An Exploration of Factors of LGBT Cultural Competency Among Prospective Healthcare Professionals

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ABSTRACT

Literature suggests there is a relationship between cultural competency and health outcomes as well as a perceived fear of discrimination LGBT individuals face when attempting to receive healthcare services. The aim of this study is to assess the level of LGBT CC (cultural competency) among prospective professionals who are expected to provide health care services and to explore factors that affect those attributes. Multiple linear regressions were conducted to test the effect of the following factors of LGBT CC: postsecondary experience, relations with LGBT individuals, and religion using a sample of 57 different healthcare students in a faith-based university during the spring of 2019. Although postsecondary experience did not have a significant effect, other findings within the disciplines raised awareness for this study. However, having a close relationship with a LGBT individual was found to be significant for both LGBT CC-belief and behavior, and religiosity was found to have a negative effect towards LGBT CC-behavior. The implication of the findings is not to disregard the postsecondary experience, but to point out the differences among disciplines. Knowing that the LGBT population is facing discrimination within healthcare settings makes it imperative for healthcare university programs and healthcare facilities to educate students and employees to be more culturally competent when working with LGBT clients.
An Exploration of Factors of LGBT Cultural Competency Among Prospective Healthcare Professionals

A Thesis
Presented to
The Faculty of the School of Social Work
Abilene Christian University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science

By
Heather Isbell
May 2019
This thesis, directed and approved by the committee for the thesis candidate Heather Isbell, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree in Master of Science in Social Work.

Assistant Provost for Graduate Programs

Date
5-8-2019

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To my partner, Brittany, to whom I would not have been able to complete this without her love and support that always kept me motivated.
ACKNOWLEDGEMENTS

I would like to thank my chair, Dr. Kyeonghee Jang, for believing in me and continuously being a great role model. I have gained great respect for her. I would also like to thank Drs. Stephanie Hamm and Tom Winter for the first initial conversations about social work and the continuous guidance throughout the program. If it was not for these three individuals, I would not be the professional I am today.
# TABLE OF CONTENTS

LIST OF TABLES......................................................................................................................... iii
LIST OF FIGURES ...................................................................................................................... iv

I. INTRODUCTION ................................................................................................................... 1
   Problem Statement ................................................................................................................ 1
   Purpose of Study .................................................................................................................... 4

II. LITERATURE REVIEW ......................................................................................................... 5
   Search Strategy ..................................................................................................................... 5
   Definition of LGBT ............................................................................................................... 5
   LGBT Facing Discrimination in Healthcare ........................................................................ 6
   Theoretical Basis for the Importance of Cultural Competency of Healthcare
      Providers .............................................................................................................................. 8
      Social Support Theory ....................................................................................................... 8
      Minority Stress Theory .................................................................................................... 10
   Knowledge about LGBT Cultural Competency ................................................................. 12
   Factors that Influence LGBT Cultural Competency ......................................................... 14
      Postsecondary Experience .............................................................................................. 15
      Training .............................................................................................................................. 16
      Religiosity .......................................................................................................................... 17
III. METHODOLOGY .................................................................................................. 21
Research Design and Sample .................................................................................. 21
Data Collection ......................................................................................................... 22
Instruments ................................................................................................................ 23
  LGBT Cultural Competence .................................................................................. 23
  Postsecondary Experience .................................................................................... 24
  Religiosity .............................................................................................................. 24
  Relations with LGBT Individuals ........................................................................... 25
  Control Variables .................................................................................................. 25
Analysis plan ............................................................................................................ 25

IV. FINDINGS ............................................................................................................ 27
Characteristics of the Sample ................................................................................ 27
Reliability Analyses to Check Internal Consistency of the Composite Variables. 28
  Religiosity .............................................................................................................. 29
  LGBT Cultural Competence .................................................................................. 30
Descriptive Statistics of Major Variables ................................................................ 32
  Continuous Variables ........................................................................................... 32
  Categorical Variables ............................................................................................ 33
Hypothesis Testing .................................................................................................. 36

V. DISCUSSION ......................................................................................................... 42
Summary of Hypothesis Testing ............................................................................. 42
Postsecondary Experience ...................................................... 42
Religiosity ................................................................................. 43
Relations with LGBT Individuals .............................................. 44
Implications of Findings .......................................................... 44
Limitations and Implications for Future Research ...................... 46
Conclusion .................................................................................. 47
REFERENCES ............................................................................. 49
APPENDIX ................................................................................ 55
LIST OF TABLES

1. Characteristics of the Sample ................................................................. 28
2. Internal Consistency of Religiosity .......................................................... 29
3. Internal Consistency of LGBT CC-Belief ............................................... 30
4. Internal Consistency of LGBT CC-Behavior ......................................... 31
5. Descriptive Statistics for Continuous Variables .................................... 33
6. Descriptive Statistics for Categorical Variables .................................... 35
7. Results of One-way ANOVA for LGBTcoursesTaken by Disciplines ....... 37
8. Multiple Linear Regression (MLR) Model of LGBT CC .......................... 39
9. Results of Independent Samples t-test for LGBT CC between Disciplines .... 41
LIST OF FIGURES

1. Research model of factors effecting cultural competency........................................19
2. LGBTcoursesTaken by Disciplines ............................................................................37
3. Residual plots for two regression models .....................................................................38
CHAPTER I
INTRODUCTION

Problem Statement

In 2018 there was a 0.4% increase in the LGBT population, making the population now 4.5% out of the total U.S. population, whereas in 2016 the population was 4.1% (Fitzsimons, 2018). This 4.5% means that the LGBT adult population accounts for more than 11 million in the U.S. (Fitzsimons, 2018). This percentage does not account for the LGBT youth in the U.S. In only looking at adolescents ages 18-19 in 2018, just under 8% of females and around 3% of males identify in the LGBT population (Office of Adolescent Health, 2018). A recent study from Chapin Hall at the University of Chicago found that young LGBT people are 20% more likely to experience more homelessness than non-LGBT youth, while 40% of youth who are experiencing homelessness are a part of the LGBT population (Our Issue, n.d.). Thus, there is a huge population of LGBT, both adults and youth, in the U.S. today, and as this population has grown in the last two years, it is only assumed that this population will continue to grow.

With the LGBT population not fitting society’s gender norms, there are levels of discrimination they face. However, some discrimination has been overcome as the U.S. legalized same-sex marriage on June 26, 2015. Ever since then, states have tried to pass bills that will discriminate against the LGBT population within businesses, adoption and foster care agencies, and in some cases with mental and physical health providers in order
to protect religious freedom (Stewart, 2018). Ryan Thoreson states in an interview with Philippa Stewart (2018), who is with Human Rights Watch, “Resistance to LGBT equality is the primary motivation for these laws, not a concern for religious freedom,” and he then goes on to say that seven states, including Texas, have laws that allow child welfare agencies to discriminate against same-sex couples when trying to adopt or foster. The reality is that none of these states have non-discrimination laws in order to protect LGBT people, so the question arises if these really are religious exemption laws, or if they are just a license to discriminate (Stewart, 2018).

The interview with Ryan Thoreson (Stewart, 2018) goes on to state other ways these laws are affecting people, by stating how people are turned away from mental and physical health providers. Many therapists in Tennessee stated that LGBT clients come to them in a crisis mode and should have seen a therapist a long time ago, but the clients have experienced forms of discrimination in the past with healthcare providers or have feared discrimination with the new laws being passed, so they have not tried to receive the services they need. The therapists spoken to were welcoming to the LGBT populations and stated that some clients were driving up to two hours for weekly therapy sessions. Another story described a man visiting the doctor, and when the patient stated that his spouse was a man, the doctor then began using female pronouns for the patient and mocked him throughout the appointment. This type of discrimination discourages LGBT people from seeking healthcare services.

Looking at the Healthcare Equality Index of 2018, a national LGBT benchmarking tool that looks through healthcare facilities’ policies and procedures when related to the inclusion of LGBT patients, visitors, and employees, 70% of transgender
patients and 56% of lesbian, gay, or bisexual patients reported they have received some sort of discrimination in healthcare. This healthcare equality index was created because the Human Rights Campaign feels that most U.S. healthcare facilities do not want the LGBT population in their area to feel or fear discrimination in their facilities, but often these facilities are not sure how to protect this population and give them the best quality of care. This development gives these facilities the information and resources needed so LGBT people have access to patient-centered care. These facilities take the healthcare equality index survey, and then if standards are met, they are awarded with designation as a LGBT healthcare equality leader. In 2018 alone there were 1,600 facilities evaluated in the U.S., and only 418 met the standards, with Texas only having eight (Healthcare Equality Index, 2018).

A 2016 survey taken with the American Hospital Association shows that there are 5,534 registered hospitals, 4,840 community hospitals, 2,840 not-for-profit hospitals, and 1,035 for-profit hospitals in the U.S. (Fast Facts on U.S. Hospitals, 2018.). With the LGBT population growing each year, it is assumed that the health needs of this population are increasing as well. There are more geriatrics that identify as LGBT that have their own unique health issues. There are also more youth “coming out,” who alone face different challenges that increase suicidal tendencies. HIV is still a continual problem among this population, too, and studies show that both women and men that identify as LGBT are more at-risk for cancers (Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017). If the fear of discrimination is what is keeping LGBT people from receiving health services and the healthcare facilities truly do want to help this population but are not entirely sure how, this study seeks to help to answer this.
This information shows that LGBT individuals still face discrimination, which tends to keep this population from receiving health services or impacts the need for services. In order for health care facilities to help this population effectively, the cultural competency of the professionals that potentially work with this population is critical because it affects a proper level of social support for this vulnerable population. Literature suggests that factors of cultural competency include postsecondary education, training, religion, past experience with relationship with LGBT. Although there have been few studies that research on the cultural competency of prospective health care professionals (Nama, MacPherson, Sampson, & McMillan, 2017), more studies are needed to examine these issues, such as comparing different healthcare disciplines, courses students have taken, the influence of beliefs, and the behaviors they may have towards LGBT individuals.

**Purpose of Study**

The aim of this study is to assess the level of cultural competency among prospective professionals who are expected to provide health care services to LGBT patients and to explore factors that affect those attributes. This study aims to answer the following sub-research questions:

1. What are the factors that impact the beliefs of professionals towards the LGBT population?
2. What are the factors that impact the behaviors of professionals towards the LGBT population?
CHAPTER II
LITERATURE REVIEW

Search Strategy

The literature review used a systematic method to identify research articles. Four search engines were used: Google Scholar, EBSCO, Science Direct, and NCBI. The criteria for inclusion were that the articles were written within the past fifteen years, written in English, and had been peer-reviewed. The articles chosen were found by a combination of different terms. Within each search engine the combination of search terms pertaining to tested studies consisted of “cultural competence,” “LGBT,” and “healthcare discrimination.” Of the other sources found, search terms that were used were “competence measuring tools,” “current LGBT statistics,” and concepts for example “person-in-environment,” “strengths perspective,” “cultural competency models,” and “social stress theory.” Relevant literature was also found by searching listed references in already retrieved articles. Initially, titles were skimmed in order to sort out articles, which then were analyzed for relevance pertaining to the purpose and research question of the study.

Definition of LGBT

According to The Joint Commission (2011), LGBT stands for lesbian, gay, bisexual and transgender with LGB referring to sexual orientation, and T being referred to as gender identity or gender expression. Sexual orientation is typically defined as a
pattern of emotional, romantic, and/or sexual attractions with opposite genders being heterosexual, with the same gender being homosexual, and with both genders being bisexual. Transgender, however, is a gender identity or expression that does not typically conform to the sex in which they were born with. While these four share the title LGBT, it is important to know that sexual orientation and gender identity are not the same even though they all do not fit the gender norm for society.

**LGBT Facing Discrimination in Healthcare**

Within the last six years (2011-2017) the lesbian, gay, bisexual, and transgender population in the U.S. has grown from 8.3 million to 11 million (Bridges, 2018). With this continuous increase, LGBT individuals are assumingly at an increased risk for cancer due to not receiving as many screenings, as well as mental health disorders, sexually transmitted diseases, and substance abuse; data shows that these individuals also receive poor healthcare and experience discrimination (Nama, MacPherson, Sampson, & McMillan, 2017). The federal government established Healthy People 2020 goals in order to improve the health, safety, and well-being of LGBT individuals as well as the Joint Commission which wants to support the correct care for these same individuals by cultural competence standards that accredited organizations have to follow (Traynor, 2016).

Studies show that LGBT individuals have increased anxiety and stress when going through the healthcare system due to past negative experiences or the fear of experiencing discrimination from the provider (Moone, Croghan, & Olson, 2016). Even though many of these providers may report that they treat every patient the same, that does not necessarily mean that the providers’ technique is giving LGBT patients the
ultimate quality of care. Sometimes ignoring the patients’ sexuality, which could be an influencing factor, can lead to the provider not seeing the whole picture of the patient. This situation could lead to negative health outcomes, as the patient is not receiving the full quality of care and services needed. These patients could also have built up anxiety due to the new religious laws that have been established that basically allow for LGBT discrimination from providers who are protected through religious freedom (Stewart, 2018). Many LGBT individuals do not receive health services due to the fear of discrimination based off the establishment of these laws (Stewart, 2018). One way to work through these barriers is to become a culturally competent practitioner, sometimes known as a “welcoming provider.” By going through trainings, giving signs through their body language, using intakes and assessments, and having visual cues for example signs on the walls, providers are able to signal to LGBT patients that they are welcoming (Moone, Croghan, & Olson, 2016).

Nowierski and Jackson (2016) stress the importance to their pharmacy students of using inclusive language when speaking with LGBT patients. For example, as Jackson states, asking a woman if she has a husband may be okay for a heterosexual woman, but if the woman is homosexual, then this could demonstrate bias. In most cases, a better way of asking is simply by using neutral words such as spouse or partner (Nowierski & Jackson, 2016). Some assumptions can cause more harm than good, as seen in the example above, but a struggle that the LGBT community still faces today is the fight with HIV and AIDS. In the past, many people in society associated HIV and AIDS with gay men, and in many cases, this population has struggled with it (Nowierski & Jackson, 2016). However, the assumption that every gay man has AIDS or that every person that is
gay has AIDS is incorrect. This thought process has put a negative image on the LGBT population, as there are heterosexual individuals that have HIV or AIDS, too (Nowierski & Jackson, 2016). These assumptions lead the LGBT population to perceive these assumptions as discrimination even if in most cases it is a lack of competence from the person assuming (Nowierski & Jackson, 2016).

Theoretical Basis for the Importance of Cultural Competency of Healthcare Providers

Cross, Bazron, Dennis, and Isaac (1989) describe cultural competence as a group of agreed-upon attitudes, knowledge, and behaviors among professionals that helps in situations dealing with cross-culture instances. Looking into a healthcare setting, Leininger and McFarland (2006) describe cultural competence among healthcare professionals as an ability to give permitted, respectful, and effective services to individuals with the understanding of the differences and similarities that diverse groups have. Two theories, the social support theory and minority stress theory, explain why cultural competency of healthcare providers is critical for LGBT patient healthcare outcomes and quality of service.

Social Support Theory

Frost, Meyer and Schwartz (2016) discuss that social support is an important resource, as it helps with emotional support, companionship, informational support (e.g., decision-making), or instrumental support (e.g., borrowing money, helping with health). Several studies have looked at the different supportive social networks one may have, such as friends or family that tend to provide emotional support. Populations who are considered to be a part of a social minority group are at risk for negative health outcomes
due to the influence of a lack of social support (Frost, Meyer, & Schwartz, 2016). When looking at the LGBT population, social support is a big factor in their lives as it is for most, but LGBT individuals specifically face their own distinct type of struggles (Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017). For instance, many LGBT youth and adults lose support from family and friends when they “come out,” which then adds stressors such as experiencing a lack of social support, resorting to substance abuse, or even being homeless (Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017).

Social support is theoretically complex and has many dimensions to build on because these dimensions can be measured in many ways (Rodriguez & Cohen, 1998). For example, Rodriguez and Cohen (1998) explain that structural support measures the interconnectedness of a person’s social relationships, whether that is friends, family, coworkers, spouse/partner, or organizations of which they are a part of. The author then explains that functional support measures the availability of psychological and material resources that someone receives within relationships. For instance, these resources are broken down into three types of support: instrumental, informational, and emotional. Instrumental support includes financial help or general help with everyday tasks. Informational support involves assisting with information that helps the person cope with their current problems, which sometimes is in the form of advice or guidance. Emotional support involves empathy, reassurance, and trust that allows for opportunities for expression or venting.

Rodriguez and Cohen (1998) then describe two social support conceptual models that may potentially affect physical and psychological health. The stress-buffering model suggests that support is in relation to well-being as support protects (buffers) people from
the effects of stress on mental and physical health. Then the direct effect model suggests that there is a relationship between support and well-being, as well-being is enhanced from support by the stress being taken away and continuing to stay away as support is there.

**Minority Stress Theory**

Minority stress theory is defined by Meyer (2003), stating that LGBT individuals experience forms of stress that are different from non-LGBT individuals that typically occur from discrimination, their own expectations of rejection, the management of their own identity, and negative social attitudes; in turn, these stress processes have a negative effect on the mental and physical health of these LGBT individuals (Frost, Meyer, & Schwartz, 2016). This theory further looks at the different levels of coping seen in this minority group that are used through these forms of stress. Meyer (2003) gives an example of these individuals using community-level coping processes, such as a community center for counseling or anti-gay violence support groups. This theory also suggests that social support from others in this minority group is helpful when coping with stress because they potentially share similar stresses, as they may have experienced similar discrimination, fear of rejection, or even struggle with similar identity issues (Frost, Meyer, & Schwartz, 2016).

An article from Samaroo (2017) looked at the effects of LGBT identities and support systems when related to mental health by studying four theories, one of which is minority stress theory. This particular study interviewed four women where they shared their experiences that concluded that LGBT youth without support, experience harassment, bullying, and other forms of discrimination that can result in negative mental
health outcomes. The article looked at a youth program in Houston, Texas where the group meets four times a week for three hours broken into unstructured social time, education, and peer support group time frames. A survey was given out to the youth that included questions about depression, social support, self-esteem and coping. The study also measured mental health outcomes by the length of attendance with the program. The study showed that the youth were experiencing mild to significant depressive symptoms, but overall the program scored high for social support within the program by showing that the longer the youth stayed the more social support they felt. With this increased social support, self-esteem grew, while depression decreased for youth that had been there longer. Overall, the study showed that mental health improved when minority stress decreased, and social support increased.

Continuing to look at minority stress, one study (Tebbe & Moradi, 2016) examined minority stress and the relation of suicide risk in transgender populations, which found that there are high rates of suicide risks and depression in this specific group. The three minority stressors that were recognized were experiences of discrimination, their own attitudes towards their identity, and fear of discrimination. These three stressors were in relation to depression in this group, and depression mediated suicide risk, placing these minority stressors as risk factors for suicide. This study also looked at social support from friends as a protective factor and look to implications with clinical practice and social justice advocacy with transgender individuals. The findings of this study are one step closer to helping clinicians understand the discrimination this group goes through and how these clinicians can do their part to
help by suggesting engagement in advocacy to reduce discrimination and help build cultural competence for themselves.

Another study (Salfas, Rendina, & Parsons, 2018) looked at the minority stress processes with gay and bisexual men, which showed that these two groups have higher rates of mental health disorders than non-gay or bisexual men. This study used data from 371 gay and bisexual men where the main focus was minority stress factors, community connectedness, and mental health outcomes. One minority stress factor (identity management) was identified to have a relationship with community connectedness and mental health outcomes. According to this relationship, the higher identified struggle with identity management led to the more risk of mental health outcomes, but the lower identified identity struggle and the more community involvement the individual participated in, the less depression and anxiety one encountered. Ultimately, clinicians can help by understanding the impact of this minority stress factor on this group and help this group overcome this factor, which can potentially lead to lower depression and anxiety levels.

**Knowledge about LGBT Cultural Competency**

Cultural competency can be considered a type of social support that LGBT patients receive from their health care providers so that they can cope with their stress better and have better healthcare outcomes. A study from Crisp (2006) developed an assessment tool, gay affirmative practice (GAP) scale, that looks at how social work practitioners engage in principles that align with the gay affirmative practice. This particular practice from Crisp (2006) looks at three approaches: person in environment, strengths perspective, and cultural competence models. These three approaches of gay
affirmative practice lay the framework of being a competent practitioner when working with the LGBT population. Person in environment is a perspective based on the idea that in order to understand a person and their behavior, one has to look at that specific person’s environment, such as their social, familial, spiritual, or physical environment (Kondrat, 2017). Strengths perspective is an approach that focuses more on the individual’s abilities and talents instead of specifically on their problems (Kim, 2013).

There are many forms of culturally competence models. The model based on the delivery of healthcare services (culturally consciously model of care) defines cultural competence as “the process in which the healthcare professional continually strives to achieve the ability and availability to effectively work within the cultural context of a client” (Transcultural C.A.R.E Associates, n.d.). This model has five constructs for competence: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Transcultural C.A.R.E Associates, n.d.).

Looking at behavior as a form of cultural competence, a study from Kite and Deaux (1986) experimented with males to predict behavior towards homosexuality. Each male was assigned a partner where they were informed, later informed, or not informed on the matter of the partner being homosexual. The results showed that tolerant and intolerant males react differently when they think they are interacting with a homosexual. This is backed by the evidence by the ratings of liking the individual, what information they asked from the individual, what information they gave the individual about themselves, and what they remembered about the individual.

Continuing to look at behavior and competence, a study for building healthcare workers’ confidence to work with same-sex parented families points out that the study
showed that many providers lack confidence when working with LGBT patients and did not have the appropriate skills or knowledge to deliver services because they were unfamiliar with the LGBT population (Doussa et al., 2016). The providers feared offending the patients and were unsure on how to approach LGBT patients through discussion. This study gave feedback from LGBT parents saying that they felt the providers “messed up” because they did not know how to ask or listen to these families for cues about appropriate language, so even though the providers were aware of the parents’ sexuality, the fact that they did not feel comfortable to approach the topic or listen during the discussion lead the parents to feel there was a lack of understanding from the provider (Doussa et al., 2016).

Turner, Wilson, and Shirah (2006) give four stages of cultural competency: awareness, sensitivity, competency, and mastery. In order to gain awareness, a person must be aware of the culture’s history, terminology, and needs. This awareness helps develop sensitivity and attitudes towards acceptance and cooperation. When this knowledge and when appropriate attitudes are built, healthcare providers are then able to demonstrate respect and consider the cultural influences of the patient when delivering health services. Eventually, through this process these providers will become knowledgeable and skilled enough that when considering cultural influences, they can reach a mastery level of competence (Hancock, 2015).

**Factors that Influence LGBT Cultural Competency**

When it comes to the question of how healthcare professionals gain cultural competence, studies have reported various determining factors that influence cultural
competence among healthcare providers. The following subsections will describe these factors identified.

**Postsecondary Experience**

The first factor identified is the education the providers receive while obtaining their degree, such as the courses taken, the discipline the provider is in, and the institution they are attending (Smith, 2016). A study from Smith (2016) looks at a few of these factors, while exploring the cultural competency among nurse practitioners and also looking at their beliefs and behaviors with LGBT patients. The study found that the participants reported that LGBT cultural competency education within their pre-licensure and graduate nursing programs did influence their beliefs and behaviors when working with LGBT individuals. In some cases, participants that attended religious institutions for their nursing programs stated that they had not received any education in regard to the LGBT population. Even if these providers attended a non-religious school, they could still be very religious, and these beliefs could potentially impact the level of comfort they have with LGBT patients or even the desire to be culturally competent to work with these patients (Smith, 2016).

Another component identified in this study was that nursing faculty are an important factor with the education process in order to gain cultural competence with the LGBT population. Even though some faculty may find it important to teach about the LGBT population, these faculty members may not feel they have the knowledge or skills to accurately teach about this specific population. With this information, it is important that the faculty are also competent, and if they are not, they try to reach a level of competency that is beneficial for the learning process for their students. It is also
important that the programs, such as the nursing program in this case, provide faculty development training or seminars in order for LGBT health to be addressed; that way faculty are given opportunities to become competent (Smith, 2016).

Continuing to discuss postsecondary experience, another study (Nama, MacPherson, Sampson, & McMillan, 2017) looked at medical students’ perception of LGBT discrimination in their own learning environment and their comfort level in caring for LGBT patients. In this study 671 students were contacted through email in order to complete an online survey. Of the 671 students only 103 responded. The statistics show that 14.6% of the respondents stated they witnessed LGBT discrimination with most of the discrimination originating from fellow students. Then nearly half (41.7%) of the students reported that fellow students or other members of the healthcare team had made LGBT discriminating jokes, started rumors, or participated in bullying. Even with these results, most of the students reported that they felt comfortable with and capable of providing medical care to LGBT patients. They also were interested in learning more about LGBT health issues. Although discrimination is still happening in some cases, the majority of the students wanted further education and trainings on LGBT issues, felt it is needed, and stated that they feel comfortable addressing medical needs to LGBT patients.

Training

Even with university faculty training needing to be provided (Smith, 2016), it is also important that prospective and current providers are being trained or are seeking training to become more culturally competent to work with the LGBT population (Bristol, Kostelec, & MacDonald, 2018). A study from Bristol, Kostelec, and MacDonald (2018) explored improving emergency healthcare workers’ knowledge, competency, and
attitudes towards LGBT patients through a cultural competency training. Through the pre-survey administered results, the study showed that 85.3% of the team did not have any previous LGBT education related to the needs of the LGBT population. After the training, a post-survey was administered that showed an 8.8% increase in the areas of knowledge, support, and awareness towards the LGBT population. This increase in awareness and knowledge may potentially help with creating an open and more supportive patient experience for LGBT individuals seeking healthcare.

Religiosity

Religiosity can also be an influencing factor in the level of cultural competency among healthcare providers. One study (Smith, 2016) found differences when it pertained to religious affiliations. Nurse practitioners who did not have religious affiliation scored higher than nurse practitioners who are impacted by religious beliefs or teachings. The study from Donaldson and Vacha-Hasse (2016) also found that some participants in the study reported that some nursing homes in the past have been homophobic, and that this homophobia occurred in smaller, religious, conservative towns. The influence of religion is also being triggered from religious freedom bills being passed that allow for discrimination toward LGBT individuals when interacting with businesses, adoption agencies, and healthcare settings (Stewart, 2018).

Previous or Current Social Relations with LGBT Individuals

Another factor that can influence cultural competence is the interactions these providers already have among the LGBT population. Some providers could have coworkers, friends, or family members that are a part of the LGBT population, which could potentially increase the comfort level of working with LGBT patients, as well as
being better informed of potential healthcare needs or how to have an appropriate
discussion with LGBT patients that have the patients feeling satisfied or supported
(Donaldson, & Vacha-Hasse, 2016).

A study from Donaldson and Vacha-Hasse (2016) explored the knowledge and
practice among staff with LGBT individuals in long-term care. When looking at the
attitude these professionals had towards LGBT individuals, the study found that many of
the participants’ attitudes were influenced by their experience with LGBT coworkers,
friends, and family members. These professionals supported neutral and favorable
attitudes toward sexual and gender minorities, and their descriptions with their
experiences with LGBT individuals also supported these attitudes.

**Conclusion Literature Review**

Previous literature looks at the relationship between cultural competency and
health outcomes, as well as the impact social support has on minority stresses in relation
with health outcomes. What literature does not present is the relationship cultural
competency has with social support, or how social support can be distinguished through
healthcare professionals’ competency levels when working with LGBT patients. By
looking at the competency levels between different healthcare students in a faith-based
university and the attitudes and beliefs that contribute to that competency level, there
should be a door opened that looks at the different level of social support that students
have for the LGBT population including how culturally competent these students and
university programs are when relating their profession to working with the LGBT
population. A determining factor is the education experience and difference between the
healthcare programs. For example, this experience can also be determined by the courses
taken, the faculty teaching, and the differences in universities (faith-based, secular). Religiosity can be another determining factor as well along with past and current social relations a professional may have with LGBT individuals. Lastly, training among professionals to reach a level of cultural competency for the LGBT population can be another determining factor. Ultimately, the study sought to find if these prospective healthcare professionals distinguish social support by looking at their level of cultural competency, attitudes and beliefs when working with LGBT individuals.

The research model that was formulated after the literature view and before conducting the research can be seen in Figure 1. The point of this model is to show that there are determining factors such as postsecondary experience, training, religiosity, and past and existing relations with LGBT individuals that can potentially have an impact on the level of cultural competence prospective healthcare providers may have when working with LGBT individuals. Although trainings have been found to be relevant for cultural competence for current healthcare professionals (Bristol et al., 2018), the factor “trainings” was not used in this research model that was tested using empirical data.

![Figure 1. Research model of factors affecting cultural competency.](image-url)
This research model includes the following hypotheses:

- **Hypothesis 1**: Prospective healthcare professionals who have a higher level of LGBT postsecondary experience will have a higher level of cultural competence for LGBT clients.

- **Hypothesis 2**: Professionals who have a higher level of religiosity will have a lower level of cultural competence for LGBT clients.

- **Hypothesis 3**: Professionals who have had existing relations with LGBT individuals will have a higher level of cultural competence for LGBT clients than those who have not.

- **Hypothesis 4**: Professionals who have had more positive relations with LGBT individuals will have a higher level of cultural competence for LGBT clients.
CHAPTER III
 METHODOLOGY

The aim of this study is to assess the level of cultural competency among prospective professionals who are expected to provide health care services to LGBT patients and to explore factors that affect those attributes. This chapter describes the research methodology that was used to test the research model was developed based on the literature review about healthcare providers cultural competency related to perceived discrimination among LGBT clients, and the effect these two have on the healthcare outcomes these patients have.

Research Design and Sample

Data were collected using a cross-sectional online survey. Participation requirements included being 18 years of age or older and being enrolled at the university within the nursing, speech and language, or social work departments during the spring semester of 2019. The surveys were administered online, along with an informed consent form via email. The consent form explains the nature of the study, informs them of the confidentiality of the response given, notifies them of any risk, and gives them the contact information for the investigator.

Convenience sampling was used as the sample for this study due to the fact the sample consisted of nursing, speech and language, and social work students from Abilene Christian University enrolled in the spring semester of 2019. The reason for selecting this
sample was due to the importance of cultural competence among prospective and current healthcare professionals when working with minority populations such as the LGBT population. This study gives more information to healthcare professionals, institutions, and the specific departments used in this study that potentially interact with LGBT individuals. The results can be beneficial for program directors, instructors, and students in healthcare fields.

**Data Collection**

Support was first obtained from the social work, speech and language, and nursing departments at the university for the study to be conducted within their departments. Then after obtaining an approval of the study from the Institutional Review Board of Abilene Christian University (See Appendix), data were collected. During the spring semester, electronic surveys were emailed to nursing, speech and language, and social work students by the department faculty that granted permission. The online survey was distributed through a link and was formulated using Google Forms. The information obtained was recorded in a way that the identity of the participants was not readily ascertained, directly or through identifiers linked to the participants. The survey included several demographic questions such as gender, race, age, and classification within school, along with what discipline they are a part of. The survey also included questions in relation to religious beliefs, and if participants have been influenced by past or existing relationships with LGBT individuals. Additional items were included to measure cultural competence towards LGBT individuals using the gay affirmative practice scale (GAP). Disclosure of the participants’ responses outside the research did not reasonably place the participants at risk of criminal or civil liability as well as not be
damaging to the participants’ financial standing, employability, educational advancement, or reputation.

**Instruments**

The variables included in the research model of this study were measured by separate instruments. Both the variables and the instruments utilized to measure them are explained in the following sections.

**LGBT Cultural Competence**

The gay affirmative practice (GAP) scale was used to measure the outcome of this study. This is a measure that Crisp (2006) developed to assess practitioners’ beliefs and behaviors in practice, or cultural competence, with gay and lesbian clients. This tool assesses how social work practitioners engage in principles that align with the gay affirmative practice. The scale itself allows for testing professionals of their bias towards LGBT clients (e.g., their behaviors toward these individuals and their beliefs in their practice with these individuals). Research shows that LGBT individuals are more likely to use counseling services than non-LGBT individuals, so it is important that health providers have a measure by which they can evaluate their competence with the LGBT population and be trained accordingly.

This GAP scale is a 30-item scale broken down into two parts: beliefs (15 items) and behavior (15 items) when working with LGBT patients. A few examples of questions from the beliefs section are as follows, “Practitioners should make an effort to learn about diversity within the gay/lesbian community,” and “Practitioners should work to develop attitudes necessary for effective practice with gay/lesbian clients.” Some examples of the 15 items that focus on behaviors used when working with these patients are as follows, “I
respond to a client’s sexual orientation when it is relevant to treatment,” and “I am open-minded when tailoring treatment for gay/lesbian clients.” All 30 items use a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) for the belief section, and 1 (never) to 5 (always) for the behavior section. A sum-score approach was used to measure the level of affirmative practice with LGBT patients with scores ranging from 30-150. A higher score means that there is a greater degree of affirmative practice.

Crisp (2006) reports the validity and reliability of this scale. Reliability for the original GAP scale using Cronbach’s alpha was .93 for the belief section and .94 for the behavior section. Then evidence by both sections show that there was correlation among the instruments the scale was expected to correlate with, which gives evidence of convergent construct validity.

**Postsecondary Experience**

With specific disciplines being one of the experiences, students were asked about their postsecondary experience in relation to any course work that may have influenced cultural competency towards the LGBT population. Questions from this section include, “How many courses have you taken that are not directly related to cultural diversity but have integrated content related to cultural competence and/or diversity?” and “Did any courses taken discuss the LGBT population?”

**Religiosity**

The Duke University Religion Index (DUREL) was used to measure the religion factor in this study. DUREL is a five-item measure of religious involvement that can be used in cross-sectional studies that assess three major dimensions: organizational religious activity, non-organizational activity, and subjective religiosity (Koenig &
Bussing, 2010). A separate subscale is used for each dimension. For example, one question, “How often do you attend church or religious meetings?” uses a scale of 1 (never) to 6 (more than once per week), while another statement, “My religious beliefs are what really lie behind my whole approach to life,” uses a scale of 1 (definitely not true) to 5 (definitely true to me). This measuring tool has an overall high test-retest reliability with a correlation of .91 and a Cronbach’s alpha of .78-.91. There is also a high convergent validity of .71-.86.

Relations with LGBT Individuals

Questions related to previous or current relations with LGBT individuals were also asked. Questions from this section include, “Have you ever been acquainted with a person who identifies in the LGBT population?” and “Do you personally know anyone who identifies in the LGBT population?”. Then the quality and nature of those relationships were also asked.

Control Variables

Other individual characteristics were also measured. Students were asked basic demographic questions including gender, age, race, religion, and classification (freshman, sophomore, junior, senior, or graduate student).

Analysis plan

After collection of the data from the surveys, a series of data analyses were conducted. First, descriptive analyses were conducted to present information about sample characteristics. An internal consistency reliability analysis was performed for any scale where the original developer reported a Cronbach’s alpha. Descriptive analyses were conducted to present information about major variables. The hypotheses of this
study were also tested by using a multiple linear regression to identify the relationship between the independent variables (postsecondary experience, religiosity, and relations with LGBT individuals) and the dependent variable (LGBT CC), and an analysis was written in order to summarize the findings and the patterns that were found.
CHAPTER IV

FINDINGS

Characteristics of the Sample

A total of 57 surveys were analyzed and used for the remainder of this study. As seen in Table 1, of the 57 students whose ages ranged between 18-67 years old, 52 (91.2%) identified as female, and 5 (8.8%) identified as male. Over half of the students identified as white (n=37, 64.9%), with Hispanic or Latino (n=8, 14.0%) and Black or African American (n=6, 10.5%) being the next highest. The majority of the students also identified as Christian (n=52, 91.2%). The students were asked to provide their discipline in school, and the majority were within the social work department (n=33, 57.9%), followed by speech and language (n=17, 29.8%), and nursing (n=5, 8.8%). Within these disciplines, 30 (52.6%) were graduate students, followed by senior (n=11, 19.3%) and junior (n=9, 15.8%) being the next highest responses.
Table 1

Characteristics of the Sample (N = 57)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category or Range</th>
<th>N or M</th>
<th>% or SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>“Female”</td>
<td>52</td>
<td>91.2</td>
</tr>
<tr>
<td></td>
<td>“Male”</td>
<td>5</td>
<td>8.8</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>“Multiracial”</td>
<td>3</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>“Asian”</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>“Black or African American”</td>
<td>6</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>“Hispanic or Latino”</td>
<td>8</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>“White”</td>
<td>37</td>
<td>64.9</td>
</tr>
<tr>
<td></td>
<td>“Prefer not to answer”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>Religion</td>
<td>“Christian”</td>
<td>52</td>
<td>91.2</td>
</tr>
<tr>
<td></td>
<td>“No religion”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>“Other”</td>
<td>4</td>
<td>7.0</td>
</tr>
<tr>
<td>Discipline</td>
<td>“Nursing”</td>
<td>5</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>“Social work”</td>
<td>33</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>“Speech and Language”</td>
<td>17</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td>“Other”</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td>Classification</td>
<td>“Freshman”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>“Sophomore”</td>
<td>6</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>“Junior”</td>
<td>9</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>“Senior”</td>
<td>11</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>“Graduate Student”</td>
<td>30</td>
<td>52.6</td>
</tr>
<tr>
<td>Age</td>
<td>18-67</td>
<td>27.49</td>
<td>10.42</td>
</tr>
</tbody>
</table>

Reliability Analyses to Check Internal Consistency of the Composite Variables

The present study included measurement scales: Duke University Religion Index (DUREL) and the gay affirmative practice (GAP) scale. Preliminary analyses were performed to check the internal consistency of the two scales. Internal consistency indicates the extent to which all the items or indicators measure the same construct and the interrelatedness of the items (Tavakol, & Dennick, 2011).

Cronbach’s alpha is a widely-used tool for assessing the reliability of a scale. This value refers to “the extent that correlations among items in a domain vary, there is some
error connected with the average correlation found in any particular sampling of items” (Nunnally, 1978, p. 206). Nunnally (1978) argued the alpha level of equal to or higher than .70 considered to be indicative of minimally adequate internal consistency. The following section provides information including what indicators were included in each scale and its Cronbach’s alpha.

Religiosity

Koenig and Bussing (2010) states, “We do NOT recommend summing all three ‘subscales´ into a total overall religiosity score. Instead, investigators should examine each subscale score independently in separate regression models when examining their relationships to health outcomes” (p. 83). As noted in Table 2, a subscale of religiosity exhibited high internal consistency (Crochbach’s $\alpha = .838$). As Koenig and Bussing (2010) suggested, these items were divided into three sections: 1) organizational religious activity, 2) non-organizational religious activities, and 3) intrinsic religiosity by averaging the score of the Religiosity 3, 4, and 5.

Table 2

*Internal Consistency of Religiosity (N= 57)*

<table>
<thead>
<tr>
<th>Indicator ((\alpha=.838))</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religiosity1 How often do you attend church or other religious meetings?</td>
<td>4.61</td>
<td>1.18</td>
</tr>
<tr>
<td>Religiosity2 How often do you spend time in private religious activities, such as prayer, meditation or Bible study?</td>
<td>3.86</td>
<td>1.69</td>
</tr>
<tr>
<td>Religiosity3 In my life, I experience the presence of the Divine (i.e. God)</td>
<td>4.35</td>
<td>0.90</td>
</tr>
<tr>
<td>Religiosity4 My religious beliefs are what really lie behind my whole approach to life</td>
<td>4.19</td>
<td>1.04</td>
</tr>
<tr>
<td>Religiosity5 I try hard to carry my religion over into all other dealings in life</td>
<td>4.02</td>
<td>1.20</td>
</tr>
</tbody>
</table>
LGBT Cultural Competence

As noted in Table 3, a subscale of LGBT CC-belief exhibited high internal consistency (Crochbach’s $\alpha = .957$). Therefore, the scores on the 1-15 items were summed up to generate a composite value to measure LGBT CC-beliefs as Crisp (2006) suggested. Although, due to the small sample size and the fact that there were limited numbers of missing values, the researcher decided to impute missing values with the respondents’ mean score of the related questions.

Table 3

*Internal Consistency of LGBT CC-Belief (N=54)*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>In their practice with gay/lesbian clients, practitioners should support the diverse makeup of their families.</td>
<td>4.72</td>
<td>0.53</td>
</tr>
<tr>
<td>Practitioners should verbalize respect for the lifestyles of gay/lesbian clients.</td>
<td>4.30</td>
<td>0.98</td>
</tr>
<tr>
<td>Practitioners should make an effort to learn about diversity within the gay/lesbian community.</td>
<td>4.65</td>
<td>0.78</td>
</tr>
<tr>
<td>Practitioners should be knowledgeable about gay/lesbian resources.</td>
<td>4.72</td>
<td>0.60</td>
</tr>
<tr>
<td>Practitioners should educate themselves about gay/lesbian lifestyles.</td>
<td>4.39</td>
<td>0.88</td>
</tr>
<tr>
<td>Practitioners should help gay/lesbian clients develop positive identities as gay/lesbian individuals.</td>
<td>4.35</td>
<td>0.91</td>
</tr>
<tr>
<td>Practitioners should challenge misinformation about gay/lesbian clients.</td>
<td>4.59</td>
<td>0.77</td>
</tr>
<tr>
<td>Practitioners should use professional development opportunities to improve their practice with gay/lesbian clients.</td>
<td>4.57</td>
<td>0.66</td>
</tr>
<tr>
<td>Practitioners should encourage gay/lesbian clients to create networks that support them as gay/lesbian individuals.</td>
<td>4.30</td>
<td>1.08</td>
</tr>
<tr>
<td>Practitioners should be knowledgeable about issues unique to gay/lesbian couples.</td>
<td>4.44</td>
<td>0.77</td>
</tr>
<tr>
<td>Practitioners should acquire knowledge necessary for effective practice with gay/lesbian clients.</td>
<td>4.63</td>
<td>0.62</td>
</tr>
<tr>
<td>Practitioners should work to develop skills necessary for effective practice with gay/lesbian clients.</td>
<td>4.57</td>
<td>0.79</td>
</tr>
<tr>
<td>Practitioners should work to develop attitudes necessary for effective practice with gay/lesbian clients.</td>
<td>4.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Practitioners should help clients reduce shame about homosexual feelings.</td>
<td>4.31</td>
<td>1.02</td>
</tr>
<tr>
<td>Discrimination creates problems that gay/lesbian clients may need to address in treatment.</td>
<td>4.59</td>
<td>0.77</td>
</tr>
</tbody>
</table>
As noted in Table 4, a subscale of LGBT CC-behavior exhibited high internal consistency (Crochbach’s $\alpha = .970$). As used for items 1-15 above in Table 3 for LGBT CC-beliefs, the scores on the items 15-30 were summed up to generate a composite value to measure LGBT CC-behavior as Crisp (2006) suggested. However, due to the small sample size and the fact that there were limited numbers of missing values, the researcher decided to impute missing values with the respondents’ mean score of the related questions.

Table 4

*Internal Consistency of LGBT CC-Behavior (N=54)*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I help clients reduce shame about homosexual feelings.</td>
<td>3.54</td>
<td>1.21</td>
</tr>
<tr>
<td>I help gay/lesbian clients address problems created by societal prejudice.</td>
<td>3.59</td>
<td>1.22</td>
</tr>
<tr>
<td>I inform clients about gay affirmative resources in the community.</td>
<td>3.39</td>
<td>1.31</td>
</tr>
<tr>
<td>I acknowledge to clients the impact of living in a homophobic society.</td>
<td>3.63</td>
<td>1.19</td>
</tr>
<tr>
<td>I respond to client's sexual orientation when it is relevant to treatment.</td>
<td>3.91</td>
<td>1.17</td>
</tr>
<tr>
<td>I help gay/lesbian clients overcome religious oppression they have experienced based on their sexual orientation.</td>
<td>3.57</td>
<td>1.21</td>
</tr>
<tr>
<td>I provide interventions that facilitate the safety of gay/lesbian clients.</td>
<td>3.56</td>
<td>1.21</td>
</tr>
<tr>
<td>I verbalize that a gay/lesbian orientation is as healthy as a heterosexual orientation.</td>
<td>3.52</td>
<td>1.28</td>
</tr>
<tr>
<td>I demonstrate comfort about gay/lesbian issues to gay/lesbian clients.</td>
<td>3.69</td>
<td>1.18</td>
</tr>
<tr>
<td>I help clients identify their internalized homophobia.</td>
<td>3.15</td>
<td>1.17</td>
</tr>
<tr>
<td>I educate myself about gay/lesbian concerns.</td>
<td>3.89</td>
<td>1.09</td>
</tr>
<tr>
<td>I am open-minded when tailoring treatment for gay/lesbian clients.</td>
<td>4.20</td>
<td>1.09</td>
</tr>
<tr>
<td>I create a climate that allows for voluntary self-identification by gay/lesbian clients.</td>
<td>3.98</td>
<td>1.11</td>
</tr>
<tr>
<td>I discuss sexual orientation in a non-threatening manner with clients.</td>
<td>4.09</td>
<td>1.17</td>
</tr>
<tr>
<td>I facilitate appropriate expression of anger by gay/lesbian clients about oppression they have experienced.</td>
<td>3.56</td>
<td>1.21</td>
</tr>
</tbody>
</table>
Descriptive Statistics of Major Variables

The following sections present descriptive statistics of the major variables within this study.

Continuous Variables

Table 5 presents descriptive statistics for continuous variables, which include the gay affirmative practice scale and the Duke University Religion Index. Due to the 30-item scores being summed up to generate a composite value to measure LGBT cultural competence with the GAP scale, calculations suggest that $30 \times 3 = 90$ is the assumed level of competence by the author’s interpretation of calculating GAP scores (30 being the scale items, 3 being the first positive answer choice of “sometimes or neutral,” and 90 being the lowest possible number of points to receive to determine a positive level of LGBT cultural competence). The overall mean value for the respondents was $M=122.55$, indicating that the respondents have a higher level of competence due to the value being higher than 90. Calculations also indicate that most respondents answered with an “agree” or “usually,,” which also signifies the higher score. The 30 items were then broken down into two distinctive constructs: items 1-15 LGBT-belief and items 16-30 LGBT-behavior. Items 1-15 are based on the respondents’ beliefs of what practitioners should do and items 16-30 are based on the personal behaviors of the respondents. The overall mean value for the LGBT-belief construct was $M=4.53$, indicating that most respondents answered with “somewhat agree” or “strongly agree.” The overall mean value for the LGBT-behavior construct was $M=3.64$, indicating that most respondents answered with “sometimes” or “more than sometimes.”
The developers of the DUREL scale, Koenig and Bussing (2010) suggested examining each subscale score independently in separate regression models. The first subscale asked respondents about their attendance to church or religious meetings. According to Table 5, $M=4.61$, indicating that most respondents answered with the response of “A few times a month” or more. The second subscale asked respondents’ how often they participate in religious activities. Most respondents answered with the response of “Once a week” or more ($M=3.86$). The third subscale asked three questions that pertained to the respondents’ own personal religious beliefs, such as if the respondent tries hard to carry religion over into all other dealings in life, or if religious beliefs are what lie behind their approach in life. Most respondents answered these questions with “Tends to be true” ($M=4.19$).

Table 5

<table>
<thead>
<tr>
<th>Description</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBT CC-Sum</td>
<td>43.00</td>
<td>150.00</td>
<td>122.55</td>
<td>21.87</td>
</tr>
<tr>
<td>LGBT-belief_Mean</td>
<td>1.80</td>
<td>5.00</td>
<td>4.53</td>
<td>0.63</td>
</tr>
<tr>
<td>LGBT-behavior_Mean</td>
<td>1.00</td>
<td>5.00</td>
<td>3.64</td>
<td>1.02</td>
</tr>
<tr>
<td>Religiosity1-Attend Frequency</td>
<td>1.00</td>
<td>6.00</td>
<td>4.61</td>
<td>1.18</td>
</tr>
<tr>
<td>Religiosity2-Private Religious Frequency</td>
<td>1.00</td>
<td>6.00</td>
<td>3.86</td>
<td>1.69</td>
</tr>
<tr>
<td>Religiosity3-Intrinsic Religiosity #'s 3, 4 &amp; 5</td>
<td>1.33</td>
<td>5.00</td>
<td>4.19</td>
<td>0.93</td>
</tr>
</tbody>
</table>

*Note.* Skewness and kurtosis were in the normal distribution range for all variables.

**Categorical Variables**

Table 6 presents descriptive statistics for categorical variables, which include postsecondary experience and relations with LGBT individuals. Besides the discipline of the respondents being one separate item, postsecondary experience was measured by two items. The first item includes the number of courses taken that are not directly related to
cultural diversity but asks if these particular courses have integrated cultural
competence/diversity related content into the course. Then item two asked how many
courses has the respondent taken that discusses the LGBT population. Looking at item
one, the majority of the respondents answered “3+” courses (n=32, 56.1%), followed by
two courses (n=17, 29.8%), one course (n=7, 12.3%), and zero courses (n=1, 1.8%).
Looking at item two, 41 respondents (71.9%) stated they had taken courses that discussed
the LGBT population, and 16 (28.1%) stated they had not taken any courses that
discussed the LGBT population.

There were four items that measured relations with LGBT individuals. Item one
asked the respondent if they have ever been acquainted with a person who identifies in
the LGBT population, and 56 (98.2%) of the respondents stated “yes,” and one
respondent (1.8%) stated “no.” Item two asked the respondents if they personally know
someone who identifies in the LGBT population, and 34 (59.6%) respondents stated they
have a friend who identifies in the LGBT population, followed by family member (n=11,
19.3%), coworker (n=6, 10.5%), and significant other (n=2, 3.5%). Item three asked the
quality of the relationship, and 23 (40.4%) respondents stated it was a close relationship,
followed by 16 (28.1%) stating semi-close, 10 (17.5%) neutral, 6 (10.5%) semi-not close,
and 1 (1.8%) not close. Item four asked the respondents to identify the nature of the
relationship, and 41 (71.9%) respondents stated a positive interaction, followed by 13
(22.8%) stating semi-positive, two (3.5%) neutral, and one (1.8%) semi-negative.
Table 6

Descriptive Statistics for Categorical Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDCoursesNumber</td>
<td>“0”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>“1”</td>
<td>7</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>“2”</td>
<td>17</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td>“3+”</td>
<td>32</td>
<td>56.1</td>
</tr>
<tr>
<td>LGBTcoursesTaken</td>
<td>“No”</td>
<td>16</td>
<td>28.1</td>
</tr>
<tr>
<td></td>
<td>“Yes”</td>
<td>41</td>
<td>71.9</td>
</tr>
<tr>
<td>AcquaintLGBT</td>
<td>“No”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>“Yes”</td>
<td>56</td>
<td>98.2</td>
</tr>
<tr>
<td>KnowLGBT</td>
<td>“Family member”</td>
<td>11</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>“Friend”</td>
<td>34</td>
<td>59.6</td>
</tr>
<tr>
<td></td>
<td>“Significant other”</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>“Coworker”</td>
<td>6</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>“Other”</td>
<td>3</td>
<td>5.3</td>
</tr>
<tr>
<td>RelationshipQuality</td>
<td>“Close relationship”</td>
<td>23</td>
<td>40.4</td>
</tr>
<tr>
<td></td>
<td>“Semi close”</td>
<td>16</td>
<td>28.1</td>
</tr>
<tr>
<td></td>
<td>“Neutral”</td>
<td>10</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>“Semi not close”</td>
<td>6</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>“Not close”</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>RelationshipNature</td>
<td>“Positive interaction”</td>
<td>41</td>
<td>71.9</td>
</tr>
<tr>
<td></td>
<td>“Semi positive”</td>
<td>13</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>“Neutral”</td>
<td>2</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>“Semi negative”</td>
<td>1</td>
<td>1.8</td>
</tr>
</tbody>
</table>

In order to test hypotheses, the research recoded RelationshipQuality into CloseYes when the answers were 1 or 2. The value of 1 for this new variable indicates having close relations with LGBT. In the same way, RelationshipNature was recoded into PositiveYes.
Hypothesis Testing

The present study has formed the following hypotheses based on the literature review:

- **Hypothesis 1**: Prospective healthcare professionals who have a higher level of LGBT postsecondary experience will have a higher level of cultural competence for LGBT clients.

- **Hypothesis 2**: Professionals who have a higher level of religious involvement will have a lower level of cultural competence for LGBT clients.

- **Hypothesis 3**: Professionals who have had existing relations with LGBT individuals will have a higher level of cultural competence for LGBT clients than those who have not.

- **Hypothesis 4**: Professionals who have had more positive relations with LGBT individuals will have a higher level of cultural competence for LGBT clients.

Before a regression analysis were conducted to test these hypotheses, multicollinearity problems (i.e., a high correlation between factors) were examined using the tolerance value for predictors (less than 0.2) or variance inflation factor (VIF) (10 or above). The initial multiple linear regression (MLR) analysis that includes all the factors hypothesized to influence the outcome was conducted.

The correlations between factors show a high correlation between the LGBTcoursesTaken and Discipline (social work vs. non-social work) ($r=0.653$). In order to test the difference in LGBTcoursesTaken between different disciplinary groups, a one-way ANOVA was conducted. Table 7 demonstrates that this test was found to be statistically significant, $F(3, 53) = 13.365$, $p < .001$. Post-hoc analyses using Tukey’s
HSD (honestly significant difference) indicated that two pairs of mean difference were statistically significant. Social work students ($M = .97$) had taken more LGBT courses than Nursing students ($M = .40$) and Speech and Language students ($M = .35$). The differences were presented visually in Figure 2. Unlike LGBT courses Taken, there was no difference in CDCoursesNumber between the disciplines.

Table 7

*Results of One-way ANOVA for LGBT courses Taken by Disciplines (N=56)*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$M$</th>
<th>SD</th>
<th>$F$</th>
<th>Tukey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 “Nursing”</td>
<td>5</td>
<td>0.40</td>
<td>0.55</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>2 “Social work”</td>
<td>33</td>
<td>0.97</td>
<td>0.17</td>
<td>13.365***</td>
<td>B</td>
</tr>
<tr>
<td>3 “Speech and Language”</td>
<td>17</td>
<td>0.35</td>
<td>0.49</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>4 “Other”</td>
<td>2</td>
<td>0.50</td>
<td>0.71</td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

*Note.* *p* < .05, ** *p* < .01, *** *p* < .001

*Figure 2.* LGBT courses Taken by Disciplines

In order to examine the association between each factor and the two outcomes (LGBT CC-beliefs and LGBT CC-behavior), the Discipline was excluded from the original regression model while LGBT courses Taken was remained. Two multiple linear
regression analyses were conducted using a revised regression model. Before testing the hypotheses, assumptions for testing a regression model were considered using Field’s recommendation (2013). In addition, assumptions of normality of errors and linear regression were investigated. The examination of residual plots is considered a preferable method of detection for the assumptions for linear regression including linearity and homoscedasticity (Field, 2013). The residual plot in Figure 3 indicates the assumptions were considered met.

![Residual plots for two regression models](image)

**Figure 3.** Residual plots for two regression models

Table 8 presents results of the revised MLR models for two outcomes: one for the LGBT CC-belief and one for the LGBT CC-behavior. The regression model for LGBT CC-belief significantly statistically explained the variance of this outcome. The results indicate that the overall regression model was not statistically significant ($R^2 = 0.196$, $F = 2.036$, $p = .078$) explaining the variance in LGBT cultural competence by 19.6%. However, one factor was significant: Having close relationship with LGBT individual (beta = .367, $t = 2.789$, $p = .007$). Respondents who had a close relationship with LGBT had higher culturally competent beliefs compared to those who did not. No other factors were statistically significant.
The regression model for LGBT CC-behavior significantly statistically explained the variance of this outcome. The results indicate that the overall regression model was statistically significant ($R^2 = 0.286, F = 3.340, p = .008$) explaining the variance in LGBT CC-behavior by 28.6%. Three factors were significant: being female, religiosity, and having close relationship with LGBT individuals. Female students had a higher behavioral competency compared to male students (beta = .418, $t = 3.240, p = .002$). The mean of the religiosity based on the third sub-scale increased (e.g., if the respondent tries hard to carry religion over into all other dealings in life, or if religious beliefs are what lie behind their approach in life) and was negatively associated with the behavioral score (beta = -.357, $t = -2.718, p = .009$). Respondents who had a close relationship with LGBT individuals had a higher culturally competent behavior compared to those who did not (beta = .269, $t = 2.169, p = .035$).

Table 8

*Multiple Linear Regression (MLR) Models of LGBT CC (N=57)*

<table>
<thead>
<tr>
<th>Category</th>
<th>Factor</th>
<th>LGBT CC-Belief</th>
<th></th>
<th>LGBT CC-Behavior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>beta</td>
<td>$t$</td>
<td>beta</td>
<td>$t$</td>
</tr>
<tr>
<td>Demographic</td>
<td>Female</td>
<td>.092</td>
<td>.675</td>
<td>.418</td>
<td>3.240**</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>.072</td>
<td>.555</td>
<td>.037</td>
<td>.306</td>
</tr>
<tr>
<td></td>
<td>age</td>
<td>-.105</td>
<td>-.762</td>
<td>-.073</td>
<td>-.560</td>
</tr>
<tr>
<td>Individual</td>
<td>Religiosity</td>
<td>-.057</td>
<td>-.409</td>
<td>-.357</td>
<td>-2.718**</td>
</tr>
<tr>
<td>Characteristics</td>
<td>CloseYes</td>
<td>.367</td>
<td>2.789**</td>
<td>.269</td>
<td>2.169*</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>LGBTcoursesTaken</td>
<td>.257</td>
<td>1.965</td>
<td>.150</td>
<td>1.219</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>R$^2 = .196$</td>
<td>R$^2 = .286**$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings show that hypothesis 1 was not supported. However, LGBT courses taken were found to be statistically significant as it showed that social work students have received more LGBT content in courses than nursing and speech and language students.
Hypothesis 2 was supported as results showed in the third religiosity sub-scale that as religiosity increased then LGBT cultural competence decreased based on the LGBT CC-behavior. Hypothesis 3 was also supported as results showed that having a close relationship with an LGBT individual increased cultural competence within both LGBT CC-behavior and LGBT CC-belief. There were not any significant findings to suggest that hypothesis 4 is supported but based on the results $N=41$ (71.9%) out of the 57 students stated they had a positive relationship with an LGBT individual. It may also be assumed by many that a close relationship could be a positive one, and findings show that a close relationship with LGBT individuals increases LGBT cultural competency as stated above.

Although the difference in the LGBT-CC between social work students and non-social work students was not a major research question of this study, additional analyses were conducted to see the difference because the assessment tool was developed by Crisp (2006) to examine how social work practitioners engage in principles that align with the gay affirmative practice. Table 9 demonstrates that the mean difference between students in the social work department ($M = 4.69$, $SD = 0.43$) and students in non-social work departments ($M = 4.31$, $SD = 0.78$) was statistically significant. This indicates that social work students had a higher LGBT CC-belief ($M=4.69$) than the others ($M=4.31$). The difference in the LGBT CC-behavior between social work students ($M=3.75$) and the others ($M=3.50$) was not statistically different.
Table 9

*Results of Independent Samples t-test for LGBT CC between Disciplines*

<table>
<thead>
<tr>
<th></th>
<th>LGBT CC-Beliefs</th>
<th></th>
<th>LGBT CC-Behaviors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Social work students</td>
<td>33</td>
<td>4.69</td>
<td>0.43</td>
<td>3.75</td>
</tr>
<tr>
<td>Non-social work students</td>
<td>24</td>
<td>4.31</td>
<td>0.78</td>
<td>3.50</td>
</tr>
</tbody>
</table>

*Note.* Difference in LGBT CC-beliefs was significant; difference in LGBT CC-behaviors was not significant.
CHAPTER V
DISCUSSION

As the LGBT population continues to increase, noting 2018 (4.5%) compared to the 4.1% in 2016, information shows that LGBT individuals still face discrimination, which in return impacts this population from receiving or benefitting from health care services (Stewart, 2018). This also impacts LGBT youth in the U.S., as 8% of females and 3% of males in 2018 identified in the LGBT population (Office of Adolescent Health, 2018). This study aimed to assess the level of cultural competency among prospective professionals who are expected to provide health care services to LGBT patients and to explore factors that affect those attributes. There were two sub-research questions this study aimed to answer: “What are the factors that impact the beliefs of professionals towards the LGBT population?” and “What are the factors that impact the behaviors of professionals towards the LGBT population?” A research model was created and sets of hypotheses were tested on the factors affecting cultural competency.

Summary of Hypothesis Testing

Postsecondary Experience

The findings from the current study show that there is a relationship between LGBT courses taken and discipline (social work verses non-social work), although, the results are not statistically significant to support hypothesis 1 that looks at postsecondary experience as an influencer on LGBT cultural competency. This finding is not consistent
with previous studies. A study from Smith (2016) found that nurse practitioners reported that LGBT cultural competency education within their pre-licensure and graduate nursing programs did influence their beliefs and behaviors when working with LGBT individuals. This study also found that, in some cases, participants who attended religious institutions for their nursing program stated that they had not received any education in regard to the LGBT population. The discrepancy in the results suggests further studies to examine which results would be more valid. However, the findings do bring awareness to the difference between LGBT courses among the disciplines, as social work students stated they had more LGBT related courses than nursing or speech and language students. The findings also found that social work students had a higher LGBT CC-belief ($M=4.69$) than the other students ($M=4.31$), which could be evidence to support that LGBT curriculum is potentially important in courses. However, with the potential of having more participants in the study, further studies are needed to look at postsecondary education.

**Religiosity**

The hypothesis regarding the association between religiosity and LGBT CC supports this as findings show that while the third sub-scale of religiosity increased the GAP score (LGBT CC-behavior) decreased. This result is consistent with a study (Smith, 2016) where differences were found as it pertained to religious affiliations. As mentioned before, participants who attended religious institutions stated that they had not received any LGBT education, and the study also showed that participants that did not have religious affiliation scored higher than those who were impacted by religious beliefs or teachings.
Relations with LGBT Individuals

The hypothesis regarding the relations with LGBT individuals and LGBT CC was partially supported. Respondents who had a close relationship with LGBT individuals had an increased GAP score (LGBT CC-beliefs and LGBT CC-behavior). However, having a positive relationship with a LGBT individual is not statistically significant in the current findings of this study. A study from Donaldson and Vacha-Hasse (2016) found that many of the participants’ attitudes were influenced by their experience with LGBT coworkers, friends, and family members that led these professionals to have supportive neutral and favorable attitudes towards sexual and gender minorities.

The results of descriptive statistics showed that $N=41$ (71.9%) out of the 57 students stated they had a positive relationship with an LGBT individual. Many also might assume that a close relationship could be considered a positive relationship, and findings in this study found having a close relationship was statistically significant.

Implications of Findings

By identifying important factors of the desired attributes of the prospective professionals, the study informs disciplinary programs and institutions of what issues they need to address so that they can educate their students to develop desired competencies as health care professionals. The study also informs hospital organizations on the challenges LGBT people face related to mental and physical health and how future and current health professionals can contribute to helping this population when overcoming discrimination.

Increased religiosity was found to be significantly correlated with LGBT cultural competence. Health care professionals may be mindful by this finding that their religious
beliefs can impact their practice with LGBT patients. This finding may also help universities and other institutions be aware of the potential impact of religiosity on practice with LGBT patients in order to help educate students and employees accordingly. This finding also contributes to religious policies to confirm that religiosity can decrease cultural competence that can then contribute to discrimination (Stewart, 2018). Thus, in some cases for religious organizations or universities that are limiting on certain acceptance of certain minority groups, it is still beneficial that students or individuals in these organizations have the option to interact with diverse groups in order for these individuals to have the opportunity to be trained appropriately to work with these minority groups.

Findings also show having a relationship with a LGBT individual was found to be significantly correlated with LGBT cultural competence. This contributes to the importance of diversity within universities and other institutions, such as health care settings in order to increase LGBT cultural competence while also potentially decreasing the minority stress LGBT individuals have (Meyer, 2003). This also contributes to the importance of policy making in terms of diversity within these universities and institutions as these policies can also affect the LGBT cultural competence obtained, and the level of minority stress LGBT individuals face.

Lastly, the use of experiential learning activities could potentially help institutions and hospitals assist students and employees become culturally competent. Studies show that the use of films can increase knowledge of participants attitudes and beliefs about themselves and culturally diverse patients. This process allows for participants to broaden learning from readings and lectures to lived experiences which can create cultural
sensitivity (Frick, Thompson, & Curtis, 2017). This helps participants increase self-awareness with personal beliefs, and helps the participants gain empathy as they see through others’ life experiences. Through trainings, films, and discussions, institutions and hospitals will better educate students and employees to become more culturally competent when working with LGBT patients.

**Limitations and Implications for Future Research**

There are limitations of this study that must be considered when appraising the findings. First, since participation was voluntary, the survey was completed by the students that chose to fill it out, meaning the measures were self-reported. This ultimately affects the accuracy of the responses that could be compromised, and that the researcher is unable to verify the validity.

Secondly, this cross-sectional study looks specifically at a small private religious university in west Texas during the spring semester of 2019. Thus, these findings cannot speak as a whole for all universities, private or state, within Texas or across the U.S. Also, while studies show that discipline can potentially effect cultural competence (Smith, 2016), the sample size of the current study can affect the validity and reliability, as the small amount of responses from the nursing program cannot speak for the program as a whole nor can it speak for all nursing programs. This also pertains to the other two departments (social work and speech and language) that were surveyed.

Thirdly, the majority of the responses were from female students (91.2%), and 8.8% were male. This study is unable to speak for the male population as a whole or for the female population. A diverse sample population can be potentially challenging to
obtain, as females are typically the norm that pursue the particular surveyed disciplines in this study.

As mentioned in limitations, because this was a cross-sectional study, this may have had an impact on the findings. Further studies should be done to look at the relationships of these variables based on longitudinal data. Data could be collected during students’ first year of a program, in the middle of the program, and at the end of the program in order to evaluate any changes, specifically in the outcome variable, LGBT cultural competence. Findings from longitudinal research could more adequately show the relationship between the variables postsecondary experience, religiosity, relations with LGBT individuals, and LGBT cultural competence.

**Conclusion**

Due to the increasing LGBT population and the fear of perceived discrimination this population faces, this research study sought to assess the level of cultural competency among prospective professionals who are expected to provide health care services to LGBT patients, as well as explore the factors that affect those attributes. Results found that LGBT cultural competence is influenced by religiosity and close relations with LGBT individuals. Results also found that participants agreed that LGBT cultural competency is important within practice, but results showed that participants’ own behaviors with LGBT cultural competency were lower than their expectation. With these findings, professionals and prospective professionals are informed of the impact that religiosity and having a close relationship with a LGBT individual can impact their professionalism in gaining LGBT cultural competency when working with LGBT clients. In conclusion, this study implies the further need for more research, as well as serves to
bring awareness to universities, healthcare facilities, policy makers, and other professionals that potentially impact ad interact with LGBT individuals as well as the people that potentially interact with these LGBT individuals.
REFERENCES


APPENDIX

IRB Approval

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World
Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 25163, Abilene, Texas 79699-5163
325-674-2865

December 3, 2018

Heather Isbell
Department of Social Work

Dear Heather,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "An Exploration of Factors of LGBT Cultural Competency Among Prospective Healthcare Professionals"

(IRB# 18-105) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth
Megan Roth, Ph.D.
Director of Research and Sponsored Programs