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Cultural Competence: A Content Analysis of a Public Health Curriculum for a Community

Health Training Program in Haiti

by

Shay Slifko

A Thesis

Presented to the Graduate and Research Committee

of Lehigh University

in Candidacy for the Degree of

Master of Arts

in

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Abstract

Foreign public health practitioners, medical doctors, and humanitarian workers, are often the providers of global health interventions. As a result, there are cultural challenges that arise when outsiders provide health education for individuals from distinctly different sociocultural realities. This study, guided by the principles of "cultural competence," examined a community health worker training program in Haiti, led by non-Haitian trainers. The training program provided public health information to 126 Haitian participants. The study specifically examined the application of the principle of culture competence in the training textbook used during this training program. Three criteria filtered and identified the degree of cultural competence demonstrated in the training textbook: language, resources, and racial representation. A gualitative content analysis approach determined the frequency of mismatched areas and inferred concepts for analysis of the text. The author's personal field observations provided contextual information according to the three areas of analysis, which provided a triangulated research perspective. Overall, based on the reported demographic statistics of the trainees and supporting cultural competence literature, the textbook content data analysis showed mismatches, or inconsistencies of culturally competent uses of cross-cultural curriculum, in the program content based on language, resources, and racial representation. These mismatches were identified in the textbook in the areas of analysis according to the principle of cultural competence in that program design must tailor its information to the individuals and communities' unique cultural and linguistic needs. Overall, mismatches in the textbook were most apparent in the language category with resources and racial representation showing fewer inconsistencies.

Keywords: Haiti, cultural competence, health promotion, content analysis

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Cultural Competence: A Content Analysis of a Public Health Curriculum for a Community Health Training Program in Haiti

Statement of the Problem

With any cross-cultural, cross-language health promotion program, there are often important elements to consider when the individuals transmitting the content have a limited familiarity with the host country's sociocultural realities. The sponsoring organization can consider whether the content is useful for the participants, how the transmitted content takes into account the participant's level of literacy, and is the participants' culture represented fittingly throughout the curriculum. Public health experts assert that in order to communicate illness and prevention methods most effectively, the content must take into consideration the individual's social determinants of health such as culture, language, and socioeconomic standing – all of which greatly influence a person's understanding of the causes of illness (Betancourt, Carillo, & Green, 2002). Cultural competence, a nexus of practices that prepare those in the helping professions to adequately care for and respond to individuals from diverse backgrounds, has established principles designed to guide professionals and program initiatives (Ronnau, 1994).

Taking into account these discussions about the social determinants of health and cultural competency, this study is guided by the National Center for Cultural Competence's culturally competent guiding principles (Cross et al, 1989; Goode, Jones, and Jackson, 2002; Cohen and Goode, 1999). The study described here examined a community health worker training program in Haiti, led by non-Haitian trainers, to assess the program content for cultural competence identified by three areas of analysis: language, resources, and racial representation. Due to the nature of this research in assessing the transmitted health promotion content for a training

program in Haiti deliberated by non-Haitians, the guiding principles set forth by the NCCC in the criteria of "Practice and Service Design" was the guiding framework for this study. Accordingly, one of the principles related to service design and practice asserts, "Culturally competent organizations design and implement services that are tailored or matched to the unique needs of individuals, children, families, organizations and communities served" (Cohen & Goode, 1999; Cross, 1989, p. 41).

Purpose of This Study

The purpose of this research study is to assess the cultural competence of a cross-cultural, cross-national public health training program curriculum in Haiti, instructed by a team of non-Haitians. Applying a qualitative content analysis research approach, this study sought to identify mismatches, or inconsistencies in the content, based on the trainees' sociocultural environment. The study analyzed the program textbook through the framework of cultural competence and examined the text according to three criteria for analysis: language, resources, and racial representation. Based on cultural competence literature by the National Center for Cultural Competence and according to the author's previous field obvservations, these categoies were chosen for this study.

Research Question

Following the 2010 Haitian earthquake that further devastated an already economically unstable country, there has been considerable research regarding the implications of the large presence of non-governmental organizations in Haiti providing short-term assistance. One such study asserts the widespread presence of short term and long term NGOs in Haiti sitting in as "substitutes for the state" that consequently further weakened the economic state in Haiti (Zanotti, 2010, p. 755). Another study addresses the presence of approximately 10,000 NGOs

who were active in Haiti during the earthquake and the unintended consequences their presence had on Haiti's healthcare system (Jobe, 2011). Jobe considers the effects of "short-term medical missions" operated by NGOs in Haiti on the sustainability of health services (2011, p.1). There is a limited amount of research that critiques the cultural competence of health training programs in Haiti and fewer resources that examine community-level health training program content and their compatibility based on the participants' backgrounds and characteristics. A Bolivian study (2010) conducted an ethnographic study of a community health worker training program led by Bolivian residents. The researcher (Bristow) explored the challenges of a group of trainers implementing culturally appropriate primary health care training among indigenous populations (2010). The study concluded the necessity for culturally competent training methodologies.

This study assessed the compatibility of the training content used in the community public health training program delivered to over 100 uniquely-contextualized Haitian participants. The current research aims to determine mismatches and matches in the training program content based on the principles of cultural competence in program design (Cohen & Goode, 1999; Cross, 1989). In light of this problem, I ask whether the previously identified Haitian community public health training program demonstrates the principles of cultural competence in the program content.

Context

Author's Identity. The researcher for this study was intimately involved throughout the great majority of the community health training program process. She was involved in each of the trainer's bi-weekly conference calls leading up to the program in Haiti where she observed the trainers' discussing the content design and navigating cultural issues. During the 23 days

spent in Haiti, she observed all 15 days of course instruction and was included in each nightly group discussion. Working as a program evaluator with a colleague, she conducted evaluation measures on day one and day five of each weekly program. Between those days, the researcher spent her time in the same training area developing results from the measures and observing and listening to the daily content. She took field notes based on her observations and noted certain areas of interest that frequently emerged among the Haitian participants via classroom conversation and questions.

An interpreter assisted all interactions between the researcher and the participants. To ensure each of the applied measures used in the former program evaluation were consistent, the researcher worked closely with her evaluation partner and the interpreters to check for further errors in translation and ensure the questions were back-translated properly. Additionally, the interpreters were closely involved in analyzing the demographic and satisfaction surveys for context assurance such as the level of education and occupation being accurately translated in the Haitian context.

Literature Review

Healthcare is unavailable for 70% of Haitians residing in rural, isolated areas. Those living in rural regions have to use mountain roads that are impassible for public transportation or emergency vehicles (Ministries of Aides International, 2013). As a result, when the rural poor become ill, treatment can be difficult to attain. For those where resources and transportation are scarce, accessing formal medical facilities and emergency transportation can be risky and require burdensome costs, travel, and time. In response to the high rate of maternal mortality and diseases affecting Haitians, community-based approaches have expanded with the objective to equip community members with health knowledge and basic skills in the prevention of disease

and death (Farmer et al., 2001). Farmer and colleagues challenged the notion that HIV treatment programs could not be highly effective in resource-poor regions and established an operational community-based approach in Haiti using community health workers to assist in the ongoing ART (anti-retroviral treatment) of prescribed patients (Farmer et al., 2001). The sponsors of community-based health efforts, worldwide, are frequently social and cultural outsiders to these rural communities, which means the sponsors often have a vested interest in reducing illness yet may have limited familiarity with the participants' social, cultural, political and economic context (Chang, 2007).

In the United States, healthcare and social work professionals who disseminate information on disease prevention are generally obligated to undergo training in cultural competence in order to better grasp how individual understanding of illness is largely influenced by one's cultural background (NASW, 2012). For instance, cultural competent practices are based on the understanding that an individual's culture, language, and socioeconomic status influence help-seeking behavior (Betancourt, Green, & Carillo, 2002). Each of these areas greatly influences a person's understanding of the causes of illness.

Those who work in the helping professions are obligated to undergo cultural competence training in order to better acquaint themselves with the patient's and learners' cultural contexts and accordingly adapt health interventions based on their culture, traditions, and practices (Betancourt, Green, & Carillo, 2002). There is a connection between cultural competence and the "elimination of racial and ethnic disparities" in health care, according to health care professionals in academia, social work, and medicine, and community health care (Betancourt, Green, & Carillo, 2002).

Public Health Promotion Transmitted through Health Education

Fostering health literacy through health communication programs enables participants to gain control of their own health and work towards improving the health of their communities (Kreps and Maibach, 1991; Guttman, 2000). Culturally competent education and training programs, according to a consortium of cultural competence professionals, includes a comprehensive definition of cultural diversity including consideration of appropriate curriculum according to the population's race, class, ethnicity, religion, and "other indices of difference" (Gilbert, 2003, p. 2).

The health education program used in this study incorporates a model in which the only resource provided to the participants is the transfer of knowledge. In resource-poor countries, health education campaigns directed toward maternal and child health and preventable disease eradication "remains a fundamental tool in the promotion of health" (Nutbeam, 2000, p. 259). Educational interventions for health or disease prevention can improve the lives of individuals and groups with specific needs. The goal of health training programs, in the context of disease and mortality prevention, is to promote positive change in people's practices and beliefs related to health. Intervention objectives vary. For example, an intervention can aim to deter people from smoking tobacco or encourage them to comply with prescribed HIV/AIDS retroviral treatments or deterring open defecation in efforts to prevent cholera exposure. In order to design educational content that is most effective for the target population, the goals of culturally competent education "should be respectful of the needs, the practice contexts and the levels of receptivity of the learners" (Gilbert, 2003, p. 1).

Haiti

Haiti is one of the most densely populated countries in the world, with a population of approximately 10.33 million and with an average life expectancy of 62.7 years (UNFPA, 2012;

UNICEF, 2012). The urban-rural divide in population shows 49.5 percent of the population living in urban areas, and 50.5 percent in rural areas (UNICEF, 2012). French is the official language of the Haitian government; however it is estimated that roughly 20 percent of the population is proficient in French, which is used predominantly by the elite and middle class (Pierre, A., Minn, P., Sterlin, C., Annoual, P. C., Jaimes, A., Raphaël, F., & Kirmayer, L., 2010). Haitian Creole is the most common language used among Haitians.

Preceding the devastating 7.0 magnitude earthquake in 2010, the country was already facing some of the greatest health disparities in the western hemisphere (WHO, 2013). Estimates of HIV among ages 22 to 44 years of age are as high as 11 percent. There is reportedly less than one doctor per 8,000 people (UNICEF, 2013) and medical facilities are known to be deficient in funding and medical staff. "The most prevalent infectious-disease related deaths are attributed to food and waterborne diseases such as hepatitis A and hepatitis E, and typhoid fever" (CIA, 2013). In Haiti, NGOs have devoted resources to improving healthcare facilities and access to health education. An ongoing effort on by Haiti's Ministry of Health and NGOs is addressing rural residents' lack of medical resources and care (UNICEF, 2012).

Maternal Health Statistics. The average number of births per woman is estimated at 3.5 children (UNFPA, 2012). The percent of women of reproductive age (15-49) who are married or in union and are using, or whose sexual partner is using, a method of contraception equals 32% (UNFPA, 2012). Shortly after the earthquake, the United Nations reported the child mortality rate at 89 deaths per 1,000 live births, and the maternal mortality rate at 300 deaths per 100,000 live births, one of the highest maternal mortality rates in the Americas (UNFPA, 2012; World Bank, 2013). The density of midwifes, nurses, and doctors per a population of 1,000 is shown at a rate of 0.4 (UNFPA, 2012). Although the maternal mortality ratio (MMR) has reduced steadily

since 1995, it remains high. Starting in 2008, in order to reduce the MMR and provide incentive for mothers to seek maternal care, Haiti's Ministry of Health and Population (MSPP) implemented a provider scheme that supports a number of formal health facilities that provide family planning, obstetric, and pre and post natal care services for free (UNFPA, 2011). The United Nations Population Fund reported that in order to reach 95% of births assisted by skilled attendants by year 2015, the deficit must rise by 562 SBAs (2012).

Geographic Indicators. Accessibility of formal healthcare facilities is exceptionally limited for Haitians residing outside of urban areas like Port au Prince. The MSPP is responsible for the health of the population and seeing to it that policy is in place to provide essential health services. However, the health budget is only "7 percent of total public spending" (PAHO, 2000). According to a 2003 Pan American Health Organization report, "88 percent of all practicing physicians in Haiti were working within the capital city of Port au Prince" (PAHO, 2012; Pierre et al., 2010, p. 31). The United Nations Population Fund reported there was one physician for every 8,000 in population in Haiti in 2012 (UNFPA). To provide some context for the average Haitian's accessibility to basic resources, less than half the population has access to clean drinking water, and other sources, once clean enough for drinking, have been contaminated (WHO, 2013; Wilentz, 2013). Close to 95 percent of income-based jobs are in the informal sector, consisting of farming, gardening, selling produce in the market, selling cellphone minutes for one of the few national carriers, or working in the home (UNICEF, 2013; UNFPA, 2012).

About one third of the population has access to sanitary facilities, and a small portion of the Haitian population has electricity (WHO, 2013). According to the 2012 Central Intelligence Agency World Factbook, the percentage of Haitians residing in rural areas with unimproved quality drinking water sources reached 52.5 percent and inadequate access to sanitation facilities

lacked for 83.7 percent of the rural population versus 69 percent among the urban population (CIA, 2012).

Education and Literacy. According to a 2012 UNICEF report on Haiti's demographic and health data, the literacy rate for female versus male youth, ages 15 years or older, in 2012 was 45 percent versus 53 (UNFPA, 2012). In regards to the formal education system, 72 percent of the population has a primary school education and one per cent of the population has a university level education. According to a 2013 report, three out of four children go to school, as "compared to 2006, when it was one in every two children" (UNICEF, 2013).

Community Health Workers

In response to the shortage of physicians and medical staff in Haiti matched with the difficulty in accessing formal medical facilities, community health workers are called upon. Following the 1978 international World Health Organization conference on the topic of global health, commonly referred to as the Alma Ata Conference, local efforts in many countries were mobilized to extend medical services and the promotion of healthy practices and behaviors through education in difficult-to-reach areas (Perry, Zulliger, Rogers, 2014). Community health workers (CHWs) were introduced in order to "assist individuals and communities to adopt healthy behaviors" as well as supplement the deficit of physicians and healthcare professionals in areas of need (Perry et al., 2014, p. 22.2).

The use of community health workers dates back to 1920s China with the "barefoot doctors" as community representatives' tasked with duties ranging from vaccinations, first aid assistance, to the recording of local births and deaths (Perry et al., 2014, p. 22.2). Subsequently, in the 1970s and through the 1980s, wide-ranging community health worker initiatives expanded globally in efforts to reduce illness (Perry et al., 2014, p. 22.2). For example, a 1992 large-scale

community health program based in Pakistan trained nearly 90,000 women CHWs intending to serve the country's rural residents (Perry et al., 2014). However, in the 1980s, a number of them "encountered serious challenges and lack of support" (Perry et al., 2014, p. 22.4). Since then, smaller-scale programs focused on training and certifying CHWs, such as the training program of which this study is based, are often carried out by outside organizations (Perry et al., 2014). NGO-led health programs utilizing community health workers to extend education and support services "have grown steadily and have reported increasingly positive" outcomes (Perry et al., 2014, p. 22.2). Studies suggest that CHWs have aided in reducing maternal mortality and promoting access to safe methods of contraception in some parts of the world (Perry et al., 2014, p. 22.9).). There are an estimated 4 million community health workers functioning in communities worldwide (Perry et al., 2014).

In present-day Haiti, community health workers carry out various tasks, from home-visits and family planning services to ensuring HIV positive individuals continue their advised antiretroviral treatment (Farmer, 2011). These community laypersons are essential in sharing public health information.

In 2010, the UN Secretary-General launched a global strategy to improve the health of women and children, worldwide, calling on governments, international humanitarian organizations, and development partners to advance progress towards the Millennium Development Goals (WHO, 2013). Due to the lack of access to basic resources, proximity to health care, and the scarcity of physicians in remote areas (CIA, 2013), community-level health programs have been growing in number. In Haiti, non-governmental organizations (NGOs) often assume the role in employing community-level health programs. Given some organization's hesitation in providing much-needed tools and supplies, they are building health promotion

education courses and set out in transmitting health knowledge to Haitian community health workers.

There is considerable research on the limitations of community health interventions based on a program's continuity and its influence on the learners' behavior. However, there is limited research focusing specifically on transmitted health promotion content cross-culturally and its pertinence based on the participating populations' culture, language, and resources. The following section will introduce existing frameworks and research pertaining to the field of domestic and international uses of cultural competence.

Conceptual Framework

As the U.S. develops into a more ethnically and racially diverse country (U.S. Census Bureau, 2013), the health care systems and providers are challenged to provide suitable crosscultural care. Understanding the link between cultural and its influence on health behavior is important for medical doctors and health care practitioners in order to provide suitable care (Betancourt, Green, & Carillo, 2002). Inequalities in medical care and social services among diverse groups in the U.S. were an impetus to prepare culturally competent health educators and establish culturally competent health promotion education (Luquis and Perez, 2003). In response, healthcare systems and medical institutions train health educators and medical practitioners with the knowledge and skills for providing appropriate care to a diverse population (Gilbert, 2003). The collection of recommended culturally competent behavior and practices is known as guiding principles of cultural competence.

A research study (Luquis and Perez, 2003) examining some of the issues surrounding cultural competence recommends strategies for health educators to become culturally competent. The researchers urge health educators to understand that a person's cultural beliefs strongly

influence how they seek treatment (Luquis and Perez, 2003). "For example, an individual from Mexican culture may be more inclined to visit a *curandero* and an African American may use folk medicine" (Luquis and Perez, 2003, p. 133). Therefore, health educators are charged with understanding how health and cultural identity can impact one's understanding of the causes of illness and accordingly integrate these lessons into health promotion content (Luquis and Perez, 2003). Researchers Luquis and Perez (2003) assert that promoting cultural competent health education, one must be proficient in its definition and concepts (Luquis and Perez, 2003, p. 133).

Cultural Competence: Principles and Guidelines

Applied principles and standards of culturally competent practices vary depending on the field of practice. Applying culturally competent content tailored to the learners' unique differences, such as their language, understanding the resources available to them, and racial identity, are a part of developing equitable care and education (Brown, personal communication, 2013). Later, the author addresses these areas of inclusion. According to the National Center for Cultural Competence, "there is no one central definition of cultural competence" (Cohen and Goode, 1999). "Definitions of cultural competence have evolved from diverse perspectives, interests and needs and are incorporated in state legislation, federal statutes and programs, private sector organizations and academic settings" (Cohen and Goode, 1999). Health care practitioners at Harvard Medical School and Cornell University describe culturally competent practices as the ability to systematically care for patients from different backgrounds and tailor medical care with respect to the patients' socio-cultural needs (Betancourt, Green, & Carillo, 2002).

The National Center for Cultural Competence (NCCC) describes the nexus of culturally competent practices as "a developmental process that evolves over an extended period. Both

individuals and organizations are at various levels of awareness, knowledge and skills" (Cross et al, 1989; Cohen and Goode, 1999; Goode, Jones, and Jackson, 2002, p. 6). Cultural competence promotes the understanding that each individual is entitled to services that take into account his or her individual sociocultural needs, and are able to see images of, interact with, and be advised by practitioners who share their linguistic or sociocultural identities (personal communication, Sharon Brown, April 13, 2013).

The National Association of Social Workers (NASW, 2001) defines the standards for cultural competence as a practice "by which individuals and systems respond respectfully and effectively to all people of all cultures, languages, classes, races, ethnic backgrounds, religions" valuing the diversity and individuality in each person (Cross et al., 1989; NASW, 2001, p. 11). The work of Cross et al in 1989 presented a definition of cultural competence that "established a foundation for the field", according to the National Center for Cultural Competence (Cross et al, 1989; Cohen and Goode, 1999). Although Cross et al.'s interpretation has been adapted; the central principles in the framework are still relevant across multiple professional fields (Cohen and Goode, 1999). Cross et al asserts that "cultural competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations" (Cross et al, 1989, p. iv). And, according to the National Center for Cultural Competence, (1998), modified from Cross et al, cultural competence requires that organizations have a defined set of values and principles, and demonstrate behaviors, attitudes, policies, and structures that enable them to work effectively cross-culturally (Cohen and Goode, 1999).

According to a field report addressing cultural competence in health care, the authors cited several barriers that sponsoring organizations experience in trying to communicate health

information to diverse target audiences (Betancourt, Green, & Carillo, 2002). For example, organizations fail to design material to meet the unique needs of diverse populations such as developing appropriate health information that is written adequately to reflect the literacy and level of familiarity of health terminology among the target audience, and do not consistently ensure the recommended health information is useful (Betancourt, Green, & Carillo, 2002). The ultimate goal of cultural competence is to equip practitioners to disseminate appropriate health communication and guidance to each individual regardless of race, ethnicity, literacy, and culture (Betancourt, Green, & Carillo, 2002).

Cross-National Cultural Competence

While the majority of research pertaining to culturally competent practices and models exists within the U.S. domestic framework, there is limited research focusing specifically on the sponsoring organization's use of culturally competent content in training community health workers and whether the curriculum is appropriately contextualized according to the trainees' environment.

Similar to the current study, an ethnographic research study (2010) explored "mutual cultural competency" among the Andean-Bolivian trainees and their ability to disseminate Andean and biomedical health practices among their community (Bristow, 2010, p. 17) The study assessed whether the Bolivian health agents utilized "their new health related knowledge when they return[ed] to their home communities in the rural and semi-urban areas of Cochabamba" (Bristow, 2010, p. 20). The individuals training to be health agents were "young, Quechua (Andean language) speakers, with minimal or at least interrupted education, from rural and semi-urban poor areas" (Bristow, 2010, p. 22).

In this study, ethnographic data was used to explore how the sponsoring health promoters

were trained "and the ways this might affect their ability to be mindful of the socio-cultural context of the population they care for" (Bristow, 2010, p. 18). Considering adult learning theory and Stephen May's (1994) theoretical underpinning for cultural competency" as the basis of the research inquiry, May posits whether mutual cultural competence is possible without socioculturally relevant content (Bristow, 2010). For instance, the research study assessing the health worker training in Bolivia found that although the trainers were native Bolivians, there were still clear aspects of cultural incompetence (Bristow, 2010). For instance, one of the trainers for the Bolivian CHW training was Bolivian and a medical doctor. The researcher reported observing his extensive use of scientific and medical language despite the content conflicting with the learners' Andean beliefs and traditional practices (Bristow, 2010).

The Bolivian ethnographic study concluded that when community health promoters are working and residing among the individuals they are intended to influence, it involves navigating a range of difficult factors in order to apply "mutual cultural competency" through the recommendation of Andean and biomedical health practices (Bristow, 2010, p. 25).

Another study explored cultural competence in adult education by examining a group of humanitarian workers practicing in a cross-cultural context in discussing the "process of their learning and change" (Chang, 2007, p. 188). Taking into account cross-cultural health promotion, the trainers may work in an environment in which they have limited knowledge of the peoples' lives with whom they intend to engage. Chang concluded that humanitarian workers, with an understanding of cultural competent practices, will be better equipped to respond to the participant's needs and 'be able to develop an appropriate [learning] environment" which best suits the unique realities of the participants (Chang, 2007, p. 188).

Paasche-Orlow (2004, p. 347) asserts that "the ethics of cultural competence" can aid in alleviating mono-cultural messaging in medical education abroad by "embracing pluralism." For instance, he points out that "it would be ludicrous to assume that all Haitians believe in Voodoo or that all white U.S. patients will only pursue allopathic approaches (Paasche-Orlow, 2004, p. 348). Ultimately, familiarity with what information is most useful for program participants should guide such health education content.

Rationale for Categories of Analysis

The areas of language, resources, and racial representation became central areas of focus through observing the training program in Haiti. For instance, during the three weeks of the training program, the author personally noted when the Haitian participants had frequent questions reagrding the topic of danger signs during delivery and considered the implications as to whether transmitted terms were adequately interpreted to the trainees. Next, "resources" was selected due to its prominent theme throughout the training program in Haiti, such as trainees requesting tools in order to implement their acquired health knowledge and noticeable awkwardness when trainees were isntructed on medical birth control methods. Lastly, racial representation, being a central area of culturally competent practices and service design was an obvious area to explore based on the lack of Haitian representation among the team of trainers. The author wanted to further explore how these areas were represented in the program textbook.

Furthermore, upon returning from Haiti, the categories of analysis - language, resources, and racial representation - were chosen according to the author's field observations, and after careful review of the National Center for Cultural Competence's operational framework for culturally competent service design "infuse content related to cultural and linguistic competence into health care training and programs," (Cohen & Goode, 1999, p. 6).

The following provide a basis for the NCCC rationale for integrating culturally competent education among practice and program services and aided in the selection of this study's category of analysis (National Center for Cultural Competence, Cohen and Goode, 1999, p. 6; Goode, Jones, and Jackson, 2002).

- "To address the fact that the formal education of practitioners has not prepared them to incorporate cultural and linguistic competence into teaching and research methodologies
- To facilitate workforce diversity, both for its reflection of the population served and for its inherent strengths
- To prepare the future workforce to lead, teach, develop, and administer public health policy and to practice in a multicultural environment".

In support of selecting racial representation as a catogory of content analysis for this study, it was further determined according to the definition of culturally competent services by Sharon Brown, former Director of Institutional Diversity at Moravian College, as services which take into consideration the racial indentity of the individuals and provices servces where the individual is able to interact with, see images of, and interact with practitoners who share their cultural and racial indentity (personal communication, April 13, 2013).

Program Context

The sponsoring organization for the community health program training is a humanitarian organization that originally began work in Haiti to transport medical supplies and "provided aid that would subsequently set the groundwork for important partnerships with community leaders and healthcare providers" as well as the formation of the organization's Haiti branch (Knettel, Slifko, Inman & Silova, 2014, p. 3). Following the 2010 earthquake, with the expansive onset of deaths due to cholera, malaria, and maternal mortality, the sponsoring organization collaborated

with Haiti's Ministry of Health in identifying a need for improved health education among the general public. Thus, the first community public health training program began in 2010 in a rural, isolated region of Haiti. This program aimed at providing community leaders with specialized health knowledge to be able to advise their community in a health crisis.

Prior to the first training program, meetings between community-led groups and the sponsoring organization took place in order to establish a sustainable community-invested model. Individuals from the host region interested in participating in the public health training program were enrolled in an adult literacy course sponsored by the Government of Haiti to ensure minimum literacy requirements were met for the Healthcare Worker Training (Knettel, Slifko, Inman & Silova, 2014).

The program's primary objectives were: expanding the health literacy of Haiti's local leaders and instituting a train-the-trainer model where participants continue to pass on their training to others. The region where the subsequent training programs took place is an area that was initially identified as high-need according to the Haitian government, the Ministry of Health, and UNICEF. However, the presence of international organizations in this area was scarce given the area's poor accessibility by road.

Public health training program. The public health education program, from which this study stems, was carried out in two provinces in a rural region of Haiti in May and June of 2013. The specific focus of the 2013 training covered topics related to prenatal and postnatal health, managing childhood disease, disease prevention, health management, sexually transmitted infections, and family planning. The program's objective was to invite and train appointed community liaisons, referred to as community health workers, with health education training in order to then share the information among their community.

The three consecutive five-day training courses trained three cohorts of local residents in public health and prevention. The program was endorsed by the MSPP (Haiti's Ministry of Health) and was established and supported through a partnership between the sponsoring NGO and its corporate sponsor, the Haitian government, and local community federations in order to establish a sustainable community program. Additionally, the organization interviewed and selected four non-Haitian trainers who were responsible for the course content during the 2013 public heath training in Haiti.

Program structure. The 2013 training program topics were chosen according to the most important health areas established by Haiti's Ministry of Health. The program objectives were designed with the intention to reduce the prevalence of morbidity and mortality among pregnant women and children under five years of age "by equipping community health workers and traditional birth attendants in Haiti with public health knowledge in prevention and promoting healthy lifestyles" (Health education program manual, 2013, p. ii). The five-day program incorporated a five-module training textbook to guide the daily content. The program discussed pregnancy, preparation for labor and delivery, care of the newborn in the first 24 to 48 hours, sexually transmitted infections, and family planning.

Program trainers. There were a total of four trainers, including the team leader, who carried out the three weeks of programming. The trainer and team leader was from Guyana and a permanent resident in the U.S., one trainer was French-Canadian, and two trainers were U.S. nationals. Each of the instructors was proficient in English. The program instructors were each health practitioners. Two trainers were public health professionals and two trainers were former registered nurses. Three trainers were selected after a rigorous interview and screening process by the sponsoring organizations. One trainer filled in some areas of content after a fifth trainer

was unexpectedly unable to make the trip to Haiti. Shortly after the team was selected, each individual going to Haiti attended a two-day orientation in the United States. Following the orientation, the teams of trainers collaborated on bi-weekly conference calls in preparation and design of the course curriculum and materials for months leading up to the training. While the team collaborated closely on the entire curriculum, each person was responsible for the design of his or her individual training module. The team leader organized and led the curriculum design and agenda for each conference call.

The modules were used to guide each day's lesson. The training textbook that guided each day's lessons had five modules. The textbook was the main source of reference for both the trainers and the trainees. Originally written in English, it had been translated to Haitian Creole and distributed to each program participant. The program content emphasized prevention methods and emergency scenarios.

Program leader's identity. The program leader, or lead trainer, was among the group of four program trainers involved in the curriculum design and content instruction. Her cultural competent characteristics, racial and ethnic identity, familiarity with the Haitian culture and the region in which the previous training ocurred, are of particular importance lending to the cultural competence of the program itself. The program leader was not employed by the sponsoring organization; rather she is a return volunteer who previously worked in a similar capacity. In total, she had been to Haiti six times, ranging from a one-week to a seven-week health program. She holds a masters degree in public health with a special interest in primary prevention strategies in maternal and child health and community-level capacity building. Like the trainees, she is from a small Caribbean country where the majority of the population speak a form of Creole with Arawakan and Caribbean influences. While she is fluent in English, she displayed a

moderate level of fluency in Haitian Creole when communicating with the participants outside of the daily course work, such as at meal times and pre- and post-course convsersation. Her proficiency in Haitian Creole wasn't formally assessed. However, the program interpreters remarked that her basic Creole use was "quite good." As well, she shares an Afro-Caribbean racial identity with that of the Haitian trainees. Her observed values and intentions for being involved in the training, voluntarily, spoke to the nature of her individual commitment to social justice and equitable global health.

Program interpreters. During the entirety of the three-week training program, two interpreters were always present to interpret the daily content. The interpreters were native Haitians residing in the region in which the training took place. They had been working for the sponsoring organization in that capacity for two years. However, the interpreters were not formally licensed in medicine or public health and their command of medical terminology has not been formally assessed.

Trainees' descriptive statistics collected. This study drew de-identifying IRB-approved data collected from a previous program evaluation study to assist in assessing the cultural competence of the program trainers' curriculum (refer to Appendix C, p. 73). For example, drawing certain information from the program participants' descriptive statistics assisted in establishing whether the content was appropriate for the participants based on their reported information such as their proximity to a clinic or hospital, their reported source of income and whether they worked in any aspect as a healthcare practitioner, and their level of education. The author of this study drew supplementary information from this measure in regards to basic cultural and demographic information about the course participants such as age, education, and occupation. The demographic questionnaire was administered in a previous study conducting a

program evaluation of the same training program. The demographic survey, adminstered on the first day of the course, was a multiple choice, open-ended, and Likert-scale quiestionnaire. The demographic survey also included several questions aimed at illustrating the social and logistical situations of the participant's lives such as participants' income, housing, and access to basic transportation, water, and healthcare. To ensure the questions that were designed to capture a condition-of-living story, the researchers, during the previous study, worked closely with the program interpreters to adequately code the most expensive home materials to the least expensive or most accessible, for example. This demographic source was used minimally in supporting this study with information in referencing participants socio-economic living conditions, education, and access to medical facilities. Each of these areas generated insight into the participant's demographic context in order to assess the appropriateness of the program textbook's use of language such as public health and medical terminology, suggested technical and bio-medical tools, and racial representation in the textbook depictions.

Trainees' demographic indicators. A total of 126 participants took part in one of the three training courses (refer to Table 1 on pg. 29). Seven participants were not present on the first day of the course and only completed the informed consent and post-test evaluation; therefore, their demographic data was not available. The participants resided in the region in which the previous trainings took place and their ages ranged from 18 to 75 years old. The participants were pre-selected by a community representative in order to ensure there was a minimum literacy command necessary for the program design. Among the trainees, 59 percent had attended a previous training with the sponsoring organization, and they traveled an average of 15.98 kilometers (9.9 miles) primarily on foot (50.9%), to attend the training program. The

following table shows the reported descriptive statistics of the 119 trainees who completed the questionnaire.

Health care professionals. Of the 126 trainees, 119 respondents completed the demographic survey question regarding their source of income showing only 4 nurses, 1 midwife, 1 nurse practitioner, and 1 nurse's assistant with a total of 7 out of 119 trainees (6%) were professionally qualified to transfer the community public health training knowledge into practice.

The discussed demographic statistics of the trainees provides a critical glimpse into the participants' ability to utilize the healthcare knowledge when used according to the mission of the program hosts e.g. trainees are certified as community health workers pledging to transfer their knowledge to inform their community, but not to practice or treat as if they are physicians or their certificate will be withdrawn.

The following table shows descriptive data of the 119 out of 126 program participants.

Table 1

Variable	N (%)	Mean	Range
Gender			
Female	38 (30.2)		
Male	81 (64.3)		
Age		37.92	18-75
Race			
African Origin/Black	116 (97.4)		
Other	3 (2.0)		
Language			
Haitian Creole	119 (100)		
French	51 (42)		
English	6 (.05)		
Education level		9.09	3-16
Previous attendance	69 (59)		
Occupation			
Farmer	41 (31.7)		
Merchant	17 (13.5)		
Work in the home	15 (11.9)		
Teacher	10 (.08)		
Community Health worker	8 (.67)		
Nurse/Midwife/Nurse Asst.	6 (.05)		
Other	25 (21.0)		
Distance to nearest clinic or hospit	al		
1-5 km	52 (43.6)		
6-10 km	34 (28.5)		
11-25 km	25 (21.0)		
More than 25 km	3 (2.0)		
Have electricity in home			
Yes	17 (13.5)		
Primary Water Source			
Tap in home	8 (.06)		
Public tap/fountain/well	58 (48.7)		
Lake, stream, open water	3 (.02)		
Rainwater	48 (40.3)		
Bottled water	3 (.02)		
Bathroom Distance			
In the home	6 (5.1)		
Outside, within 50 meters	91 (76.4)		
Outside, more than 50 meters	17 (14.2)		

Note. N= 119 (completed demographic survey).*Knettel, Slifko, Inman & Silova, 2014* **Research Proposition**

The goal of this study is to explore the use of cultural competence within the crosscultural, cross-national health education program content in Haiti. In my research, I consider the cultural mismatches with the program content and the context of the hosting environment and its broader implications for the program's effectiveness. Taking into account the existing literature pertaining to the application of culturally competent health education, I propose that the current research study's results will indicate inconsistencies between the transmitted health promotion content and its appropriateness based on what is known of the Haitian trainees' reported statistics. Considering the convergence of culture and health promotion education, this study employed the guiding principles of cultural competence according to the National Center for Cultural Competence (Cross et al, 1989; Goode, Jones, and Jackson, 2002; Cohen and Goode, 1999) in order to analyze the community public health training curriculum for its contextualized approach.

Methodology

Assessing cultural competence in the community health program, this study identified matches and mismatches in program content based on the program participants' reported descriptive demographics. Therefore, this study drew from the Haitian participants' demographic information in order to examine the community health training textbook appropriateness using three focus areas for the content analysis: language, resources, and racial representation. These three indicators emerged initially from the author's field observations and then after considerable research on cultural competence literature. The health education program utilized for this study, instituted a train-the-trainer model whereby the 126 Haitian participants received training in a

range of health-related topics and practice skills. The participants were encouraged to share their health knowledge with their respective community. The sponsoring organization focused on transmitting basic heath literacy through education.

This study used a qualitative content analysis to examine how a community public health program curriculum, carried out in a cultural context different from the trainers who designed the content, use the principle of cultural competence to design the course curriculum in the delivery of public health content. The author of this study began the content analysis procedure of the textbook by first documenting each occurrence of public health and medical terminology. Each text that was complex, rather than simple, that appeared in the textbook and was lacking clarification was noted. This helped identify the use of language that was inconsistent with the learners' reported descriptive statistics.

Consent

With permission from the sponsoring organization and Lehigh University's Institutional Review Board (IRB) to conduct such research, the author proceeded to extract pre-existing data from a prior approved IRB study. The study drew supplementary contextual information from the Haitian participants' demographic survey and the satisfactions survey in order to examine the community health training textbook using three indicators for the content analysis: language, resources, and racial representation.

Consent forms, provided in the prevous study, were translated to Haitian Creole from their original English version and distributed to each program participant. In addition, the consent forms were interpreted out loud by the program interpreters. Time for questions was alotted before signing the form. Participation was entirely voluntary.

Sample

In order to test these statements of cultural compatibility, the author used the health promotion training textbook that was provided to each of the Haitian participants. The manual is a 283-page training program textbook. It comprised five topic areas: Introduction (module 1), Pregnancy (module 2), Labor (module 3), Care of the Newborn (module 4), and Sexually Transmitted Infections and Family Planning (module 5). The textbook was provided to each of the program participants in the Creole language version, and it also served as a daily program manual for the trainers during their instruction. The trainers referenced the textbook frequently during instruction to reiterate an illustration or address a concept. For example, during the third day of instruction, discussing preparation for labor and delivery, there is a section where the trainees are provided alternative ways to track the age of the fetus by counting the number of full moons and crescent moons.

The textbook was chosen as the main source of analysis for the training program due to its daily role in the training program; the textbook served as the participants' and the trainers' daily connection to the course content. Therefore, the author of this study was interested in drawing out areas of mismatch that could be built upon for future trainings. The program and textbook is divided among five modules with sub-topics for each training day. The following information was included in the textbook, according to the table of contents (p. i):

Module 1: Introduction

Module 2: Pregnancy

2.1 A Woman's Body during Pregnancy2.2 Normal Development of Pregnancy and Fetus2.3 Learning a Pregnant Woman's Health History2.4 Prenatal Care

Module 3: Preparing for Labor and Delivery

3.1 Preparation for Labor

3.2 Signs That Labor Is Near

3.3 Stage One of Labor: Opening

3.4 Stage Two of Labor: Pushing

3.5 Stage Three of Labor: Birth of the Placenta

3.6 Care of the Baby at Birth

3.7 Post-Partum Care of the Mother

Module 4: Care of the Newborn: First 24-48 Hours after Birth

4.1: How to Make a Health Assessment and Care for a Sick Child

4.2: Newborn Assessment and Signs of Distress

4.3: Development from Birth to Five Years and Nutritional Needs

4.4: Identifying/Treating/Preventing Childhood Diseases

4.5: Immunization

Module 5: Sexually Transmitted Infections & Family Planning

5.1: The Basics of Communicable Diseases

5.2: Sexually Transmitted Infections

5.3: Family Planning

Procedure

The reporting of the data was divided between two types: content analysis, such as data rendered from the textbook analysis, and context, anecdotal and supporting data extracted from the author's field observations, post-course satisfaction survey, and the descriptive statistics of

the trainees in order answer the research study question. From this data, I utilized the following

sources of data for the current research study:

Content Analysis Primary Data Source

I. Program Textbook: A 283-page manual divided among five course topics.

Context- Supplementary Data Sources

- II. Author's personal field observations (administered June 2013)
- III. Post-Course Satisfaction Survey (prior summary results used for context)
 -Five-question multiple choice questionnai
- IV. Descriptive statistics of each participant (prior summary results used for

context)

-Multiple-choice, open-end questions

Content analysis

Program textbook. The training program textbook, the primary source of data for this study, was a printed manual used to guide the trainees through the daily content and modules. As well, the textbook was intended to provide the trainees with a reliable reference beyond the classroom to aid them in their anticipated community health worker tasks. The textbook detailed each day's lesson and additional illustrations in the appendices.

Context for Analysis

For context supporting the research findings and discussion, the author of this study drew supplementary anecdotal information from the Haitian participants' descriptive statistics, postprogram satisfaction survey, and the author's field observations -all of which are from a previous study. The training content was carefully considered according to the cultural competence principles defined by the National Center for Cultural Competence conceptual framework. One

of the primary principles of cultural competence regarding practice and service design is the following: Culturally competent organizations design and implement services that are tailored or matched to the unique needs of individuals, children, families, organizations and communities served (Cross et al, 1989; Goode, Jones, and Jackson, 2002; Cohen and Goode, 1999).

Context

Post-course satisfaction survey. Used in a pre-approved IRB study, this brief questionnaire asked participants five simple quantitative questions evaluating the effectiveness and applicability of the course as well as two areas for additional comments (see Appendix D, pg. 81). The basic questions included whether the course was helpful for the participant's work in the community, whether the length and duration of the course was appropriate, and whether they would recommend the course to others. Additionally, participants were provided space for open-ended information on how the program could be strengthened. From these qualitative responses, this study examined the data generated from the open-ended information for exhibiting cultural appropriateness according to the principles of cultural competence. This source was used minimally speaking to the first-hand usefulness of the training program.

Author's personal field observations. The author of this study participated in a previous IRB-approved program evaluation in Haiti for a community health worker training. From the previous study, the author worked in a team and conducted field observations taken during each day of instruction and reflections on emerging topics and themes noted throughout the 21 days of observation. For this study, the field notes discussed the trainer's characteristics, any noticeable reactions from the trainees during instruction, and the nature of the textbook's usefulness. The current study drew form those field observations in relation to the current research question.

Content Analysis of the Data

In order to determine how compatible the health program content was in relation to its use of cultural competence, this study utilized a qualitative content analysis approach (Cornwell, 2013; Tsai et al., 2004) to assess the use of the cultural competence demonstrated in the course textbook. A qualitative research approach provided this study with the most suitable format in answering the research question because this study emphasized the participants' context (Creswell, 2013). Content analysis is defined as a systematic, replicable technique for condensing a considerable amount of words of text into fewer content categories (Krippendorff, 1980; Weber, 1990). Another researcher (Holsti, 1969) defined content analysis as, "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (p. 14). Content analysis is useful in identifying inferences and assessing messaging related to health education (Kondracki et al, 2002, p. 228). In fact, public health researchers posit that content analysis methods are well suited to health education research and are both reliable and valid (Kondracki et al, 2002). Content analysis is a technique used in health and social science research studies.

This method explores the details of textual data; for example, this method of analysis has been applied across varying research studies and settings such as physicians' biographies examining community-centered health approaches (Rapport, 2010). And, while a content analysis cannot provide a complete interpretation, "it can offer the opportunity for analytic creativity" (Rapport, 2010, p. 273). Additionally, qualitative content analysis equips researchers to be aware of more nuanced aspects of text and meaning (Rapport, 2010). The principal researcher involved in content analysis can be one who is extensively familiar with the subject area, or someone who lacks expertise in the subject area and with the individuals providing

objectivity to the study (Rapport, 2010). For this study, the primary researcher is someone with a limited knowledge base in the subject area of public health and who provided objectivity to the study. While the author lacks competence in the cultural context where the training took place, she is greatly familiar with the program administration and curriculum design.

Qualitative content analysis adopts a search for essential elements of textual data and takes into account all of the text for conceptual meaning (Rapport, 2010). For instance, researcher Rapport argues that "essential text" in content analysis purposes can comprise context, observation notes, personal experience, and testimonials (Rapport, 2010, p. 273). As well, the fundamental qualities of analyzed text can be found in a variety of textual forms like interview transcripts, focus group transcripts, and biographic reports carried out among minority or mainstream groups (Rapport, 2010). Through this approach, the research looked at the relationship between the entirety and parts of the text as well as the trainees who learned the content.

For this study, the common use of the term 'text' was employed to refer to the course manual provided to the trainees during the course, the author's personal observations, and results indicated through the demographic survey and satisfaction survey. As well, in content analysis methods, sometimes a group of researchers may collectively discuss the data. However, for the design and use of this study, the author served as the primary researcher though the analysis of all applied text data with the assistance of an independent rater. The independent rater examined 17 textbook sample pages. Those results are discussed in detail in the subsequent data analysis section.

Categories of Analysis

Three indicators of analysis - language, resources, and racial representation -were identified for this study. The author of this study wanted to further assess how the training content could be more adequate in context to the trainees' day to day use for the knowledge. The indicators identified for analysis are as follows:

Category 1: Language (Defined according to NCCC, 1999; APHA, 2002)

Public Health/Medical Terminology

Category 2: Resources (Defined according to NCCC, 1999; WHO, 2003)

Technical tools/resources

Bio-Medical tools/resources

Category 3: Racial Representation (Defined according to NCCC, 1999; Brown, 2013).

Language

Public health terminology. The data bank of mismatched text was utilized primarily to distinguish common language versus public health and medical terminology. "Communicating Public Health Information Effectively: A Guide for Practitioners" guided the list of terms and further definition of what was "common language" (Nelson et al, 2002). This book that defined effective public health content as "text that uses plain language, avoids jargon, explains each new complex term, and uses culturally appropriate language" (Nelson et al, 2002, p. 132). The data bank included public health terms that should be clarified in simple language using words such as "womb" instead of "uterus," or "lasting a short time" rather than "acute," "shortage" instead of "deficit," "after childbirth" instead of "postpartum," blood vessels instead of vascular, and "shortage of iron in blood" rather than "anemia" (Nelson et al, 2002, p. 135). The authors assert that public health communication must be transmitted with taking into account the learners' level of literacy or education (Nelson et al, 2002). For example, the researchers emphasize that when

writing information for non-scientific audiences, it is essential to introduce all new terminology and explain thoroughly (Nelson et al, 2002).

Effective public health communication impacts medical adherence, and content must use simplified and "in-language information for patients with less health literacy," or little ability to read (Nelson, et al, 2002, pg. 132). Therefore, this area of analysis examined each of the 283 pages of the textbook for language that was non-basic such as "uterus" instead of "womb" or "hemorrhage" rather than "excessive bleeding" (Nelson, et al, 2002, pg. 132). According to the source this for analysis, the authors supported by the American Public Health Association's text on communicating public health information effectively, helped establish the research language category as public health and medical terminology that was not otherwise communicated in common language (Nelson et al, 2002, p. 132). Overall, guided by the definition of scientific text versus common language was used to identify the language mismatches: any and all textbook terms that were not written in basic and common language were noted in the frequency count and considered a language mismatch. The use of simple, non-scientific words ensures each trainee, regardless of level of education and occupation, can participate in the training program.

Resources

Technical. Technical resources used in the text were determined after careful consideration of what is not a local or alternative method of treatment during the author's field observations and after identifying the definition of a biomedical tool by the World Health Organization (2003). Each concept found in the text was identified as a "technical resource" if it required accessing it from a health facility, if it was not commonly available for Haitians that are non-medical practitioners, and if it required any basic medical knowledge to apply. It was conclusively determined to be a commonly accessible resource based on what is reported on the

regions country indicators (UNICEF, 2013). Further, the participants' reported demographic statistics helped determine a technical tool that required some health practice experience and was inaccessible according to cost. Such technical resources mentioned in the text included condoms, aspirin, forceps, and rubber gloves.

Biomedical. For this area of analysis, biomedical tools and resources were defined in this study according to the World Health Organization's medical device regulations as "any instrument, apparatus, implement, machine, appliance, implant, software, material or other similar or related article, intended for one or more of the specific purposes of diagnosis, prevention, monitoring, treatment or alleviation of disease diagnosis, monitoring, treatment, modification, or support of the anatomy or of a physiological process supporting or sustaining life control of conception disinfection of medical devices" (Cheng, 2003, p. vii). Examples of biomedical resources provided in the text included oxygen tanks, blood pressure gauge, and blood tests administered for pre-natal testing, sexually transmitted infections, and HIV tests.

Racial Representation

Racial representation, defined by Brown (2013), is the shared racial representation of the participants and the trainers, in this case. Racial representation for this study refers primarily to Black/Haitian race shared by the hosting region and all of the 126 program participants. The third and final category for analysis was evaluated according to depiction and representation of race shared by participants via the illustrations provided in the program textbook. An example of a mismatch may be the illustration of a white woman delivering a baby. Cultural competence promotes the understanding that each individual is entitled to services that take into account their individual needs, and are able to interact with, see images of, and be advised by practitioners

who share or understand their linguistic or sociocultural identities (personal communication, Sharon Brown, April 13, 2013).

Content Analysis Procedure

Using program textbook data and contextual supporting data, the author conducted a qualitative content analysis to identify mismatches and matched in the use of culturally competent content in community public health promotion training in Haiti. The content analysis procedure for this study was divided into three stages:

Stage 1: The three categories (language (1), resources (2), and racial representation (3)) were pre-identified before examining the text due to the cultural competency literature providing a basis for these areas of analysis as well as the author's personal observations in apparent program mismatches. Then, the text was analyzed for concepts according to the three categories and highlighted according to number one, two, and three according to each of the three indicators. This stage of development enabled the researcher to capture the determined categorical and conceptual elements and apparent messaging of the course content (Rapport, 2010).

Stage 2: Upon completion of Stage 1, the researcher "re-storied the data" in preparation for the next stage: This involved a careful construction of messages and themes extracted from the textbook and any inferred messaging noted by the research. For example, once the author reviewed the outcomes of the content analysis, she created findings based on grouped themes such as the frequent suggestion to seek medical care. The findings were grouped and listed under the topic-oriented categories provided in the research summary. Thematic or topic-oriented headings were classified in the discussion section below according to the issues that the researcher identified through the findings.

Stage 3: In this final stage, the researcher reported the findings that were documented in the analysis of the textbook; this stage was the content analysis data. The author also imposed a more interpretive perspective, presenting personal views and opinions as well as highlighting emerging themes in relation to the text; this was reported as contextual data. For example, the findings from the content analysis were grouped into apparent themes and messages while the supporting contextual data were reported messages and themes based on the author's field observations and the results from the post course satisfaction survey. Stage 3 was the point in the analysis when nuance "or ambiguity within the data," which may have been explored in preceding analysis relation to how meaning is derived, was then discussed and considered in relation to the thesis (Rapport, 2010, p. 284).

Reliability

Independent Rater: The independent rater examined 17 sample pages of the text for uses of the three indicators according to the study framework. The 17 samples of text were chosen by the primary researcher and were chosen at random in order to provide a few samples from each textbook module. The independent rater is a medical doctor with extensive experience in providing cross-cultural medical education in resource-poor settings. The percentage of agreement according to the framework resulted in an 80% agreement rate- a "substantial" strength of agreement according to Cohen's Kappa (1968).

Findings

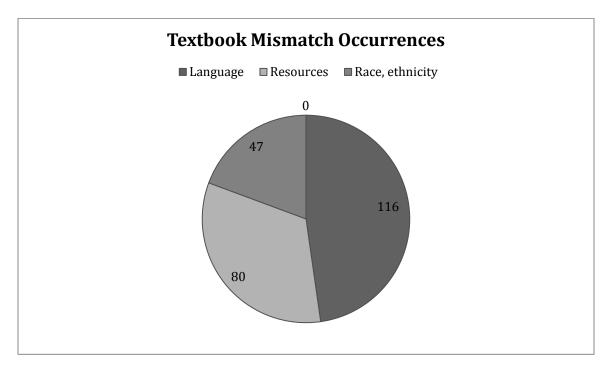
The findings indicated in the analysis are reported according to the content analysis results and supporting contextual information. The content analysis analyzed the community health training program textbook for mismatches and matches in the use of language, resources, and racial representation according to the author's field observations, cultural competence

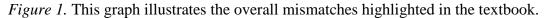
literature and the guiding principle: "Culturally competent organizations design and implement services that are tailored or matched to the unique needs of individuals, children, families, organizations and communities served" (Cohen & Goode, 1999; Cross, 1989, p. 41). Context and background information provided supplementary information lending to the cultural competency in the program curriculum.

Content Analysis

Frequency. In accordance with the cultural competence literature by the National Center for Cultural Competence and the American Public Health Association, the author examined the textbook for occurrences in culturally incompatible terms.

Overall, the textbook content analysis procedure also considered the frequency in terms that occurred among the three identified categories that were established as mismatches, or inconsistencies. The grand total of all noted inconsistencies among all three areas of analysis came to a total of 243. The highest frequency in inconsistencies, based on the reported demographic characteristics of the trainees, was found in the language category with a total of 116 public health/medical mismatched terms that appeared in the textbook. This showed a substantial use of public health and medical terminology that was not explained in common terms or lacked an accompanying definition. Second in highest frequency with a total of 80 occurrences, was the appearance of suggested technical and bio-medical tools/resources in the textbook or that were not provided in alternative methods. Lastly, out of 129 textbook illustrations, 47 lacked a shared racial representation with that of the Haitian trainees. The following graph (Figure 1) illustrates the total number of inconsistencies found in the text among the three categories.





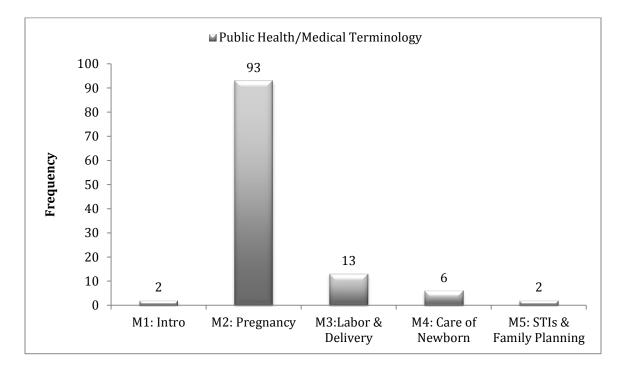
Public Health Terminology (Refer to Figure 2)

Least frequent occurrences. Module five, focused on sexually transmitted infections and family planning, was highlighted for containing the least occurring number of mismatches. In this section, the public health and medical terms that did appear were clarified using basic terms to explain each recommendation such as "lasting a short time" instead of saying "acute." As well, the nature of this section did not command a high use of medical terms.

Most frequent occurrences. Noted in module two covering the topic related to pregnancy, was the high use of technical language in order to explain the development of the fetus in utero. The number of public health and medical terms in this section was higher, reaching a sum of 93 occurrences. Occurrences included public health terminology that was not clarified in more common language and lacked clarification in the textbook and those scientific terms that were used and provided a definition later. For instance, the reoccurring term anemia

was used and was explained almost 40 pages later that it was a "shortage of iron in the blood."

The figure below illustrates the textbook modules containing language mismatches.





Most common public health terms lacking clarification. The following terms were used most often and lacked clarification or a definition in using non-medical language: Anemia, pre-eclampsia, high blood pressure/hypertension, diabetes, birth defects, and placenta. Anemia occurred six times before the term was defined for the reader in common terms: "it usually means she has not been able to eat enough foods with iron" on page 70. Pre-Eclampsia was frequently used throughout the textbook and was strictly defined as "toxemia of pregnancy" often resulting in "convulsions" (p. 78). High blood pressure was first used on page 49 and occurred four times before the term was defined in clear, basic terms on page 76. For example, it

is described as a condition "where the heart must work harder to press the blood through tight

blood vessels, making it hard for the mother to pass food to the baby" (p. 76).

Module number: Topic	Public Health Terminology
Module 1: Introduction	Diabetes
	Hypertension (referred to
	interchangeably as high blood pressure
	throughout text)
Module 2: Pregnancy	Pre-eclampsia (9)
	Anemia (7)
	Birth defects (9)
	Placenta (7)
	High blood pressure (6)
	Diabetes (5)
Module 3: Labor &	Diabetes (2)
Delivery	Pre-eclampsia (2)
Module 4: Care of Newborn	Antibiotics (2)

Table 2. Most Common Public Health Terms Used in the Textbook

Resources

Technical Resources.

Frequency. (Refer to Figure 3) Technical tools and resources noted in the content analysis were any item that did not fit in the distinction of a biomedical device, according to the definition by the World Health Organization, and it is an item that did not require a health

practitioner's knowledge to utilize. Each module shows the total frequency found in the resources distinguished between technical recommendations and biomedical recommendations. The most common occurring recommended technical tools and resources in the text included items as rubber gloves, stethoscope, thermometer, fetoscope, condoms, the practice of "sterilizing," bulb syringes, and midwife supplies (p. 121).

Module 2, discussing the topic of pregnancy, recommended the use of 12 total technical items like condoms, urine sticks, stethoscopes, and thermometers, whereas the count of biomedical tools totaled 18 uses. Module three, since it was focused on training participants in safe labor and delivery practices, was heavier in technical recommendations with a total of 24 uses recommending the use of items like bulb syringe, blunt-tipped scissors, catheter, rubber gloves, sterile gloves, birthing kit with sterilizing alcohol, and blood pressure gauge.

Module three contained 15 noted biomedical tools or resources such as obstetric emergency, cesarean surgery, oxygen tank, antibiotics, oxytocin, betadine, and medical help. Nonetheless, noted technical tools that were recommended to the trainees were most often birthing supplies such as flashlights, forceps, alcohol, rubber gloves, and catheter. Noted in figure 3, module 1 contained no use of either type of tools whereas module 2 contained 18 biomedical tools and 12 technical tools. Some examples of biomedical tools noted in module 2 were medical pregnancy test, cesarean surgery, anti-malarial medicine chloroquine, clindamycin, ART medicines, IV fluids, and sonogram. Some examples of technical tools noted in module 2 contained suggested resources and tools such as paracetamol, stethoscope, condoms, thermometer, Uri sticks, and fetoscope.

Module 4 and 5 contained the fewer recommendations for both types of resources, than the preceding two modules. Module 5 contained 8 biomedical uses listing items such as

chlamydia treatment using erythromycin and amoxicillin, medical blood test for STIs, medical family planning items such as IUD (intra-uterine devices), hormonal birth control pills, and a diaphragm.

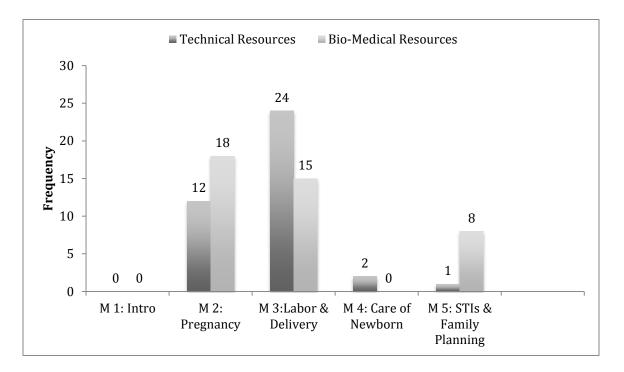


Figure 3. This chart shows the frequency of mismatched occurrences among the use of technical and bio-medical resources in the textbook.

Prominent recommendation of tools. Overall, technical resources and tools noted in the textbook were most often recommended in modules two and three discussing pregnancy and safe labor and delivery instructions. These sections highlighted what actions to take in various emergency scenarios when there are danger signs during delivery. Many posited circumstances required the use of technical tools such as paracetamol for the mother to alleviate birthing pain, stethoscope to hear the baby's heart, scissors for birthing kits, forceps, bulb syringe, and a fetoscope.

Bio-Medical Resources

Some resources referenced in the textbook included administering oxygen liters using an oxygen tank, inserting catheters, and administering oxytocin to trainees assuming they are formally trained practitioners. However, only 7 trainees (6% of trainees) claimed to be health practitioners: 1 midwife, 4 nurses, 1 nurse practitioner, and 1 nursing assistant. The likelihood is great that the residents living in the rural regions will have great difficulty accessing certain technical and biomedical tools and resources.

Medical help emphasized. The labor and delivery section, module 3, contained content that consistently referenced the use of "emergency help," "medical help," and hospital care in cases of obstetric emergencies and danger signs during labor. The term "medical" is not explicitly defined for the reader. From the author's field observations during the training program, the trainers emphasize the importance of seeking professional medical help in emergency situations. The trainers never discredited the use of local healers, however recommending the use of a hospital and "doctor" were prominent.

Prescribed medical treatment. Anti-retroviral medicine, vaccinations, and antibiotics are among the most apparent recommendations in the training textbook. For instance, in preventing tetanus, a five-series vaccination is recommended to the participants as well as antiretroviral therapy medicines for HIV/AIDS.

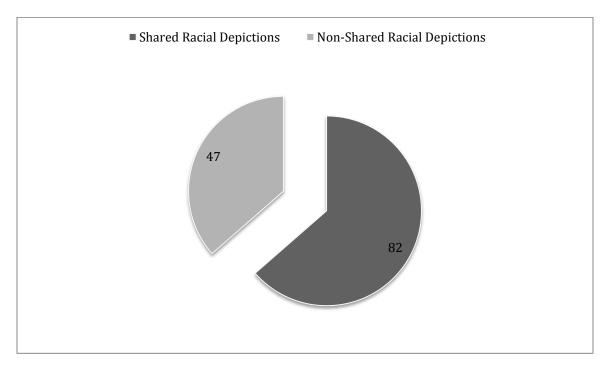
Vaccinations. During this topic area, the textbook discusses the distinction between communicable diseases and sexually transmitted infections. In the section discussing treatment options for various STIs, the text recommended a few treatment options for women with the human papilloma virus. The treatment options for possible strains of HPV ranged from applying a petroleum gel to the genitals area, applying trichloroacetic acid on the warts, or pursuing a

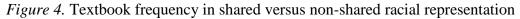
vaccine called Gardasil[®]. This vaccine requires three injections and is best suited for "women between the ages of 9 and 26." While these recommendations are suggestions in efforts to prevent STIs and the possibility of cervical cancer, a 3-series vaccination may not be realistic for individuals with limited access to medical facilities.

Racial Representation

Prominently included in culturally competent service design is the shared cultural and racial representation of the program participants. Noted by Brown (2013) discussing culturally competent practices, she asserts that participants should be able to interact with and see images of individuals that share a racial and linguistic identity. With this standard in mind, the author analyzed each of the 129 textbook illustrations for applicable racial representation (refer to Figure 4).

People of color depicted in the textbook illustrations. Overall, the textbook contained a sum of 129 illustrations (refer to Figure 4). There were a total of 47 depictions of individuals and families noted for their lack of shared racial representation with that of the racial identity reported by the 119 out of the 126 participants that completed the demographic questionnaire. The remaining 82 textbook illustrations adequately depicted individuals and families of a racial background shared by the participants.





Contextual Data

Field Observations. The results of my contextual analysis revealed the possible loss of some transmitted content due to cross-language interpretation, recommended family planning methods using technical and medical hormonal methods, and the lack of the trainees' shared racial representation among the program design.

Medical terminology proficiency. Each of the 126 program participants' and the interpreters' primary language is Haitian Creole. The trainers instructed the daily course content in English, which was immediately interpreted into Creole by one of the program interpreters. All communication was transferred in this manner, as the instructors do not speak Creole and it was the preferred language of communication for the trainees. Because the medical knowledge proficiency of the program interpreters is unknown, there may have been opportunities for some program content to be compromised.

Trainees' literacy level unknown. Most of the program trainees we pre-selected prior to the course. They were chosen according to various characteristics and abilities, one of them being a required command of literacy in order to participate in the program. However, according to my field observations, it was made clear that a greater number of participants arrived for the training than initially anticipated. Seemingly, some individuals arrived that were not pre-vetted for literacy. Therefore, there is a likelihood that for those individuals who may not have had the necessary literacy level, they faced difficulty in understanding the volume of technical and biomedical language used throughout the textbook. Further, if a participant did not have the level of literacy required to grasp the textbook content that was designed based on the intended education level of the participants, this would have resulted in a number of trainees not adequately learning the intended health knowledge.

Advised family planning methods. During the final day of training, the participants reviewed prevention and treatment of sexually transmitted infections and discussed family planning methods. The textbook modules suggested the use of some methods that are not easily accessible to the average participant such as birth control pills, spermicides, and sterilization. Noted in the author's previous field observations, condoms and spermicide were two methods suggested by a program trainer. And, among the biomedical resources discussed in this module were other methods such as the patch or injections, the sponge, spermicides, a diaphragm, and IUD.

Shared racial representation among the program. The program trainers are professionally credentialed to discuss primary health content, however, there were no Haitian community members among the team of trainers lending an area for improvement. The program trainers were fortunate to bring a life-size baby model to assist in providing interactive lessons

and illustrate the birthing process and possible danger signs. This model was received very well among the participants as this module was met with the most frequent questions and focused attention. The author's field observations noted the baby model provided a unique interactive tool for transmitting the information and demonstrating the birthing process. However, the baby model containing a baby, and a woman's birth canal, uterus, vagina, and torso represented a white mother and child. This shows a lack of cultural competence understanding or preparation in the program model. There is a chance it could have impeded their learning.

Post-Course Satisfaction Survey. On the final day of the program, participants completed a brief five-question survey soliciting feedback on the program topics, length of the program, and a comments area for any further information they would like to provide. In order to interpret the responses, the researchers worked closely with the program interpreters in translating each response. Next, they were coded according to emerging themes in the responses. This survey, uniquely, provided possible candid responses from participants that were used to illustrate cultural competency mismatches and matches from their point of view.

Participants frequently requested tools. In the post-course satisfaction survey and noted in the author's field observation, when participants were solicited to share how the program could be improved, the responses revealed a consistent them in the request for tools. The trainees often asked that they be given tools in order to utilize their training in health promotion. The sponsoring organization addressed these requests by saying that providing health knowledge and prevention methods were the foundation of their program mission. Tools would not be provided. There is debate whether participants might utilize the tools to practice as medical doctors when they are not professional trained to do so.

Positive Examples of Cultural Competence in the Curriculum

Language. While some public health terms were noted for their lack of clarification, the overall majority of the textbook communicated the health content in common terms. Yet, the etiology of an illness or disease was not always provided. Frequency was not accounted for given the research design for the current study. Positive example of cultural competent material highlighted in the textbook included the recommendation for a home test "to check for signs of diabetes" (p. 69). To check for diabetes, trainees were instructed to urinate in a jar, set it outside, and if ants were attracted, it was likely there was a high sugar content in the urine which was very likely one had diabetes (p. 69). The term birth defects, was not explained further. Areas of positive cultural competent practices were note in the following:

- The stages of labor and delivery were explicitly explained in the text and defined in common terms.
- Labor illustrations were uniquely provided throughout the labor and pregnancy section as well as photos of the various stages of the baby in utero.
- Prevention and treatment of malaria explained in very clear language.

Trainers used multiple teaching tactics. During the program training, the instructors displayed multiple teaching methods in order to ensure each trainee could grasp the material. With the nightly assistance of the interpreters, the trainers produced large posters with rich illustrations for topics such as explaining the process of diabetes and what local food is best for a diabetic, early signs of pregnancy, and a poster illustrating preventative measures for cholera. Other posters utilized by the trainers illustrated proper hand washing methods to prevent waterborne, vector-borne, and animal-borne diseases. The trainees responded very positively to these posters.

Program interpreters. While the interpreters' command of medical terminology was not known, they have been working in this capacity for the sponsoring organization for approximately two years, often times accompanying visiting physicians and nurses to regional clinics. Also, they are native Haitians residing in the region in which this program took place. The interpreters provided cultural interpretation beyond inferring the daily lessons, such as assisting the former study's program researchers in translating measures, interpreted among the team members and trainees outside of formal class time, and helped the trainers understand medical practices and beliefs. Some beliefs that emerged during class time were that twins are good luck or infertility was only an issue for the woman.

Resources

The following examples were highlighted as positive examples of the cultural competence principle. Some examples were documented through the researcher's previous field observations while some were apparent conceptual messages captured from the program textbook. They were highlighted areas incorporating the study's identified principles of cultural competence; the noted text tailored the program content according to the participants' socioeconomic environment and their accessibility to technical and bio-medical tools. The program textbook provided natural and local alternatives as preventative measures.

Alternative Methods and Remedies for Non-Medical Emergencies

- Home test for diabetes: urinate in jar, leave outside and if ants are attracted, it is likely that diabetes is apparent.
- Applying cool cabbage leafs on genitals to treat swollen veins.
- In the treatment of hemorrhoids, trainees are informed that they can soak a garlic clove in vegetable oil then insert into the anus to alleviate discomfort.

- (Cleaning water for disinfectant) Boil water and add disinfectant or a little salt.
- (To warm cold newborn) Heat water bottles, wrap in cloths, and set on both sides of baby.
- (Diarrhea treatment) Give child protein. If none is available, add spoon of oil to porridge.
- (Treatment for pain associated with herpes) Soak cloth in cooled black tea or tea of cloves or make a paste of baking soda or cornstarch with water.

Family planning methods. Among the list of family planning methods in the textbook, were particular topic areas that were noted due to the likelihood that they would be accessible to the participants and community without a healthcare professional. The following methods were the mucus method, counting days using a beaded necklace to track days of cycle and ovulation where fertilization is possible, the homemade sponge, sex without intercourse, and the "pulling-out method."

Maternal health recommendations. During the Pregnancy and the Labor and Delivery section, the trainers provided the following alternative methods of care for a pregnant woman. These methods included the following:

- Wrapping birthing tools in banana leaves and steaming them for sterilization.
- Interactive lessons about nutritional items to be taken during pregnancy using native foods, avoiding dehydration by drinking coconut water, fruit juice mixed with water, water with sugar or honey, and herbal teas.
- To hear the baby's heartbeat, construct a homemade stethoscope from bamboo, clay, or wood.
- In order to find the heartbeat of twins in the womb without tools, readers are instructed to have two people listening and making pat-pats with their hands.

- Remove amniotic water with a homemade suction trap using a jar and rubber tubes.
- Track the age of the fetus by measuring two finger widths horizontally from the crown of the womb to the top of the pelvic area. Each width equals approximately one month.
- Use locally suggested plant medicine for vaginal tears.
- To supplement calcium, use local herbs and folic acid.

Discussion

These findings suggest there may be cultural conflicts in the community public health training program based on the indicators of analysis and the Haitian trainees' reported descriptive statistics. There are areas for improvement overall in the training course; however, the program design does show some positive uses of culturally competent principles and standards in the program content based on its use of language, resources, and racial representation. The research question inquires whether the community public health training program used the principle of cultural competence.

 Culturally competent organizations design and implement services that are tailored or matched to the unique needs of individuals, children, families, organizations and communities served (Cross et al, 1989; Goode, Jones, and Jackson, 2002; Cohen and Goode, 1999).

The evidence suggests that the transmitted content and the manner in which the trainers demonstrated alternative methods for the participants was a clear example of tailoring the material in the best interest of the trainees. Prominent conceptual messages were inferred from the training program without necessarily having a high frequency in text form. The overall findings are summarized as follows:

- 1. Health and medical terminology used in program textbook was not consistently identified in common language or always defined upon its first appearance in the textbook.
- 2. Participants were advised to carry out services using resources that are not readily available in their environment such as HIV antiretroviral treatment, family planning methods, spermicides, and condoms. Noted in the previous study's satisfaction survey as well as the author's previous field observations, there was a distinct theme among the participants' requests for tools in order to apply their public health knowledge.
- 3. Trainees were provided with the knowledge and practice skills in order to respond to a medical situation and concurrently advised against applying such methods unless they were health practitioners. Only 7 of the 126 participants reported working in the health or medical occupation, whereas the majority of participants are farmers or merchants. Further, participants were reminded that completion of the program and receipt of certification did not license them to practice medicine and any negligence will result in their losing their training certificate.
- 4. "Medical" care and the use of a "doctor" were consistently advised, however the terms were not explicit in the context of the program content. When participants asked for advice in the case where medical treatment was necessary, the course instructors strongly reiterated such medical emergencies were only appropriate for trained medical practitioners.

Language mismatch

Overall, the majority of medical and public health terminology was defined for the reader in the textbook using common language. There remain areas in the textbook that could be further clarified. Notably, the program trainers further discussed complex program topics using posters

with illustrations, such as how a person with diabetes processes food differently than those without diabetes.

Formal employment. In the same questionnaire, trainees were asked to note their type of work or employment. Although formal employment is not common, given two-thirds of the labor force do not have typical formal jobs (CIA World Factbook, 2013), among the 126 respondents, seven trainees were reported health practitioners. Therefore, providing a textbook that explains public health and medical terminology in common terms easily understood by all 126 trainees was highlighted for this reason.

Resource mismatch

A theme that emerged through the textbook content analysis was the overwhelming recommendation for technical and biomedical resources that are generally scarce for the average Haitian residing in a rural, difficult-to-reach region. A noticeable mismatch central to the program training was the program's recommendation to use suggested tools during various areas of necessity while simultaneously advising the participants in the act of practicing ethically and referring those in need to a medical practitioner. From the textbook content analysis and the researcher's field observations, the program instruction recommended technical tools and biomedical resources that were unavailable for the trainees. Context and data analysis indicates the following findings:

 Trainees were reminded that completion of the program does not license them to practice medical care and if found practicing, their certificates will be withdrawn;
 The majority of the trainees are not working in the health professions with only 6% of the participants reporting work in the healthcare professions; and
 Trainees were not provided any tools discussed throughout the program content.

Distance to the nearest clinic. Of the 126 trainees, a total of 114 respondents who answered the question regarding the distance from their home to the nearest clinic showing that 52 (45%) trainees lived within 1-5 km of the nearest clinic; 34 (29%) trainees lived within 6-10 km; 25 (22%) trainees lived within 11-25km to the nearest clinic; and 3 (2%) trainees lived more than 25 km from the nearest clinic.

Racial Representation

The textbook illustrations showed an overall positive representation of individuals and families that were appropriately depicted according to the trainees reported racial identity. Less than half of the textbook depictions were not of a shared racial identity, and should be addressed in future curriculum design.

Potential Significance of the Study

The current study has the potential to influence the sponsoring organization's future program curriculum in Haiti in order to integrate a more culturally competent framework according to effective language, resources, and racial representation. Due to the lack of existing research on the contextual content analysis of cross-cultural and cross-national health promotion content among individuals in a resource-poor country, this study has the potential to grow in size and depth. Furthermore, due to the uniqueness of this research using a content analysis approach to examine mismatches in cross-cultural health education, the research generates helpful insight into how curriculum can be better designed according to the learners' unique environment and needs. Although Haitians may not be plagued with unique causes of maternal and infant mortality and HIV/AIDS deaths, the residual affects seen after the earthquake have continued encourage researchers to explore the presence of international humanitarian organizations, both secular and non-secular, in Haiti.

In Haiti, non governmental organizations collaborate with the Haitian Ministry of Health to provide the rural poor with medical care and needed medical supplies. Taking into account the widespread presence of foreign NGOs and workers in Haiti, this research could be influential in the manner in which community-based health approaches are carried out. Future programs may consider the importance of training program administrators in cultural competence education.

There is also great opportunity for future research to look at the usefulness of this particular program model and how beneficial the training was overall for the trainees. The resulting study may cause further programs to consider cultural competence training for a more culturally relevant program curriculum carried out in cross-cultural, resource-poor regions. If this research were to reoccur, I would attempt to assess the program trainers' cultural competence proficiency and how this affects the usefulness of the program content for the learners as well as the trainees' perceived usefulness of the previous programs' content. For a more comprehensive analysis, I would solicit a co-researcher with full proficiency in both Haitian Creole and English to analyze the Creole version of the program textbook looking for the same categories of analysis.

Limitations and Ethical Considerations

The author of this study is not a public health professional and instead relied on personal knowledge of the specific area where the trainings took place; however she does not claim to be competent in the geographic area served. The author was a previous program evaluator for this training and drew from personal field observations to generate supporting anecdotal information according to the research framework. It is important to note that during the previous study, all room and board was paid for by the sponsoring organizations.

With regard to a cross-language and cross-cultural research approach, there was some potential for nuance compromised in the interpretation of the trainees' observed responses during the program. It is possible that the program interpreters or trainers could have explained the terms in the textbook that were noted in this study for lacking clarification and common usage. For instance, the interpreters could have clarified the term "anemia" early on in Creole. However, this would not have been noted in my previous observation notes due to my lack of Creole proficiency.

The textbook utilized for this analysis was written in English (and later translated to Creole) and analyzed according to this study's framework. The textbook distributed to the trainees was translated in Creole.

Conclusion

To limit the inconsistencies that may arise when outsiders are designing health promotion education for individuals from distinctly different sociocultural environments, incorporating a member from the host community into the program content design will alleviate some cultural competence mismatches. Further, inviting a community representative as a collaborator, someone who shares a linguistic, cultural, and racial identity with the learners will incite a more relevant program, overall, for the trainees. As well, the program leader's positive unique experience in the hosting region, her noted professional criteria, and her commitment to progressing health promotion programs in Haiti provides, in part, culturally competent principles for future programming models in accordance with other recommendations. In conclusion, the program will continue to confront inconsistencies in achieving a culturally competent program model unless some adjustments are taken into consideration.

As researcher and public health expert Numi Guttman points out, interventions are a

"value-laden" enterprise and in order to utilize strategies for behavior-modification that aim to do good and promote the welfare of the people it aims to empower, the people themselves must be a part of the conversation (Guttman, 2000, p. 21).

Future considerations for a more culturally competent program:

- Include Haitian representation. Integrating Haitians from the host community into the content design and training of the program will ensure the program is contextualized to the hosting environment as accurately as possible and alleviate a considerable amount of cultural discrepancies.
- 2. Design the health promotion curriculum according to the participants' literacy level to ensure accuracy and readability.
- Match curriculum content to reflect the low-resource measures available for those without access.
- 4. In order to further depict people of color and support the principles of cultural competence, build on the program content to more adequately identify with the program trainees racial, linguistic, and cultural environments. Consider collaborating with a member of the participating community in order to better reflect the trainees' usefulness in every aspect of the program content.

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Appendix

Appendix A: Terms Defined

Culture

Culture is a term used to describe beliefs, behaviors, and practices shared among groups (Betancourt et al., 2002). "Culture is information that people acquire from others by teaching, imitation, and other forms of social learning" (Boyd, Richerson, 2004, p. 3). Such patterns are unique to certain groups to share commonalities in spoken language, styles of communicating, "ways of interacting, perspectives on social roles and relationships, customs and values" (Betancourt et al., 2002). As well, culture is shaped to include language, race, ethnicity, history, and nationality.

Socio-cultural

Inasmuch as culture is influenced by social practices and customs, it is also formed by socioeconomic status, structural policies that influence social values and practices, gender, and norms (Betancourt et al., 2002). The epistemology of the sociocultural perspective, posits that one's physical and social contexts help shape the various dimensions of human learning and understanding or to say that one's lens of how the world functions is mediated by the cultural environment in which they are in (Johnson, 2009).

Health Promotion

Health promotion is referred to as "the process of enabling people to increase control over, and to improve, their health, therefore going above and beyond traditional formal schooling to pursue the improvement of health practices (NIH, 2005, p. viii).

Cultural Competence

A term used to refer to how practitioners and organizations respond uniquely to people of all cultures, languages, classes, races, ethnic backgrounds and religions in a manner that recognizes each individual's distinctive background and needs (National Association of Social Workers, 2000, p. 61). The word competence is used because it implies the ability to function effectively. "A culturally competent and equitable health promotion program recognizes and integrates how important culture is in how one understands disease and prevention the tailoring of educational content and program design to be culturally relevant (Cross et al., 1989).

Community Health Education

Community health education is developing community-level approaches in response to a particular need that has been shown to aid in alleviating poor health-statuses through education and knowledge -building in order to improve the overall health of a community.

Appendix B: Informed Consent Form

Study Title: Teaching Prenatal Health, Postpartum Care, and Family Planning in Rural Haiti: Evaluating a Public Health Education Program (2013)

Researchers: Brandon Knettel and Shay Slifko, College of Education and Human Services, Lehigh University

You are invited to participate in a research study being conducted by graduate students from Lehigh University under the direction of Dr. Iveta Silova, Ph.D. and Dr. Arpana Inman, Ph.D. Before agreeing to participate in this research, we strongly encourage you to read the following explanation describing the purpose and procedures of the study. This study has been approved by the Institutional Review Board of Lehigh University.

Explanation of Procedures

This study is designed to measure the efficacy of the course you are taking to improve your public health knowledge. Participation in the study involves questionnaires and focus group interviews.

On the first day *prior* to the beginning of the class, you will be asked to participate in the following: completion of a 38-multiple choice and true/false questionnaire pre-test on the first day of your class, and retaking the same test on the last day of your class. The pre-test and post-test will measure your knowledge and attitudes related to public health. As well as two brief pre-course questionnaires based on your demographics and basic background information and your expectations for the course. These questionnaires are aimed at understanding your social and

logistical realities of your lives and find out any existing barilers to healthcare. Also an approximate 20 minute pre-course focus group interview consisting of open-ended questions will be given to learn your expectations and goals for this course.

On the last day, immediately *following* the conclusion of the course, you will be asked to participate in a brief post-course evaluation questionnaire consisting of five questions on the effectiveness of the course, a post-course focus group interview, approximately 20 minutes, asking you to evaluate how helpful you found the course and how it will help you in your work in the community and a brief post-course questionnaire consisting of two scenarios aimed at assessing your behavior in seeking sources of help for a variety of health problems.

Risks and Benefits of Being in the Study

You should be expect minimal discomfort from your participation in this study. Should you feel significant discomfort, we encourage you to withdraw from the study. Although you will not be personally compensated for your participation, the knowledge obtained from this study will help us to improve our understanding of public health education.

Confidentiality

At no point will you be asked to provide identifying data and your responses will remain completely confidential. All information gathered during this study will remain in secure premises and only the researchers will have access to the study data. The results of the research will be presented in a formal presentation and research paper and may be published in a

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professional journal or presented at professional conferences. It may also be published in book form.

Withdrawal without Prejudice

Participation in this study is completely voluntary. You are free to discontinue participation or choose not to answer a question at any time without penalty.

If you have other questions or concerns about the study **you are encouraged** to contact either of the researchers, whose contact information is listed below.

If you would like to talk to someone other than the researchers, **you are encouraged** to contact to Susan Disidore or Troy Boni at +1 (610) 758-3021 (email: <u>inors@lehigh.edu</u>) of Lehigh University's Office of Research and Sponsored Programs. All reports or correspondence will be kept confidential.

You may request a copy of this information to keep for your records.

Researcher contact information:

- 1. Brandon A. Knettel: brandon.knettel@gmail.com or call +1 (320) 247-3100
- 2. Shay Slifko: shayslifko@gmail.com or call +1 (304) 550-4990
- 3. Dr. Iveta Silova: ism207@lehigh.edu or call +1 (610) 758-5750

4. Dr. Arpana Inman: agi2@lehigh.edu or call +1 (610) 758-4443

By signing below, I agree that I have read and understand the above information. I meet the requirements of the study and freely agree to participate. I understand that I am free to choose not to answer any question and to withdraw from the study at any time. I understand that my responses will be kept anonymous and confidential.

Signature

Date

Appendix C: Demographics Statistics Questionnaire

- 1. Gender: What is your gender?
 - a. Male
 - b. Female
- 2. What is your age? _____
- 3. What is your race/ethnicity?
 - a. African Origin/Black
 - b. Hispanic/Latino
 - c. White/Caucasian
 - d. Mixed Race/Multiracial
 - e. Other (please indicate)
- 4. Where type of work do you do?
- 5. Do you have children? (Choose one) Yes No

If yes, how many? _____

Of these, how many currently live in your home?

- Please indicate which language(s) you speak most often in your home. Circle all that apply:
 - a. Haitian Creole
 - b. French
 - c. English
 - d. Other (Please indicate):_____
- 7. Please indicate your religious affiliation(s). Circle all that apply:

- a. Catholicism
- b. Voodoo
- c. Protestant
- d. Islam
- e. Other (please indicate) _____
- f. None
- 8. Education: Indicate the highest grade or year of school you have completed:
- 9. What is your home's primary water source?
 - a. Tap in home
 - b. Public tap/fountain/well
 - c. Lake, stream, or other open water source
 - d. Rainwater
 - e. Bottled water
 - f. Other _____
- 10. What type of house do you live in?
 - a. Dirt/ Earthen/Rock
 - b. Wood
 - c. Cement /Block
 - d. Tin or Other (please explain)
- 11. What type of fuel do you use for your cooking?
 - a. Wood or Charcoal
 - b. Gas

- c. Electric
- d. Other _____
- 12. How close is the nearest bathroom to your home?
 - a. In the home.
 - b. Outside the home, but within 50 meters.
 - c. Outside the home, more than 50 meters.

If you answered more than 50 meters, how far is it?

- 13. Do you have electricity in your home?
 - a. Yes
 - b. No
 - c. Sometimes

14. Do you have a radio in your home?

- a. Yes
- b. No

15. Do you have a television in your home?

- a. Yes
- b. No
- 16. Do you have a refrigerator in your home?
 - a. Yes
 - b. No
- 17. Do you own a mobile phone?
 - a. Yes
 - b. No

18. Approximately how many kilometers did you travel to get to this class?

19. What form of transportation did you use to get to this class:

- a. Bicycle
- b. Horse or mule
- c. Motorcycle
- d. Car or truck
- e. Public transportation (tap-tap, bus, van)
- f. Walk
- g. Other (please indicate) _____

20. How many people live in your household? _____

- 21. How close is the nearest health clinic or hospital to where you currently live:
 - a. 1-5 kilometers
 - b. 6-10 kilometers
 - c. 11-25 kilometers
 - d. More (please indicate how far)_____
- 22. How often do you visit an Herbal Doctor/Traditional Healer or Voodoo practitioner when there is a medical problem?
 - a. Weekly
 - b. Monthly
 - c. Yearly

- d. Only when there is a medical emergency
- e. Never
 - i. If you answered "Never", please explain why
- 23. How often do you visit a hospital or clinic when there is a health problem?
 - a. Weekly
 - b. Monthly
 - c. Yearly
 - d. Only when there is a medical emergency
 - e. Never
 - i. If you answered "Never", please explain why
- 24. Did you participate in last year's community health worker training?
 - a. Yes
 - b. No
- 25. Using the responses below, please use the numbers to indicate the level of knowledge you have currently for each of these areas:

Very much (5), Very (4) somewhat (3), very little (2), none (1)

Please rate your knowledge for the following course topics: (you may repeat numbers)

- a. Disease and vaccinations_____
- b. Pregnancy_____
- c. Birthing process_____

- d. After birth care_____
- e. Family planning_____
- f. Child development _____
- g. Child illnesses _____
- h. Child illness prevention _____
- 26. Using one of the options below, please indicate what aspects of the public course you are

most looking forward to learning:

Very much (5), Very (4) somewhat (3), very little (2), none (1)

Please rate the following course topics: (you may repeat numbers)

- a. Disease and vaccinations_____
- b. Prenatal Health management_____
- c. Birthing process_____
- d. Postpartum care_____
- e. Family planning_____
- f. Child development _____
- g. Child illnesses _____
- h. Child illness prevention _____

Appendix D: Post-Course Satisfaction Survey

- 1. How helpful was this course for your work in the community?
 - a. Very helpful
 - b. Helpful
 - c. Not very helpful
 - d. Not helpful at all
- 2. If a similar course were made available next year, would you like to participate?
 - a. Yes
 - b. No

Why or why not?

- 3. Would you recommend this course to a friend or neighbor?
 - a. Yes
 - b. No

Why or why not?

- 4. Choosing one of the options below, which one of the following options do you most agree with regarding the length of the course:
 - a. This course should have lasted longer than five days/Course was too short
 - b. This course should have been shorter than five days/ Course was too long
 - c. This course was just the right length.

Comments:

5. Choosing one of the options below, which one of the following options do you most agree with regarding the timing of the course:

- a. Each day of class should have been longer/Course was too short
- b. Each day of class should have been shorter/ Course was too long
- c. Each day of class was just the right length.

Comments:

Please provide any additional suggestions you may have about how to improve the course or

feedback overall:

Author Vita

Shay E. Slifko is from North Carolina and West Virginia. She holds a Bachelor of Arts in Mass Communications and Spanish from the University of North Carolina at Asheville. After completing her undergraduate program, she was employed as a teacher in Ecuador. And prior to enrolling at Lehigh University, she was the Assistant Director for International Enrollment with the University of Charleston. She entered Lehigh University's Comparative and International Education masters level program. Her research interests include contextualization of educational approaches, global health promotion, women's health issues, and qualitative research.