2012) reported no significant differences in students' attitudes in relation to previous HIV education, the majority of studies exploring attitudes of students have indicated that education plays an important role in prevention and quality care measures in relation to HIV/AIDS care. Nursing education can have a positive impact on students' attitudes when providing care to PLWH, by providing opportunities for self-reflection and incorporation of learning opportunities for ethical decision-making related to HIV care (Carney, Werth, & Martin, 1999; Frain, 2017; Rose, 2009).

Bektas and Kulakac (2007) stressed the need to strengthen all aspects of HIV education to improve nursing students' attitudes and willingness to care for PLWH. Studies depicting the outcomes of incorporating HIV competencies throughout nursing curriculum are limited. Missed opportunities in providing education related HIV competencies related to psychosocial, spiritual, ethical, and legal issues were generalized, and did not include special considerations related to HIV care (Bektas & Kulakac, 2007). However, Gagnon and Cator (2015) presented a pilot study that identified gaps found in the curriculum where further HIV education needs to be adapted in

entry-level nursing courses in Canada. The pilot project took place at the University of Ottawa. The goal was to map out current courses offered in undergraduate nursing education, using the HIV/AIDS nursing core competencies as the framework for the mapping. Data were collected from 21 nursing courses, including courses with clinical practicums, and seven prerequisite courses (anatomy, microbiology, pathophysiology, pharmacology, and social determinants of health). Data included content from syllabi, emails, and information collected from group discussions. The data from each course was cross-referenced with the HIV and AIDS nursing core competencies. Coverage of core competencies was defined by the number of times each competency was covered per course. HIV and AIDS core competencies consists of four categories: (1) HIV prevention, testing, treatment, and care; (2) psychosocial, spiritual, ethical, and legal issues; (3) psychomotor skills necessary to provide HIV and AIDS nursing care; and (4) professional expectations required in the delivery of HIV and AIDS nursing.

The findings from the mapping revealed that only two courses cover category one, which are courses taught in the senior year: Complex Nursing Care and Community Health Nursing. This means that students have little to no exposure to HIV content for the first three years of the program. The researchers also noted that basic knowledge of HIV and AIDS is not covered in prerequisite courses, and that knowledge is also lacking in clinical practice, because it has not been traditionally covered in nursing education. Missed opportunities were discovered in providing education related to category two. Topics related to psychosocial, spiritual, ethical, and legal issues were generalized, and did not include special considerations related to HIV and AIDS care. For category three, psychomotor skills were well covered, but areas of improvement were identified with universal precautions, and issues related to inappropriate or inconsistent use

of universal precautions did not receive much attention. The last area of improvement needed was teaching students harm reduction when working with PLWH. Category four, professional expectations was covered in 18 courses, but was not specific to the delivery of HIV nursing, and it was noted by the authors that competencies need to be carried into clinical practice settings (Gagnon & Cator, 2015). This study echoes the findings from Frain's (2017) interventional study of preparing students for HIV nursing. Prior to HIV education, students exhibited negative attitudes toward caring for PLWH and carried little knowledge about this disease. However, positive attitudes were reported after an HIV intervention using speakers living with HIV and HIV specialized healthcare professionals in educating undergraduate nursing students (Frain, 2017).

It is imperative that nursing education examine how training influences the actual treatment of PLWH. The impact of improved HIV education for nursing students is vital in preparing confident and competent nurses for professional practice (Carney et al., 1999; Earl & Penney, 2003; Gagnon & Cator, 2015). This can only be done by promoting opportunities for reflection on personal attitudes of students in caring for PLWH by incorporating HIV education into existing nursing curriculum. Exposing nursing students to educational experiences with HIV allows educators to have an open the dialogue with students to discuss their own attitudes, misconceptions, and perspectives in caring for PLWH. New teaching-learning strategies are needed to help nursing students prepare through self-reflection on attitudes, in order to promote ethical nursing practice and quality of care in their future practice encounters with PLWH (Relf et al., 2009).

Nurse Faculty Attitudes

It is also important that nurse faculty assess their own attitudes toward caring for and teaching about PLWH, because students' role model the behaviors of their nurse educators. According to Herr et al. (2012), teachers who report the least experience with HIV teaching reported the least supportive attitudes, perceived the most barriers, and had the lowest efficacy and outcomes expectations related to teaching HIV prevention. Although this study was not directly related to nursing faculty, but to health educators of high school students, the findings are significant for nurse faculty as well. Attitudes carried by faculty in relation to PLWH may have a direct impact on attitudes students develop during their time in their respected nursing programs. Although this literature review did not reveal research pertaining to the impact of nursing faculty on the attitudes of nursing students in relation to HIV care, the study provides insight into the importance of self-reflection of faculty on attitudes toward PLWH and HIV education.

Gaps in the Literature

There were several limitations found in this literature review. The majority of the studies discussed in this research were studies from other countries: Australia, Canada, China, Greece, and India (Arora et al., 2014; Ouzouni & Nakakis, 2012; Peate et al., 2002; Pickles et al., 2012; Stavropoulou et al., 2011; Qu et al., 2009; Valois et al, 2001). Although these studies provide useful insights, they may not depict the attitudes of nursing students in the Deep South region of the U.S., including Alabama. The majority of studies were quantitative in nature and restricted to preset statements found on questionnaires or surveys. No qualitative or mixed methods studies were found during the literature search relative to this topic that provide a deeper understanding

of attitudes and how they may be influenced by a person's communal and religious beliefs. Because students from Alabama are unrepresented in these studies, they do not depict the attitudes that may be unique to students within the Deep South or Alabama. Given then Deep South's unique culture, which is imbedded in greater conservatism on moral and religious issues (Baunach & Burgess, 2013; Lichtenstein, 2003), more current studies are needed to identify and explore attitudes while exploring how these factors may affect the attitudes of nursing students.

To address these gaps, this current study aimed to identify attitudes of nursing students in Alabama using a sequential mixed methods approach. The goal was to first examine overall attitudes of nursing students through quantitative measures. Then, explore these attitudes using the subjective meaning of participants. The aim was to explore connections between attitudes, willingness to care, and factors related to influences of community, religion, and nursing education on nursing students' attitudes toward caring for PLWH.

CHAPTER III:
METHODOLOGY

Sequential Mixed Methods Design

Mixed methods research is an approach to inquiry that combines or associates both quantitative and qualitative forms. It involves philosophical assumptions, the use of quantitative and qualitative approaches, and the mixing of both approaches in a study (Creswell, 2013). Employing mixed methods in a study enhances its credibility (Creswell & Plano Clark, 2007). Hence, this study utilized an explanatory sequential mixed method design employing two separate phases of data collection. This study aimed to identify attitudes of nursing students in Alabama, employing a quantitative approach, by first detecting overall attitudes of nursing students and comparing attitudes with specific sociodemographic characteristics using an online survey instrument. The researcher then explored these attitudes using the subjective meaning of participants gathered through individual semi-structured interviews. Use of this qualitative approach helped to provide a deeper understanding of attitudes on willingness to care for PLWH. Additionally, employing a qualitative approach using individual interviews helped the researcher explore influences of community, religion, and nursing education on nursing students' attitudes toward caring for PLWH.

Participant Sampling

Participants consisted of senior level nursing students from one Baccalaureate of Science in Nursing (BSN) and three Associate Degree in Nursing (ADN) programs at both university and

community college settings in the west, central, and eastern Alabama regions. Students were identified through correspondence with program leaders and nursing faculty at selected institutions, who allowed the researcher to visit their classrooms and speak to the students about participating in this study. Two universities granted Institutional Review Board (IRB) approval, and two faculty emails supporting and approving recruitment from community colleges were received from the selected institutions. These colleges were approved via The University of Alabama's IRB. All approvals were received prior to the researcher beginning the study. IRB Approvals and Faculty approvals from the selected institutions can be found in Appendices A through E.

Data collection occurred through the use of an online survey via Qualtrics and took place from January through February 2018. The survey link was distributed in a recruitment letter handed out to students during the researcher's visits to their respective classes (Appendix F). The survey was comprised of a sociodemographic questionnaire and the HIV/AIDS Provider Stigma Inventory (HAPSI), developed by Rutledge, Whyte, Abell, Brown, and Cesnales (2011). The results of the survey were downloaded into SPSS version 25 for analysis. For the qualitative phase, semi-structured private audio-recorded interviews were completed via telephone with individual students between May through June 2018. Interviews were performed with participants who had completed the survey, and who had also consented and volunteered to be contacted for the interviews. Prior to ending the interviews, participants were given the opportunity to ask any questions and provide additional clarification regarding their responses to interview questions. Interviews were transcribed verbatim by the researcher, and manually coded using Microsoft Word document tools.

Participant Population

Recruitment of participants for this study took place at four different institutions across the western, central, and north regions of Alabama. These institutions included BSN and ADN programs at two universities, and ADN programs at two community colleges. The inclusion criteria were students between the ages of 19 through 60 years old and who were enrolled in the senior year of their respective nursing programs (BSN or ADN). This study excluded entry level students in both nursing programs, graduate level students, and students under the age of 19 years and over the age of 60 years. No compensation was offered or given to participants for participating in the study. No study related cost was charged to participants. Additionally, there was no direct benefit to participants.

Population Sample for Quantitative Phase

Utilizing the program G* Power, a priori power analysis indicated that a minimal sample size was 128, with 64 participants within each group was needed for computing two-tailed independent *t* tests and one-way ANOVAs. This priori power analysis was computed using a medium effect size and a .80 power. Through convenience sampling, a total of 252 students from one BSN program and three ADN programs were recruited to take part in this study across the west, central, and north regions of Alabama. Recruited students included 105 BSN students and 147 ADN students. All participants were enrolled in one of their last two semesters of their respective nursing programs. Of those nursing students who were recruited, 16.6 % (n=42) accessed the survey via the Qualtrics survey link that was included in the participation letter. Six participants' responses were excluded for failure to complete surveys past the sociodemographic questionnaire. Ultimately, 14.3% of participants (n=36) completed 100% of the survey: 58% of

BSN ($n=21$) and 42% of ADN ($n=15$). Due to the poor response rate, the researcher was unable to meet this criterion based on power analysis. This resulted in a limitation to the quantitative findings from this study. Therefore, readers are warned that the following quantitative results in Chapter IV are not generalizable beyond the participants who took part in the study. However, this sample provided a robust population for purposeful sampling procedures used for the qualitative phase of this study. Results from the qualitative analysis helped to strengthen some of quantitative findings.

In attempts to increase participation, the researcher reached out to faculty to remind and encourage nursing students to complete the surveys. Participants were also given two weeks to complete the survey in a location of their choice. The survey could be accessed at any time with a password to protect their responses. The researcher also attempted to reach out to two additional academic institutions to recruit additional students, but these attempts failed. With additional IRB approval, the researcher also expanded the criteria for students to include senior level nursing students, instead of nursing students in their last semester since the ADN classes proved to have lower numbers of students. Due to failed efforts to increase student participation, the researcher made the decision to move forward with the qualitative phase of the study due to time and resource constraints.

Population Sample for Qualitative Phase

Participants were purposefully sampled from the quantitative participant group using the overall HAPSI total scores. Participant information for those who consented to participate in the qualitative phase, was exported to an Excel spreadsheet and was organized in ascending to descending order based on overall HAPSI scores. No names or other personal contact

information was included in this data. Participants were identified by their Qualtrics assigned participant identification (ID) numbers. A master list of contact information, including participant ID numbers were kept separate from survey responses, but were required for identifying participants for individual interviews. This master list also contained the assigned pseudonyms of each respondent next to the participant ID in order to organize and track data for the qualitative phase of this study.

To find interview participants based on high, average, and low scores, descriptive statistics and standard deviation (*SD*) were used and based on a mean of 2.58 and a *SD* of .81. Participants who scored within 1 *SD* above the mean score were high. Participants who scored within 1 *SD* of the mean score were average. Participants who scored 1 *SD* below the mean were considered low scoring. As a reminder, low scores indicated more positive attitudes. Likewise, higher scores on the total HAPSI indicate more negative attitudes toward caring for PLWH. Twenty-one participants of the original quantitative participant group (n=36) provided contact information to be contacted for interviews during the qualitative phase of the study.

Thirteen participants meeting scoring criteria were contacted via phone and email to remind them of their volunteering to participate in the qualitative phase of this study, and to schedule private interviews. Of the 13 participants who were contacted, nine participants responded back to the researcher. The nine interview participants provided sufficient qualitative data to reach saturation. Saturation was reached when no new information emerged (Creswell, 2013). Saturation was determined when the researcher was able to thoroughly define themes through similar responses of participants that allowed for a complete interpretation of the data; and when the research questions could be fully answered.

Materials and Analysis

Quantitative Sociodemographics

The survey included a questionnaire comprised of nine sociodemographic questions constructed by the researcher that asked about the following: (a) age; (b) race/ethnicity; (c) gender; (d) religion; (e) knowing someone with HIV/AIDS; (f) having cared for someone with HIV; (g) community setting the student was raised in: rural, suburban or urban; (h) community setting the student currently lives in: rural, suburban or urban; and (i) level of degree student is obtaining: BSN or ADN (Appendix G).

HIV/AIDS Provider Stigma Inventory

Acceptance and *Awareness* scales from the HIV/AIDS Provider Stigma Inventory (HAPSI), an instrument constructed by Rutledge et al. (2011) was used to develop the Qualtrics survey. The HAPSI was utilized for collecting data regarding students' attitudes toward PLWH (Appendix H). Permission to utilize the HAPSI instrument was granted on March 15, 2017 by Rutledge et al. (Appendix I). The instrument was designed by the researchers to gain insights into the attitudes and interactions with PLWH in order to identify the presence of stigma related attitudes (Rutledge et al., 2011).

The Awareness scale contains 42 items and is defined as looking deeply, noticing the full range of our experiences when thinking about PLWH. The Awareness items focus on the following:

- a) How people may use names for PLWH when thinking or talking about them.
- b) How people may judge PLWH based on personal characteristics or qualities.
- c) How people may reinforce differences between themselves and PLWH.

The Acceptance scale contains 20 items and is defined as fully acknowledging the potential impact, intended or not, of our thoughts about and interactions with PLWH. Acceptance items focused on the following:

a) How people may harm PLWH if they use names for them when thinking or talking about them.

b) How people may harm PLWH if they judge them based on personal characteristics and qualities.

c) How people may harm PLWH if they reinforce differences between themselves and PLW.

d) How people may harm PLWH if they respond differently to them based on their personal characteristics or qualities.

For this study Awareness and Acceptance global mean scores, and overall HAPSI mean scores were used to identify attitudes of nursing students. These two scales are useful in discerning nurses' self-perceived attitudes and potential actions directed at PLWH, and also provide self-assessment of the consequences of prejudices and discrimination toward this population (Rutledge et al., 2011). All questions were answered using a 7-point reverse Likert-type scale with 1 being "*completely disagree*" and 7 being "*completely agree*" (Rutledge et al., 2011).

Scoring Outcomes

According to the HAPSI scoring template on the Awareness and Acceptance scales, and respective subscales, higher scores mean there are greater tendencies to stigmatize or discriminate in specific ways. In this case, if negative attitudes exist, these attitudes may affect

the type and quality of care PLWH receive (Rutledge et al., 2011). All HAPSI scores range from one to seven (Cochran & Fischer, 2013).

Validity and Reliability

The validity and reliability of the HAPSI instrument was confirmed via pilot study and an expert panel review (Rutledge et al., 2011). The researchers, using a sample of 174 baccalaureate-nursing students from the Southeastern United States, piloted the instrument. A panel of 15 experts also reviewed the HAPSI. The instrument was also reviewed and published in Corcoran and Fischer's (2013) *Measures for Clinical Practice and Research*. Internal consistency reliability is excellent (Corcoran & Fischer, 2013). Global measure of *Awareness* consistency coefficient was .97; *Acceptance* global was .98. Subscale reliability had coefficients ranging from .69 to .98. Confirmatory factor analysis indicated a good fit. Evidence supports good validity and accuracy of primary constructs of the HAPSI survey (Corcoran & Fischer, 2013; Rutledge et al., 2011).

For this study, the HAPSI Acceptance and Awareness items helped determine attitudes that affect the behavioral beliefs of students, one of the theoretical constructs of the TRA. The Acceptance and Awareness items of the HAPSI instrument provided a deeper understanding into this phenomenon, which helped to identify attitudes of nursing students that were further explored in the qualitative phase of this study. TRA helped explore attitudes toward caring for PLWH (behavioral beliefs), and normative beliefs/subjective norms--how they shape certain attitudes and influence behavior intentions in caring for PLWH.

Qualitative Material

The researcher developed the following eight interview questions that would best help answer the qualitative research questions. The telephone script used for the semi-structured private interviews can be found in Appendix J. Table 1 depicts how these interview questions align with the research questions and fit within the constructs of the TRA.

Table 1

Qualitative Research Questions and Qualitative Interview Questions

Research Questions	Interview Questions	Theory of Reasoned Action
1) How do nursing students' attitudes affect their willingness to care for PLWH?	<ul style="list-style-type: none"> • If you know or suspect a person has contracted HIV through lifestyle factors or through a sexual orientation that you do not agree with, how do you think you would treat them as a nurse? • What is your opinion about patient rights in health care as its related to HIV positive patients? • If you were to witness an HIV/AIDS patient being refused care by another health professional, how would be react or respond to the situation? • In your opinion, what are some concerns of nursing students in caring for a person with HIV/AIDS? 	Assesses behavior intentions that are influenced by attitudes developed through beliefs.
2) How do students perceive how others will view them if they were to provide care to PLWH? <i>*Sub-questions provide an overlap of the qualitative research question 2, and will provide a better understanding to the quantitative question 2: (Is there a relationship between specific attitudes of nursing students toward caring for PLWH and socio-demographic characteristics?)</i>	<ul style="list-style-type: none"> • If you were to work in an environment where you cared for patients with HIV/AIDS, describe how you might be treated or viewed by others that are close to you (co-workers, friends, family, etc.) Sub-questions: • How has the culture within your community influenced your attitude toward PLWH? • How has your spiritual/religious beliefs influenced your attitude toward PLWH? • What influence has your nursing education had on your attitude toward PLWH? 	Assesses normative beliefs/subjective norm. Sub-questions: Also, assesses attitudes that may be influenced and shaped by the individual's normative believes/subjective norm.

Data Analysis

Quantitative Data Analysis

Utilizing survey responses, the researcher sought to establish relationships between dependent variables: HAPSI Acceptance, HAPSI Awareness, and the overall HAPSI total scores, with the independent variables (sociodemographic characteristics): sex, degree (BSN or ADN), knowing someone with HIV, caring for someone with HIV, age, race, religion, community the participant grew up in, and the type of community the participant currently lives in. The purpose was to identify overall attitudes and to detect whether the independent variables had any connection to these attitudes. Frequency, percentage values, and standard deviations were used for determining overall attitudes of nursing students. Independent *t* tests and analysis of variances (ANOVAs) were used to determine mean differences between attitudes and based on sociodemographic characteristics. Data were analyzed using SPSS version 25.

An overall HAPSI score was calculated by taking the mean of all 62 HAPSI items (alpha = .95). An Awareness score was calculated by taking the mean of the 42 Awareness items (alpha = .95), and an Acceptance subscale score was calculated by taking the mean of the 20 Acceptance items (alpha = .95). Because of the small sample size ($n=36$), some groups from the sociodemographic data were collapsed in order to allow for analysis. Specifically, age categories were collapsed into 19-25 versus 26-60, race was collapsed into White versus non-White, and religion was collapsed into Christian (Protestant and Catholic) versus Other. Because only two people (5.6%) reported knowing someone with HIV, the researcher was not able to make comparisons between those who do and do not know someone with HIV.

In order to test whether there was a relationship between HAPSI scores and sociodemographic characteristics, the researcher employed independent *t* tests and one-way ANOVAs. Independent *t* tests are recommended when homogeneity of variance is not met (Lomax & Vaughn; 2012). Additionally, one-way ANOVAs are recommended when comparisons between three or more groups are needed (Lomax & Vaughn; 2012). Levene's test was employed to test for homogeneity of variance. In cases where equal variance cannot be assumed, the adjusted test-statistic and degrees of freedom (*df*) are reported. This is also noted in the tables in the next chapter.

Qualitative Data Analysis

For qualitative data analysis, the researcher utilized manual coding procedures using Microsoft Word for organizing and coding qualitative data of the nine interview transcripts, which were transcribed verbatim by the researcher; and digital audio recordings of private interviews with the nine participants. *Provisional Coding* was the first cycle coding method used to identify major categories and themes. These provisional codes utilized the constructs of TRA normative beliefs and subjective norms, common themes revealed in previous research, as well as recurring themes that emerged during several reviews of transcripts collected during the qualitative phase of this study.

A qualitative coding scheme was developed to help guide the analysis by providing conditions in which themes and phrases should be coded for further analysis. This coding scheme (Table 2) and samples of interview transcripts were shared with three of the researcher's committee members with expertise in qualitative research prior to beginning the coding process and analysis.

Table 2

Qualitative Coding Scheme

Acceptance	<ul style="list-style-type: none"> • Attitudes that display positive views toward PLWH, despite personal beliefs and values.
Fear <ul style="list-style-type: none"> • Misconceptions 	<ul style="list-style-type: none"> • Fear of contagion/ transmission when it comes to the HIV. • False impression/understanding regarding PLWH.
Willingness or Unwillingness to Care	<ul style="list-style-type: none"> • How overall attitudes affect potential decisions in caring for PLWH.
Stigma <ul style="list-style-type: none"> • Labeling • Stereotyping 	<ul style="list-style-type: none"> • Portrayal of negative attitudes toward PLWH based on lifestyle factors or how they contracted the disease. • Using names/terms to describe PLWH or who are at risk for HIV. • Association of HIV with certain groups of people.
Behavior Intentions	<ul style="list-style-type: none"> • Assesses a participant's willingness or unwillingness to provide care to PLWH.
Normative Beliefs/Subjective norms	<ul style="list-style-type: none"> • Beliefs that may influence attitudes, which have been gained through a participant's religious and community/cultural standards regarding PLWH. • How a participant views how they would be treated or seen by others if they were to care for PLWH.
Awareness	<ul style="list-style-type: none"> • Acknowledging their own knowledge level, prejudices, and stigmas and how these may affect decisions in caring for PLWH.
Prejudices	<ul style="list-style-type: none"> • Looks for preconceived opinions not based on any real experiences; may stem from what the participants normative beliefs are.

(table continues)

<p>Patient Right's Sub-codes:</p> <ul style="list-style-type: none"> • Confidentiality • Disclosure • Equal treatment • Compassion • Informed decision making/autonomy 	<ul style="list-style-type: none"> • Assessed whether or not participants' view PLWH as having the same rights in healthcare as any other patient: • Sharing or not sharing diagnosis with others. • Views regarding informing partners about positive status; or the public. • Receive the same treatment as anyone else. • Assesses level of compassion and caring attitudes toward PLWH among participants. • Assesses whether participants' view PLWH as having rights to receive all healthcare information and options for treatment, so that they can make well- informed decisions about what care they receive or do not receive.
<p>Ethical decision-making:</p> <ul style="list-style-type: none"> • Refusal 	<ul style="list-style-type: none"> • Helps gage whether participants believe it is wrong or right for a nurse to refuse care to PLWH.
<p>Experience</p>	<ul style="list-style-type: none"> • Gages level of experience with PLWH: gained through education, personally knowing, or caring for a person w/ HIV.

Values Coding of transcripts was used as a second cycle coding method to identify trends and patterns in participants' responses to help uncover their perspectives and attitudes. These codes helped to define themes and categories found through Provisional Coding. Saldana (2016) points out that Values Coding reflects a participant's attitudes, which represents his or her perspectives. This coding method is appropriate for qualitative studies, particularly those that are exploring values, beliefs, and intrapersonal and interpersonal participant experiences (Saldana, 2016). Therefore, this coding method aligns with the intent of this study of exploring students' attitudes toward caring for PLWH and helps to categorize codes and reflect on their collective meaning (Saldana, 2016).

Lastly, *In Vivo Coding* was used for first cycle and second cycle coding to analyze the data collected through the interviews to look for short phrases that assisted in defining different

categories and themes. These were also used as supportive data to add validity to this study by utilizing the participants own voice and perceptions. Use of In Vivo coding helped to honor the participant's voice through the use of quotations that denoted the participant's own perspectives (Saldana, 2016). To prevent restricting the perspectives that can lead to a deeper understanding regarding attitudes, this coding method was not used as a stand-alone method for analysis (Saldana, 2016). To address data restriction, Provisional and Values coding methods assisted in providing a more in-depth perspective of the data gathered through the interviews.

As suggested by Saldana (2016), running lists of codes and themes were used for analytic reflection to assist in weaving codes together in narrative form. Additionally, the researcher's analytic memos were employed to compare the researcher's insights and interpretations during the interviews with what the participants' data revealed during the analysis process. Researcher-generated field notes taken during the interviews helped with categorizing data related to differences in attitudes found through the subjective thoughts of the researcher.

By using these multiple forms of analysis, the researcher sought to increase the credibility of this study (Maxwell, 2013). TRA served as a lens for interpreting data analyzed through these coding methods. An initial coding scheme was shared with three of the researcher's committee members to clarify needed changes and to confirm understanding of the coding processes. To validate trustworthiness of the analysis, an expert review was performed by the researcher's chair, Dr. S. George, who has expertise in qualitative research.

The purpose of the qualitative phase of this study was to further explore attitudes found through the quantitative findings. To organize data, major themes and codes were captured in tables to display findings from the qualitative analysis and can be found in Chapter IV under

each qualitative research question. Chapter IV discusses the results in the following order: quantitative results, quantitative summary, qualitative results, and qualitative summary. Chapter IV concludes with a summary of mixed methods results. Discussion and interpretation of overall results can be found in Chapter V.

Ethical Considerations

Benefits and Alternatives

There was no direct benefit to participants. Participants had the alternative not to participate in the study. During the researcher's visit to campus classes, the researcher discussed risks, benefits, and the alternative during these meetings, so that students were fully informed before volunteering to participate in this study.

Data Security

Access to the Qualtrics survey required a password from the participant to protect their responses to the survey. Quantitative data were stripped of identifiers by the researcher. Data were kept in the researcher's UA Box and password protected. Hardcopies were kept secured in a locked file cabinet in the researcher's personal office at her home. Qualtrics assigned participant ID numbers, which were used to track participant's data for the purpose of identifying participants for qualitative interviews. Participants' names, email addresses and phone numbers were kept on a master list in a secured file and kept separately from data in UA Box. This master list was required for contacting participants regarding telephone interviews. Audio recorded interviews and interview transcripts were deidentified and did not contain personal information. Recordings were not started until the purpose of the study was reviewed and the participant had

expressed they were ready to start the interview. Pseudonyms were assigned to transcripts by the researcher.

This study utilized an online survey platform, Qualtrics, to distribute the HAPSI survey and socio-demographic questionnaire to participants. IP addresses and other personal information were removed from the raw data prior to analysis. All responses were anonymous and confidential. Participants were given the choice of how the interviews took place: Skype, telephone, or in person. All participants chose telephone interviews, which took place from the researcher's personal home office at a time that was convenient for the participant.

Informed Consent

The University of Alabama Institutional Review Board (IRB) approval was received for all protocol used in this study. Nursing students were given an invitation letter to participate explaining this mixed methods study, which included a link to the Qualtrics survey instrument that participants could access at any time (Appendix K). This invitation letter was distributed in person during the researcher's visits to the IRB approved institutions.

An informed consent letter was included as a face sheet in the Qualtrics survey, stating that participation in the survey served as consent to participate in both phases of this study. Students were informed that they may chose not to continue participation at any time during the study and that information gathered from them would not be included in the analysis. Students' who wished to be contacted for follow-up interviews during phase two of this study were asked to include their email addresses and phone numbers at the end of the survey. This contact information was kept separate from participants response data. Participation was voluntary in both phases of the study.

CHAPTER IV:

RESULTS

The purpose of this sequential explanatory mixed methods study was to identify and explore the attitudes and perceptions of nursing students in Alabama toward caring for PLWH. The following research questions originated from existing literature surrounding this phenomenon and the researcher's own professional experiences. These questions were explored to address the gap relative to the phenomena in Alabama. In identifying and exploring attitudes of nursing students toward caring for PLWH, the TRA constructs— *behavioral beliefs* and *normative beliefs*— were used as a lens for interpreting the answers to the following four research questions. Interpretation of the finding is discussed in Chapter V. Using descriptive statistics, the results of quantitative questions presented served to identify attitudes and any affects sociodemographic characteristics may have on these attitudes. Using three coding methods for qualitative analysis, the results to the qualitative questions served to help explain how these attitudes may be affected by nursing students' willingness to care for PLWH and to also identify how students' attitudes and willingness to care for PLWH may be influenced by the perceived attitudes of others close to them. The researcher also sought to identify connections between attitudes and the participants community culture, religion, and nursing education.

This chapter reports the results using description of data and tables of quantitative data, and categories, themes, narratives, and tables for qualitative data. Quantitative research questions

and results are presented below, followed by the qualitative questions and results. Discussion of results is presented in Chapter V.

Quantitative Research Questions

Quantitative Research Question 1: Do nursing students carry stigmatizing attitudes toward caring for PLWH?

Quantitative Research Question 2: Are there differences in specific attitudes of nursing students toward caring for PLWH based on the following characteristics: (a) Age; (b) Race/Ethnicity; (c) Gender; (d) Religion; (e) Knowing someone with HIV/AIDS; (f) Ever cared for someone with HIV/AIDS; (g) Community setting the student was raised in: urban, suburban, or rural; (h) The community setting the student currently lives in: urban, suburban, or rural; or (i) Level of degree student is obtaining, i.e. Associates of Nursing (ADN) or Bachelor of Nursing (BSN)?

Sociodemographic Characteristics

Of the 36 participants, 80.6% of participants fell into the 19-25 age group and only 2.8% ($n=1$) fell into the 56-60 age group. The majority of participants (91.7%) were female, compared to 8.3% male. Of participants who responded, 86.1% were White, compared to 13.3% (11.1%; 2.8%, respectively) who identified as Black or Other. When reporting religious faith, 11.1% of participants identified as Catholic, 50% Protestant, 33.3% as Other, and 5.6% as None.

Almost half (44.4%) of participants grew up in rural communities; 47.2% of participants grew up in suburban communities, while only 8.3% of participants grew up in urban communities. Thirty-nine percent currently live in rural communities, while 47.2% live in suburban communities. Only 8.3% of participants reported living in an urban setting in Alabama;

41.7% of nursing students were enrolled in an ADN program, while 58.3% were enrolled in a BSN program. Only 5.6% of participants personally knew someone with HIV, while 33.3% noted they had cared for someone with HIV. Sample characteristics are presented below.

Table 3

Sample Characteristics (N=36)

Variables	N (%)
Age	
19-25	29 (80.6)
26-40	3 (8.3)
41-55	3 (8.3)
56-60	1(2.8)
Gender	
Female	33 (91.7)
Male	3 (8.3)
Race	
White	31(86.1)
Black/African-American	4 (11.1)
Other	1 (2.8)
Religion	
Catholic	4 (11.1)
Protestant	18 (50.0)
None	2 (5.6)
Other	12 (33.3)
Community grown up in	N (%)
Rural	16 (44.4)
Suburban	17 (47.2)
Urban	3 (8.3)
Community lived in	
Rural	14 (38.9)
Suburban	17 (47.2)
Urban	5 (13.9)
Degree	
ADN	15 (41.7)
BSN	21 (58.3)
Knowing someone with HIV	2 (5.6)
Cared for someone with HIV	12 (33.3)

Quantitative Results

Quantitative Research Question 1: Do nursing students carry stigmatizing attitudes toward caring for PLWH?

To test this research question, the researcher examined the mean scores for the HAPSI Awareness and Acceptance subscales, as well as the overall HAPSI scale. Overall HAPSI scores ranged from a minimum score of 1.00 to a maximum score of 3.71. On average, participants scored well below the midpoint on the overall HAPSI scale ($M = 2.53$; $SD = .81$). Acceptance scores ranged from a minimum of 1.00 to a maximum of 5.75. Similarly, participants scored well below the midpoint on the Acceptance subscale ($M = 3.01$, $SD = 1.42$). Finally, Awareness scores ranged from a minimum of 1.00 to a maximum of 3.76. Participants scored below the midpoint on the Awareness subscale ($M = 2.30$, $SD = .82$); (Table 4). These scores suggest participants had generally positive attitudes toward PLWH.

Table 4

Descriptive Statistics

HAPSI	<i>N</i>	<i>MIN</i>	<i>MAX</i>	<i>MEAN</i>	<i>SD</i>
HAPSI Total	36	1.00	3.71	2.53	.81
HAPSI Acceptance	36	1.00	5.75	3.01	1.4
HAPSI Awareness	36	1.00	3.76	2.30	.82
Valid <i>N</i> (listwise)	36				

Quantitative Research Question 2: Are there differences in specific attitudes of nursing students toward caring for PLWH based on the following characteristics: (a) Age; (b)

Race/Ethnicity; (c) Gender; (d) Religion; (e) Knowing someone with HIV/AIDS; (f) Ever cared for someone with HIV/AIDS; (g) Community setting the student was raised in: urban, suburban, or rural; (h) The community setting the student currently lives in: urban, suburban, or rural; or (i) Level of degree student is obtaining, i.e. Associates of Nursing (ADN) or Bachelor of Nursing (BSN)?

As a reminder, due to the small and unequal sample sizes, groups were collapsed in order to allow for analysis. Specifically, age categories were collapsed into 19-25 versus 26-60, since there were only four participants who fell between the ages of 41 and 60. Race was collapsed into White versus non-White, since only one participant reported being of Other Race, and Religion was collapsed into Christian (Protestant & Catholic) versus Other, since only two participants reported being non-religious. Independent *t* tests were employed to test whether there were relationships between the sociodemographic characteristics of gender, race, age, religion, and degree being obtained: BSN or ADN, and HAPSI scores. Because only two people reported knowing someone with HIV the researcher was not able to make comparisons between those who do and do not know someone with HIV. One-way ANOVAs were used to test whether there were relationships between the sociodemographic characteristics of community raised in and community where person lives, and HAPSI scores. A *p* value < .05 was considered statistically significant.

During the analysis, it was revealed that men ($n=3$) scored significantly higher on the Awareness subscale, indicating more negative attitudes toward PLWH than women ($n=33$). The adjusted test-statistic and degrees of freedom (*df*) are reported on the HAPSI Awareness subscale ($p= <.01$; $t= 4.15$; $df= 16.97$), because equal variance could not be assumed. Additionally, there

were no differences when comparing gender influence on overall HAPSI scores ($t = 2.26$; $df = 5.70$) or the Acceptance subscale scores ($t = .07$; $df = 24$) (Table 5).

Table 5

Independent t Test: Differences in HAPSI Scores by Gender

Outcome	Male ($N = 3$)		Female ($N = 33$)		$t(df)$	p
	M	SD	M	SD		
HAPSI Acceptance	3.07	0.8	3.01	1.48	.07 (24)	0.945
HAPSI Awareness	2.96	0.16	2.24	0.83	4.15 (16.97) ^{*a}	0.001
HAPSI total score	2.99	0.3	2.49	0.83	2.26 (5.70) ^a	0.067

* $p < .01$; ^aEqual variances not assumed.

Participants who identified as White ($n=31$) scored significantly higher on both Acceptance ($p < .001$; $t = 90$; $df = 34$) and overall HAPSI scale ($p < .05$), indicating more negative attitudes toward PLWH, than participants who identified as non-White ($n=5$), but there were no race differences on the Awareness subscale scores (Table 6).

Table 6

Independent t Test: Differences in HAPSI Scores by Race

Outcome	White ($N = 31$)		Non-White ($N = 5$)		$t(df)$	p
	M	SD	M	SD		
HAPSI Acceptance	3.25	1.38	1.51	0.45	5.48(19.63) ^{a**}	.000
HAPSI Awareness	2.35	0.83	2	0.81	.90(34)	.373
HAPSI total score	2.64	0.78	1.84	0.69	2.17(34) [*]	.056

* $p < .05$; ** $p < .001$

^aEqual variances not assumed

There were no differences on total HAPSI scales, or on Acceptance and Awareness subscales when comparing age groups 19-25 (n=29) and 26-60 (n=7) (Table 7).

Table 7

Independent t Test: Differences in HAPSI Scores by Age

Outcome	19-25 years old (N = 29)		26-60 years old (N = 7)		<i>t(df)</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
HAPSI Acceptance	2.93	1.32	3.34	1.87	.67(34)	.606
HAPSI Awareness	2.38	0.85	1.98	0.67	1.17(34)	.202
HAPSI total score	2.56	0.85	2.42	0.65	.42(34)	.632

p < .05

An independent *t* test indicated there were no significant differences on total HAPSI scores, or Acceptance and Awareness subscale scores when comparing religious beliefs: Christian (n=22) and Other (n=14) (Table 8).

Table 8

Independent t Test: Differences in HAPSI Scores by Religion

Outcome	Christian (N = 22)		Other (N = 14)		<i>t(df)</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
HAPSI Acceptance	3.12	1.52	2.84	1.29	.57(34)	.571
HAPSI Awareness	2.2	0.84	2.47	0.8	.94(34)	.352
HAPSI total score	2.5	0.8	2.59	0.85	.32(34)	.753

p < .05

A one-way ANOVA indicated there were no significant differences based on total HAPSI scores, or Acceptance and Awareness subscale scores by community in which the participant grew up: rural (n=16), suburban (n=17), or urban (n=3). (Table 9).

Table 9

One-Way ANOVA: Differences in HAPSI Scores by Community Where Person Grew Up

Outcome	Rural (N = 16)		Suburban (N = 17)		Urban (N = 3)		F(df ¹ ,df ²)	p
	M	SD	M	SD	M	SD		
HAPSI Acceptance	2.82	1.16	3.45	1.56	1.52	0.77	2.89(2,33)	.070
HAPSI Awareness	2.36	0.81	2.3	0.76	2.01	1.45	.22(2,33)	.804
HAPSI total score	2.51	0.74	2.68	0.79	1.85	1.23	1.37(2,33)	.268

p < .05 (level of significance)

A one-way ANOVA indicated there were no significant differences based on total HAPSI scores, or Acceptance and Awareness subscale scores by community in which the participants currently live: rural (n=14), suburban (n=17) or urban (n=5) (Table 10).

Table 10

One-Way ANOVA: Differences in HAPSI Scores by Community Where Person Lives

Outcome	Rural (N = 14)		Suburban (N = 17)		Urban (N = 5)		F(df ¹ ,df ²)	p
	M	SD	M	SD	M	SD		
HAPSI Acceptance	3.06	1.32	3.25	1.61	2.08	0.68	1.33(2,33)	.278
HAPSI Awareness	2.34	0.82	2.21	0.83	2.55	0.93	.34(2, 33)	.714
HAPSI total score	2.57	0.82	2.54	0.84	2.4	0.82	.08(2,33)	.922

p < .05

An independent *t* test indicated no significant differences based on HAPSI scores or subscale scores by degree the participant was pursuing: ADN (*n*=15) or BSN (*n*=21) (Table 11).

Table 11

Independent t Test: Differences in HAPSI Scores by Degree Pursued

Outcome	ADN (<i>N</i> = 15)		BSN (<i>N</i> = 21)		<i>t</i> (<i>df</i>)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
HAPSI Acceptance	3.05	1.44	2.99	1.45	.13(34)	.901
HAPSI Awareness	2.1	0.69	2.45	0.89	1.27(34)	.212
HAPSI total score	2.41	0.71	2.62	0.88	.79(34)	.435

p < .05

Additionally, an independent *t* test indicated there were no significant differences in HAPSI scores or subscale scores on whether or not the participant had ever cared for someone with HIV: has cared (*n*=12) or has not cared (*n*=24) (Table 12).

Table 12

Independent t Test: Differences in HAPSI Scores by Caring for Someone with HIV

Outcome	Has cared (<i>N</i> = 12)		Has not cared (<i>N</i> = 24)		<i>t</i> (<i>df</i>)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
HAPSI Acceptance	3.18	1.59	2.93	1.36	.51(34)	.615
HAPSI Awareness	2.31	0.91	2.3	0.8	.05(34)	.961
HAPSI total score	2.59	0.82	2.5	0.82	.32(34)	.750

p < .05

Lastly, because the sample of participants ($n=2$) who knew someone with HIV was small, comparisons could not be made between those who do and do not know someone with HIV ($n=34$). Therefore, this data was excluded from the analysis.

Summary of Quantitative Findings

Of the nursing students who participated in this study, 92% were female and between the age of 19-25 years of age (81%). Of these nursing students, 86% were White and of either Catholic or Christian faith (61%). The majority grew up in either rural or suburban communities (44%, 47%, respectively), and now currently live in suburban and rural communities (47% and 39%, respectively). Fifty-eight percent of nursing students were in their senior year of a BSN program, while 42% were in the last year of an ADN nursing program. There were 33% of nursing students who had experience in caring for someone with HIV, while only 6% knew someone with HIV.

According to HAPSI Awareness, Acceptance, and overall HAPSI scores, nursing students in Alabama have generally positive attitudes toward PLWH, indicating low stigma among students related to PLWH. Male nursing students, who only accounted for 8% of study participants, scored higher on the Awareness global scale indicating slightly more stigma than the female participants; however, there were no differences on acceptance scores, or overall HAPSI scores. As a reminder, the awareness scale measures how people may use names when thinking about PLWH; judgements based on personal qualities/characteristics of PLWH, and how people may reinforce differences between themselves and PLWH.

White participants scored higher on both Acceptance and overall HAPSI scores, indicating more stigmatizing attitudes than non-Whites, who only accounted for 15% of nursing

student in the study. As a reminder, Acceptance measures how people may harm PLWH with names for them when talking or thinking of them; harming through judgement based on personal qualities or characteristics; harming by reinforcing differences between themselves and PLWH; and harming PLWH by responding differently to them based on their personal characteristics or quality.

There were no significant differences in attitudes based on age, religion, growing up in or currently living in rural, urban, or suburban areas, level of nursing degree being obtained, or whether participants had ever cared for someone with HIV.

Qualitative Research Questions

Qualitative Research Question 1: How do nursing students' attitudes affect their willingness to care for PLWH?

Qualitative Research Question 2: How do nursing students perceive how others will view them if they were to provide care to PLWH?

Results from the qualitative analysis revealed eight categories and one sub-category found through provisional coding and several themes that emerged through values coding. These codes and themes are aligned with statements similar to the research questions and can be found in Figure 2. More details of these codes and themes are shared in subsequent sections listed under each research question and are explained in detail in additional charts and thematic analysis.

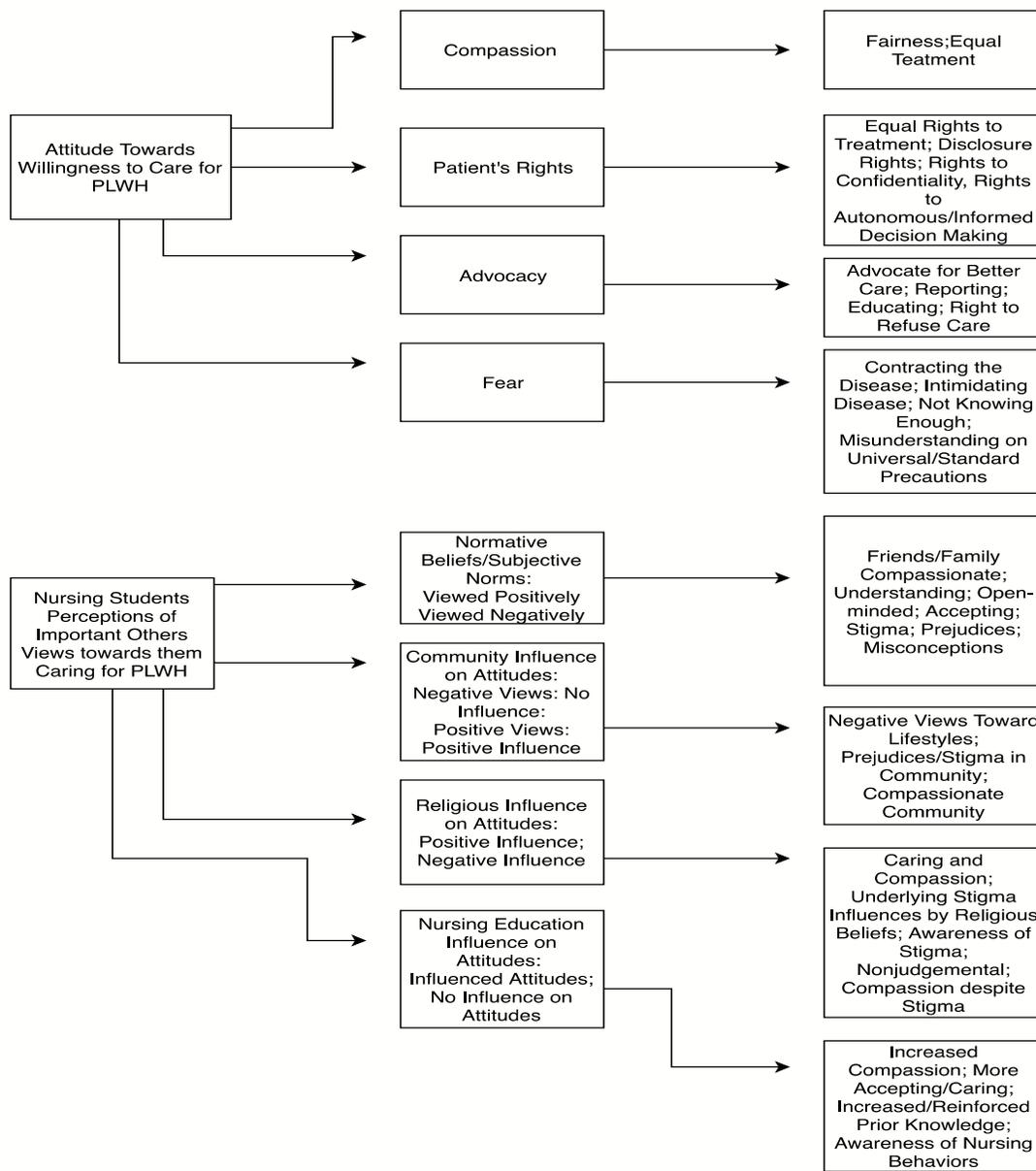


Figure 2. Diagram of categories and themes of nursing students' attitudes toward PLWH.

Qualitative Participant Characteristics

The following characteristics were extracted from the quantitative sociodemographic questionnaire responses of participants who volunteered to take part in the qualitative phase of this study. There were eight females and one male who participated in the interviews.

Participants fell within the following age categories: 19-26 (n=6); 26-40 (n=1); and 41-55 (n=2). The majority of participants identified their religion as Christian (n=7), Catholic (n=1), Other, but spiritual (n=1). Participants reported living in suburban areas of Alabama (n=5), and rural areas (n=4). Participants were attending nursing programs in the west (n=6), central (n=2), and north (n=1) regions of the state. Participants were either enrolled in an ADN nursing program (n=5) or a BSN program (n=4). At least one participant was enrolled in each of four academic institutions visited by the researcher during the recruitment phase of this study. One participant knew someone close to them with HIV. Almost half of the students reported caring for someone with HIV (n=4).

Participants Based on HAPSI Scores

The participant introduced in the previous section were purposefully sampled using the overall HAPSI total score. Participants were selected based on high, average, and low scores. Descriptive statistics and standard deviation ($SD=.81$) were used to calculate the scores. Participants who scored within 1 SD above the mean score ($M=2.53$) were high. Participants who scored within 1 SD of the mean score ($M=2.53$) were average. Participants who scored 1 SD below the mean ($M=2.53$) were considered low scoring. As a reminder, low scores indicated more positive attitudes. Likewise, higher scores on the total HAPSI indicate more negative attitudes toward caring for PLWH. Participants were scheduled and completed interviews via telephone with the researcher (three high scoring participants with scores of 2.98; 3.41; 3.47; three average scoring participants, with scores of 2.60; 2.66; 2.77; and three low scoring participants, with scores of 1.00; 1.24; 1.56).

High scoring participants. *Ann's* overall HAPSI score was 3.47. She is a white female of Christian faith, who is 19 to 25 years of age. She was raised and currently lives in a rural community. At the time of the interview, Ann had recently completed her last nursing course in her respective BSN program. Ann reported not knowing or ever having cared for PLWH while in nursing school. *Lynn's* overall HAPSI score was 2.98. She is a white female of Christian faith, who is 41 to 55 years of age. She was raised and lives in a rural community. At the time of the interview, Lynn was enrolled in one of her last courses in her respective ADN program. She reported not knowing a person with HIV but has cared for an HIV positive patient during her time as a nursing student. Lastly, *Sam's* overall HAPSI score was 3.41. She is a white female of Christian faith, who is 19 to 25 years of age. She was raised and currently lives in a suburban community. At the time of the interview, Sam had recently completed her last nursing course in her respective BSN program. She reports not knowing or having ever cared for PLWH.

Average scoring participants. *Beth's* overall HAPSI score was 2.77. She is a white female of Christian faith, who is 19 to 25 years of age. She was raised and currently lives in a suburban community. At the time of the interview, Beth had recently completed her last course in her respective BSN program. She had reported not knowing or ever having cared for PLWH. *Bob's* overall HAPSI score was 2.66. He is a white male of Christian faith, who is 41 to 55 years of age. He was raised and currently lives in a rural community. At the time of the interview, Bob had recently completed one of his last nursing courses in his respective ADN program. Bob reported not knowing or every having cared for PLWH. However, he did report working with PLWH in the prison setting and non-healthcare related position prior to attending nursing school. Lastly, *Lee's* overall HAPSI score was 2.60. She is black female of Christian faith, who is 19 to

25 years of age. She was raised and currently lives in a suburban community. At the time of the interview, Lee had recently completed her last nursing course in her respective BSN program. She reported not knowing someone with HIV but had cared for an HIV positive patient while attending nursing school.

Low scoring participants. *Liz's* overall HAPSI score was 1.56. She is a white female of Catholic faith, who is 19 to 25 years of age. She was raised and currently lives in a suburban community. At the time of the interview, Liz had just completed one of her last nursing courses in her respective ADN program. She reported not knowing someone with HIV but has cared for an HIV positive patient while attending nursing school. *Sal's* overall HAPSI score was 1.24. She is a white female of Christian faith. She is 26 to 40 years of age. Sal grew up in rural community, and currently lives in a suburban community. At the time of the interview, Sal had recently completed one of her last nursing courses in her respective ADN program. Sal reported having a childhood friend who has HIV but has never cared for PLWH as a nursing student. Lastly, *Sue's* HAPSI score was 1.00. She is a black female who reports being Spiritual. She is 19 to 25 years of age. Sue was raised in an urban community and currently lives in a rural community. At the time of her interview, Sue had completed one of her last nursing courses in her respective ADN program. She reports not knowing someone with HIV but has cared for an HIV positive patient while attending nursing school.

Qualitative Question 1 Results

How do nursing students' attitudes affect their willingness to care for PLWH?

To best answer this research question, four open-ended interview questions were employed to assess behavior beliefs, which are considered to be influenced by attitudes toward

caring for PLWH. Participants were asked questions related to the following topics: (a) how they would treat a patient who contracted HIV through lifestyle factors or sexual orientation they may not agree with, (b) healthcare rights of PLWH, (c) their reaction or response to the scenario of a nurse refusing care to an HIV patient, and (d) opinions regarding the concerns of nursing students in caring for PLWH. Through analysis, it was revealed that as senior level ADN and BSN participants (n=9) have positive attitudes and a willingness to care for PLWH. Four main categories and one sub-category were revealed that helped to answer this research question. The following themes that were revealed to help define these categories are as follows: compassion, the HIV patients' rights to healthcare, advocacy, and fear, with a subtheme of fear related to misconceptions and lack of knowledge or experience.

In Table 13, the first column includes categories that are identified by Provisional coding, and the second column includes themes, identified by Values coding, that help define each category from the participants' perspective. The table also includes supportive phrases, identified by In Vivo coding, to honor the participant's voice and their subjective meaning. The In Vivo codes listed in the following chart do not include statements or phrases from every participant but serve as exemplary codes that represent all participants in each category and theme. Participants are also linked to their respective degree level (ADN or BSN) and overall HAPSI scores in Table 13. As a reminder, high scores indicate more stigmatizing tendencies toward PLWH.

Categories (Provisional Codes):	Themes (Values Codes):	Supportive Phrases (In Vivo Codes):
Advocacy	Advocate for better care through: Reporting Educating person refusing care *Unethical	^a Liz : “Do what I needed to get that nurse off of the patient’s services.”- <i>low: 1.56</i> ^b Beth : “Bring it to my supervisor.”- <i>average: 2.77</i> ^a Bob : “Tell them what they are doing is wrong”, and “Go to their supervisor.” - <i>average:2.66</i> ^b Lee : “Provide Education due to misunderstanding of the disease.”- <i>average: 2.60</i> ^a Sue : “It’s their right to refuse to work with the patient.”- <i>low: 1.00</i>
Fear <i>subcategories:</i> Misconceptions and inexperience	Contracting the disease Intimidating Disease Lack of knowledge Misunderstanding of universal/standard precautions	^b Ann : Fear of “needle sticks” - <i>high:3.47</i> ^a Bob : “Treating them like Typhoid Mary”- <i>average: 2.66</i> ^a Liz : “Like the flu”- <i>low:1.56</i> ^b Sam : “Not being as confident with skills”- <i>high: 3.41</i> ^b Beth : Not “sure on precautions, or whether they were contact.” - <i>average: 2.77</i>

^aADN; ^bBSN; Overall HAPSI scores: high, average, low scores. Higher scores indicate more stigmatizing tendencies toward PLWH. *Unethical: nurses have right to refuse care (n=2);

Category 1: Compassion

All nine participants revealed compassionate attitudes, which exhibits a willingness to caring for PLWH. All nine participants endorsed the following themes: fairness and equal treatment of PLWH, which were expressed by participants in various ways. Some exemplar statements given by participants in support of their compassionate attitudes can be found in Table 1. Sal (low HAPSI score: 1.24) expressed that she would “Treat them as I would anyone else.” While Beth (average HAPSI score: 2.77) expressed the importance of “making them feel

valued” as patients. Ann (high HAPSI score: 3.37) voiced that “Their diagnosis and their disease does not define who they are as a person”.

Category 2: Patient Rights

All nine participants believed that PLWH have the same patient rights and equal treatment as any other patient. The following themes were revealed by participants in support of the patients’ rights to healthcare: equal rights to treatment (n=5); disclosure of status rights (n=6), rights to confidentiality (n=3), and rights to informed decision-making/autonomy was endorsed by one participant, Ann (high HAPSI score: 3.47), who voiced that HIV patients have the “right to be informed of every option.” Three participants voiced PLWH have rights to confidentiality, and six participants voiced disclosure rights of status to only those who they are in relationships with, or those who are at risks of contracting the disease (i.e.; healthcare workers or sex partners).

Category 3: Advocacy

Four major themes were revealed in support of advocacy. Eight participants reported they would advocate for better care for an HIV patient who is being refused care. Six out of nine participants expressed they would advocate by reporting to their supervisors. Two participants reported they would try to gain understanding about why the patient was being refused care and provide education regarding HIV to help the patient receive adequate treatment. One participant, Bob (average HAPSI score: 2.66), voiced that in addition to reporting the refusal of care to the supervisor, he would also intervene and tell the person who is refusing care “what they are doing is wrong.”

Despite the majority of participants voicing that they would advocate for the HIV patient who is being refused care, two out of the nine participants revealed that healthcare workers have the right to refuse care to the HIV patient, if there are “conflicts of interest” or under “special circumstance” (Sam and Sue [high and low HAPSI scores: 3.41;1.24, respectively]; personal communication; May 23, 2018; May18, 2018). This depicts unethical decision-making, which may be led by misconceptions. However, eight out of nine participants voiced advocating for the HIV patient being refused care in the following ways: reporting to the supervisor (n=6); and/or educating the person refusing care (n=2) (Table 1). Although Sue expressed healthcare workers have the right to refuse care, she also expressed she would educate the person refusing care and seek to understanding their reasoning for doing so.

Category 4: Fear

When each participant was asked about their perceptions of other nursing students concerns in caring for PLWH there were four main themes revealed in support of the fear category. These themes are (a) contracting the disease, (b) intimidating disease, (c) lack of knowledge, and (d) misunderstanding of universal and standard precautions. Four participants revealed that most fears related to HIV and caring for PLWH stem from fear of contracting the disease. More specifically, fear of needle sticks was mentioned by two participants: Ann, who is a BSN student (high HAPSI score: 3.47), and Lee, who is a BSN student (average HAPSI score: 2.60). One participant, Liz, an ADN student (low HAPSI score: 1.56), expressed that this fear stems from students thinking that HIV can be caught “like the flu.” Participant Bob, an ADN student (average HAPSI Score: 2.66) reiterates on this fear by explaining his perception of other nursing students treating PLWH as “Typhoid Mary.” Two other participants, Liz, an ADN

student (low HAPSI score: 1.56) and Sue, an ADN student (low HAPSI score: 1.00) expressed that other nursing students view HIV/AIDS as an intimidating disease.

Sub-category: Fear related to misconceptions and inexperience. The majority, eight participants, expressed that not knowing enough about HIV leads to fear. All nine participants offered particular detail that led to the researcher's understanding that this fear stems from lack of knowledge or inexperience in caring for PLWH, and not truly understanding the disease itself. For example, three participants reported that they perceived that other nursing students have a misunderstanding of universal/standard precautions. Beth, a BSN student (average HAPSI score: 2.77) reports this lack of experience and knowledge leads to not being "sure on precautions or whether they are contact". While Sam, who is also a BSN student, expressed that fears stem from "not being confident with skills." This participant expressed this lack of confidence in skills is not just with HIV patients, but with all patients. This lack of confidence comes from being a nursing student embarking into professional nursing practice as novice practitioner (Sam [high HAPSI score: 3.41]; Personal Communication; May 23,2018).

Qualitative Question 1 Results Based on HAPSI Scores and Degree Level

The results indicate positive attitudes and willingness to care for PLWH despite HAPSI scores and degree level (ADN or BSN). All nine participants indicated compassion through the endorsement of fairness and equal treatment of PLWH. In analyzing cases regarding advocacy for the HIV patient being refused care, only one participant from both degree levels, and from high and low score ranges, expressed that nurses have the right to refuse care (Sam and Sue high and low HAPSI scores: 3.41;1.24, respectively). Participants across all score ranges and both

degree levels endorsed fears and misconceptions related to contracting the disease, lack of knowledge and experience despite carrying positive attitudes toward PLWH.

Qualitative Question 2 Results

How do students perceive how others will view them if they were to provide care to PLWH?

The analysis revealed that the majority of participants' perceptions about how they would be viewed by others if they were to provide care to PLWH were positive. Six out of nine participants perceived they would be viewed in a positive way if they were to provide care to PLWH. One participant had mixed perceptions in how he would be viewed by family members compared to friends. This is discussed in more detail under the thematic description written under each category.

To answer this question the researcher asked a series of open-ended questions that elicited participants' responses to how they would be viewed by others close to them if they were to work in an environment where they cared for patients with HIV. Additionally, to explore deeper the subjective norms of participants, a series of sub-interview questions were used to inquire about the influence of community, religion, and nursing education on participants' attitudes. Table 14, column one includes the categories: Normative beliefs/subjective norms, community influence on attitudes, religious influence on attitudes, and nurse education influence on attitudes. These categories were identified by Provisional coding. Column two includes the themes, identified by Values coding, that helped to draw conclusions to answer the qualitative research question. Defining themes endorsed by participants, which were identified by In Vivo coding, are discussed under each category. Supportive statements are used to honor the

participants voices and to support the defining themes and categories. Participants are also linked by their respective degree level (ADN or BSN) and overall HAPSI scores in Table 14. As a reminder, high scores indicated more stigmatizing tendencies toward PLWH. The In Vivo codes listed in the following chart do not include statements or phrases from every participant but serve as exemplary codes that represent all participants in each category and theme.

Table 14

Qualitative Question 2: Categories and Themes

Categories (Provisional Codes):	Themes (Values Codes):	Supportive Phrases (In Vivo Codes):
Normative beliefs/ Subjective Norms: Viewed Positively by others	Friends /Family Compassionate Friends/Family Understanding Open-minded Accepting	^a Sal: “They don’t look at it as being stigmatized”; “wouldn’t be viewed differently.”- <i>low: 1.24</i> ^b Lee: “not the biggest deal.”- <i>average: 2.60</i>
Viewed Negatively by others	Stigma Prejudices Misconceptions	^b Beth: “Happy I am caring for people in need.”- <i>average: 2.77</i> ^a Sue: “Social stigma”- <i>low: 1.00</i> ^b Ann: “Strong biases”; “Like, me being around them could make them feel that I am contagious.”- <i>high: 3.47</i> ^a Bob: “Friends would probably frown on me for doing that, because they don’t fully understand the disease”; “Family accepting.”- <i>average: 2.66</i>

(table continues)

<p>Community Influence on attitudes: Negative views, but does not influence</p> <p>Positive views, positive influence</p>	<p>Negative views toward lifestyles</p> <p>Prejudices or stigma in community</p> <p>Compassionate community</p>	<p>^bAnn: “We are very religious down here; there is a lot of strong biases...especially when it comes to lifestyle factor[s].”-<i>high: 3.47</i></p> <p>^bLee: “A gay disease; bias I grew up with; not something I associate with today.”- <i>average:2.60</i></p> <p>^bSam: Growing up in “a conservative Christian community-not looking down HIV or AIDS, but on lifestyle choices...seeing them as wrong choices”, but my community seems to be more compassionate toward people living with HIV and seeking to treat that.”- <i>high: 3.41</i></p> <p>^aSue: “Just growing up in a diverse community” lead to being “open-minded”- <i>low: 1.00</i></p> <p>^bBeth: “Wouldn’t view them differently.”- <i>average: 2.77</i></p>
<p>Religious Influence on attitudes:</p> <p>Positive Influence:</p> <p>Negative Influence:</p>	<p>Caring and Compassion</p> <p>Underlying Stigma Influenced by religious beliefs</p> <p>Awareness of stigma</p> <p>Nonjudgmental</p> <p>Compassion despite stigma</p>	<p>^bLee: “Faith is based off of caring for people and caring about people.” -<i>average:2.60</i></p> <p>^aLiz: “they have strong views.” “We are also loving.” -<i>low: 1.56</i></p> <p>^aLynn: “Minor [in]discretions not judged”-<i>high: 2.98</i></p> <p>^bAnn: “In the back of my mind, I would have some form of prejudice.”; “Sexual relationships are meant to be between a man and woman.”-<i>high: 3.47</i></p> <p>^bSam: “As a Christian, I would see those as wrong lifestyle choices.”- <i>high: 3.41</i></p> <p>^bBeth: “Try not to make them feel bad about their decisions”; “How HIV is transmitted, I don’t always agree with.”-<i>average: 2.77</i></p>

(table continues)

Nursing Education influence on attitudes:	Increased compassion, acceptance	^b Ann: “Leave what you believe at the door”. - <i>high: 3.47</i>
Influenced attitudes	Increased/Reinforced prior knowledge	^a Sue: “don’t really have to go overboard with PPE.”- <i>low: 1.00</i>
No influence on Attitudes	Awareness of nursing behaviors	^b Sam: Made me realize that it’s not this kind of scary disease.”- <i>high: 3.41</i>
		^b Lee: “hyperawareness”- <i>average:2.60</i>
		^a Liz: “nurses are hesitant in having to take care of them.”- <i>low: 1.56</i>

^aADN; ^bBSN; Overall HAPSI scores: *high, average, low scores. Higher scores indicate more stigmatizing tendencies toward PLWH.*

Category 1: Normative Beliefs and Subjective Norms

Students’ perceptions about how they would be treated or viewed by others if they were to care for PLWH were generally positive. Six out of nine participants: Beth, Bob, Liz, Lee, Sal, and Sam felt they would be viewed positively and be supported by others close to them. These participants’ HAPSI scores were 2.77, 2.66, 1.56, 2.60, 1.24, and 3.41, respectively. Five out of these six participants had average and low HAPSI scores: 2.77, 2.66, 1.56, 2.60, and 1.24 respectively. Sam (HAPSI score: 3.41) was the only high scoring participant who expressed she would be viewed positive by important others if caring for PLWH. One participant, Beth (average HAPSI score: 2.77), expressed that family and friends would be “Happy I’m caring for people in need.” Lee (average HAPSI score: 2.60) expressed that caring for PLWH is viewed as not being the “biggest deal” among people she is close to. Sal spoke about her reasoning for being viewed positively being related to having a friend who has HIV:

They don’t look at it as being stigmatized, and I wouldn’t be viewed differently for caring for PLWH. Because I do have a childhood friend who actually contracted HIV as a teenager. So, I would not be looked at any different, because I do have family and friends who are open-minded. That are not closed off to the factor of HIV. They don’t look at it as being stigmatized. (Sal [low HAPSI score: 1.24], Personal Communication, May 18, 2018)

All six participants perceived that their family or friends would view them in a positive manner. Defining themes that related to these positive perceptions are as follows: family and friends are compassionate (n=3), understanding (n=4), accepting (n=2), and open-minded (n=1). One participant had mixed perceptions in how he would be viewed. Bob (average HAPSI score: 2.66) reported being accepted by family, because his spouse is a nurse. However, this participant also expressed he would be viewed negatively by friends who do not understand this disease. Bob expressed this by stating during his interview that “Friends would probably frown on me for doing that, because they don’t fully understand the disease;” however, my “Family would be accepting.” This lack of acceptance from friends stems from the misconception of how HIV is transmitted (Table 2).

Four of nine participants, Ann, Lynn, Bob, and Sue expressed they would be viewed negatively by friends or family. Three out of these four participants had high to average HAPSI scores: 3.47, 2.98, and 2.66, respectively. Only one low scoring participant, Sue (low HAPSI score: 1.00) expressed she would be viewed negatively by others. Defining themes that related to these negative perceptions are stigma (n=3), prejudices (n=1), or misconceptions (n=2) among family and friends regarding the disease and lifestyle factors. One of these four participants expressed if she were to work in an environment where she cared for PLWH, she would “keep confidential,” due to the “social stigma.” Pointing out that she “does not want people judging her patient” (Sue [HAPSI score: 1.00]; Personal Communication; June 2, 2018).

Category 2: Community Influence

Six participants, Ann, Sam, Lynn, Bob, Lee, and Liz, reported negative views within their respective communities toward PLWH but proclaimed that these views have no influence on

their attitudes toward caring for PLWH. Five out of the six participants had high to average HAPSI scores: 3.47, 3.41, 2.98, 2.66, and 2.60, respectively. Only one low scoring participant, Liz (HAPSI score: 1.56) reported negative views within her community. Those participants who expressed stigma within their communities (n=6) reported the need to separate their conservative beliefs from caring for PLWH. These negative views perceived by participants related to their communities were negative views toward lifestyle (n=3) in terms of stigma or prejudices (n=4). Two participants, Ann and Sam (high HAPSI scores: 3.37 and 3.41, respectively), expressed their communities in terms of conservative religious communities. Ann expressed that “We are very religious down here; there is a lot of strong biases, especially when it comes to lifestyle factor[s].” Sam described growing up in a conservative Christian community where certain lifestyle choices are unacceptable. The participants reported “Growing up in a Christian conservative community where it’s not so much looking down on HIV and AIDS, but on lifestyle choices . . . seeing them as wrong choices” (Table 2). One participant, Lee (average HAPSI score: 2.60) reports related stigma and HIV being viewed as a “gay disease” yet expresses that she does not associate with the views of her community (Table 2). Two participants, Sam and Liz (high and low HAPSI scores: 3.41 and 1.56, respectively) proclaim that their communities are compassionate toward PLWH, despite stigma toward lifestyle factors. All the participants discussed in this section reported being raised in and currently living in either rural and suburban communities in Alabama.

Three participants, Beth, Lee, and Sue (average and low HAPSI scores: 2.77, 2.60, and 1.00, respectively) reported positive attitudes within their respective communities toward PLWH, which have influenced their attitudes in positive ways. All three, who reside in suburban

or rural communities, expressed living in compassionate communities. For example, this compassion is described as stemming from a “diverse community,” which led to Sue (low HAPSI score: 1.24) being “open-minded.” Whereas Beth (average HAPSI score: 2.77) describes her community as one that “wouldn’t view [PLWH] differently” from anyone else. One student expressed that the way PLWH are viewed comes from the “small community, Bible belt stigma.” Yet, she expresses the need to separate the two (care and stigma) and provide the best level of care you can to patients, despite their disease process (Table 2).

Category 3: Religious Influence

While the majority of participants did not disclose underlying personal stigma when discussing the influence on their attitudes by their respective communities, this discourse was revealed in responses related to religious influences on their attitudes. Eight participants revealed that their religious beliefs influence their attitudes toward caring for PLWH in positive ways by fostering compassionate and caring attitudes. However, five out nine of these participants: Ann, Sam, Lynn, Beth, Bob portrayed underlying stigma when discussing their religious influence. Participants had high to average HAPSI scores: 3.47, 3.41, 2.98, 2.77, and 2.66, respectively. For example, Beth (average HAPSI score: 2.77) expressed she would “try not to make them feel bad about their decisions.” How the disease is transmitted “I do not always agree with.” Two other participants were open with discussing their own stigmas, which stem from their religious beliefs. For instance, Ann expressed that “In the back of my mind, I would have some form of prejudice”; “sexual relationships are meant to be between a man and a woman.” Sam (high HAPSI score: 3.41) expressed that “As a Christian, I would see those as wrong lifestyle choices.” Despite these expressed stigmas, four participants endorsed the need to remain nonjudgmental

toward PLWH. Liz (low HAPSI score: 1.56) discussed the strong views within the Catholic church regarding sexuality, but from her perspective her religion has influence her by teaching her to treat everyone with compassion and remain nonjudgmental, regardless of views. Lee (average HAPSI score: 2.60) offers an exemplar statement regarding religious influence, “Faith is based off caring for people and about people.” Similar responses were echoed by others in many ways regarding their views in caring for PLWH.

Category 4: Nurse Education Influence

The majority, seven participants, expressed their nursing education has influenced their attitudes toward caring for PLWH in some way. One participant, Ann who is a BSN student (high HAPSI score: 3.47), expressed how her education obtained through nursing school has taught her compassion and the ability to “leave what you believe at the door” and not let personal views “effect how you talk to” or “care for that patient.” Five participants reported their nursing education had relieved some misconceptions regarding the disease by either increasing knowledge or reinforcing prior knowledge about HIV. For example, Sue who is an ADN student (low HAPSI score: 1.24) suggested that her nursing education improved her understanding of the appropriate use of personal protective equipment (PPE), where she expressed she now understands that you “don’t really have to go overboard with PPE.”

Two participants expressed learning through observation during clinical rotations regarding barriers presented by preceptors during care for a patient with HIV. Lee, who is a BSN student (average HAPSI score: 2.60) reported witnessing the “hyperawareness” regarding the patient being HIV positive and how the nurses treated the patient differently because of this. Liz, who is an ADN student (low HAPSI score: 1.56) expressed how she witnessed the hesitancy of

other nurses toward caring for the HIV patient. Both participants revealed increased awareness and understanding to how PLWH are treated differently by healthcare professionals in actual practice. Only two students expressed that nursing school had no influence on their attitudes toward caring for PLWH.

Qualitative Question 2 Results Based on HAPSI Scores and Degree Level

The results to qualitative question two indicate a correlation between HAPSI scores and how participants felt they would be viewed by important others if they were to provide care to PLWH. Participants with low to average HAPSI scores indicated more positive views in how they would be perceived by others if they were to provide care to PLWH. Participants with average to high HAPSI scores indicated they would be viewed negatively by friends or family. These negative views stem from stigma, prejudices, and misconceptions related to the disease and lifestyle factors associated with HIV. Whereas participants with low to average HAPSI scores perceived more acceptance among important others if they were to care for PLWH. There were no differences in how participants perceived they would be viewed by others and their degree level (ADN or BSN).

When analyzing community, religious, and nurse education influence on participants attitudes, differences were found based on HAPSI scores and community and religious influences. Participants with higher HAPSI scores perceived more stigma within their respective communities and revealed more underlying stigma associated with their religious beliefs than lower scoring participants. Lastly, there were no differences between HAPSI scores or degree level and participants perceptions of how their nursing education had influenced their attitudes.

The majority of participants voiced that their nursing education had improved some knowledge and alleviated some misconceptions related to HIV.

Summary of Qualitative Results

All nursing students for the qualitative phase of the study were drawn from the sample of students who had volunteered to be contacted for interviews. The majority of participants, eight out of nine nursing students, were females. Seven nursing students were of the Christian faith, one student was of the Catholic faith, and one participant identified as other, but voiced being spiritual. All nursing students were living in suburban and rural regions of Alabama. The majority, six participants, were attending either an ADN (n=2) program or BSN(n=4) program in the western region of Alabama. Three participants were attending ADN programs in the central and north regions of the state. Four of the nursing students had cared for someone with HIV while in nursing school. The one male participant had worked in a non-healthcare setting with PLWH. And one participant personally knew someone close to her with HIV.

Results for qualitative question one revealed generally positive attitudes students and a willingness to care for toward PLWH among nursing students, despite their HAPSI scores or whether the participant was obtaining an ADN or BSN degree. The results for qualitative question two revealed that the majority, six out of nine participants, had positive perceptions about how important others would view them if working in an environment where they care for PLWH. There was a correlation between HAPSI scores and how participants perceived others would view them with average to high scoring participants perceiving they would be viewed negatively by friends or family. Likewise, participants who expressed being viewed positively generally had average to low HAPSI scores.

When exploring the influences community, religion, and nursing education had on attitudes, participants voiced that the views of their communities had no impact on their attitudes, yet higher HAPSI scores among participants correlated with more perceived negative attitudes among participants respective communities. Findings also revealed that HAPSI scores were associated with religious influence on participants attitudes. Participants carrying more underlying stigma related to lifestyle factors generally had higher HAPSI scores than participants with average to lower HAPSI scores. However, despite underlying stigma toward lifestyle factors, participants expressed the need for separating these beliefs from caring for PLWH. Others voiced that the compassion within their religion has influenced their attitudes toward caring for PLWH. There was no correlation between compassionate attitudes influenced by participants religious beliefs and participants HAPSI scores. Lastly, when looking at influences of nursing education on participants' attitudes, most students voiced that their education influenced their attitudes in positive ways by alleviating some fears and increasing some knowledge of HIV. However, participants voiced that nursing students' concerns are linked to lack of experiences and knowledge, and fears of contagion when thinking about caring for PLWH. There was no correlation between HAPSI scores, degree level and nursing education influence on attitudes among participants.

Summary of Mixed Method Results

The mixed method results indicate that nursing students in Alabama carry generally positive attitudes and a willingness to care for PLWH. According to HAPSI Awareness, Acceptance, and the overall HAPSI scales, scores were generally low which indicates low stigma among students related to PLWH. When comparing overall HAPSI scores and sociodemographic

characteristics, male nursing students, who only accounted for 8% of study participants, scored higher on the Awareness global scale indicating slightly more stigma than the female participants. However, there were no differences on Acceptance scores or overall HAPSI scores. Additionally, white participants scored higher on both Acceptance and overall HAPSI scores, indicating more stigmatizing attitudes than non-whites. Non-white participants only accounted for 15% of nursing student in this study. Qualitative results confirmed the quantitative findings in that nursing students generally have an overall positive attitude and a willingness to care for PLWH. However, these qualitative results also indicate underlying stigma which stems from conservative religious beliefs existing among nursing students toward lifestyle factors associated with HIV infection. Despite this underlying stigma, the majority, eight participants expressed that their religion has helped foster caring and compassionate attitudes towards PLWH.

Quantitative results indicated no significant differences in attitudes based on age, growing up in or currently living in rural, urban, or suburban areas, level of nursing degree being obtained, or whether participants had ever cared for someone with HIV. Further qualitative analysis of the degree level and community influence on attitudes confirmed that there were no differences based on these characteristics and nursing students' attitudes toward PLWH. Nursing students, regardless of overall HAPSI scores and degree levels endorsed concerns in caring for PLWH due to fears and misconceptions related to contracting the disease, lack of knowledge, and inexperience despite carrying generally positive attitudes toward PLWH.

Chapter V will discuss the interpretations of the mixed methods findings and discussion recommendations for nursing education, implications for future research, the limitations of this study, and finally the conclusion

CHAPTER V: DISCUSSION

This sequential mixed methods study sought to identify nursing students' attitudes toward caring for PLWH and explore how these attitudes influence their willingness to care (behavioral beliefs) and sociodemographic characteristics influence on attitudes. This study also sought to explain how students' perceptions (subjective norms) of how important others views about them caring for PLWH impacts their attitudes toward caring for PLWH. Through qualitative measures the researcher also sought to uncover how community, religion, and nursing education influenced attitudes of nursing students. Exploring these three factors helped to provide insights into how students' attitudes toward PLWH are influenced by the beliefs, religious values, and their nursing education.

To identify attitudes, the researcher utilized a Qualtrics survey instrument consisting of sociodemographic questions and the HAPSI scales of Awareness and Acceptance. Descriptive statistics were used to analyze global Awareness and Acceptance scores and overall HAPSI scores to determine stigma related attitudes. Qualitative open-ended interview questions were used to further explore attitudes from different perspectives utilizing participants' perceptions to provide a deeper understanding of attitudes and how they affect nursing students' willingness to care for PLWH. This study also explored nursing students' perceptions of how people they viewed as important others (family, friends, etc.) would perceive them if they were to care for PLWH. In addition, influences of community, religion, and nursing education on students'

attitudes were explored further through interviews to gain a better understanding of how these factors play a role in shaping attitudes toward PLWH.

Interpretation of Findings

As a reminder, attitudes were determined by HAPSI score ranges, with higher scores indicating more negative attitudes and lower scores indicating more positive attitudes. The quantitative results suggest that nursing students have generally positive attitudes and carry less stigma toward PLWH. There were no significant differences in nursing students' attitudes based on sociodemographic characteristics of age; having cared for someone with HIV; community settings students were raised in: rural, suburban, or urban, community setting students currently live in; level of nursing degree (ADN or BSN); or religion. However, there were differences in attitudes based on gender when comparing Awareness global scores, with male nursing students scoring higher indicating slightly more stigma related attitudes than female nursing students.

Additionally, findings suggest White nursing students have higher stigma related attitudes than non-White nursing students when comparing race with Acceptance global scores and overall HAPSI scores. Readers are cautioned that due to unequal sizes between groups related to gender and race, accurate inferences could not be made. Because the sample of qualitative participants fitting into the characteristics based on gender and race were also unequal, the researcher could not make inferences between the quantitative and qualitative findings based on these characteristics. However, male and non-white participants indicated no differences in their responses compared to female or White participants during their interviews.

The qualitative findings in this study indicate that students carry positive attitudes toward caring for PLWH, which is supported by findings in the literature which suggests that despite

lack of education regarding the psychological and physical aspects of caring for PLWH, students revealed a willingness to care (Veeramah, 2008). However, there were mixed attitudes in regard to how students felt they would be viewed by family and friends if they were to care for PLWH. These mixed perceptions of students on how others would view them are consistent with Oliver and Dykeman's (2003) study, which revealed that students' willingness to care was influenced by how they were viewed by others, despite students' personal attitudes. Nursing students in this current study did not reveal that how they would be viewed by others would have any effect on their attitudes or their willingness to care for PLWH. However, it is important for nurse educators to evaluate the potential impact of students' perceptions regarding the views of others in caring for PLWH. This evaluation is important since anxiety related to fear of rejection have been linked to hesitancy in caring for PLWH, despite the personal attitudes of nursing students (Oliver & Dykeman; 2003).

To provide a more in-depth understanding to how students' attitudes are connected to their subjective norms, the researcher explored community, religion, and nursing education influences on attitudes. It was revealed that while students voiced positive attitudes toward caring for PLWH, underlying stigmas were expressed regarding lifestyle factors associated with the transmission of HIV. Stigma related to how HIV is transmitted is well documented in the literature as being a leading to barriers in health care for PLWH (Baunach & Burgess, 2013; CDC, 2016; Menefee, 2012). These stigmas were revealed during discussions of religious influence on attitudes with students and were addressed as disagreements with how HIV is transmitted. This finding is congruent with reports that influences from community and religious views that are embedded in deeply held conservative and religious convictions are tied to

underlying stigmas (Lichtenstein, 2003; Reif et al., 2017; Sartorius, 2007). Underlying stigmas revealed through qualitative analysis in this study are reflective of other research findings relative to nursing students' attitudes toward PLWH, and one of the main contributors to negative health consequences among this population (Lichtenstein, 2003; Menefee 2012).

While underlying stigmas were revealed during the discussion of religious influence, most participants expressed their religion influenced their attitudes in positive ways in relation to being compassionate and caring toward PLWH. The researcher postulates that these positive views gained through students' religious beliefs have more influence on attitudes toward caring for PLWH than the influence of underlying stigma. However, it is important to note that despite caring attitudes, underlying stigmas can be unintentionally expressed during encounters with PLWH. It is also important to note that nursing students who reported perceived negative attitudes within their respective communities voiced that these views would not affect their personal attitudes toward PLWH. However, nurse educators must consider the emotional stress caused by prejudice and stigma related attitudes toward PLWH, which can impede therapeutic communication between nursing students and PLWH (Stavropoulou et al., 2011).

The influence of nursing education on attitudes for both ADN and BSN level students was also found to have reinforced the compassion and caring attitudes revealed through the discussion of religious influences. The majority of nursing students revealed that nursing education also increased some understanding or reinforced prior knowledge related to HIV. Although, nursing students from both ADN and BSN level programs carry fear related to disease contagion, lack of knowledge, and lack of experience. These concerns are indicators affecting nursing students' attitudes toward caring for PLWH (Arora, Jyoti, & Chakravarty, 2014; Atav et

al., 2014; Herr et al., 2012; Qu et al., 2009; Cornelius, 2006). Additionally, fear related to contagion, lack of knowledge and lack of experience in HIV care may lead to hesitancy in caring for PLWH in professional nursing practice settings. This statement is echoed through nursing students in this study who observed the hyperawareness and hesitancy of practicing nurses during their clinical experiences. This finding is comparative to the results revealed in a study of healthcare workers in Alabama and Mississippi where healthcare workers endorsed stigma and resistance towards PLWH (Stinger et al.; 2016). This discourse in care for PLWH resonates the importance of this study, so that nurse educators can be informed in ways to help build curriculum that includes educational experiences to help prepare nursing students for future practice.

Having experience in nursing education, I am aware that HIV competencies are limited in coverage in both ADN and BSN nursing programs. Additional information gathered from other nurse educators who work within ADN and BSN programs indicate that HIV education is covered briefly in the BSN level community health and complex care courses offered to senior level students (M. Montgomery, Personal Communication, May 19, 2017) and in pathophysiology, medical-surgical courses, and pharmacology in both ADN and BSN nursing programs (C. Murton and A. Huff, Personal Communication, April 16, 2017). These reports are consistent with the literature that focused on curriculum evaluation of HIV nursing competencies in current nursing curriculum (Gagnon & Cator, 2015). Literature suggests that HIV competencies related to the psychosocial, spiritual and legal issues are generalized and do not included special considerations related to PLWH (Bektas & Kulakac, 2007). While competencies related to psychomotor skills are well covered, issues related to inappropriate use of universal

precautions were lacking when incorporating the care of PLWH (Gagnon & Cantor, 2015). One of the main concerns reported in this current study of ADN and BSN nursing students was their lack of skills and knowledge in using universal precautions.

Limitations to the Study

Although the findings from this study are informative and can be used in many ways as a foundation for further research and inform nursing education regarding attitudes, there were a few limitations that restricted the outcomes. As mentioned in Chapter III, the main limitation was the small sample size which affected the ability to generalize the findings from the quantitative analysis to nursing students within Alabama. The convenience sampling procedure restricted the study and resulted in a smaller population the researcher could recruit participants from. The time and resource constraints of the researcher and time constraints of senior level nursing students also contributed to the limited response rate. However, the quantitative sample provided a robust sample to purposefully draw from for the qualitative phase of the study and provided a baseline of attitudes of nursing students that could be explored further through interviews. Use of a mixed method approach allowed the researcher to validate findings from the quantitative data and also provide a deeper understanding of findings through qualitative methods. Additionally, mixed method research allowed for overcoming weakness in individual methods, which occurred in the quantitative phase of this study (Harris & Brown, 2010).

An additional limitation to this study was contributed to the use of an online survey, the results are limited to the personal meanings and trustworthiness of the participants who completed them. Social desirability bias, which is the tendency to answer in a way that the participants sees as socially acceptable, especially when surveys cover sensitive topics, can affect

trustworthiness of responses (Moy & Murphy; 2016). This same type of bias applies to the interviews. Also, the survey may be subject to problems with goodness of fit with the targeted population. The researcher attempted to address this potential problem by utilizing the HAPSI instrument, which was piloted with nursing students and was measured as having a good fit and reliability.

Lastly, qualitative studies include their own special set of limitations. Response bias is a major factor in that participants may state what they perceive the researcher wants to hear. The researcher took steps to reduce response bias in the study by selecting private interviews over focus group discussions due to the sensitive topic (Maxwell, 2013). The researcher made sure to always address herself as a doctoral student to reduce intimidating participants. Additionally, the researcher visited students' classes to build rapport and explain the study procedures ahead of time in an attempt to increase students' comfort level in participating in the study.

Lessons Learned

There were three important lessons learned from conducting this sequential mixed methods study. First, the researcher chose to recruit participants in person, and provided a handout comprised of an invitation to participate and a link to the online survey. The use of a survey link on the handout may have played a role in decreasing the number of participants who accessed the survey, as the handout could have been lost by potential participants. Secondly, emails of potential participants were not collected at the time of recruitment. Instead, the researcher provided an option at the end of the online survey for those who agreed to volunteer for the follow-up interviews that took place in the qualitative phase of the study. This limited access to participants during the data collection, since the researcher could not contact

participants to remind and encourage them to complete the survey. Collecting emails from students during the recruitment visits to campuses would have provided a better way to distribute the Qualtrics survey via email and may have improved participation in this study. Also, collecting emails during recruitment would have allowed the researcher a means for contacting participants regarding completion of the online survey. Lastly, no incentive was offered to participants in this study. Offering a small incentive for participation, such as a chance to win a gift card, may have increased participation in this study.

Implications for Nursing Education

This study supports the need for integrating HIV competencies into nursing curriculum to allow opportunities for nursing students to build the knowledge and confidence in not only the physical aspects of caring, but the psychosocial aspects of caring for PLWH. Integrating HIV competencies throughout nursing curriculum is crucial for preparing nursing students in the south, since there are increasing encounters between nurses and PLWH across all clinical settings. Providing opportunities for applying HIV competencies in clinical practice scenarios using simulation exercises, or during real clinical encounters may increase student confidence levels in caring for PLWH. The researcher recommends allowing opportunities for nursing students to reflect on their own personal views toward PLWH. The researcher encourages nurse educators to utilize the scales from the HAPSI survey and open-ended questions from the interview script as ways to help build an open dialogue with students regarding their attitudes and willingness to care. Incorporating learning experiences with PLWH will assist in increasing knowledge, but also provided students opportunity to reflect on their own concerns and attitudes

in a safe learning environment. Teaching communication skills to help students build confidence in communicating with patients with HIV during care is also important.

Recommendations for Future Research

While this study addresses nursing students' attitudes in the Deep South who have been underrepresented in research pertaining to attitudes toward caring for PLWH, continued research is needed in this area. The researcher recommends that future research expand upon the results of this study using a concurrent mixed methods strategy employing a random sampling of participants to help increase the population size and diversity of nursing students within the study. Random sampling may increase the number of participants who are male and non-white nursing students so that more equal comparisons can be made between attitudes of nursing students toward caring for PLWH. Additionally, a concurrent design will allow the researcher to gather quantitative data and qualitative data in one instrument at the same time from a larger geographic region, while also decreasing the burden to the participants over time (Creswell, 2013). It is the researcher's opinion that a concurrent mixed methods study design using random sampling procedures could help build upon and help further validate the outcomes of this study.

Conclusion

PLWH report barriers in healthcare related to negative stigmatizing attitudes of healthcare workers, including nurses. Improvement in these attitudes will occur through incorporation of not only physical learning experiences, but psychosocial learning experiences in nursing curriculum involving care of PLWH. In addition, curriculum focused on increasing knowledge of HIV will improve attitudes of nursing students toward caring for PLWH, which in turn will influence the success of their professional practice encounters with this population

across the healthcare spectrum. This study found that nursing students in Alabama, while having positive attitudes toward and willingness to care for PLWH, carry underlying stigmas associated with how the disease is transmitted. This suggests what previous research reports--despite a willingness to care and compassionate attitudes toward caring for PLWH, influences from community and religious views that are embedded in deeply held conservative and religious convictions are tied to underlying stigmas revealed in nursing students. Stigma coupled with perceived lack of knowledge and lack of experience with PLWH can instill fears toward caring for this population. It is the hope of this researcher that findings from this study provide useful insights regarding nursing students' attitudes for future development of nursing curriculum. Lastly, it is anticipated that this study will pave the way for future research endeavors associated with exploring Alabama nursing students' attitudes toward caring for PLWH to expand upon the findings of this study and add to the body of knowledge related to this phenomenon within Alabama.

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APPENDIX A

THE UNIVERSITY OF ALABAMA IRB APPROVAL



DATE: TO:

FROM: PROTOCOL TITLE:

FUNDING SOURCE: PROTOCOL NUMBER: APPROVAL PERIOD:

December 05, 2017

Jennings, April, Educational Leadership, Policy and Technology Studies

March, Alice, Nursing Continuing Studies, George, Safiya, Nursing Instruction

Graham, Jeanelle, MPH, Research Compliance Specialist, NM Expedited

Identifying and Exploring Alabama Nursing Students' Attitudes Toward Caring for People with HIV: An Explanatory Sequential Mixed Methods Study

NONE

17-10-593

Approval Date: December 01, 2017 Expiration Date: November 29, 2018

NOTICE OF APPROVAL FOR HUMAN RESEARCH

The Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled: Identifying and Exploring Alabama Nursing Students' Attitudes Toward Caring for People with HIV: An Explanatory Sequential Mixed Methods Study. The project has been approved for the procedures and subjects described in the protocol. This protocol must be reviewed for renewal on a yearly basis for as long as the research remains active. Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.

If approval did not accompany a proposal when it was submitted to a sponsor, it is the PI's responsibility to provide the sponsor with the approval notice.

This approval is issued under University of Alabama's Federal Wide Assurance 00000647 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under Committee's Assurance, please do not hesitate to contact us.

Please direct any questions about the IRB's actions on this project to:

Graham, Jeanelle

Graham, Jeanelle

Approval Period: Review Type: IRB Number:

December 01, 2017 through November 29, 2018 FULLBOARD

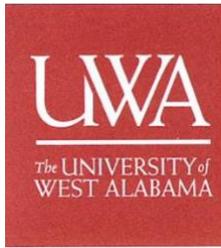
03

Page: 1

The University of Alabama 801 University Blvd Tuscaloosa AL TEL: 205 348 6457

APPENDIX B

THE UNIVERSITY OF WEST ALABAMA IRB APPROVAL



January 8, 2018

April Jennings, RN, MSN
Doctoral Candidate in Instructional Leadership, Policy, and Technology for Nurse Education
The University of Alabama

Re: UWA IRB Protocol #17-35, "Identifying and Exploring Alabama Nursing Students' Attitudes Toward Caring for People with HIV: An Explanatory Sequential Mixed Methods Study"

Dear Ms. Jennings,

The University of West Alabama Institutional Review Board has granted approval for your proposed research "Identifying and Exploring Alabama Nursing Students' Attitudes Toward Caring for People with HIV: An Explanatory Sequential Mixed Methods Study."

Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(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.

Your application will expire on January 8, 2019. If your research will continue beyond this date contact me at cgiles@uwa.edu for an extension.

Should you need to submit any further correspondence regarding this proposal, please include the above IRB number.

Sincerely,

Carmen Giles
Chair, Institutional Review Board
Office of Sponsored Programs & Research The University of West Alabama

OFFICE OF SPONSORED PROGRAMS & RESEARCH



Lyon Hall · Station 47 · Livingston, AL 35470 · 205-652-3424 · Fax 205-652-3837

APPENDIX C

NORTHEAST ALABAMA COMMUNITY COLLEGE APPROVAL

April,
It's a go.
J. Hopson

Jane S. Hopson, MSN, RN, CNE
Health Science Division Director/Nursing
Northeast Alabama Community College
Rainsville, Alabama 35986
256.228.6001 X2299
hopsonj@nacc.edu

From: Dr. David Campbell [mailto:campbelld@nacc.edu]
Sent: Thursday, November 16, 2017 11:19 AM
To: 'Jane Hopson' <hopsonj@nacc.edu>
Subject: RE: Potential research site

Yes, looks like a good project. Please let me know what she concludes. JDC

Dr. David Campbell
President of Northeast Alabama Community College
Post Office Box 159
Rainsville, Alabama 35986
Email: campbelld@nacc.edu
 [\(256\)-638-4418](tel:(256)-638-4418), Ext. 2243

From: Jane Hopson [mailto:hopsonj@nacc.edu]
Sent: Thursday, November 16, 2017 8:27 AM
To: Dr. David Campbell <campbelld@nacc.edu>
Cc: Dr. Joe Burke <burkej@nacc.edu>
Subject: FW: Potential research site

Dr. Campbell,

With your permission, I would like to take part in this study. Not only will it assist a nurse educator colleague, it will also give us information about our students' attitudes regarding care of a vulnerable patient population. From a nursing standpoint, it would be very interesting to know how students in 2017 view care of HIV/AIDS patients versus how I recall student and employee attitudes in the 1980's.

Thank you for your consideration,

Jane

Jane S. Hopson, MSN, RN, CNE
Health Science Division Director/Nursing
Northeast Alabama Community College
Rainsville, Alabama 35986
[256.228.6001](tel:256.228.6001) X2299
hopsonj@nacc.edu

APPENDIX D

PARTICIPANT RECRUITMENT APPROVAL FROM JEFFERSON STATE COMMUNITY
COLLEGE--JEFFERSON CAMPUS

April,

I would be happy to facilitate your access to the students. I am seeing them on Thursday and will give them a heads up that you will be coming.

Here are the dates we meet this semester:

(all are Thursdays, 9-3 except as noted)

Jan 11, 25

Feb 8, 15

Mar 1, (12-3) 22 (testing only)

Apr 5 (testing only)

Please let me know what you would like me to do to make this happen for you.

Dr. Venius Turner

Nursing Instructor

vturner@jeffersonstate.edu

[\(205\) 856-7771](tel:(205)856-7771)

www.jeffersonstate.edu

APPENDIX E

THE UNIVERSITY OF ALABAMA AMENDED IRB APPROVAL

January 22, 2018

April Jennings, MSN
Department of LEPTS
College of Education
The University of Alabama
Box 870302

Re: IRB # 17-OR-406-A "Identifying and Exploring Alabama Nursing Students' Attitudes Towards Caring for People Living with HIV: An Explanatory Sequential Mixed Methods Study"

Dear Ms. Jennings:

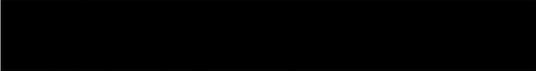
The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.

Please remember that your protocol will expire on November 29, 2018.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.

Good luck with your research.

Sincerely,


Carpantato T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer
Office for Research Compliance

APPENDIX F

LETTER OF INVITATION TO PARTICIPATE IN A RESEARCH STUDY

Identifying and Exploring Alabama Nursing Students' Attitudes Toward Caring for People Living with HIV: An Explanatory Sequential Mixed Methods Study

Dear Student,

I am currently involved in a research study exploring the attitudes of nursing students in Alabama in relation to providing care to patients living with Human Immunodeficiency Virus (HIV). This study examines the relationship between attitudes based on existing knowledge related to HIV, previous experience with someone living with HIV, and personal beliefs related to providing care to this population. This study is being performed as partial fulfillment of the requirements for my doctoral degree in nursing education at The University of Alabama under the supervision of Dr. Safiya George, PhD.

Your participation in this project will provide useful information that will inform nursing education in ways to help prepare nursing students for future professional practice encounters with people living with HIV/AIDS. To qualify for participation, you must be an undergraduate nursing student in a 2 or 4-year professional nursing program and currently enrolled as a senior nursing student during the 2018 spring semester. You must be between 19 and 60 years of age. You will be asked to fill out a 9-item socio-demographic questionnaire and a 72-item survey using the HIV/AIDS Provider Stigma Inventory (HAPSI). The HAPSI includes sections that require responses to statements from "completely disagree" to "completely agree." Both the questionnaire and survey instrument will be completed online through a secure platform known as Qualtrics® and will take approximately 45 to 60 minutes to complete. Since the survey is completed online, you may complete at a time of day that is convenient for you and in the privacy of your own home. This survey can also be completed from your mobile device. Participants will have **14 days** to complete the survey.

Participation in the study is voluntary and you may withdraw at any time. There are no incentives, such as bonus points for completing the survey. Therefore, completion will not negatively impact your grades. All data collected from the survey are confidential and you will remain anonymous. Data collection is for research purposes only. There will be no way of identifying your responses from other participants' responses. Names, personal addresses, or date of birth will not be included in the survey responses. Also, you will have the opportunity to participate in a 30-45-minute telephone interview with the principal investigator at a later time to answer brief questions that will be based on the overall analysis of the survey data. Participation in the survey will be considered consent to both phases on this research. To participate in the interviews, you will be asked to provide your name, email, and phone number at the end of the survey, so that you can be reached to schedule this interview at a time convenient for you.

Although there are no foreseeable risks to the participant, the questions on the HAPSI survey related to beliefs and viewpoints about disease contagion, lifestyle factors, and sexual orientation may be to disturbing to some. If you feel questions of this type would upset you, please feel free to decline participation at any point during this study. Any responses in the survey up to the point of your withdrawal will be discarded from the data analysis. Thank you for your time and consideration.

Sincerely,
April Jennings RN, MSN
Doctoral Candidate at
The University of Alabama
Doctor of Education in Instructional Leadership,
Policy, & Technology for Nurse Educators

Survey Access Instructions

You may access the HAPSI survey from your computer or mobile device:

- Type link into your survey engine:

https://universityofalabama.az1.qualtrics.com/jfe/form/SV_9KLDPBm3J4RHNYx

APPENDIX G
SOCIODEMOGRAPHIC QUESTIONNAIRE

- 1) What is your age?
 - 19-25
 - 26-40
 - 41-55
 - 56-60
- 2) What is your sex?
 - Male
 - Female
- 3) What is your race/ethnicity?
 - Black/African-American
 - White/Caucasian
 - Hispanic/Latino
 - Other
- 4) What is your religion?
 - Catholic
 - Protestant
 - Other
 - None
- 5) What type of community did you grow up in?
 - Rural
 - Urban
 - Suburban
- 6) What type of community do you currently live in?
 - Rural
 - Urban
 - Suburban
- 7) What nursing degree are you working toward?
 - Associated of Science/Applied Science in Nursing
 - Bachelorette of Science in Nursing
- 8) Do you know someone in your community who lives HIV/AIDS?
 - Yes
 - No
- 9) Have you ever cared for a person with HIV/AIDS?
 - Yes
 - No

APPENDIX H
HIV/AIDS PROVIDER STIGMA INVENTORY (HAPSI)

AWARENESS

Defined as: "looking deeply," noticing the full range of our experiences when encountering or thinking of people living with HIV/AIDS (PLHA).

Drawing from your own experiences, please circle the number that fits best, where:
1 = Completely Disagree and 7 = Completely Agree

The first "awareness" items focus on how people may use names for PLHA when thinking or talking about them.

If I know or suspect a patient or client has HIV, I am more likely to:

- 1) think of negative names to describe them. 1 2 3 4 5 6 7
2) think of them in scornful terms. 1 2 3 4 5 6 7
3) think they are a bad person. 1 2 3 4 5 6 7
4) think of them as a "junkie," "whore," or "pervert." 1 2 3 4 5 6 7

If I am concerned that I might get HIV from a patient or client, I am more likely to:

- 5) think of them in language I wouldn't want others to hear me say. 1 2 3 4 5 6 7
6) imagine names for them that are angry or blaming. 1 2 3 4 5 6 7
7) think they are disgusting. 1 2 3 4 5 6 7
8) think of them as contagious to justify avoiding them. 1 2 3 4 5 6 7

If I am concerned that others in my life will think of or treat me differently because I work with PLHA, I am more likely to:

- 9) use scornful language when describing them. 1 2 3 4 5 6 7
10) imagine them in terms I'd be embarrassed to say out loud. 1 2 3 4 5 6 7
11) call them names behind their back that I wouldn't say to their face..... 1 2 3 4 5 6 7
12) think they are "low lifes." 1 2 3 4 5 6 7

The next "awareness" items focus on how people may judge PLHA based on personal characteristics or qualities.

If I know or suspect a PLHA is also gay, I am more likely to think he or she:

- 13) is immoral. 1 2 3 4 5 6 7
14) is a sinner. 1 2 3 4 5 6 7
15) got HIV through bad behavior. 1 2 3 4 5 6 7
16) is disgusting. 1 2 3 4 5 6 7

If I know or suspect a PLHA is also an injection drug user (IDU), I am more likely to think he or she:

- 17) is a thief. 1 2 3 4 5 6 7
18) is an addict. 1 2 3 4 5 6 7
19) is a criminal. 1 2 3 4 5 6 7
20) is weak. 1 2 3 4 5 6 7
21) cannot be trusted. 1 2 3 4 5 6 7
22) is hiding important information from me. 1 2 3 4 5 6 7
23) will not follow through on recommendations or instructions. 1 2 3 4 5 6 7
24) will say anything to get what he or she wants. 1 2 3 4 5 6 7

If I know or suspect a PLHA has many sex partners, I am more likely to think he or she:

- 25) is desperate. 1 2 3 4 5 6 7
26) is immoral. 1 2 3 4 5 6 7
27) is a sinner. 1 2 3 4 5 6 7
28) has no self-control. 1 2 3 4 5 6 7
29) has made a mess of his or her life. 1 2 3 4 5 6 7
30) is bringing trouble on himself or herself. 1 2 3 4 5 6 7
31) is filthy. 1 2 3 4 5 6 7
-

The next "awareness" items focus on how people may reinforce differences between themselves and PLHA.

If I know or suspect a PLHA is gay, an injection drug user, or has many sex partners, I am more likely to:

- 32) make sure others know I think their behavior is unacceptable. 1 2 3 4 5 6 7
33) remind myself that I'm not like them. 1 2 3 4 5 6 7
34) think of my life as different from theirs. 1 2 3 4 5 6 7
35) keep quiet when others say hurtful or mean things about PLHA. 1 2 3 4 5 6 7
36) avoid spending my free time around people like PLHA. 1 2 3 4 5 6
-

If I am concerned that I might get HIV from a patient or client, I am more likely to:

- 37) make my interactions with them as brief as possible. 1 2 3 4 5 6 7
38) let volunteers or family members provide care that I should provide. 1 2 3 4 5 6 7
39) ask a colleague to take over their case. 1 2 3 4 5 6 7
-

If I am concerned that others in my life will think of or treat me differently because I work with PLHA, I am more likely to:

- 40) put them down for the way they live. 1 2 3 4 5 6 7
41) blame them for bringing problems on themselves. 1 2 3 4 5 6 7
42) gossip about them. 1 2 3 4 5 6 7
-

ACCEPTANCE

Defined as fully acknowledging the potential impact, intended or not, of our thoughts about and interactions with PLHA.

Drawing from your own experiences, please circle the number that fits best, where:
1 = Completely Disagree and 7 = Completely Agree

The first "acceptance" items focus on how people may harm PLHA if they use names for them when thinking or talking about them.

If I think of or use unpleasant names (e.g., queer, junkie, hooker, etc.) to describe my patients or clients, I am more likely to:

- 1) think of them as a "case" rather than as a unique human being.1 2 3 4 5 6 7
- 2) think of them based on their program of care (e.g., Ryan White Part B or C, or Medicaid) rather than their individual identity and life experiences.1 2 3 4 5 6 7
- 3) think of them as a disease rather than a person.1 2 3 4 5 6 7
- 4) oversimplify their experiences or problems.1 2 3 4 5 6 7

The next "acceptance" items focus on how people may harm PLHA if they judge them based on personal characteristics or qualities.

If I let my opinions about PLHAs being injection drug users, gay, or promiscuous shape how I think or feel about them, I am more likely to:

- 5) think of them as immoral.1 2 3 4 5 6 7
- 6) think of them as lazy.1 2 3 4 5 6 7
- 7) give up on being creative, and just try to get through the day at work.1 2 3 4 5 6 7
- 8) think of them as, having brought their problems on themselves.1 2 3 4 5 6 7
- 9) feel they won't come back for test results or other follow-up.1 2 3 4 5 6 7
- 10) feel that people like them are not worth the trouble.1 2 3 4 5 6 7

The next "acceptance" items focus on how people may harm PLHA if they reinforce differences between themselves and PLHA.

If I try to make sure others will see I am not like my PLHA patients or clients, I am more likely to:

- 11) reinforce that as a professional I know better than they do.1 2 3 4 5 6 7
- 12) tell degrading jokes about them.1 2 3 4 5 6 7
- 13) make sure that others know that I do not approve of the way PLHA live.1 2 3 4 5 6 7
- 14) talk about how other people make better lifestyle choices than PLHA do.1 2 3 4 5 6 7

The last "acceptance" items focus on how people may harm PLHA if they respond differently to them based on their personal characteristics or qualities.

If I treat my clients or patients differently because I think or know they have HIV, I am more likely to:

- 15) forget to remind colleagues to maintain confidentiality.1 2 3 4 5 6 7
- 16) keep quiet when others speak badly of them.1 2 3 4 5 6 7
- 17) overlook practices at work that may make PLHA feel put down or disrespected.1 2 3 4 5 6 7
- 18) rush through things rather than take the time to understand their feelings.1 2 3 4 5 6 7
- 19) not advocate for changing the way things are done.1 2 3 4 5 6 7
- 20) have them wait, sit or receive treatment in a separate area from other people.1 2 3 4 5 6 7

APPENDIX I

HAPSI APPROVAL FROM RESEARCHER

Dear April,

I am copying my colleague Neil Abell, co-author and expert psychometrician.

I am pleased that you wish to use the instrument in your dissertation research. We would appreciate learning about your results.

I have attached materials that will be useful to you. These are also available in a clinical measures book.

I'm glad to know of your interest, April. Sounds like a meaningful project, and I hope the HAPSI suits your needs. Let me know if I can be of any further assistance.

Best,

Neil Abell, Ph.D., LCSW

Professor & Director of International Programs

College of Social Work

C3409 UCC

296 Champions Way

Florida State University

Tallahassee, Florida 32306-2570

APPENDIX J
TELEPHONE INTERVIEW SCRIPT

Hello. This is April Jennings, a doctoral candidate at the University of Alabama in the EdD Nurse Educator program. I am contacting you, because you recently participated in a survey that I distributed to your nursing class related to nursing student' attitudes toward people living with HIV/AIDS. After completing this survey, you volunteered to be contacted so that you can participate in the interview portion of this study.

As a reminder, the interviews will be recorded for research purposes only. It should only take 20-30 minutes to complete the interview questions. The recording will begin when we are ready to start. Also, as a reminder, you will remain anonymous and your answers will be assigned a pseudonym (fake name), in order for me to keep the interviews organized during the transcribing and writing process.

- Do you have any questions before we begin the interview?
 - Are you ready to begin? (Start recording if participant ready)
1. If you know or suspect a person has contracted HIV through lifestyle factors, or through a sexual orientation that you do not agree with, as a nurse, how would you treat them?
 2. What is your opinion about patient rights in healthcare as its related to HIV positive patients?
 3. If you were to witness an HIV/AIDS patient being refused care by another health professional, how would be react or respond to the situation?
 4. In your opinion, what are some concerns of nursing students in caring for a person with HIV/AIDS?
 5. If you were to work in an environment where you cared for patients with HIV/AIDS, describe how you might be treated or viewed by others that are close to you (co-workers, friends, family, etc.)

Sub Questions:

6. How has the culture within your community influenced your attitude toward PLWH?
7. How has your spiritual or religious beliefs influenced your attitude toward PLWH?
8. What influence has your nursing education had on your attitude toward PLWH?

-You have completed the interview. I truly appreciate the time you have taken out of your schedule to participate in my study. Good Bye.

APPENDIX K
INFORMED CONSENT

Attitudes Toward Caring for People Living with HIV: Online Survey and Interview Consent

Dear Nursing Student,

This is a request for you to participate in a study. Please read the consent document before deciding to participate.

Purpose of the Research Study

I am doctoral student at the University of Alabama, and the principal investigator of a study regarding Alabama nursing students' attitudes toward caring for people living with Human Immunodeficiency Virus (HIV). This is an important study that will help inform nursing education in preparing students to care for patients living with HIV/AIDS (PLWH) in their professional practice. The research is being conducted through The University of Alabama and has been approved through the Institutional Review Board(s) and ethics committees. I would appreciate your participation and am asking you to take part in the online socio-demographics questionnaire and survey. You may also be asked to participate in a follow-up telephone interview with the principal investigator. This will occur after the all survey data has been analyzed. These interviews are an important part of the research, as they will allow for clarification and more in depth understanding to survey responses using your personal perspectives. Your completion of this online survey serves as your consent to participate in both phases of this study: survey and interview.

Risks and Benefits

Sometimes thinking about attitudes and beliefs related to HIV can be disturbing to some people. If the topic makes you uncomfortable, please do not participate. In addition, if you feel that you need to talk to anyone about any issues raised, please contact April Jennings, EdD Candidate, under the supervision of Safiya George, CRNP, PhD-Dissertation Supervisory Chair. While there are no direct benefits to you for participating in this study, your contribution as a participant is greatly appreciated.

Participation, Anonymity, Confidentiality and Consent

Survey responses and interview responses are anonymous and confidential. Personal information (name, address, date of birth, email, IP addresses, or the names of the affiliated nursing programs) will not be included in the data analysis. Responses will be restricted to only the researcher. Contact information: emails and phone numbers will be kept confidential and secured by the principal investigator in an encrypted file. There will be no identifying information linking you to your responses. As stated above, completion of the online survey implies your consent to participate in this study.

Compensation and Right to Withdraw from the Study

Participation is strictly voluntary, and no compensation will be given. The cost to you is the time that it takes to complete your participation in the study. If you elect to participate in the survey and follow up interview, and become uncomfortable, you are free to stop the survey or

interview at any time during the process. If you discontinue, any information already collected will be discarded. No extra credit or other incentives for participation in the study are given to participants. Therefore, you will not be negatively affected by withdrawing from the study.

Time Required

Completion of the online survey will take approximately 45-60 minutes, and you may complete this at a time and place that is convenient for you; however, please submit before the two-week deadline. If you are contacted for an interview, these interviews will take around 30 minutes to complete. The principal investigator will contact you via email to schedule a convenient time to be interviewed.

Data Results

Your input is valuable, therefore, you may be asked to review the outcomes of this study to rule out misinterpretations. Additionally, you may request a copy of the final results and any reports after the grouped data analyses has been completed. Please submit the written requests to April Jennings, RN, EdD (c) or Dr. S. George, CRNP, PhD at The University of Alabama Capstone College of Nursing 650 University Blvd. Tuscaloosa, Alabama 35401

Contact

If you have questions about your rights as a person taking part in a research study, make suggestions, or to file complaints and concerns, you may call Ms. Tanta Myles, the University of Alabama Research Compliance Officer at (205)-348-8461, or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html. You may email us at participantoutreach@bama.ua.edu. You may also contact my UA faculty advisor, Dr. Safiya George at (205) 348-1033 if you have any questions.

After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and email it to the University Office for Research Compliance, Box 870127, Rose Administration Building, Tuscaloosa, AL 35487-0127.

Thank you for your time and consideration.
Sincerely,

April Jennings, RN, MSN
Doctoral Candidate in Instructional Leadership,
Policy, and Technology for Nurse Education
The University of Alabama