12-2011

Methodological quality of quantitative nursing lesbian, gay, bisexual, and transgender research from 2000 to 2010

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METHODOLOGICAL QUALITY OF QUANTITATIVE NURSING LESBIAN, GAY, BISEXUAL, AND TRANSGENDER RESEARCH FROM 2000 TO 2010

by

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Bachelor of Science
University of Nevada, Las Vegas
2008

A thesis submitted in partial fulfillment
of the requirements for the

Master of Science in Nursing
School of Nursing
The Graduate College

University of Nevada, Las Vegas
December 2011

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

THE GRADUATE COLLEGE

We recommend the thesis prepared under our supervision by

Michael Johnson

entitled

Methodological Quality of Quantitative Nursing Lesbian, Gay, Bisexual, and Transgender Research From 2000 to 2010

be accepted in partial fulfillment of the requirements for the degree of

Master of Science in Nursing
Department of Nursing

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December 2011

ABSTRACT

Methodological Quality of Quantitative Nursing Lesbian, Gay, Bisexual, and Transgender Research from 2000 to 2010

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Lesbian, gay, bisexual, and transgender (LGBT) people constitute one of the largest underserved populations in any nursing setting. Despite the large LGBT populations, very little nursing research has been conducted on these populations. Nurse researchers have recommended that nursing researchers end the silence on LGBT research. To accomplish this, the methodological rigor of LGBT nursing research must be evaluated and improved upon. Currently, no literature examines the methodological quality of quantitative nursing LGBT research. Using a cross-sectional design, it was the purpose of this study to evaluate the methodological quality of quantitative nursing LGBT research from 2000 to 2010 using the Medical Education Research Study Quality Instrument (MERSQI). The descriptive analyses were completed for the MERSQI scores, and MERSQI scores were also compared by funding category and country of origin. Only 188 research studies were identified and 40 met the inclusion and exclusion criteria in nursing literature from 2000-2010. The MERSQI scores had a mean of 9.4 $\pm$ 1.5 and a range of 7.0 – 14.4. There was no significant difference in the MERSQI scores between studies with no funding, external funding, or internal funding. There was no significant difference in the MERSQI scores for those studies conducted inside or outside the U.S.

The findings from this study can be utilized to improve the quality of future LGBT nursing research.

ACKNOWLEDGEMENTS

The writing of this thesis has been one of the most significant academic challenges I have ever had to face. My deepest gratitude goes to those people who offered support, patience and guidance. I am grateful and indebted to, Dr. Tish Smyer, who despite her many other academic and professional commitments, undertook the act of supervising, guiding, and supporting me. Thank you to Dr. Carolyn Yucha for guiding and assisting with all of the statistical analyses and for editing. I am appreciative for Dr. Michele Clark and Dr. LeAnn Putney's expertise and guidance of theoretical frameworks. Both of you made me think on a deeper level. Searching through masses of electronic research journals would not have been possible without the assistance of Ms. Eva Stowers. Working with this group of well-regarded scholars has been the most rewarding experience. Special thanks to Ms. Elizabeth Gardner for her always immediate assistance to me during the past two years. My undergraduate and graduate experiences are because of the UNLV School of Nursing. Every faculty and staff member never ceased to impress me and they deserve a standing ovation.

Finally, my family and friends have been an immense support system. Matthew Roell, my husband, has been the most loving, supportive, and patient person in my life. Without him, this effort would have been worth nothing. To my two closest confidants, Carmela Chavez and Grissell Hernandez, who have opened their hearts and homes. Both have been supportive in countless ways and provided me with much needed distractions.

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CHAPTER 1

INTRODUCTION

Background and Significance

Lesbian, gay, bisexual, and transgender (LGBT) people constitute one of the largest underserved populations in any nursing setting (Eliason, Dibble, & DeJoseph, 2010). Despite the large LGBT populations, very little nursing research has been conducted on these populations. According to Eliason, Dibble, and DeJoseph, only "0.16% of the articles in the top-10 impact journals in nursing focused on LGBT issues" (p. 213). Harcourt (2006) further provides that those interested in LGBT populations' health status must rely on small descriptive studies due to the lack of large-scale measurement research.

The lack of nursing research on LGBT issues may result in negative outcomes for patients, such as increased levels of stress for patients and their partners, delayed health care seeking, and poor communication between nurses and patients (Eliason, Dibble, & DeJoseph, 2010). These negative consequences were exposed in a 1999 report on lesbian health by the Institute of Medicine (Harcourt, 2006). As a result, 10 of the 28 prevention focus areas for the Healthy People 2010 campaign include health issues that affect the LGBT populations, and a health objective directed toward sexual orientation was also included (Harcourt). Healthy People 2020 have a goal specific to improving the health, safety, and well-being of LGBT individuals (U.S. Department of Health and Human Services, 2011).

Although great strides have been undertaken to increase LGBT nursing and health related research, the numbers of papers published every year is minimal. Due to these

deficiencies in LGBT nursing and health research, it is important to evaluate the methodological quality of existing LGBT nursing studies. In addition, an evidentiary link between funding sources and methodological quality is important to justify greater allocation to LGBT nursing research (Reed et al., 2007).

Purpose of Study

Research completed by Eliason, Dibble, and DeJoseph (2010) brought attention to the enormous lack of LGBT nursing research, and especially the lack of quantitative research studies. Eliason and her colleagues have recommended that nursing researchers end the silence on LGBT research. To accomplish this, the methodological rigor of LGBT nursing research must be evaluated and improved upon. Currently, no literature examines the methodological quality of quantitative nursing LGBT research. Therefore, the purpose of this study is to evaluate the methodological quality of quantitative nursing LGBT research from 2000 to 2010 using the Medical Education Research Study Quality Instrument (MERSQI) (Reed et al., 2007).

Research Questions

The three research questions asked in this study include:

1. What is the methodological quality of quantitative nursing LGBT research reports?
2. What is the relationship between the MERSQI score and the funding source?
3. What is the relationship between the MERSQI score and the country of data collection?

CHATPER 2

LITERATURE REVIEW

Health Disparities of Lesbian, Gay, Bisexual, and Transgender People

Lesbian, gay, bisexual, and transgender people constitute one of the largest underserved populations in any nursing setting (Eliason, Dibble, & DeJoseph, 2010). Although the exact number of people who identify as LGBT is not known, Snyder (2011) cites that currently between 6.0 and 30.4 million people in the United States (U.S.) identify as LGBT. The largest U.S. representative study of sexual and sexual-health behaviors ever conducted, performed by Indiana University sexual health researchers, cite that 7% of adult women and 8% of adult men identify as gay, lesbian, or bisexual (Herbenick et al., 2010). Eliason, Dibble, and DeJoseph further state that 15% to 20% of the United States population identifies as non-heterosexual. These statistics are not representative of the world population, and after a lengthy review of the literature, it appears as though there are no reliable research studies that have examined the LGBT populations in other countries.

Many different research studies have illustrated the health disparities between the LGBT populations compared to their heterosexual counterparts (Krehely, 2009). Harcourt (2006) asserts that gay men are at increased risk for lung cancer, heart disease, anal cancer, non-Hodgkin's lymphoma, and Hodgkin's disease. Lesbian women are at higher risk for neoplasm, coronary artery disease, hypertension, peripheral vascular disease, and chronic pulmonary conditions (Harcourt). Krehely also supports the claim that LGBT people are at "higher risk for cancer, mental illnesses, and other diseases, and are more likely to smoke, drink alcohol, use drugs, and engage in other risky behaviors"

(p. 1). Mental health disparities have also been shown to impact the LGBT populations in comparison to heterosexuals (Koh & Ross, 2006; Krehely).

Case et al. (2004) completed a significant and sizeable study on the health disparities among self-identified lesbians. The study consisted of surveying 90,823 women aged 32-51, of whom 694 self-identified as lesbian. The researchers concluded that lesbian women are at an increase risk for health disparities when compared to their heterosexual counterparts. Lesbian women were found to have a higher prevalence of risk factors for breast cancer, which may be in part related to nulliparity. In addition, lesbian women had a higher prevalence of risk factors for cardiovascular disease, including high daily alcohol intake, elevated prevalence of tobacco smoking, and higher body mass index. Reported depression and use of antidepressants were also higher in the lesbian population. The researchers concluded that these findings were almost all linked to modifiable risk factors and were similar to those women who self identified as bisexual (Case et al.).

Other researchers have also found health disparities among the lesbian population. Hutchinson, Thompson, and Cederbaum (2006) have concluded that although heterosexual and homosexual women may have similar risk factors, access to, and interactions with health care providers differ significantly between the two populations. They reported that lesbian women often underutilize preventive health services and postpone seeking treatment. Roberts (2006) reported that lesbians are at higher risks for abnormal pap smears, breast cancer, and cardiovascular disease and have greater treatment for mental health illnesses than heterosexual women.

As already illustrated, LGBT health disparities are not only related to sexual practices and risk behaviors. One of the largest papers on LGBT health findings published in January 2000 identified numerous health disparities and the relationship to social and behavioral factors (Dean et al., 2000). As illustrated in Figure 1, these health disparities relate to cultural factors, disclosure of sexual orientation and gender identity, prejudice and discrimination, and concealed sexual identity (Dean et al.). Snyder (2011) assumes that LGBT persons are at risk for different disease conditions that are unrelated to sexual practices and instead are based on heritable and cultural factors. All of these factors ultimately contribute to the poor health related outcomes experienced by the LGBT populations.

Lack of Lesbian, Gay, Bisexual, and Transgender Research Reports

Despite the large U.S. LGBT populations and the diminished health outcomes as compared to heterosexuals, health research to better understand this population is lacking. Different research teams have evaluated the existing health and nursing research literature focusing on LGBT populations, and the results are disheartening. Of the existing LGBT nursing and health research, not only is there a dearth of studies, but there is a bias toward LGBT research as it relates to human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), and sexually transmitted diseases (STD).

Boehmer (2002) identified and analyzed the content of all English LGBT public health research from 1980 to 1999. Over 3.8 million article citations were reviewed and only 3,777 (0.1%) focused on LGBT health (Boehmer). Eliason, Dibble, and DeJoseph (2010) reviewed all peer-reviewed LGBT nursing research in the top-10 nursing journals from 2005 to 2009. The authors cited that only eight research papers (0.16%) of all the

articles in the top-10 nursing journals focused on LGBT nursing research. Of these eight papers, six were qualitative, two were quantitative, and the papers were biased toward authors outside of the U.S. Snyder (2011) examined published medical LGBT articles over a 57 year period, from 1950 to 2007, and ultimately discovered that medical research addressing the LGBT populations is lacking; however, Snyder did not perform descriptive statistics to identify the percentage of LGBT research papers compared to total research papers.

Existing research has also examined and described the focus of LGBT health research. Snyder (2011) examined 21,728 papers and found that 31.78% focused on HIV, AIDS, and STDs. Snyder only categorized 0.65% as related to LGBT health services, 3.28% to health care provider interactions, 6.37% to tobacco, alcohol, and substance abuse, and 9.69% to adolescent health. Nearly all of the other categories did not relate to LGBT health, and instead focused on other LGBT issues. Boehmer (2002) cites that of the 3,777 citations reviewed, 2,285 (61%) were coded as disease specific. Nearly all of the disease specific articles focused on STD's, particularly HIV and AIDS. In addition, 80% of these citations focused on gay men, 39% on bisexual men, and 46% on the LGBT populations in general. Eliason, Dibble, and DeJoseph (2010) did not examine the specific content areas in their research; however, it is apparent from Snyder and Boehmer that the majority of LGBT health research has focused on HIV and AIDS.

The majority of LGBT research focuses on HIV and AIDS despite the small percentage of LGBT persons who live with these diseases (Krehely, 2009; Snyder, 2011). Only 1.89 to 9.6% of the entire LGBT populations are living with an HIV infection (Snyder). However, the Centers for Disease Control (CDC) have released facts in 2010

that find men who have sex with men (MSM) account for 48% of the one million people living with HIV in the U.S. (Centers for Disease Control, 2010). In addition, the CDC has also found that MSM are the only high risk group in which new HIV infections are increasing.

In summary, there needs to be more focus on LGBT health research. Health care professionals cannot continue to ignore LGBT or their health issues. An evidence-based comprehensive approach must be developed and disseminated to assist LGBT to appropriate healthcare.

CHATPER 3

THEORETICAL FRAMEWORK

Queer Theory

Queer Theory was chosen as the theoretical framework for this study. Queer Theory is a very complex and dynamic theory that continues to evolve and remains open to interpretation (Watson, 2005). Numer and Gahagan (2009) describe the Queer Theory as exploring uncharted territory. This theory has evolved from the overarching theories of postmodernism, poststructuralism, and feminism (Kirsch, 2000; Numer & Gahagan; Pinary, Reynolds, Slattery, & Taubman, 2004). Queer Theory views truth, knowledge, and language as socially constructed. Examining the Queer Theory constructs of historical discourse and power imparts insight into why the nursing profession has neglected to research the LGBT populations.

Discourses

The definition of discourse varies between different theorists and disciplines. The definition set by Michael Foucault will be drawn from to serve this paper. Foucault defined discourse as "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak" (Lessa, 2006, p. 283). Foucault (1970) used discourse to describe verbal and non-verbal communication, and he also asserted that discourse regulates the types of declarations that can and cannot be made. Additionally, Wilchins (2004) and Foucault (1978) both suggest that huge institutions, such as the church, state, law, medicine, and education have defined normal versus abnormal through discourse.

In relation to sexuality, Foucault (1978) maintained that society created sexuality. Foucault believed that discourses of institutions, such as the church, state, medicine, and education, have ultimately defined sexuality and these definitions have continued to persevere. These institutions have come to label individuals who partake in non-heterosexual sexual relationships as deviant. In fact, Foucault contended that the homosexual is now considered a species as a result of discourse.

These ideas can be best illustrated by examining different institutions. The medical institution historically attached negative stigma to the LGBT person. Until 1973, homosexuality was included in the Diagnostic and Statistical Manual of Mental Disorders (DSM) as a diagnosable mental illness (Institute of Medicine of the National Academies, 2011). Examining the institution of our government reveals that in 1993, the U.S. federal government enacted a law providing military officials the ability to discharge military personnel who openly identified as gay, lesbian, or bisexual. It was not until 2011 that this law was finally repealed (McCune, 2011). Another case in point can be illustrated by considering the position of religious institutions. The Church of Jesus Christ of Latter-day Saints (2011) expresses that any person who participates in sexual relations that is not heterosexual in nature can be excommunicated from the church. The same view point can be observed in the Catholic Church (Catholic Answers, 2008). These two religious institutions were used as examples, but it must be noted that there are other churches and religions that have similar viewpoints.

After examining historical discourse, it can be assumed that institutions have failed the LGBT populations. Foucault (1978) was correct in writing that homosexuals have become a species. Society has historically identified the LGBT populations as

deviant, and this label and discourse still applies to modern times. As a result of this discourse, the LGBT populations have been invisible to the medical community. As illustrated in the literature review section of this paper, LGBT nursing research accounts for 0.1% of all nursing research (Eliason, Dibble, and DeJoseph, 2011). This lack of nursing research can be related to many factors; however, one of the greatest and most notable causes can probably be traced to the discourse of huge institutions and the resulting dominant beliefs that homosexuality is deviant and inferior to heterosexuality.

Power and Sexuality

The construct of power and sexuality is intertwined with discourse and also stems from Michael Foucault's analysis and use of the concept (Kirsch, 2000). Foucault worked extensively with the idea of power; however, this paper will only draw on his ideas of power and sexuality. Foucault conjectured that power is inherent to institutions rather than in the individuals that make those institutions function. Foucault further theorized that institutional power and disindividualization was achieved through disciplinary power (Felluga, 2011).

In order to understand the idea of power over sexuality, Foucault's beliefs about the origins of the concept must first be addressed. The connotations surrounding the term 'sexuality' has evolved over the past few centuries. Foucault (1978) and Felluga (2011) state that in the 17th and 18th centuries, sexuality was associated with reproductive sexual practices and was only discussed during confessions at church. The term evolved into connotations about non-reproductive sexual practices, and by means of discourse and cultural flow, the term now refers to an identity as opposed to a behavior (Foucault; Kirsch, 2000). Watson (2005) writes that sexuality has been "attached to individuals

instead of acts/behaviors, and these individuals were then constituted as an object of knowledge [and] thus subject to disciplinary power" (p. 70).

Wilchins (2004) further elaborates on sexuality. She states that the term 'sexuality' is now linked to homosexuals. Through institutional discourse, nearly all modern discussion of the LGBT community will relate to their sexuality. Wilchins' discussion about sexuality slightly differs from Foucault (1978). As already stated, Foucault claims that sexuality now refers to an identity as opposed to a behavior; however, Wilchins contends that not only does sexuality refer to identity, but it is now almost always associated with the sexual behaviors of homosexuals.

With sexuality being defined and better understood, the construct of power as it relates to sexuality can be explored. Foucault (1978) asserts that power works on multiple levels and in multiple directions. This paper will briefly discuss institutional power through means of disciplinary power and how it relates to sexuality and LGBT inequalities.

Foucault conjectured that institutional power has always existed (Felluga, 2011). As discussed earlier, institutional power exists based on historical discourse; however, Foucault theorized that disciplinary power has also permitted institutional power. Through disciplinary power, disindividuation has been achieved. In past centuries, this type of discipline and power was achieved by means of public displays of torture, dismemberment, and obliteration; however, in latter punishment, discipline became internalized and directed to the constitution (Felluga). Kirsch (2000) states that disciplinary power results from people becoming passive and thus the individual is

rendered barely invisible. Foucault's example of government and power illustrates his concept of institutional power:

> Basically power is less a confrontation between two adversaries or the linking of one to the other than a question of government. This word must be allowed the very broad meaning which it had in the sixteenth century. "Government" did not refer only to political structures or to the management of states; rather it designated the way in which the conduct of individuals or of groups might be directed: the government of children, of souls, of communities, of families, of the sick. It did not only cover the legitimately constituted forms of political or economic subject, but also modes of action, more or less considered and calculated, which were destined to act upon the possibilities of action of other people. To govern, in this sense, is to structure the possible field of action of others. The relationship proper to power would not therefore be sought on the side of violence or of struggle, nor on that of voluntary linking (all of which can, at best, only be the instruments of power), but rather in the area of the singular mode of action, neither warlike nor juridical, which is government (Felluga, 2011, para. 3).

Wilchins (2004) believes that the acquiescence of the LGBT populations as a result of disciplinary power has allowed institutions, such as the church, state, and medicine, to have power. As discussed earlier, institutional discourse, such as the U.S. federal government, religious organizations, and even medicine has illustrated LGBT populations as deviant. Much of this discourse is related to institutional power and sexuality.

LGBT Inequalities

LGBT inequalities and the inequities of LGBT nursing research can be explained by historical discourse of sexuality and power. Eliason, Dibble, and DeJoseph (2010) considered the historical discourse of sexuality as a reason to the inequalities in LGBT nursing research. Eliason and her colleagues assert that sexuality has historically been relegated as a private subject and were not appropriate for nurses to assess and discuss with patients. They further elaborate that the silence on LGBT issues arises from "different root causes than other professions, and the nursing closet door has been closed for most of nursing's contemporary history" (Eliason, Dibble, & DeJoseph, p. 209). Eliason and her colleagues conclude that LGBT health disparities are not related to sexual behaviors, and instead are attributed to societal stigma that results in harassment, discrimination, violence, and denial of human rights.

Kirsch (2000) also links the inequalities of the LGBT populations to discourse and power. He states that, "like other minorities and ethnic groups, workers, and the disenfranchised, queers are easily blamed when they fail to conform to the social idea" (Kirsch, p. 36). The LGBT populations have long been discriminated against, and it is the author's belief that through institutional power and discourse, LGBT nursing research has not been promoted or valued.

These constructs of power and discourse link Queer Theory to the proposed study. This study is based on the notion that a silence exists on LGBT nursing research, and that what is needed is an increase in the amount of LGBT nursing research to improve evidence-based guidelines. Based on Queer Theory, two main reasons can link the lack of LGBT research to the construct of power.

First, the idea behind historical sexuality discourse is that the LGBT person has been inherently linked to sexuality, and as cited by Eliason, Dibble, and DeJoseph (2010), the nursing profession has historically avoided the topic of sexuality because it is relegated as a private topic. Second, institutional power has seriously affected past and present research on LGBT populations. The LGBT populations have been historically and irrefutably discriminated against. These inequalities have been blatant and can be exemplified by actions of institutions, such as the church, state, medicine, and education. As a direct result, LGBT people have faced great inequalities and thus the nursing profession has been discouraged to research on this marginalized population.

It is important for nurse researchers to resist and challenge this power difference. Foucault stated that power ultimately is inherent in individuals and that power exists only when it is put into action (Felluga, 2011). Eliason, Dibble, and DeJoseph (2010) conclude that it is important to rise to the occasion in order to improve LGBT nursing research. Eliason and her colleagues conclude:

> In an era of evidence-based practice, all changes in practice and education, at least in theory, are driven from a research base. If LGBT individuals and issues are invisible in the nursing literature, how will progress be made? Without research, no "evidence-based practice" guidelines can be developed (p. 209).

CHAPTER 4

METHODOLOGY

Design, Sample, and Variables

This study used a cross-sectional design to evaluate the methodological quality of recent quantitative nursing LGBT research reports. This study did not involve human subjects; however, an application to the University of Nevada Las Vegas Institutional Review Board (IRB) for the Protection of Human Subjects was submitted. The IRB has reviewed the protocol and deemed the study excluded from review (see Appendix E).

Research reports being used were published between the years 2000 and 2010. This time period was selected in order to obtain an adequate sample size. Even though the relevancy of research may decrease over a ten year span, obtaining a large enough sample size to perform statistical analysis was deemed more important. As mentioned in the literature review section of this paper, quantitative nursing LGBT research is lacking, and thus retrieving literature that dates back to the year 2000 was required to acquire an adequate number of peer-reviewed research reports.

The research reports were obtained by initially performing a search on the Cumulative Index to Nursing and Allied Health Literature (CINAHL) database. The literature search was completed with the assistance of the allied health librarian. The search criteria included using the subject heading "LGBT persons" and exploding the subject heading to ensure the search would identify narrower terms. In addition, the nursing journal subset was used, and the time frame was set between 2000 and 2010. The results of this search yielded 188 articles (see Figure 3).

Each of the 188 article titles and abstracts were then read by the researcher to determine if exclusion criteria could be immediately identified. Those papers that met exclusion criteria based on the abstract or title were immediately excluded. The remaining articles were all examined in greater detail to determine if they could be used based on inclusion and exclusion criteria. Of the remaining reports, 40 were identified as useable for this study (see Figure 3).

The article inclusion criteria included:

1. Available in English
2. Included original quantitative research (used descriptive statistics to present all or a portion of findings or inferential statistics to analyze all or a portion of results)
3. Focused on LGBT as subjects
4. Published in a nursing journal
5. Featured a descriptive, experimental, quasi-experimental, or observational (including case-control, cohort, cross-sectional) design.

The article exclusion criteria included:

1. Solely qualitative research
2. Meta-analysis
3. Systematic review
4. Literature review

This study included three distinct variables. The primary variable was the methodological quality of published research reports, which was quantified using the MERSQI (see Appendix C). The other two variables included the study funding source

and country of data collection. These two variables were examined against their relationship with the methodological quality of the research papers.

Data Collection

As described above, 188 articles were identified by the allied health librarian upon searching the CINAHL database using specific criteria. After reviewing the research reports for inclusion and exclusion criteria, 40 were identified as appropriate for this study. To ensure reliability, the researcher conferred with the committee chair, Dr. Tish Smyer, to review a random sample of 18 of the 188 reports to make certain that the reports were being accurately reviewed for inclusion and exclusion criteria. In addition, any report that was questionable for inclusion was then reviewed by the committee chair to guarantee reliability.

The researcher scored all of the 40 research papers using the MERSQI (see Appendix C). A Microsoft Excel spreadsheet was used to record the MERSQI scores. In addition, a MERSQI paper copy was also scored and retained to make certain that other researchers and committee members could verify the scoring results. The researcher has conferred with the committee chair, Dr. Tish Smyer, and committee member, Dr. Carolyn Yucha, to make certain that he understands how to properly score research reports using the MERSQI. To guarantee reliability, 10 of the 40 articles was evaluated and verified by the committee chair for accuracy. Additionally, the researcher consulted with the committee chair if any research report had a questionable MERSQI score.

Medical Education Research Study Quality Instrument (MERSQI)

The MERSQI (Appendix C) was identified as an appropriate tool for this study because of its ability to evaluate the methodological quality of a research study, and then

compare that score to the funding and country of data collection. Reed et al. (2007) developed the MERSQI to identify links between funding and study quality for medical education research. The MERSQI was designed to "measure the quality of experimental, quasi-experimental, and observational studies" (p. 1003).

The MERSQI items were operationally defined and adapted according to repeated pilot testing. Reed et al. (2007) developed the MERSQI to include 10 items, reflecting 6 domains of study quality: (1) study design, (2) sampling, (3) type of data, (4) validity, (5) data analysis, and (6) outcomes. MERSQI items are scored on ordinal scales and summed to conclude a total score. The maximum score for each domain is 3, producing a potential score range of 5 to 18 (see Appendix D). In addition, Reed et al. developed the MERSQI to allow for score adjustments in the case of a non-applicable response. This score adjustment allows for comparison of scores across studies.

Reed et al. (2007) established validity and reliability for the MERSQI. Cronbach alpha was utilized to establish internal consistency of the components and the overall tool. Intraclass correlation coefficients (ICCs) were used to "assess interrater and intrarater reliability for all items" (Reed et al., pg. 1003).

Criterion validity was demonstrated by correlating the MERSQI scores with global quality ratings from two independent experts, measuring the association of MERSQI scores to the 3-year citation rate, and measuring the association between MERSQI scores and impact factors of the publishing journals. Spearman p was utilized to compute correlation between expert quality ratings and total MERSQI scores. In addition, simple linear regression was employed to quantify associations between total MERSQI scores and citation rate and impact factor (Reed et al., 2007).

Data Analysis

The researcher has conferred with committee member, Dr. Carolyn Yucha, on proper data analysis. Data analysis was performed using the Statistical Program for the Social Sciences (SPSS version 17.0) software (Chicago, IL). Descriptive analyses were completed for the MERSQI scores. Analysis of Variance (ANOVA) was used to compare MERSQI scores by funding category. In addition, independent *t*-tests (Student's *t*) were used to compare studies done within the U.S. to those done outside of the U.S.

CHAPTER 5

RESULTS

Demographic Descriptive Statistics

Forty studies were included in this study. The years of publication range from 2000 to 2010. Of the 40 studies, 70% included data that were collected in the U.S. and 30% from countries outside of the U.S. Those countries outside of the U.S. included England (2.5%), Israel (5%), Canada (2.5%), Sweden (10%), New Zealand (7.5%), and Botswana (2.5%) (see Figure 4). From the 40 studies, 57.5% did not receive any type of funding, whereas 42.5% did receive funding. From those funded studies, 37.5% received external funding and 5% received internal funding.

MERSQI Descriptive Statistics

The MERSQI scores had a mean of 9.4 ± 1.5 and a range of 7.0 – 14.4 (see Figure 5). The majority of the studies (85%) used a cross-sectional design or posttest only. Only 2.5% used a single group pretest and posttest design, and 12.5% used a nonrandomized with two or more group design. The majority of the studies (57.5%) sampled from two or more institutions. Sixty-one percent of the studies had a sampling response rate that was either less than 50% or was not reported, and almost all of the studies (95%) used self-report data as opposed to objective measurements.

The three sub-categories under the validity of evaluation instrument had varied results. Over half of the studies (52.8%) reported the internal structure; whereas the majority of studies did not report the content validity or the relationships to other variables (52.8% and 80.6% respectively). All of the studies (100%) utilized appropriate study design and data analysis techniques, and 85% of the studies analyzed the data using

techniques beyond descriptive analysis. Nearly all of the studies (92.5%) reported outcomes that were defined as either being satisfaction, attitudes, perceptions, opinions, or general facts. Only 5% reported outcomes that resulted in gaining knowledge or skills, and 2.5% reported patient or health care outcomes (see Table 1).

MERSQI Scores and Funding Source

As already stated, 57.5% of the studies did not receive funding; whereas 37.5% received external funding and 5% received internal funding. Those studies that did not receive funding had a mean MERSQI score of 9.6 $\pm$ 1.6 and had a range of 8.0 – 14.4. Those studies that received internal funding had a mean MERSQI score of 8.5 $\pm$ 2.1 and had a range of 7.0 – 10.0. Lastly, those studies that received external funding had a mean MERSQI score of 9.0 $\pm$ 1.3 and had a range of 7.0 – 11.5 (see Figure 6). Using ANOVA, there was no significant difference in the MERSQI scores between studies with no funding, external funding, or internal funding (p = 0.376). Each MERSQI sub-category was also examined and there were no significant differences between any of the MERSQI sub-categories and the funding category.

MERSQI Scores and Country

As already stated, 70% of the studies used data that originated in the U.S., and 30% from other countries. Those studies originating from the U.S. had a mean MERSQI score of 9.3 $\pm$ 1.6, and those outside of the U.S. had a mean of 9.4 $\pm$ 1.3 (see Figure 7). Using independent t-tests (Students t), there was no significant difference in the MERSQI scores for those studies conducted inside or outside the U.S. (CI 95%, -1.16, 0.98, p = .622). Each sub-category was also examined and there were no significant differences between any of the MERSQI sub-categories and country of data collection.

Limitations

The first noted limitation in this study was the small sample size of 40 research reports. Had a larger sample size been used, the results might be very different. This small sample size may be the result of a few other noted limitations. The only literature database used to collect the sample was CINAHL, and if other nursing literature databases had been used, a larger sample size may have been obtained. In addition, using only quantitative research definitely limited the sample size. However, the MERSQI is not intended to score qualitative research, and based on the literature review, a limited number of quantitative research reports was anticipated. Additionally, the small sample size increases the possibility of committing type II errors.

In order to obtain an adequate sample size, research reports published between 2000 and 2010 were used. The literature review revealed that there is a huge lack in the number of quantitative LGBT nursing research articles published, and thus going back ten years was required to obtain an adequate sample size. Gottlieb (2003) states that limiting a literature reviews to the last 5 years is of importance, and this was understood at the start of this research; however, obtaining a large enough sample size was deemed more significant.

Lastly, this study was the first of its kind. No other study has used the MERSQI to evaluate the research methodology of quantitative nursing LGBT research reports. The MERSQI was developed to evaluate medical education research, and thus using this tool to evaluate nursing LGBT research was a limitation understood from the beginning.

CHAPTER 6

CONCLUSIONS

The findings in this study did not reveal a significant difference in the MERSQI scores between studies with no funding, external funding, or internal funding ($p = 0.376$). Of the 40 research studies, 57.5% did not receive funding, 37.5% received external funding, and 5% received internal funding. Those studies that did not receive funding had a mean MERSQI score of 9.6 $\pm$ 1.6 and a range of 8.0 – 14.4. Those studies with internal funding had a mean MERSQI score of 8.5 $\pm$ 2.1 and a range of 7.0 – 10.0. Those studies with external funding had a mean MERSQI score of 9.0 $\pm$ 1.3 and a range of 7.0 – 11.5.

Since this study was the first of its kind, it is difficult to compare the findings to other research studies. However, there are other studies that have used the MERSQI, and the results are mixed. Yucha, St. Pierre Schneider, Smyer, Kowalski, and Stowers (in press) studied the research methodology of nursing education studies, and they found no statistical difference between MERSQI scores and the type of funding. Yucha et al. had a sample number of 133 research studies. In contrast, Reed et al. (2007) had a sample number of 210 research studies and studied the association between funding and quality of published medical education research. Reed and her colleagues reported higher MERSQI scores with study funding over $20,000.

The small sample number may attribute to this finding, and had a larger sample size been obtained, the results could have been very different. Despite no significant differences being found between the MERSQI scores and level of funding, this should not imply to others that funding of LGBT nursing research is not important. The Institute of Medicine of the National Academies (IOM, 2011) published a report on the health of

LGBT people and recommends further funding and research. Boehmer (2002), Eliason, Dibble, and DeJoseph (2010), and Snyder (2011) have all also recommended further funding and research for the LGBT populations. Lastly, the sample studies used for this study did not list the amount of funding received; however, the funded sample studies most likely received nominal funding when compared to Reed et al. (2007). The variations in funding may account for the findings in this study.

Of the existing LGBT nursing and health research, there is a bias toward LGBT research as it relates to HIV, AIDS, and STDs. Snyder (2011), Krehely (2009), and Boehmer (2002) all cite a partiality toward these topics as it relates to LGBT research. Interestingly, of those funded studies in this study, over half (58.5%) related to HIV or AIDS. As already discussed in this paper, the homosexual population has been inherently linked to HIV, AIDS, and STDs. However, future funded nursing LGBT research needs to start expanding on other important health topics.

The findings did not reveal a significant difference in the MERSQI scores for those studies conducted inside or outside the U.S. (CI 95%, -1.16, 0.98, $p = .622$). Those studies originating from the U.S. had a mean MERSQI score of 9.3 ± 1.6, and those outside of the U.S. had a mean of 9.4 ± 1.3. Seventy percent of the studies used data that originated in the U.S. and 30% from other countries.

Yucha et al. (in press) reported significant higher MERSQI scores in those studies conducted in the U.S. More specifically, Yucha and her colleagues found that those studies scored more points for research study design and validity of instruments. No other studies were found that compare MERSQI scores to the country of data collection.

When comparing the mean MERSQI scores of those studies originating from the U.S. versus those from outside the U.S., the scores are almost identical (9.3 $\pm$ 1.6 and 9.4 $\pm$ 1.3 respectively). Again, these findings might be different had a larger sample size been obtained. Only seven countries were represented in the sample studies, and 70% originated in the U.S. Again, those countries include England (2.5%), Israel (5%), Canada (2.5%), Sweden (10%), New Zealand (7.5%), and Botswana (2.5%).

It is dismal that such little LGBT research exists in other countries; however, this can be expected when considering the current politics surrounding homosexuals. According to the International Lesbian, Gay, Bisexual, Trans and Intersex Association (2009), homosexuality remains illegal in 80 countries around the world and five of them punish homosexual acts with death. Given this political environment, LGBT research is not likely to originate from most other countries. In fact, the one research study originating from Botswana provided the disclaimer that the research participants had to exhibit caution when participating due to fears of being imprisoned or killed.

The findings in this study revealed an overall mean MERSQI score of 9.4 $\pm$ 1.5 and a range of 7.0 – 14.4. These scores are not overly impressive when considering that the MERSQI has a potential score ranging from 5 to 18. However, Reed et al. (2007) and Yucha et al. (in press) both report similar MERSQI scores. Reed et al. reported a mean of 9.95 $\pm$ 2.34, and Yucha et al. reported a mean of 9.5 $\pm$ 2.1. Both of those studies had much larger sample sizes. Given these few comparisons, it can be inferred that the quality of quantitative nursing LGBT research has similar rigor.

There are some domains where LGBT research can improve. Eighty-five percent of the sample used a single group cross-sectional or single group posttest design. Future

research should expand on using two or more groups, and randomized controlled trials as the study design. Only a few (5%) of these studies used objective measurement data, thus future research should focus on using this type of data to improve. Reporting the internal structure, content validity, and relationships to other variables when describing the validity of the evaluation instrument should also be improved upon in future LGBT research. Lastly, future research should focus on providing research outcomes other than satisfaction, attitudes, perceptions, opinions and general facts. Nurse researchers should be focusing on producing LGBT research that provides patient and health care outcomes.

There are two main objectives that future nurse researchers must meet to improve the number and quality of LGBT research and to eventually normalize LGBT research. These two objectives are for nurse researchers to publish more research related to the LGBT population and to publish research that is of greater rigor. To meet these objectives, it is most important for nurse researchers to have an understanding of the research that has been completed and how to improve future research. Utilizing the MERSQI descriptive statistics (see Table 1) will become important for future nurse researchers interested in the LGBT populations. Having an awareness of the research methodology domains that need to be addressed in future nursing LGBT research will become invaluable. As the number and quality of nursing LGBT research improves, the normalization and credibility of LGBT research will be achieved.

APPENDIX A

TABLES

Table 1: MERSQI Descriptive Statistics

Domain	MERSQI Item	N	Percent[1]
	Study Design		
	Single group cross-sectional or single group posttest only	34	85
	Single group pretest and posttest	1	2.5
	Nonrandomized, 2 or more groups	5	12.5
	Randomized controlled trial	0	0
Sampling	No of institutions studied		
	1	12	30
	2	5	12.5
	>2	23	57.5
	Response rate %		
	Not applicable	4	
	<50% or not reported	22	61.1
	50-74%	7	19.4
	≥75%	7	19.4
Type of data	Type of data		
	Assessment by study participant (knowledge self-report)	38	95
	Objective measurement (knowledge test)	2	5
Validity of evaluation instrument	Internal structure		
	Not applicable	4	
	Not reported	17	47.2
	Reported	19	52.8
	Content validity		
	Not applicable	4	
	Not reported	19	52.8
	Reported	17	47.2
	Relationships to other variables		
	Not applicable	4	
	Not reported	29	80.6
	Reported	7	19.4
Data Analysis	Appropriateness of analysis		
	Inappropriate for study design or type of data	0	0
	Appropriate for study design & type of data	40	100
	Complexity of analysis		
	Descriptive analysis only	6	15
	Beyond descriptive analysis	34	85
Outcomes	Outcomes		
	Satisfaction, attitudes, perceptions, opinions, general facts	37	92.5
	Knowledge, skills	2	5
	Behaviors	0	0
	Patient/health care outcomes	1	2.5

[1]Ratings of "not applicable" are not included in percentages.

APPENDIX B

FIGURES

Sexual Behavior	**Cultural Factors**	**Disclosure of Sexual Orientation, Gender Identity**	**Prejudice and Discrimination**	**Concealed Sexual Identity**
HIV/AIDS	Body culture: eating disorders	Psychological adjustment, depression, anxiety, suicide	Provider bias, lack of sensitivity	Reluctance to seek preventive care
Hepatitis A and B	Socialization through bars: drug, alcohol and tobacco use	Conflicts with family of origins, lack of social support	Harassment and discrimination in medical encounters, employment, housing, and child custody	Delayed medical care
Enteritis (e.g., Giardia, amoeba)	Nulliparity: breast cancer	Physical/economic dislocation	Limited access to care or insurance coverage	Incomplete medical history, (e.g., concealed risks, sexually-related complications, social factors)
Human Papillomavirus	Parenting: insemination questions, mental health concerns		Pathologizing of gender variant behavior	
Bacterial Vaginosis	Gender polarity in dominant culture: conflicts for transgender and intersex persons		Violence against LGBT populations	
Anal Cancer				
Other STDs				

Figure 1. LGBT Health Outcomes and their Relationship to Social/Behavioral Factors. Adapted from Dean, L., Meyer, I. H., Robinson, K., Sell, R. I., Sember, R., Silenzio, V. M., Wolfe, D., Bowen, D. J., Bradford, J., Rothblum, E., Scout, White, J., & Dunn, P. (2000). Lesbian, gay, bisexual, and transgender health: Findings and concerns. *Journal of the Gay and Lesbian Medical Association*, *4*(3), 101-151.

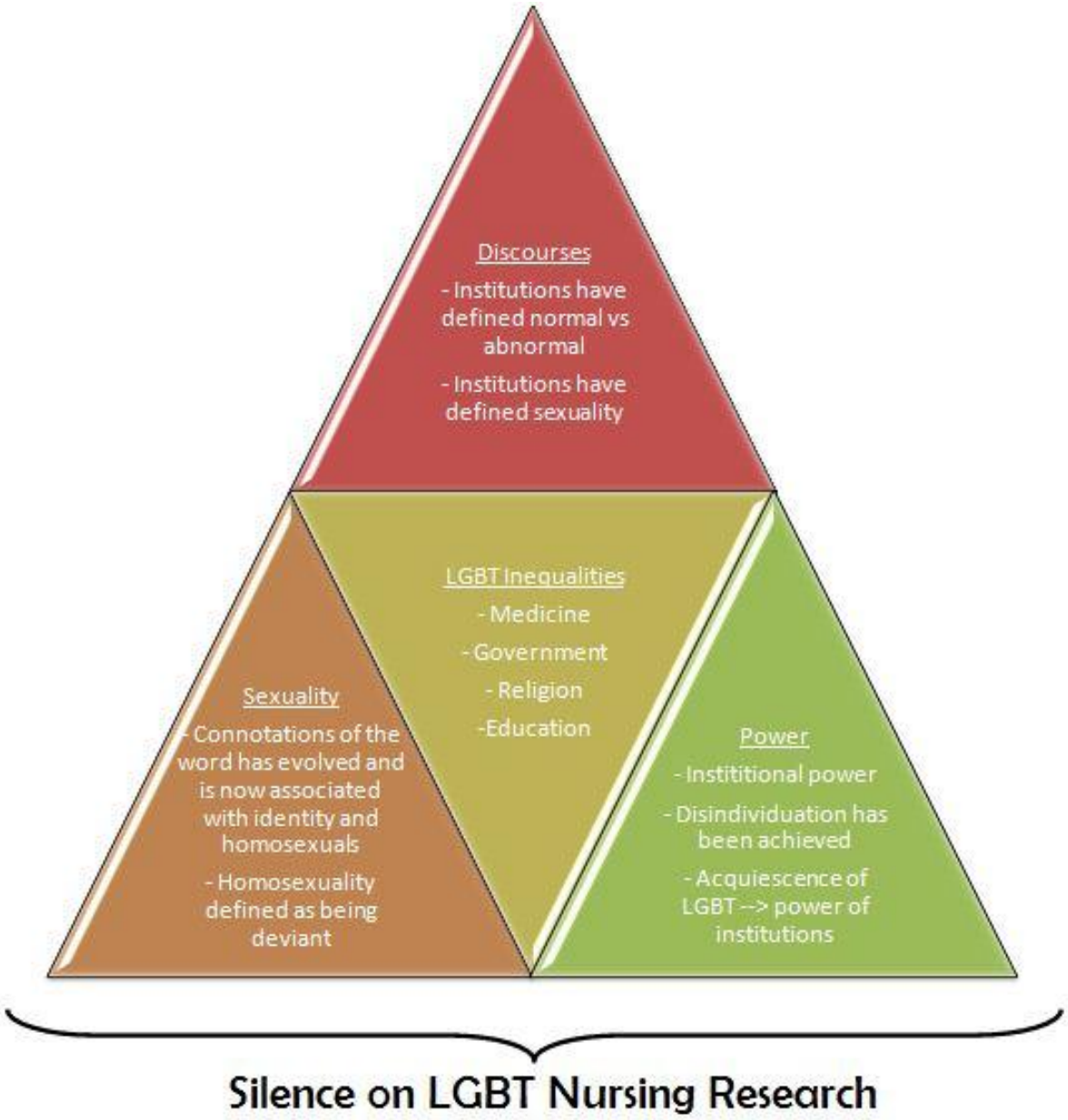

Figure 2. Queer Theory model.

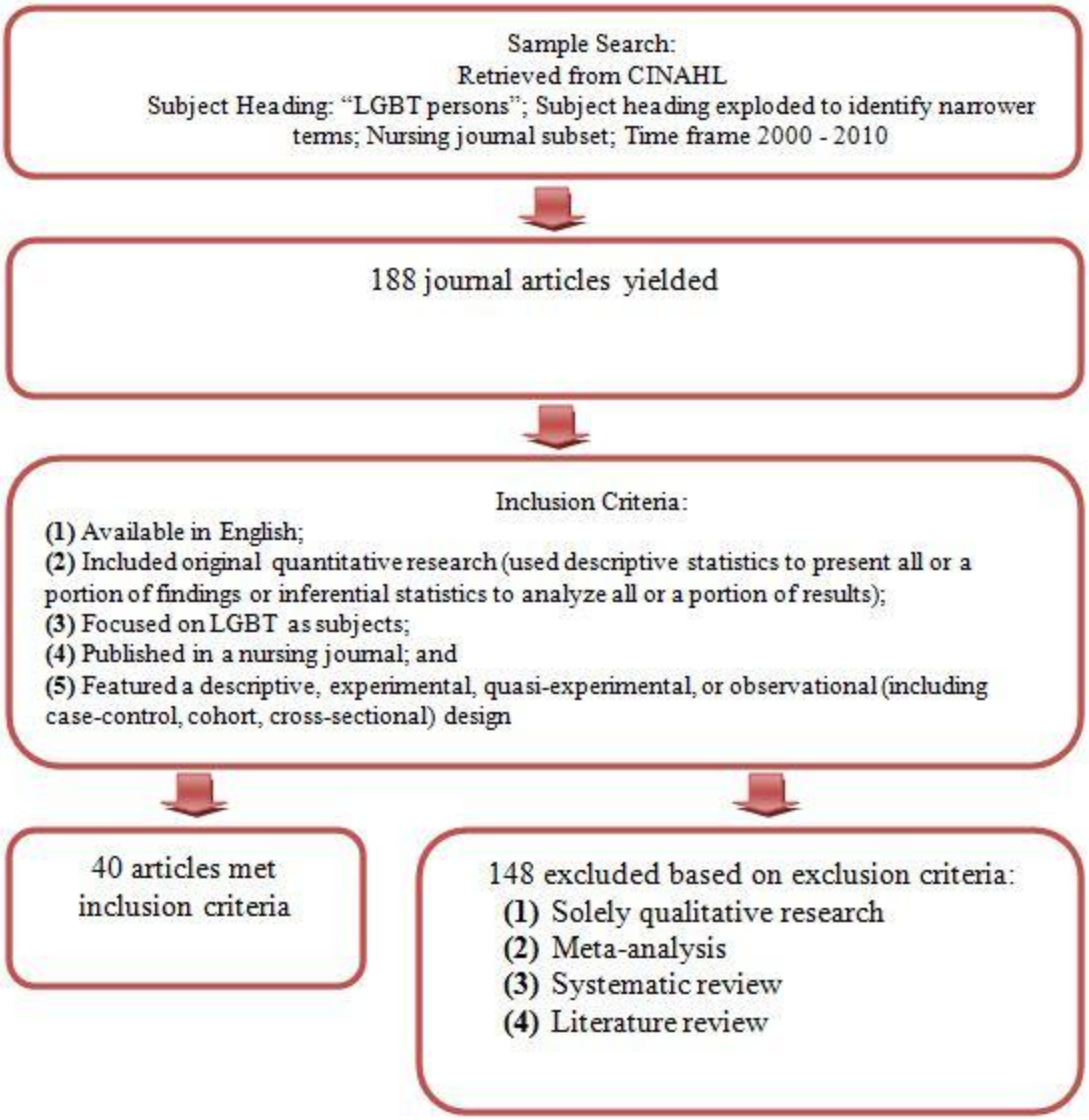

Figure 3. Sample size flow diagram.

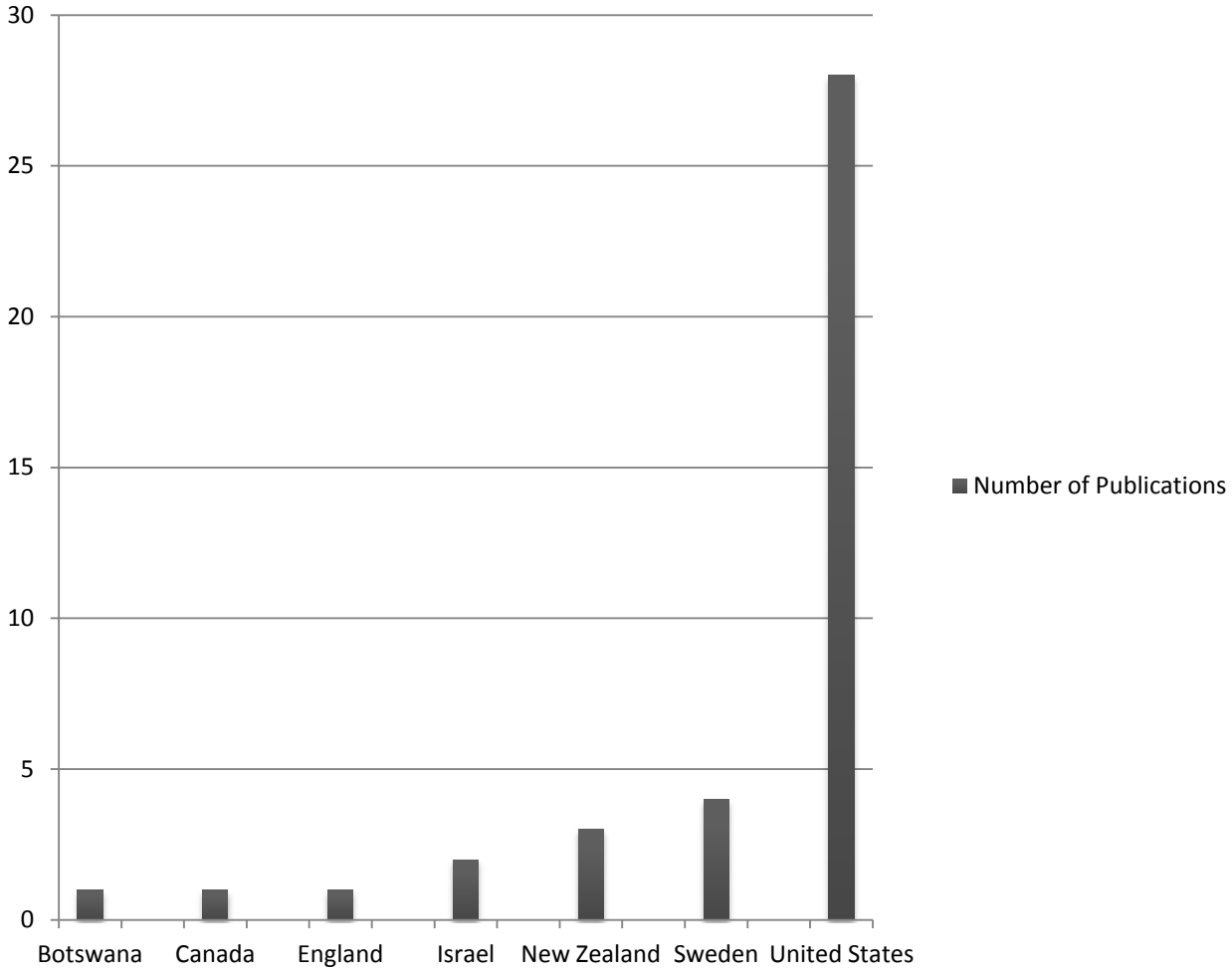

Figure 4. Number of publications by country of data collection.

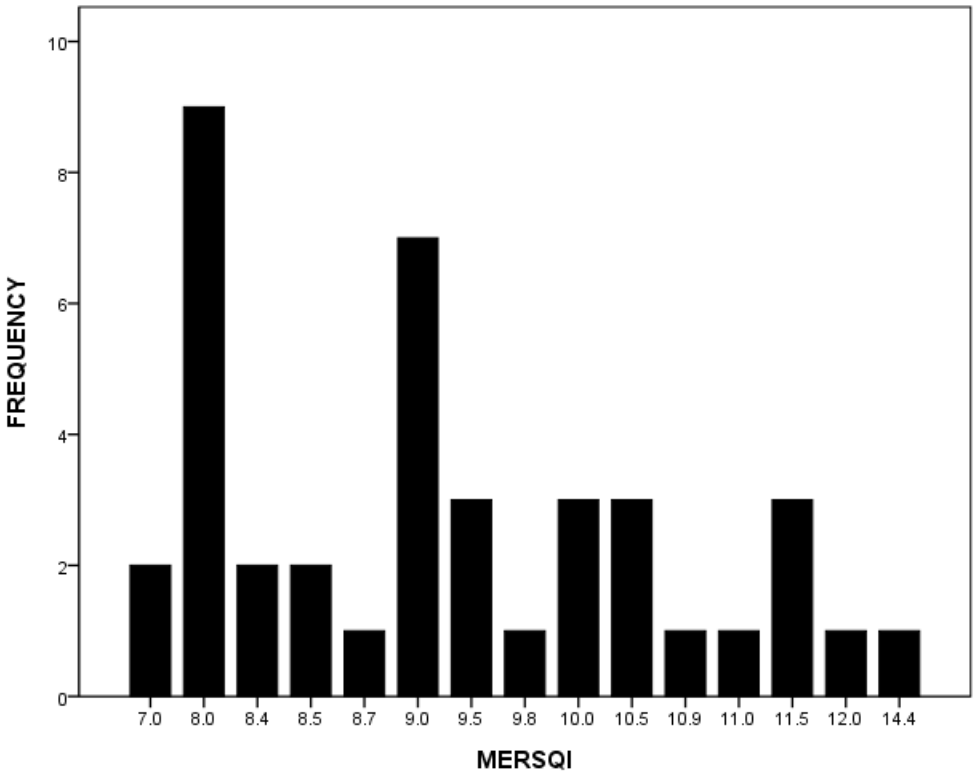

Figure 5. The distributions of MERSQI scores depicted in a frequency bar graph. The MERSQI scores had a mean score of 9.4 $\pm$ 1.5, and a range of 7.0 – 14.4.

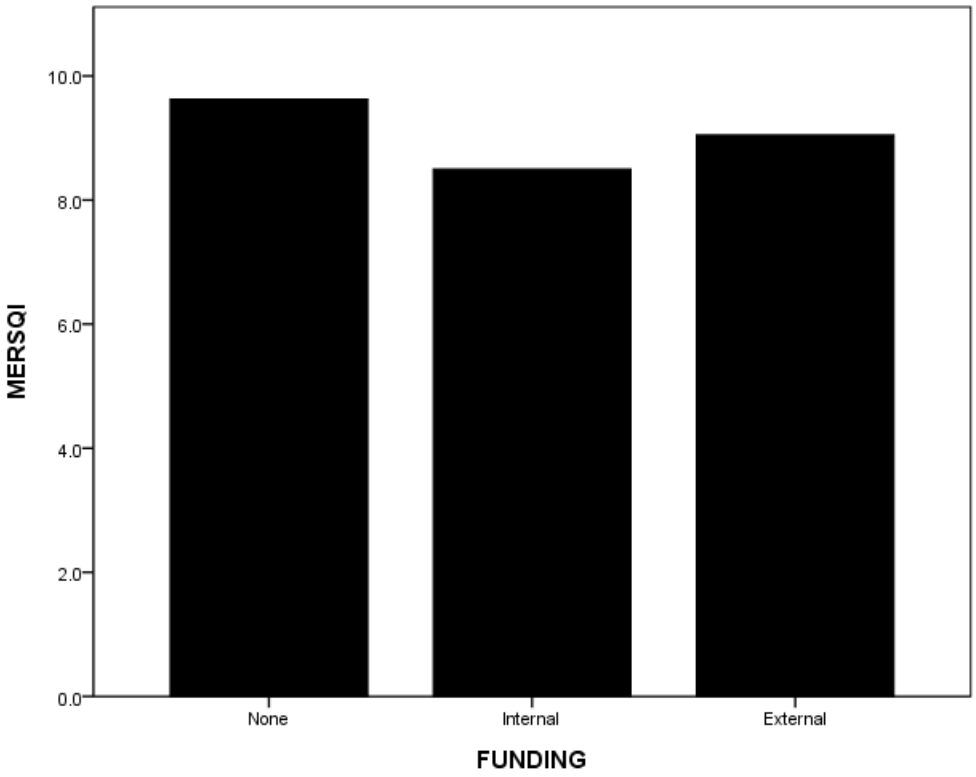

Figure 6. Mean MERSQI scores compared to the funding categories. Those studies that did not receive funding had a mean MERSQI score of 9.6 $\pm$ 1.6. Those studies that received internal funding had a mean MERSQI score of 8.5 $\pm$ 2.1, and those studies that received external funding had a mean MERSQI score of 9.0 $\pm$ 1.3. These scores were not significantly different from one another.

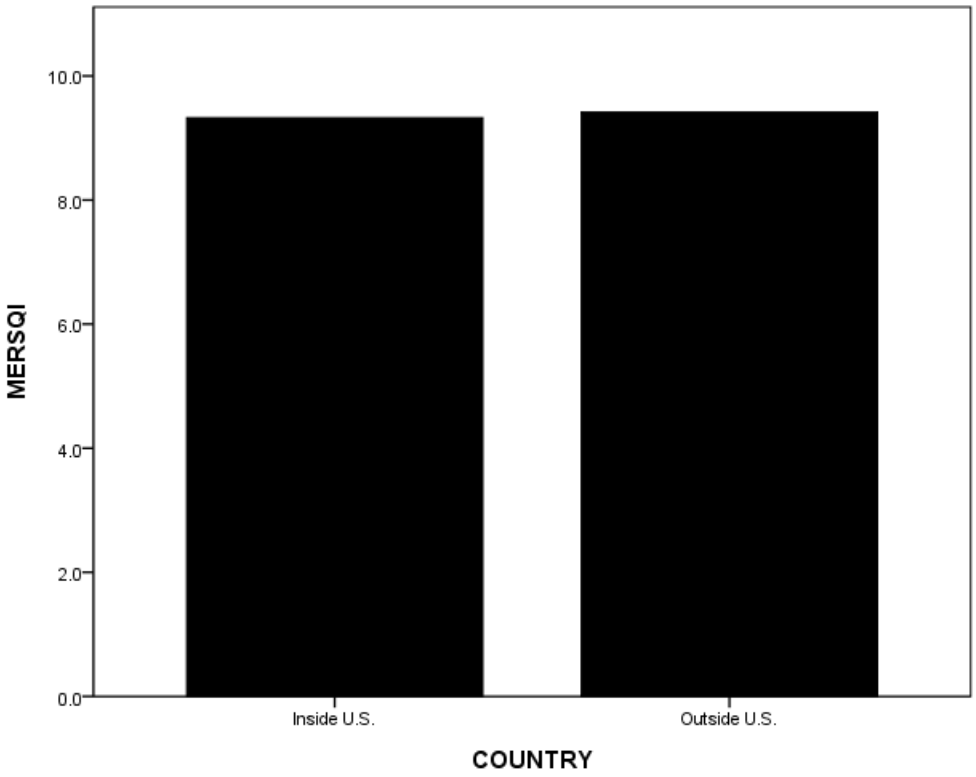

Figure 7. Mean MERSQI scores compared to country of data collection. Studies originating from the U.S. had a mean MERSQI score of 9.3 $\pm$ 1.6, and those outside of the U.S. had a mean of 9.4 $\pm$ 1.3. These scores were not significantly different from one another.

APPENDIX C

MERSQI

Domain	MERSQI Item	Item Score	Score
	Study Design		
	Single group cross-sectional or single group posttest only	1	
	Single group pretest and posttest	1.5	
	Nonrandomized, 2 or more groups	2	
	Randomized controlled trial	3	
Sampling	No of institutions studied		
	1	0.5	
	2	1	
	>2	1.5	
	Response rate %		
	Not applicable		
	<50% or not reported	0.5	
	50-74%	1	
	≥75%	1.5	
Type of data	Type of data		
	Assessment by study participant (knowledge self-report)	1	
	Objective measurement (knowledge test)	3	
Validity of evaluation instrument	Internal structure		
	Not applicable		
	Not reported	0	
	Reported	1	
	Content validity		
	Not applicable		
	Not reported	0	
	Reported	1	
	Relationships to other variables		
	Not applicable		
	Not reported	0	
	Reported	1	
Data Analysis	Appropriateness of analysis		
	Inappropriate for study design or type of data	0	
	Appropriate for study design & type of data	1	
	Complexity of analysis		
	Descriptive analysis only	1	
	Beyond descriptive analysis	2	
Outcomes	Outcomes		
	Satisfaction, attitudes, perceptions, opinions, general facts	1	
	Knowledge, skills	1.5	
	Behaviors	2	
	Patient/health care outcomes	3	
Total Score		18	

APPENDIX D

MERSQI SCORING RUBRIC

1. Study design

O1 = Single group cross-sectional (may include subgroup comparisons) or single group post-test only (1)

O2 = Single group pre and post-test (1.5)

O3 = Non-randomized, two or more groups (case-control, cohort with comparison group, nonrandomized two-group experiment) (2)

O4 = Randomized controlled experiment (random assignment to groups; control group may be standard treatment) (3)

2. Institutions

O1 = Single institution (0.5)

O2 = Two institutions (1)

O3 = More than two institutions (1.5)

3. Response rate

O4 = Not applicable (use only if a response rate truly does not apply. *This is different from not reported*) (N/A)

O5 = Response rate <50% OR not reported (if repeated measures are done, use highest rate for data included in analysis) (0)

O6 = Response rate 50-74% (1)

O7 = Response rate ≥75% (1.5)

4. Type of Data

O1 = Assessment by study subject (1)

O2 = Objective measurement (assessment by someone or something other than the study subject himself/herself, includes written tests and direct observation) (3)

5. Internal structure

O1 = Not applicable (Use ONLY if study does not measure a psychological construct & there is no instrument to rate, such as physiological measures) (N/A)

O2 = Not reported (0)

O3 = Reported (e.g., internal consistency, inter-rater reliability, intra-rater and test-retest reliability, factor analysis) (1)

6. Content (items are derived from the literature/experts and iteratively reviewed by experts)

O4 = Not applicable (Use ONLY if study does not measure a psychological construct & there is no instrument to rate, such as physiological measures) (N/A)

O5 = Not reported (0)

O6 = Reported (1)

7. Relations to other variables (criterion, concurrent, and predictive validity)

O7 = Not applicable (Use ONLY if study does not measure a psychological construct & there is no instrument to rate, such as physiological measures) (N/A)

O8 = Not reported (0)

O9 = Reported (relationship between instrument scores and other measures) (1)

8. Appropriateness of data analysis

O1 = Data analysis inappropriate for study design OR type of data for highest level outcome (0)

O2 = Data analysis appropriate for study design AND type of data for highest level outcome (1)

9. Sophistication of data analysis

O3 = Descriptive analysis only (frequencies, measures of central tendency) (1)

O4 = Beyond descriptive analysis (comparisons, correlations, relationships between variables) (includes X^2) (2)

10. Outcome (use highest level data)

O1 = Satisfaction, attitudes, perceptions, opinions, demographics, general facts (1)

O2 = Knowledge, skills (1.5)

O3 = Behaviors (2)

O4 = Patient/health care outcome (3)

Adapted from Reed, D. A., Cook, D. A., Beckman, T. J., Levine, R. B., Kern, D. E., & Wright, S. M. (2007). Association between funding and quality of published medical education research. *Journal of American Medical Association, 298*(9), 1002-1009.

APPENDIX E

INSTITUTIONAL REVIEW BOARD EXCLUSION

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

Biomedical IRB

Notice of Excluded Activity

DATE: May 27, 2011

TO: **Dr. Patricia Smyer,** Nursing

FROM: Office of Research Integrity – Human Subjects

RE: Notification of review by /Charles Rasmussen/
Dr. Charles Rasmussen, Co-Chair
Protocol Title: **Methodological Quality of Quantitative Nursing Lesbian Gay Bisexual and Transgender Research from 2000 to 2010**
Protocol# 1105-3834

This memorandum is notification that the project referenced above has been reviewed as indicated in Federal regulatory statutes 45CFR46.

The protocol has been reviewed and deemed excluded from IRB review. It is not in need of further review or approval by the IRB.

Any changes to the excluded activity may cause this project to require a different level of IRB review. Should any changes need to be made, please submit a Modification Form.

If you have questions or require any assistance, please contact the Office of Research Integrity – Human Subjects at IRB@unlv.edu or call 895-2794.

REFERENCES

Boehmer, U. (2002). Twenty years of public health research: Inclusion of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health, 92*(7), 1125-1130.

Case, P., Austin, B., Hunger, D. J., Manson, J. E., Malspeis, S., Willett, W. C., & Spiegelman, D. (2004). Sexual orientation, health risk factors, and physical functioning in the Nurses' Health Study II. *Journal of Women's Health, 13*(9), 1033-1047.

Catholic Answers. (2008). Homosexuality. Retrieved from http://www.catholic.com/library/Homosexuality.asp

Centers for Disease Control. (2010). HIV and AIDS among gay and bisexual men. Retrieved from http://www.cdc.gov/nchhstp/newsroom/docs/FastFacts-msm-final508comp.pdf

Dean, L., Meyer, I. H., Robinson, K., Sell, R. I., Sember, R., Silenzio, V. M., Wolfe, D., Bowen, D. J., Bradford, J., Rothblum, E., Scout, White, J., & Dunn, P. (2000). Lesbian, gay, bisexual, and transgender health: Findings and concerns. *Journal of the Gay and Lesbian Medical Association, 4*(3), 101-151.

Eliason, M. J., Dibble, S., & DeJoseph, J. (2010). Nursing's silence on lesbian, gay, bisexual, and transgender issues: The need for emancipatory efforts. *Advances in Nursing Science, 33*(3), 206-218.

Felluga, D. (2011). Introductory guide to critical theory. Retrieved from http://www.purdue.edu/guidetheory/newhistoricism/modules/focaultpower.html

Foucault, M. (1970). *The order of things: An archaeology of the human sciences*. New York, NY: Vintage.

Foucault, M. (1978). *The history of sexuality* (R. Hurley, Trans Vol. 1). New York, NY: Random House, Inc.

Gottlieb, L. (2003). Editorial: Ageism of knowledge: Outdated research. *Canadian Journal of Nursing Research, 35*(3), 3.

Harcourt, J. (2006). Current issues in lesbian, gay, bisexual, and transgender (LGBT) health: Introduction. *Journal of Homosexuality, 51*(1), 1-11.

Herbenick, D., Reece, M., Sanders, S. A., Schick, V., Dodge, B., & Fortenberry, J. D. (2010). Sexual behavior in the U.S.: Results from a national probability sample of male and females ages 14 to 94. *Journal of Sexual Medicine, 7*(suppl 5), 255-265.

Hutchinson, M. K., Thompson, A. C., & Cederbaum, J. A. (2006). Multisystem factors contributing to disparities in preventive health care among lesbian women. *Association of Women's Health, Obstetric and Neonatal Nurses, 35*(3), 393-402.

Institute of Medicine of the National Academies. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Retrieved from http://www.iom.edu/reports/2011/the-health-of-lesbian-gay-bisexual-and-transgender-people.aspx

International Lesbian, Gay, Bisexual, Trans and Intersex Association. (2009). 2009 report on state-sponsored homophobia. Retrieved from http://ilga.org/ilga/en/article/1251

Kirsch, M. H. (2000). *Queer theory and social change*. New York, NY: Routledge.

Koh, A. S., & Ross, L. K. (2006). Mental health issues: A comparison of lesbian, bisexual and heterosexual women. *Journal of Homosexuality, 51*(1), 33-57.

Krehely, J. (2009). *How to close the LGBT health disparities gap*. Washington, DC: Center for American Progress.

Lessa, I. (2006). Discursive struggles within social welfare: Restaging teen motherhood. *The British Journal of Social Work, 36*(2), 283-298.

McCune, G. (2011, September 19). "Don't ask, don't tell" for military gays runs out. *Reuters*. Retrieved from http://www.reuters.com/article/2011/09/19/us-usa-gays-military-idUSTRE78I53W20110919

Numer, M. S., & Gahagan, J. (2009). The sexual health of gay men in the post-AIDS era: Feminist, post-structuralist and queer theory perspectives. *International Journal of Men's Health, 8*(2), 155-168.

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2004). Understanding curriculum as poststructuralist, deconstructed, postmodern text. In *Understanding curriculum.* New York: Peter Lang.

Reed, D. A., Cook, D. A., Beckman, T. J., Levine, R. B., Kern, D. E., & Wright, S. M. (2007). Association between funding and quality of published medical education research. *Journal of the American Medical Association, 298*(9), 1002-1009.

Roberts, S. J. (2006). Health care recommendations for lesbian women. *Association of Women's Health, Obstetric and Neonatal Nurses, 35*(5), 583-591.

Snyder, J. E. (2011). Trend analysis of medical publications about LGBT persons: 1950-2007. *Journal of Homosexuality, 58*(2), 164-188.

The Church of Jesus Christ of Latter-Day Saints. (2011). Chastity. Retrieved from http://lds.org/study/topics/chastity?lang=eng

U.S. Department of Health and Human Services. (2011). Lesbian, gay, bisexual, and transgender health. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=25

Watson, K. (2005). Queer theory. *Group Analysis, 38*(1), 67-81.

Wilchins, R. (2004). *Queer theory gender theory*. Los Angeles, CA: Alyson Publications.

Yucha, C., St. Pierre Schneider, B., Smyer, T., Kowalski, S., & Stowers, E. (in press). Methodological quality and scientific impact of quantitative nursing education research over 1.5 years. *Nursing Education Perspectives*.

VITA

Graduate College
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Michael Johnson

Degrees:

Bachelor of Science in Nursing, 2008
University of Nevada, Las Vegas

Thesis Title: Methodological Quality of Quantitative Nursing Lesbian, Gay, Bisexual, and Transgender Research from 2000 to 2010

Thesis Examination Committee:

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Committee Member, Carolyn Yucha, Ph.D.
Committee Member, Michele Clark, Ph.D.
Graduate Faculty Representative, LeAnn Putney, Ph.D.