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The Relationship Of Assimilation On The Health Behaviors, Health Beliefs, And Use Of Health Care Services Of The Samoan Immigrants In The United States

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**THE RELATIONSHIP OF ASSIMILATION ON THE HEALTH BEHAVIORS,
HEALTH BELIEFS, AND USE OF HEALTH CARE SERVICES OF THE SAMOAN
IMMIGRANTS IN THE UNITED STATES**

by

MILIAMA BRACKEN

THESIS

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of Wayne State University,

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Approved By:

Advisor

Janet Ruth Phelan 5/22/17
Date

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Dedication

I would like to dedicate this work to my professor, mentor, and advisor,

Dr. Janet Ruth Hankin for her invaluable guidance, advice, patience, and support.

This journey was a challenge and I would not have accomplished it without her incredible leadership. For that I am forever grateful.

To my husband, Charles O. Bracken, and my children, Meki Louise Bracken Craig,

Joseph Oliver Bracken, and Ian Robert Craig for their on-going support and encouragement.

Your desire for my success was obvious from the beginning.

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Chapter 1 Introduction

This study examined the relationship of assimilation on the health behaviors, health beliefs, and use of health care services by a sample of Samoan immigrants in the United States. The results show a weak relationship between assimilation and health behaviors, health beliefs, and use of health care services. Many view assimilation as a “linear process” – moving upward and adapting to American life. This notion suggests that to become an American, one had to advance socially and economically. The “implicit deficit model” suggests that this advancement will help overcome deficits in the new language and culture. This is achieved through learning to read, speak, and understand the new language, adapting to the new culture and the new diet, as well as accepting the new way of dress. Once assimilated, immigrants adopt American habits and their health deteriorates, so assimilating may result in worse health. First generation immigrants are healthier than later generations.

The Healthy Immigrant Effect (HIE) is the concept that immigrants enter the United States healthy, but over time the health advantage dissipates (Antecol and Bedard, 2006). Several studies supported this belief. For example, pregnancy outcomes measured either by birthweight or mortality are better among babies born to immigrants than to native-born mothers Eberstein, (1991). The data from the Hispanic-HANES survey showed that the rate of low birthweight was significantly higher for second generation native-born women of Mexican descent compared with first generation Mexican-born women, even though the latter population had a lower socioeconomic status, a higher percentage of mothers over 35 years of age, and inadequate prenatal care. The same study found that the risk of low birthweight was about four times higher for second-generation compared with the first generation primiparous (giving birth for the first time) women, and two times higher for second generation compared with first-generation multiparous (having borne more than one child) women (Guendelman et al., 1990). It was also reported that Chinese

American women had lower fetal, neonatal, and post neonatal mortality rates than women of European origin and those in other major ethnic and racial groups in the United States. The superior health profile of Chinese infants was observed at every level of maternal education and for all maternal ages (Yu, 1982). Research in California over the past decade found that infant mortality rates for recently resettled Southeast Asian refugees (especially Vietnamese and Cambodians) were significantly lower than those for the non-Hispanic white population (Rumbaut and Weeks, 1989; Weeks and Rumbaut, 1991). These results are significant because the Southeast Asians had the highest rates of poverty and fertility in the state, experienced very high infant death prior to their arrival in the United States, lacked English proficiency, and had the latest onset of prenatal care of all ethnic groups. Other Asian groups (Japanese, Chinese, and Filipinos) and Hispanics (mostly of Mexican origin) also had lower infant death rates than whites and much lower rates than those observed for Native Americans and Blacks.

A study of students in the San Diego high schools found that Hispanics, immigrant minority students from non-English speaking families had higher grade averages than either majority native-born students or immigrant minority student from English speaking families. The students with the highest-grade point average were from immigrant families from China, Korea, Japan, Vietnam, and the Philippines. Most significantly were the Hmong students (whose parents were mostly from poorly educated rural areas) performed well compared to the average native-born student. There are reports of similar findings among immigrants of lower socioeconomic status from Central America, Southeast Asia, and the Punjab. Mexican born immigrant students do better in school and were less likely to drop out than U.S. born students of Mexican descent, despite the comparatively greater socioeconomic disadvantages of less assimilated foreign-born individuals (Rumbaut, 1990).

Contrary to the theory that view assimilation as a straight-line process where immigrants become “Americans” as they let go of their old language and culture and acquire a new language and culture in the new economy and society, Rumbaut (1997, p. 489) argued that assimilation is only possible when “immigrants and aliens are given the opportunity to participate in the new life” rather than inhibiting their old memories. The current immigrant population is very diverse in terms of class, culture, color, and how they are welcomed in the America. This situation has presented new questions about the definition of assimilation.

Gordon, (1964) in *Assimilation in American Life* argued that assimilation is multidimensional and he identified seven stages of assimilation. The seven stages described the different ways to look at the assimilation process: cultural, structural, marital, identity, prejudice, discrimination, and civic. Gordon posited that acculturation is possible with the first two steps – acculturation and structural assimilation. This acculturation could last indefinitely. He also added that each of the sub-processes could happen at different times. These seven stages could be used to measure or determine the extent of a group’s assimilation based on the individual and group level standards. This system provided first hand indicators of assimilation which contributed to the development of research on assimilation during the 1960s.

The “rethinking assimilation theory for a new era of immigration” by Alba and Nee (1997) expanded Gordon’s account by arguing that certain institutions, including those supported by civil rights law, play important roles in achieving assimilation. Their argument used the example of the Jewish organization that persuaded the New York City Council in 1946 to threaten the tax-exempt status of colleges and universities that discriminated against race or religion (Brown and Bean, 2006). Alba and Nee further suggested that assimilation occurs when individuals do what they can to achieve their goals such as an education, a good job, relocating to a nice neighborhood, and

developing relationships with others like themselves. They concluded that assimilation is an important theory for understanding the experiences of the new arrivals and that we are more united by common experiences than divided along ethnic and cultural lines (Alba and Nee 2003).

In their book, *Beyond the Melting Pot*, Glazer and Moynihan (1963) argued that ethnicity can be a resource as well as a burden for achieving economic mobility. They suggested that language and cultural familiarity do not necessarily lead to assimilation. Rather, it is discrimination and institutional barriers to employments and other opportunities that hinder assimilation. In an article titled, *Assimilation Model, Old and New: Explaining a Long-Term Process* by Susan K. Brown, and Frank D. Bean (2006, 1) noted that assimilation, sometimes known as integration and incorporation, “is the process by which the characteristics of members of immigrant groups and host societies come to resemble one another”.

This study supports the null hypothesis that there is no relationship between assimilation and the health behaviors, health beliefs, and use of health care services of the Samoan Immigrants in the United States.

Assimilation and Health

A study by Schachter, Kimbro, Gorman, (2012) utilizing a nationally representative U.S. data set with large samples of Latino and Asian foreign-born adults, suggested that better self-rated physical health and self-rated mental health are the results of bilingualism – strong proficiency in both English and native languages. In addition, they suggested that the association between bilingualism and better self-reported health is mediated by socio-economic status and family support. To measure language proficiency, the immigrants were divided into the following groups: bilingual; native language dominant; or English dominant (Schachter et. al., 2012). Language was measured by frequency of English usage with family, friends, and when thinking. This study examined the relationship of assimilation on the health behaviors, health beliefs, and use of health

care services of the Samoan immigrants in the United States. I defined assimilation as the degree to which the Samoan immigrants have adopted the American way of life – utilizing the Samoan and English language fluency, Language of media, language with spouse and family, importance of Samoan and American cultures. The health beliefs variable is the traditional credence (belief) of the Samoan immigrants about the Samoan herbal medicine, illnesses, and healers. Here the health behavior variable is defined as the Samoan immigrants’ utilization of health care practices, eating habits, and routine physical exercise.

Origination Questions

Several questions were apparent while reading through the available literature including the following: Does assimilation influence the health belief system and the health behaviors of the Samoan immigrants in the United States? It is important to know if the Samoan immigrants have assimilated to their new environment. Do the Samoans socialize beyond the confines of the Samoan community?

Rationale

An article by Camarota and Zeigler (2014) published in the “Center for Immigration Studies) noted that the population of legal and illegal immigrants increased by 1.4 million from July 2010 – July 2013. The total number of immigrants in the United States in July 2013 was 41.3 million (legal/illegal). Although immigrants generally live in many states and large urban areas, they are residing more and more in rural areas away from urban enclaves (Singer, 2004). An increase in American deep-seated feelings of dislike towards immigrants, as well as the high cost of health care and a new attempt at healthcare reform, created great need for reliable data on the health and well-being of immigrant groups, and how their assimilation into the United States may influence their health and well-being (Kimbrow, Gorman, Schachter, 2012).

The number of immigrants in the United States has increased rapidly. Borjas and Hilton (1996), suggested that an increase in the immigrant population may put increased pressure on the U.S. health care system. They further suggested that immigrants place a burden on Medicaid. This thesis is vital not only for the Samoan immigrants in the United States, but it can be helpful to the health care professionals, politicians, and the general public in understanding the health behaviors, health beliefs, and utilization of health care services of the Samoan Immigrants in the United States.

While research about immigration to the United States has been plentiful, very little is known about the Samoan immigrants. This may be the result of insufficient data available about the Samoan immigrants, or the fact that the Samoan population has been grouped as Asians, which makes it difficult to address issues specific to the Samoan immigrant population. Although Samoa is located in the Pacific Ocean and in close proximity to the Asian countries, it has its own culture including unique value systems, language, diet and dress. Generalizing findings from Asian immigrant populations to the Samoan immigrant population is misleading. Thus, it is useful to examine the health behaviors, health beliefs, and use of health care services of the Samoan immigrants during the assimilation processes. Some studies have concluded that nonadherence to medical regimens and underutilizing of health care serviced in small populations like the Samoan immigrants is due primarily to the level of education and socioeconomic status, but little research has been done on the effects of assimilation on the health beliefs and health behaviors of immigrants.

Healthcare professionals do their best to help people, and their work can be made easier when research on the beliefs and health behaviors of immigrant populations is available. For example, the Samoan immigrants do not visit doctors often. It is not because they do not like doctors, but in most cases, it is uncommon for Samoans to visit the doctor for a regular medical

check-up or for health screening purposes. (Mishra, et al., 2001). Rather, the Samoans prefer to utilize the traditional Samoan medicines first before seeking the help of the doctors. Thus, the non-adherence to the doctor's orders is not a reflection of non-compliance, or being stubborn, it could be a language barrier, or a true misunderstanding of the doctor's orders (Saau (1992). In addition, such knowledge can assist the doctors in providing proper diagnoses and treatment of the Samoan immigrants' health problems (Ishida, et al., 2001)

Chapter 2 Literature Review

The Two `Samoa – Demographic and Cultural Background

Samoa means “Sacred Earth.” The Samoa island group lies at the western edge of the Polynesian Triangle, between 13 degrees and 15 degrees south of latitude and 168 degrees and 173 degrees west longitude (Janes, 1990) (see Appendix A).

The German, Britain, and American entrepreneurs established trading posts on the island with the intention of exploiting Samoan natural and human resources (Janes, 1990). Conflict occurred between the trading nations, and in 1880 the three powers waged war over Samoa. Fortunately, the hurricane of 1889 wrecked the warships of the three powers and a peaceful solution ensued. The Britons decided to pursue other interests, while Germans and Americans signed the “1889 Treaty.” The Treaty granted Germany control of the island of Western Samoa and the control of the Eastern Samoa was given to the United States of America. Today, American Samoa is an unincorporated territory of the United States (Tanjasi, 2006).

Currently, Western Samoa is an independent nation and it has been the case since 1962. In 1995 the name was changed to Samoa. Although there is no difference in the way of life (faasamoa) and language (Samoan), between the two Samoas, there is a marked difference in immigration regulations to the United States. Being an independent nation, Samoan citizens require visas to enter the United States of America. In contrast, American Samoan citizens (national status) have the autonomy to travel back and forth to Hawaii and the mainland. American Samoan citizens are required to apply for citizenship, just like any migrant population to the United States. Becoming an American citizen affords the individual the opportunity to vote and have access to other available resources.

Concept of Health and Medicine

In American Samoa, the Department of Health and the National Hospital are two separate entities. The Department of Health deals with public health issues such as communicable disease control for conditions including tuberculosis and HIV/AIDS and health clinics in the regions and communities. The National Hospital in the capital, Pago Pago, is managed by the Hospital Board, organized by the Governor. The hospital is operated according to federal rules and regulations of the United States. The major portion of public health programs are funded by federal grants (World Health Organization Western Pacific Region, 2008:1)

The health infrastructure in American Samoa is made up of one hospital, Lyndon Baines Johnson Tropical Medical Center, and five primary health centers. The LBJ Medical Center has a 128-bed general acute care hospital. It provides a number of inpatient and outpatient services such as medicine, surgery, obstetrics and gynecology, ear, nose, and throat (ENT), eye, pediatrics, mental health; and renal dialysis. In 2003, American Samoa was served by 49 physicians (American doctors, Fiji School of Medicine graduates and foreign doctors), 15 dentists, 2 pharmacists, 127 nurses, 1 midwife, 98 other nursing/auxiliary staff, 146 paramedical personnel, and 13 other health personnel (World Health Organization Western Pacific Region 2008:2).

Annually, the LBJ Tropical Medical Center receives US\$3 million from the United States Health Care Financing Administration, and most is spent on medicine and medical supplies used at the center. All pharmaceuticals and vaccines are purchased from the United States as Federal Drug Administration regulations prevent the territory from purchasing pharmaceutical goods from other sources. Citizens of American Samoa benefit from programs such as Medicare, Medicaid and Children's Health Insurance Program (CHIP) coverage (World Health Organization Western Pacific Region, 2008:2).

In contrast, in the independent part of Samoa, the Ministry of Health has the responsibility for the leadership and governance of the Samoan health sector. The Samoan government provides most of the funds for the Samoan health system. The health care system provides primary, secondary and some specialized care. Most specialized care patients are airlifted to New Zealand or Fiji due to limited specialized facilities in Samoa. The independent Samoa has three public hospitals, one in Apia, Tupua Tamasese Meaole Hospital – Motoootua, Apia, and two on the island of Savaii - Malietoa Tanumafili II hospital at Tuasivi and the Sataua hospital that opened April 23, 2015 (samoagovr.ws.2015) and 11 health clinics. The dental facilities in Samoa provide limited services. More advanced cases are referred to doctors in New Zealand or American Samoa. Midwives are required by the government to be licensed and to work in hospitals (Saau, 1992). The Samoans have great respect for the medical professionals. The patients get to know their doctors and the doctors treat the patients with respect (Saau, 1992).

Prior to the arrival of Christianity, the Samoans believed in several gods. The Samoans generally believed that the gods can bring affliction, or tragedy upon people who disobey them. In addition, the Samoans believed in ghosts (aitu) and that they too, can bring turmoil and tragedy upon an individual, family, or people. Currently, there are some Samoans who still believe that a curse or punishment can manifest itself in a form of a disease. It is further believed that this can happen to anyone who lives an un-godly life style. The Samoans have their own line of traditional herbal medicines and are used interchangeably with modern medical practice or, as a supplement if modern medicine does not bring relief. Some home remedies include traditional herbal medicine, oil massage on the affected part of the body, and heating the body by wrapping it with warm sheets, causing it to sweat, as a way of combating high fever and chills.

Most Samoans prefer using traditional herbal medicines but are unable to find the ingredients in the United States. The Samoans sometimes combine over-the-counter remedies with traditional techniques. For example, an elderly woman would use tea leaves with water or oil to massage the head of a person with a headache, and at the same time the individual is given an aspirin for the problem. The Samoans believe that the use of herbs, roots, and leaves have no side effects. In addition, they believe that traditional medicine has to be applied twice in order to see change. Biomedical assistance is sought only when positive results do not happen (Saau, 1992).

Samoan Migration and Health

Janes (1990) suggested that when the Samoans migrate to the United States they experienced different kinds of diseases. The parasite/infectious diseases that were the main causes of morbidity and mortality in their homeland are now replaced with chronic and debilitating diseases of the host country. The epidemiological transition has been analyzed by members of the Samoan Studies Project, a large multiple-objective study of Samoan Modernization and Migration (Baker et al., 1986). The data from the multiple-objective study were collected from 1975 to 1978, and the researchers focused on communities in Samoa, California, and Hawaii. The general goal of the study was to measure body morphology, blood pressure, and self-reported health problems utilizing the survey approach. The survey was followed by more extensive but limited studies of work capacity, food habits, blood biochemistry, attitudes toward body size and genetics (Janes, 1990).

The results indicated that Samoans who were exposed to modernization rapidly increased their body mass and experienced a rapid weight gain. The level of obesity among Samoans in California (more modernized) than Samoa or Hawaii is as great as any known in the world (Pawson and Janes, 1981; Janes and Pawson, 1986). The lowest body mass was found among the rural Western Samoan agricultural communities, and the highest among urbanized California and Hawaii. This further confirms the notion that body mass is associated with the place of residence and level of modernization.

The sources of such massive weight gain in the modernized subpopulation are not known. However, based on data from American Samoa, Samoan children gain weight within the first four months of life and the weight gain persists during infancy into the teenage years (Bindon and Zansky, 1986). Baker and Hann (1986) speculated that some environmental factor such as nutrition sustains the weight gain during infancy into the adolescent years in the more modernized subpopulations. Studies of the Samoan diet have been conducted in different urbanized communities in Western Samoa, American Samoa, and a small sample from Hawaii (Hanna, Pelletier, and Brown, 1986).

Pelletier (1984) studied three groups of men from Western Samoa: the first group consisted of men from rural residents of the village of Saleaamua; the second group was wage laborers employed in physical demanding occupation; and the third group included sedentary workers employed in Apia, capital of Samoa. Although the three groups differed from one another in body mass and adiposity (body fat), there was no difference in the percentage of nutrients consumed – protein (10%); fat (30%), and carbohydrate (60%). Those who were more active consumed more calories than the less active with one exception – the sedentary workers. The sedentary workers in keeping with the Samoan culture of feasting on Sunday (toona'i) ended up eating too much which increased their energy intake. As a result of less energy expenditure, the sedentary workers were

more obese. Pelletier (1984) suggested that the difference in body mass and fatness is due to inactivity (energy expenditure) rather than what we consume (energy intake).

Similar results were reported when the same study was conducted with the residents from the village of Ta'u, in the outlying Manu'a group of American Samoa, and Samoans living on Oahu, Hawaii. There were no consistent patterns in nutrients consumption which reflected the migration and modernization experience (Bindon 1984; Brown et al., 1984). It has been noted that the major dietary change with modernization is a greater diversity of foods, which is consistent with modernization in other parts of the world (Janes, 1990). These finding suggested that obesity, and its link to cardiovascular disease in Samoans is not as direct as it has been suggested for Caucasian groups (Janes, 1990. Pelletier and Hornick (1986) concluded that despite the modernizing, Samoans' obesity and high intake of saturated fats, they have significantly lower cholesterol and triglyceride levels than people of European heritage.

Stress and Health of the Samoans

Stress occurs when the expectations that define appropriate behavior are unclear (Cassell, 1974, 1975), or when individuals are unable to live up to status and role expectations, or aspirations. Dressler (1982; 1988) suggested that material acquisition is an expectation associated with prestige and high status apparent in cultures marked by rapid change. Individuals are under stress when they are unable to acquire the prized goods necessary to maintain their social status. Similarly, what the Samoans have termed – “faalavelave” (stressful life events) are always associated with rites of passage or role changes, in which individuals are placed in situations where social expectations are unclear (Mestrovic and Glassner, 1983). Stressful life events within the Samoan community include the celebrations of birthdays, weddings, funerals, bestowing of chiefly titles, grand openings of a new structure such as a church, government building, or sometimes private homes. Family members, community, and friends are expected to contribute financially or

with material goods such as fine mats or food, in big quantities. An older Samoan woman holding an important role in her extended family shared the following story according to Janes, (1990, p. 119):

Sometimes I just lie in bed all night and can't sleep. I'm just thinking about the family problems. I worry that a relative might pass away, and then I'll have to get involved. I worry a lot about being short when it comes time for the faalavelave. It's always these worries which cause the stomach problems and the headaches too.

Cassell (1976) suggested that stress leads to a state of “generalized susceptibility,” which may result in different health outcomes depending on the individual’s physical condition, age, and power to resist such situations. Stressful situations can influence the health of an individual. For example, acute life changes may result in feeling tired, loss of appetite, or experiencing a headache. Janes (1990) suggested that stress should not only be considered in its specific social, historical cultural, and gender context but it should also be examined, whenever possible, in various health situations.

The lack of necessary resources contributes to the worrisome and problematic life changes experienced by Samoan immigrants. Dealing with family problems including arguments with kin, problems with children and stressful life events (faalavelave), create stress (Janes, 1990:118). Striving to maintain a high standard of living without adequate financial resources can be very stressful. Janes (1990), in his study of the Samoan immigrants concluded that the Samoans continue to be engaged members of the community, but in order to maintain the Samoan culture, the individual needs to have funds.

Support Groups

Migration, according to Cassel (1975), involves moving to social environments that are unfamiliar to the individual. Yet some immigrants arrive with traits or qualities that make the new place less foreign or threatening. For example, some newcomers may have experience in education or the work place and may have lived in cities before coming to the United States. Many Samoans especially the early immigrants have worked with Americans before moving to the United States. Some were trained teachers and nurses. These qualities help with the transition to the new environment. It is also assumed that immigrants become exposed to unfamiliar institutions in their new environment. According to Banton (1965), Epstein (1961), Gutkind (1969), and Little (1965), immigrants reconstruct familiar institution to provide informal socialization.

The Samoan immigrants have two such institutions – the core family (aiga), and the church (lotu) congregation. The family and the church provide network of social support. Researchers have argued that social support promotes health, especially in buffering stressors (Berkman 1985; Broadhead et al., 1983; Cobb 1976; Cohen and Syme 1985). A study by Lene Levy-Storms and Lubben (2006) to explore how kin and non-kin social networks influence health behavior among older Samoa women concluded that kin networks influence health behaviors such as never salting food, getting screened for diabetes in the past, having a mammogram in the past 2 years. In contrast, the non-kin networks increased the likelihood of lifestyle-related health behaviors such as efforts to lose weight and exercise. It has been suggested that the Samoan church networks may influence their knowledge and attitudes about health as they talk and discuss health issues amongst themselves. Levy-Storms (1999) points out that traditional healing and medicine in Samoan culture were passed on orally from generation to generation. The negative effect of this process is the fact that, like any other migrant and minority population, traditional Samoan culture provides no preventative guidelines when it comes to health (Olsen and Frank-Stromborg, 1993).

Health Care Utilization

The availability and quality of health services are important determinants of health and disease in populations undergoing rapid change (Janes, 1990, p. 152). It is well known that assimilation has been associated with both a decline in the overall health from exposure to new disease in a new environment, and an improvement in overall health due to better protection against common infectious ailments, the availability of better health care services and medicines (Dennett, Connell (1988); Wirsing, 1984). Janes (1990:152) noted that the Samoans hold definite attitudes towards American medicines and these attitudes greatly influence their participation in the health-care system, including the treatment of serious diseases. A study by Levy-Storms and Wallace (2003) suggested that these attitudes are based on old Samoan health beliefs about the treatment of illnesses, biomedical views of diseases, and access to care.

Janes (1990:153) concluded that the Samoans hold a certain view of how diseases occur and it affects their health care seeking behaviors. The Samoan's traditional medical belief system included supernatural causes and spirit possession. The system is made up of herbalists (foma'i) who believe that certain ailments pertaining to the Samoans (ma'i Samoa) cannot be treated by American or Western medicine. Therefore, such illnesses should be treated by the Samoan general practitioners (taulasea). Romanucci-Ross (1969) reported in her insightful analysis of medical pluralism in Manu'a, Papua New Guinea, that many Samoans perceived a cultural pride in "their" unique sicknesses. The Samoans believe that these sicknesses are the result of the actions of a ghost (aitu), which typically resembles a dead relative who takes actions against the living out of anger over violation of cultural or moral prescriptions. The most common manifestation of this illness is evil possession (Lazar, 1985).

Thomas Lazer (1985) identified the following four main types of Samoan healers: the foma'i or herbalists; taulasea or general practitioner; foma'i aitu or power healer who specializes in the manipulation of supernatural powers in curing spirit possession; and the diviners, who determines the cause of an illness. The healers utilize the following three methods of treating the sick: massage (fofo); internal/external treatment with herbal concoctions, and communication with the spirits. Giving a massage is considered necessary for restoring the individual's life force or to'ala, to its appropriate place in the abdomen (Lazar, 1985). Herbal medicines are made from a variety of plants, leaves, roots, and barks that are brought in from Hawaii or Samoa by visitors.

Herbal remedies and massages are used to treat internal conditions such as stomach ailments and headaches including cases of injury or chronic pain. Concoctions made of leaves, roots, or barks of trees or plants were used for external conditions such as rashes, sores, and burns. Communications with possessing ghost (aitu) is initiated by the taulasea. The massage is utilized and external herbal medicines and a dose of "Devil's Weed" (ava'ava aitu) persuades the spirit (aitu) to speak through the patient who reveals the cause of the possession (usually taboo violation, a moral infraction, or some violation of Samoan customs, Janes 1990). Initially, the Samoans will treat a health issue or problem with a traditional Samoan herbal medicine before going to the doctor. Most Samoans consider herbal medicine and massages superior to Western biomedicine in treating these health problems.

It is important to note that insufficient current literature is available on the effects of assimilation on the health beliefs, the health behaviors, and the use of health care services of the Samoan immigrants in the United States. This research will add to existing knowledge about the Samoan immigrants and generate future research.

Hypothesis

Question. Is assimilation related to the health behaviors, health beliefs, and health care utilization, of the Samoan immigrants in the United States?

Original hypothesis. Assimilation is related to the health behaviors, health beliefs, and the health care utilization of the Samoan Immigrants in the United States.

Chapter 3 Method

This study was approved by the Wayne State University International Review Board (IRB), (see Appendix B), on September 22, 2012. The data were collected from October 22, 2012 – May 5, 2013. Permission to conduct the study at the six Samoan churches in California was granted by the Pastor of each congregation. Signed letters (see Appendix C) of invitation, written on the official stationary of each church, were sent via attachment through email. The respondents from Berrien Springs, Michigan were recruited by visiting homes of eligible participants. Each respondent was given an information sheet written in the English language (see Appendix D) and in the Samoan language (see Appendix E). Filling out the questionnaire indicated the respondent's consent to participate, and the responses were confidential and anonymous.

A recruitment script written in the English language (see Appendix F) and in the Samoan language (see Appendix G) was placed in the bulletin of each church and was also read during church services two months prior to the start of the research. The recruitment script included the name of the Principal Researcher (PI), Miriama Bracken, and the purpose of the research, "The Health Beliefs and Health Behaviors of the Samoan Immigrants in the United States." Volunteers were recruited from the churches in California and Berrien Springs, Michigan. Volunteers had to be 18 years of age or older, born in Samoa or American Samoa. Participants were given a choice to use the questionnaire written in the Samoan language or the one written in the English language. Times and locations of the survey administration were announced after the IRB approval.

Questionnaire

A self-administered survey questionnaire was written in English (see Appendix H), translated into the Samoan Language (see Appendix I) and translated back into English. The different questions were pretested and revised before the final versions (Samoan/English) were finalized and distributed to the research sites.

The research focused on the relationship between assimilation and the health behaviors and beliefs, and use of health care services of the Samoan Immigrants in the United States. Language use, interest in the culture and history of country of origin and the host country, as well as the language of radio broadcastings listened to, and language of television programs watched were utilized to measure assimilation. Health behaviors and beliefs were measured by doctor visits, regular exercise routine, consumption of traditional Samoan food, fast food, low fat meals, vegetarian meals, vegan meals, low carb meals, high protein meals, belief that food consumed contributes to health, does the quality/quantity of food consumed contribute to health, and would diet modification improve health.

In addition, questions about the health condition, physical exercise routine, importance of annual check-ups, annual physical exam last year, health screening for high blood pressure or, diabetes in the past year were used to measure health status and health behaviors. The respondents were also asked how often they engage in vigorous or light to moderate physical activity of at least 10 minutes in duration, how difficult it is: 1) to walk up 10 steps without resting, 2) it for about 2 hours, stoop, 3) bend or kneel, 4) reach over-head, 5) use fingers to grasp or handle small objects, 6) lift or carry something as heavy as 10 pounds such as a full bag of groceries. Additional questions were asked about the number of visits, in the past 12 months to: the emergency room, doctor's office, clinic, or elsewhere about your health, not including overnight hospital stays, home visits, dental visits, or telephone calls, and where you seek help when sick. Weight in pounds, and

height in feet and inches were also reported by the respondents. They were asked: Do you weight more, or less now, than when you first arrived in the United States? Has your weight change in the past year? How do you feel about your weight? Finally, the sociodemographic information was also reported: gender, marital status, income, and if they sent money home, and how often they sent it. The study accepts the null hypothesis that there is a relationship between assimilation and health behaviors, health beliefs, and use of health care services of the Samoan Immigrants in the United States.

Sample

Respondents were recruited from the seven study locations through announcements in church bulletins, advertisements posted on the church bulletin boards, and personal contact. The Michigan respondents were visited and were asked if they would like to participate in the survey, and total of eight (8) participated. The California study locations completed the following number of surveys: Compton, California – sixteen (16); New Hope, California – thirty-one (31); San Francisco, California – twenty-three (23); Santa Ana, California – five (5); Vista, California – eighteen (18); and Yucaipa, California – twenty-five (25). A total of 150 surveys were distributed and 141 (94%) were returned. Fifteen of the returned surveys (10.6%) were discarded because they were either incomplete or the respondent was born in the United States. The final sample size was 126 valid surveys: thus 84% of the total surveys distributed were analyzed for this thesis.

The sites for the research were selected as places where the Samoan Immigrants congregate and participate in cultural functions and worship. The leaders in these communities were also very interested in participating in the research. The respondents at the Michigan location were visited and were asked if they would like to participate in the survey. Different times and dates were set for the locations in California. These times and dates as well as locations were announced during church services, placed in the bulletins, advertised utilizing posters posted on

assigned locations at the churches and personal contact. On the appointed day to administer the survey, the respondents were greeted and thanked for their willingness to participate. They were also given a copy of the rules of the survey and their right to withdraw from the study at any time. The survey was allotted 30 minutes to complete, but an extra 15 minutes was granted to anyone who needed more time to complete the survey. Table 1 shows that the majority of respondents used the Samoan version of the survey and 45% of respondents were from New Hope and Yucaipa California. Chapter 4 describes the sample characteristic.

Table 1				
<i>Study sites and language of questionnaire used</i>				
<u>Study Site</u>	<u>Samoan</u>	<u>English</u>	<u>N</u>	<u>%</u>
Berrien Springs, MI.	4	4	8	6
Compton, CA.	8	8	16	13
New Hope, CA	31	-	31	25
San Francisco, CA	13	10	23	18
Santa Ana, CA	5	-	5	4
Vistas, CA	18	-	18	14
Yucaipa, CA	25	-	25	20
Total	104	22	126	100%

Chapter 4 Sample Characteristics

This chapter describes the sociodemographic characteristics of the respondents, their migration experience, health insurance and health status, food and diet, exercise and physical condition and health behaviors.

Sociodemographic Characteristics of Sample

Table 2 shows the sociodemographic of the sample. The sample consisted of (53) 42% male and (73) 58% female. The mean age was (47) 32%, 19% were under the age of 35 years, while 11% were sixty-five and over. About 9% had less than high school education or G.E.D. and 25% completed a BA degree. The majority 51% were educated in the United States, 27% in American Samoan and 19% in Samoa. More than two thirds were married - 68%, 14% were either widowed or separated or divorced and only 18% were single. Thirty-eight (38%) earned less than \$20,000 - \$39,999 per year while 5% earned \$100,000 or more. The income mean was 2.37 which means that the average person earned from \$20,000 – \$39,999 per year. A little over half (58) were employed outside of the home.

Table 2		
<i>Socio-demographic Characteristics</i>		
Age since last birthday		
<u>Age</u>	<u>N</u>	<u>%</u>
<35	24	19.5
35-49	40	32.5
50-64	46	37.3
65 and over	13	10.5
Education		
	<u>N</u>	<u>%</u>
<less than High School	11	8.8
High School G.E.D.	29	22.4
Vocational College	12	9.6
Some College	30	24.0
Associate Degree	14	11.2
Bachelor Degree	21	16.8
Graduate Degree	9	7.2
Marital Status		
	<u>N</u>	<u>%</u>
Married	85	68.0
Widowed	10	8.0
Separated/Divorced	7	5.6
Single	23	18.4
Income (US Dollars)		
	<u>N</u>	<u>%</u>
0-19,999	48	38.1
20,000 - 39,999	28	22.2
40,000 - 59,999	25	19.8
60,000 - 79,999	15	11.9
80,000 - 99,999	4	3.2
100,000 – 119,999	2	1.6
120,000+	4	3.2
Mean: 2.37; Median: 2; Standard Deviation 1,506		
Employed outside of home		
	<u>N</u>	<u>%</u>
Yes	74	58.7
No	52	41.3

The Migration Experience

Table 3 shows the migration experience. The mean age at migration was 23.33; median 23; and Standard Deviation 13,463. The majority migrated at ages 17-23 (22.5%), and ages 24 – 30 (25%). Only 18% migrated at ages 45 and above. More than half were born in American Samoa 59% compared to 40% who were born in Samoa. The majority of the respondents moved to the United States during the periods of 1980 – 1989 (27%), 1970 – 1979 (22%), and the year 2000 and beyond (26%). The two main reasons for leaving the home country were to be with family and for education.

Table 3		
<i>The Migration Experience</i>		
Age at Migration		
<u>Age</u>	<u>N</u>	<u>%</u>
< than 10	14	12.0
10 – 16	14	12.0
17 – 23	27	22.5
24 – 30	30	25.0
31 – 37	9	7.5
38 – 44	4	3.0
45 and above	22	18.0
Mean: 23.33; Median: 23; Standard Deviation: 3,463		
Country of Birth		
	<u>N</u>	<u>%</u>
Samoa	51	40.5
American Samoa	74	58.7
Year Moved to the United States		
	<u>N</u>	<u>%</u>
Before 1970	10	8
1970 – 1979	28	22
1980 – 1989	34	27
1990 – 1998	21	17
2000 and over	33	26
Reasons for Leaving		
	<u>N</u>	<u>%</u>
Find Work	8	6.5
Be with Family	35	28.5
Education	34	27.6
Find Work/be with family	6	4.9
Be with family/education	15	12.2
Work/Education	7	5.7
Work/Family/Education	15	12.2
Get Married	1	.8
Education/church purposes	1	.8
Other	1	.8

Health Insurance and Health Status

Table 4 shows health insurance and health status. Half the respondents had health insurance. While 18.3% report excellent health, 33.3% reported poor or fair health status. A total of 66% (two thirds) were classified as obese (BMIs), and 12.9% have normal weight. The mean for BMI was 34, median 33, standard deviation 7,539.

Table 4		
<i>Health Insurance and Health Status</i>		
Health Insurance		
	<u>N</u>	<u>%</u>
Yes	63	50
No	63	50
Health Status		
	<u>N</u>	<u>%</u>
Excellent	23	18.3
Very Good	24	19.0
Good	37	28.4
Fair	31	24.6
Poor	11	8.7
Body Mass Index (BMI)		
	<u>N</u>	<u>%</u>
Normal	16	12.9
Overweight (>25)	26	21.0
Obese (> 30)	82	66.1

Food and Diet

Tables 5-6 represent the Food and Diet of the respondents. The average respondent ate three meals a day, ate Samoan food twice a week, fast food twice a week, vegetarian meals twice a week, low fat and vegan meals once a week. High protein meals twice a week, and Low Carb meals once a week.

Meals per day. Half of the sample had three meals a day. About (28) 22% had 2 meals a day and (29) 23% had four or more meals a day.

Table 5		
<i>Food and Diet</i>		
Meals Per Day		
	<u>N</u>	<u>%</u>
One	2	1.6
Twice	28	22.2
Three	64	50.8
Four or more	29	23.0
Not sure	3	2.4

Mean: 3.02; SD: .784

Types of food consumed each week. The sample ate Samoan food at least once a week (43) 34.1%, 22 % (28) ate Samoan food twice a week. Only 6.3% (8) ate Samoan Food seven days a week. Twenty-five percent ate fast food once a week. Another 25% ate fast food three times a week. Only 3% ate fast food seven times a week. Sixteen percent do not eat fast food at all. Twenty-five percent did not eat low fat meals at all. Twenty-two percent ate low fat meals twice a week and eighteen percent ate low fat meals once a week. Twenty-eight (22.2%) did not eat vegetarian meals; 27 (21.4%) ate vegetarian meals twice a week, twenty-two (18%) consumed vegetarian meals three times a week. Most of the sample did not eat vegan meals (45 (36%)), only 19% (24) ate vegan meals twice a week, 10% ate vegan meals three times a week. Only three percent ate

vegan meals. Twenty-seven percent did not eat Low Carb Meals at all. About 24% ate low carb meals twice a week. Eighteen percent ate low carb meals three times a week. Only 4% ate low carb meals seven times a week. Twenty-three (18.3%) ate high protein meals four times a week, twenty-two (18% ate high protein meals twice a week, only 17 (14%) did not eat high protein meals at all, and twenty (16% ate high protein meals once a week. Eighteen (14%) ate high protein meals seven times a week.

Table 6		
<i>Weekly Frequency</i>		
Samoan Food		
	<u>N</u>	<u>%</u>
None	24	19.0
One	43	34.1
Twice	28	22.2
Three	14	11.1
Four	4	3.2
Five	4	3.2
Six	1	.8
Seven	8	6.3

Mean: 3.02; SD: .78

Fast Food		
	<u>N</u>	<u>%</u>
None	20	15.9
One	32	25.4
Twice	25	19.8
Three	31	24.6
Four	10	7.9
Five	4	3.2
Six	--	--
Seven	4	3.2

Mean: 2.09; SD: 1.59

Low Fat Meals		
	<u>N</u>	<u>%</u>
None	32	25.4
One	23	18.3
Twice	28	22.2
Three	24	19.0
Four	9	7.1
Five	3	2.4
Six	2	1.6
Seven	5	4.0

Mean:1.98; SD: 1. 85

Mean: 2.44; SD: 2.04

Vegetarian Meals		
	<u>N</u>	<u>%</u>
None	28	22.2
One	17	13.5
Twice	27	21.4
Three	22	17.5
Four	11	8.7
Five	7	5.6
Six	7	5.6
Seven	7	5.6

Mean 2.44; SD: 2.04

Vegan Meals		
	<u>N</u>	<u>%</u>
None	45	35.7
One	21	16.7
Twice	24	19.0
Three	12	9.5
Four	13	10.3
Five	5	4.0
Six	2	1.6
Seven	4	3.2

Mean: 1.76; SD: 1.86

Low Carb Meals		
	<u>N</u>	<u>%</u>
None	34	27.0
One	19	15.1
Twice	30	23.8
Three	22	17.5
Four	7	5.6
Five	6	4.8
Six	3	2.4
Seven	5	4.0

Mean: 2.03; SD: 1.85

High Protein Meals		
	<u>N</u>	<u>%</u>
None	17	13.5
One	20	15.9
Twice	22	17.5
Three	12	9.5
Four	23	18.3
Five	11	8.7
Six	3	2.4
Seven	18	14.3

Mean: 3.10; SD: 2.25

Exercise, Physical Condition, and Physical Activity

Fifty-one percent of the sample were engaged in regular physical exercise whereas 45% did not exercise. A little over half (51) 41% were more active than the people their age. About 32% were less active than the people of the same age. Over half of the sample 58% were engaged in vigorous physical activity 1 – 4 times a week compared to 26% who had no physical activity during the week. Most respondents said various activities were not at all difficult. Seventy-six percent had no trouble grasping small objects, 63.5% had no difficulty walking up 10 steps without stopping, and 71% had no difficulty lifting and carrying 10 pounds.

Table 7 Exercise, Physical Condition, and Physical Activity		
	<u>N</u>	<u>%</u>
More active	51	40.5
Less active	40	31.7
Active people my age	35	27.8

Vigorous Physical Activity (10 minutes per week)		
	<u>N</u>	<u>%</u>
None	32	25.5
1 – 4 times	72	57.6
5 or more times	21	16.9

Difficulty	<u>N</u>	<u>%</u>
Walk 10 steps	80	63.5
Stand 2 hours	67	53.7
Sit 2 hours	76	60.3
Stoop, Bend, or Kneel	58	46.1
Reach Up Over Head	82	65.1
Grasp small objects	96	76.2
Lift and carry 10 pounds	89	71.2

Health Behaviors

Reported health behaviors of respondents included reports that 33% had made at least one emergency visit in the past year, 60% visited the doctor at least once during the past year. The majority (72%) had a physical exam in the past year. Almost 36% had been screened for cancer, 65% for high blood pressure, and 61% for diabetes.

Summary statement of tables 2-7 and health behaviors. The typical respondent was more likely to be female, age 47, and have at least a high school degree. High protein diets were common. Most were obese and about two thirds (66%) had health screening exams, 36% for cancer, 65% for high blood pressure, and 61% for diabetes. About (51%) of the sample visited the doctor at least once during the past year. Less than half (41%) were more active than others their age, while (28%) reported that they were as active as people their age. Fifty-eight percent reported doing vigorous physical activity 1-4 times a week. Only 18% reported excellent health.

Chapter 5 Assimilation and Its Relationship to Health Status, Health Beliefs, and Health Behaviors

The first part of this chapter describes the assimilation experience of the respondents and explains the assimilation scales that were derived from factor analysis. The statistical analysis that examines the relationship between assimilation and health status, health beliefs, and health behaviors concludes this chapter.

Assimilation

Table 8 shows the responses to the assimilation questions and how the responses were coded to measure Fluency in Samoan. The respondents were asked to describe how often they speak, understand, and read Samoan. The responses were coded - (1) All time, (2) Some time, (3) None Time. Most of the respondents spoke, understood, and read Samoan. Sixty percent spoke, 81% understood, and 58% read Samoan all the time. Some of the time, 49 (39%) spoke, 21 (17%) understood, and 45 (36%) read Samoan. An insignificant number did not speak, understand, or read Samoan.

Table 9 shows the responses to the assimilation questions and how they were coded to measure English Fluency. Respondents described themselves as reading and understanding English as follows: (1) None of the time, (2) Some of the Time, (3) All the time. Seventy-one percent (89) spoke English some of the time, and 29% (36) all the time. Seventy-three percent (92) understood, and 55% (69) read English all the time. (see Table 9).

Table 10 shows that the respondents used both Samoan and English to communicate with their children 51% (64), with spouse 51% (59), with family 69% (87), and 63% (79) with friends. Communications with neighbors were in English 56.3% (71) most of the time. Most of the sample listened to the radio programs 55.3% (68); watched television programs 74.4% (93), and read books and magazines 45.2% (56) in English. (see Table 11). The questions were coded (1) Samoan,

(2) Samoan and English, (3) English. The questions about the importance of the Samoan history, Samoan culture, and the Samoan extended family were coded as follows; (1) extremely important, (2) very important, (3) important, (4) somewhat important, (5) not important

Thus, a high number of respondents spoke, understood, and read English. A majority listened to radio programs and watched television in English. Despite this behavior, 27% (34) indicated that Samoan history was extremely important, and 34% (43) indicated that it was important. Thirty-seven percent (46) suggested that Samoan customs were very important and 24% (30) extremely important. A small percentage 10% (12) indicated the history of Samoa was not important. (see Table 12).

Table 8		
<i>Fluency in Samoan: Speaks Samoan</i>		
	<u>N</u>	<u>%</u>
All Time	76	60.3
Some Time	49	38.9
None Time	1	.8

Mean: 1.40; Median: 1.00; Std. Deviation: .507

Understands Samoan		
	<u>N</u>	<u>%</u>
All Time	104	82.5
Some Time	21	16.7
None Time	1	.8

Mean: 1.18; Median: 1.00; Std. Deviation: .408

Reads Samoan		
	<u>N</u>	<u>%</u>
All Times	73	58.4
Some Times	45	36.0
None Time	7	5.6

Mean: 1.47; Median: 1.00; Std. Deviation: .603

Table 9		
<i>Fluency in English</i>		
Speaks English		
	<u>N</u>	<u>%</u>
None Time	1	.8
Some Time	89	70.6
All Time	36	28.6
Mean: 2.28; Median: 2.00; Std. Deviation: .467		
Understands English		
	<u>N</u>	<u>%</u>
None Time	1	.8
Some Time	33	26.2
All Time	92	73.0
Mean: 2.72; Median: 3.00; Std. Deviation: .467		
Reads English		
	<u>N</u>	<u>%</u>
None Time	-	-
Some Times	56	44.8
All Times	69	55.2
Mean: 2.55; Median: 3.00; Std. Deviation: .634		
Table 10		
<i>Language Use</i>		
Language with kids		
	<u>N</u>	<u>%</u>
Samoan	17	38.3
Samoan/English	64	59.3
English	27	35.0
Mean: 2.09; Median: 2.00; Std. Deviation: .634		
Language with spouse		
	<u>N</u>	<u>%</u>
Samoan	44	38.3
Samoan/English	59	51.3
English	12	10.4
Mean: 1.72; Median: 2.00; Std. Deviation: .643		
Language with family		
	<u>N</u>	<u>%</u>
Samoan	32	25.4
Samoan/English	87	69.0
English	7	6.6

Mean: 1.80; Median: 2.00; Std. Deviation: .533

Language with Neighbors		
	<u>N</u>	<u>%</u>
Samoan	12	9.5
Samoan/English	43	43.1
English	71	56.3

Mean: 2.47; Median: 3.00; Std. Deviation: .666

Language with Friends		
	<u>N</u>	<u>%</u>
Samoan	18	14.3
Samoan/English	79	62.7
English	29	23.0

Mean: 2.09; Median: 2.00; Std. Deviation: .607

Table 11		
<i>Media</i>	Language of Radio Program	
	<u>N</u>	<u>%</u>
Samoan	17	13.9
Samoan/English	37	30.3
English	68	55.7

Median: 2.42; Median: 3.00; Std. Deviation: .725

Language of Television programs		
	<u>N</u>	<u>%</u>
Samoan	7	5.6
Samoan/English	25	20.0
English	93	74.4

Mean: 2.69; Median: 3.00; Std. Deviation: .574

Language of Books/Magazines		
	<u>N</u>	<u>%</u>
Samoan	13	10.5
Samoan/English	55	44.4
English	56	45.2

Mean: 2.35; Medan: 2.00; Std. Deviation: .663

Table 12		
<i>Samoan History/Culture</i>		
Samoan History		
	<u>N</u>	<u>%</u>
Extremely Important	34	27.0
Very Important	43	34.1
Important	24	19.0
Somewhat Important	13	10.3
Not Important	12	9.5

Mean: 2.42; Median: 2.00; Std. Deviation: 1.254

Samoan Customs		
	<u>N</u>	<u>%</u>
Extremely Important	30	23.8
Very Important	46	36.5
Important	26	20.6
Somewhat Important	11	8.7
Not Important	13	10.3

Mean: 2.45; Median: 2.00; Std. Deviation: 1.237

Extended Family		
	<u>N</u>	<u>%</u>
Extremely Important	35	27.8
Very Important	46	36.5
Important	30	23.8
Somewhat important	4	3.2
Not important	11	8.7

Mean: 2.29; Median: 2.00; Std. Deviation: 1.165

Factor Analysis

The Principal Component Analysis (PCA) was used to extract factors from a list of assimilation variables. The Varimax with Kaiser Normalization was the rotation method used. A total of 13 factors were extracted and were grouped to create five assimilation scales. Scale 1 was given the scale name, Culture and it included the following factors – Samoan history, Samoan Culture, and extended Samoan family. The respondents were asked how important Samoan history, Samoan culture, and extended family by responding (1) extremely important, (2) very important,

(3) important, (4), somewhat important, and (5) not important. Scale 2: given the name Media and it consisted of factors language of radio listened to, language of television programs watched, and language of books and magazines read. The responses were coded as follows: (1) Samoan, (2) Samoan and English, (3) English. Scale 3 was called Language Use and it included the following factors - language with spouse and language with family. The responses were coded as follows: (1) Samoan, (2) Samoan and English, and (3) English. Scale 4: was given the name Samoan Fluency included the following factors - speaks Samoan, understands Samoan, and reads Samoan. The responses were coded as follows: (1) none of the time (2) some time, (3) all of the time. Scale 5 was given the name English Fluency, included factors speak and understand English. The responses were coded as follows: (1) none of the time, (2) some time, (3) all the time.

The average respondent viewed the Samoan history, customs, and extended family as very important, utilized English media programs, spoke Samoan and English with spouse and family. Speak, read, and understand Samoan all of the time, speak and read English some of the time.

Table 13			
<i>Scales – Descriptive Statistics</i>			
Samoan Culture			
	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Extremely Important	126	2.41	1.254
Very Important	126	2.45	1.237
Not Important	126	2.29	1.165

Media			
	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Radio	122	2.42	.725
Television	125	2.69	.574

Language Use			
	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Spouse	115	1.72	.643
Family	126	1.80	.522

Samoan Fluency			
	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Speaks Samoan	126	1.40	.509
Understands Samoan	126	1.18	.408
Reads Samoan	126	1.47	.603

English Fluency			
	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>
Speaks English	126	2.28	.467
Reads English	125	2.55	.499

Table 14 shows the correlations between the scales. The scales were significantly correlated at the 0.01 level (2 tailed). For example, all the variables that constituted the Samoan Culture were significantly correlated at the 0.01 level (2 tailed).

Table 14			
<i>Correlation, Scales</i>	Samoan Culture		
	<u>1</u>	<u>2</u>	<u>3</u>
1. Samoan History	-	.779**	.784**
2. Samoan Customs	-	-	.720**
3. Extended Family	-	-	-

** Correlations is significant at the 0.01 level (2 tailed)

Media			
	<u>1</u>	<u>2</u>	<u>3</u>
1. Radio	-	.577**	.572**
2. T.V.	-	--	.517**
3. Books/Magazines	-	--	--

Language Use		
	1	2
1. Spouse	-	.520**
2. Family	--	--

** Correlation is significant at the 0.01 level (2 tailed)

Samoan Fluency			
	1	2	3
1. Speaks Samoan	-	.489**	.695**
2. Understands Samoan	-	-	.578**
3. Reads Samoan	-	-	-

** Correlation is significant at the 0.01 level (2 tailed)

English Fluency		
	1	2
1. Speaks English	-	.506
2. Reads English	-	-

** Correlation is significant at 0.01 level (2 tailed).

Reliability. The Cronbach's Alpha was calculated to determine the reliability of each scale. For example, the Samoan Culture had a Cronbach's alpha of .904, and the scale language use had the lowest Cronbach's alpha of .546. (See table 15).

Table 15			
<i>Cronbach's Alpha</i>			
	<u>Names of Scales</u>	<u>N</u>	<u>Cronbach's Alpha</u>
Scale 1	Samoan Culture	3	.904
Scale 2	Media	3	.789
Scale 3	Language Use	2	.549
Scale 4	Samoan Fluency	3	.691
Scale 5	English Fluency	2	.671

Results

Correlations between health behavior variables and assimilation scale variables

Table 16 shows the results of the correlation analysis. The significant findings are described below:

1. There was a positive correlation between Physical Exam, ($M = .72$, $SD = .451$) and Screening for Diabetes ($M = .61$, $SD = .489$).

$$r = .57, p < .01, n = 124$$

Those who had physical exams were more likely to be screened for diabetes. Thus, an increase in physical exams meant an increase in screening for diabetes.

2. There was a positive correlation between Physical Exam ($M = .72$, $SD = .451$) and Screening for Cancer ($M = .36$, $SD = .482$).

$$r = .36, p < .01, n = 122$$

As physical exams increased, screening for cancer increased as well.

3. There was a positive correlation between Screening for High Blood Pressure ($M = .72$, $SD = .451$) and Screening for Diabetes ($M = .61$, $SD = .489$).

$$r = .78, p < .01, n = 123$$

As more people were screened for High Blood Pressure, there was more screening for Diabetes. As High Blood Pressure screening increased, Diabetes screening increased.

4. There was a positive correlation between High Blood Pressure ($M = .65$, $SD = .478$) and Cancer Screening ($M = .36$, $SD = .482$).

$$r = .45, p < .01, n = 122$$

Increased High Blood Pressure screening meant an increase in Cancer screening as well.

5. There was a negative correlation between the High Blood Pressure ($M = .65$, $SD = .478$) and English Fluency in English.

$$r = -.19, p < .05, n = 123$$

More fluency in English meant less High Blood Pressure screening.

6. There was a positive correlation between Diabetes ($M = .61$, $SD = .489$) and Cancer screening ($M = .36$, $SD = .482$).

$$r = .47, p < .01, n = 122$$

More screening for diabetes meant more screening for cancer. As diabetes screening increased, screening for cancer also increased.

Table 16

<i>Correlations between Assimilation Scales and Health Behavior Variables</i>				
	1	2	3	4
1. High Blood Pressure				
2. Diabetes	0.777**			
3. Cancer	0.447**	0.465**		
4. Phys. Exam	0.560**	0.568**	0.363*	
5. Culture	-0.053	-0.118	-0.001	-.108
6. Media	0.063	-0.055	-0.068	0.008
7. Language Use	-0.039	-0.069	-0.107	0.071
8. Samoan Fluency	-0.069	-0.073	-0.115	0.034
9. English Fluency	-0.191*	-0.080	0.066	-0.125

N=126

$p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

** Correlation is significant at the 0.01 level (2 tailed).

* Correlation is significant at the 0.05 level (2 tailed).

Summary. As noted in the correlation table as well as the text there were mainly positive correlations and two negative correlations. The correlations were not robust. Regressions were conducted with all the variables. There were no significant relationships between the health behavior variables and the assimilation scale variables. Considering the regression results this

study supported the null hypothesis – that there is no relationship between assimilation and the health behaviors, health beliefs, and use of health care services by the Samoan Immigrants in the United States. The inverse relationship between English fluency and high blood pressure screening is difficult to understand. It is possible that fluent English speakers are concerned about the negative consequences of high blood pressure and potential side effects from antihypertensive drugs, and thus would rather not be screened. Additional research is needed to understand this finding.

Correlations Between Assimilation Scale Variables and Health Belief Variables

The results are shown in Table 17.

1. There was a positive correlation between Food Contribute Health (M=1.15, SD = .359) and Food Quantity Important (M=1.23, SD = .423). Increase in the belief that Food contribute Health increases the belief that Food Quantity is important. $r(124) = .35, p < .01$ (2 tailed).
2. There was a positive correlation between Food Contribute Health (M = 1.15, SD. = .357) and Food Modify Health (M = 1.10, SD =.295). Increase in the belief that Food Contribute Health increases the belief that Food modify Health. $r(124) = .32, p < .01$ (2 tailed)
3. There was a positive correlation between Food Quality (M = 1.17, SD = .381) and Food Quantity (M=1.23, SD = .423). Increase in the importance of Food Quality means an increase in the importance of food quantity. $r(124) = .35, p < .01$ (2 tailed).
4. There was a positive correlation between Food Quality importance (M = 1.17, SD = .381) and Food Modify Health (M = 1.10, SD = .295). An increase in the importance of food Quality means an increase in Food Modify Health. $r(124) = .35, p < .01$ (2 tailed).

5. There was a positive correlation between Food Quantity ($M = 1.23$, $SD = .423$) and Food Modify Health ($M = 1.10$, $SD = .295$). An increase in the importance of Food Quantity increases the belief that Food Modify Health. $r(124) = .27$, $p < .01$ (2 tailed).
6. There was a positive correlation between Food Quality and Language Use. An Increase in Language Use increases the importance of Food Quality. More use of the Samoan Language with spouse and family meant increased information about the importance of Food Quality. The r is $(126) = 0.219^*$, p value = .05.

	1	2	3	4
1. Good Contributes Health				
2. Food Quality Important	0.098			
3. Food Quantity Important	0.349**	0.345**		
4. Food Modify Health	0.317**	0.349**	0.272**	
5. Samoan Culture	-.078	.187	-.008	-.031
6. Samoan Media	-.078	-.086	-.067	0.006
7. Language Use	0.119	0.219*	0.140	0.060
8. Samoan Fluency	0.172	-.047	0.230	0.120
9. English Fluency	0.066	-.001	0.008	0.036

N=126

$p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

** Correlation is significant at the 0.01 level (2 – tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Summary. All the significant correlations were positive and moderate in strength, except for the inverse correlation between Samoan Fluency and Samoan culture. Regressions were conducted and the results were non-significant. My analysis supports the null hypothesis there is no relationship between assimilation and health behaviors, health beliefs, and use of health care services by the Samoan Immigrants in the United States.

Correlations Between Assimilation Scale Variables and Use of Health Care

Table 18 shows the correlations between five assimilation scales – Samoan Culture, Samoan Media, Samoan Language Use, Samoan Fluency, and English Fluency, and their Use of Health Care, variables – Emergency Visits (past year), Doctor Visits (past year), and Seek Help When Sick.

1. There was a small positive correlation between Samoan Media and Emergency visits (past year). Higher use of the Samoan Media increased the use of emergency visits. The more information they learn from the media, the more they use emergency visits as a means of caring for their health. So, more Samoan media exposure may mean more emergency visits because they do not understand the importance of primary care doctor. $r = .27$, p value = .05, (2 tailed).

2. There was a positive correlation between doctor visits (past year), and emergency visits (past year). Increased emergency visits meant increased doctor visits. After emergency visits patients had to follow through with their primary care doctors, or with specialized doctors.

 $r = .25$, p value = .01 level (2 tailed)

3. There was a small negative correlation between doctor visits and seek help when sick. The more they visit the doctor the less interest to seek help when sick. Perhaps they are not getting the expected help from the doctor. It could also be an insurance issue - no insurance and can't afford to pay out of pocket.

Table 18

Correlations between Assimilation Scale Variables and Use of Health Care

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
1. Samoan Culture							
2. Samoan Media	-0.112						
3. Language Use	-0.228	0.243*					
4. Samoan Fluency	-0.444*	0.283	0.189				
5. English Fluency	-0.049	0.064	0.054	0.545			
6. Emergency Visits,	-0.094	0.080	0.273*	0.105	0.130		
7. Doctor Visits, past	-0.059	0.011	-0.001	0.220	0.191	0.434**	
8. Seek Help When Sick	-0.220	-0.008	0.004	-0.102	-0.048	-0.095	-0.247**

N=12 p < .05*, p < .01**, p < .001 ***

r = -.25, p value = .01 (2 tailed)

Summary. Table 18 showed that the correlations between assimilation and use of health care supported the null hypothesis that there is no relationship between assimilation and the use of health care services of the Samoan Immigrants in the United States. Regression analyses were conducted but the results were not significant.

Chapter 6 Conclusion

Assimilation plays an important role in how immigrants adjust to their new environment and country. Unfortunately, the process of assimilating to a new environment may be problematic to some immigrant groups. This study examined the relationship between assimilation and the health behaviors, health beliefs, and use of health care services of the Samoan Immigrants in the United States. The findings supported the null hypothesis that no relationship between Assimilation and the Health Behaviors, Health Beliefs, and use of Health Care Services of the Samoan immigrants in the United States. More research about the health of the Samoan immigrants is needed.

Strengths

This was the first study of Samoan immigrants that used multiple measures of assimilation and a variety of measures of health care use, health beliefs, and health behaviors. The response rate was very high. The respondents could choose either a Samoan or English language version of the survey.

Weaknesses

The weaknesses of the study included the small sample size. A larger sample may have yielded different results. Most respondents lived in California, so the sample was not geographically diverse. In addition, the sample is not generalizable to all Samoan immigrants who reside in the United States. The questionnaire did not ask about why they had certain health beliefs, health utilization, and health behaviors. Finally, most respondents immigrated to the U.S. many years ago, and the impact of their migration and assimilation on health-related behavior may have diminished over time. Only 26% of respondents entered the U.S. in 2000 or later.

Future Studies

Future research might measure assimilation of the Samoans in different ways. It would be important to study people who remained in Samoa, migrated to Australia, or returned to Samoa after living in the United States. These comparison groups could provide additional data on predictors of health status, health beliefs, and health care use. In addition, a qualitative study using focus groups, in-depth interviews, or case studies would be useful to understand how assimilation might impact health and health behaviors.

Policy Implications

This thesis provided rich descriptions about a sample of Samoan Immigrants in the United States. One of the most important findings showed that the two-thirds of sample were obese using the Body Mass Index. This high prevalence of obesity may reflect their lack of access to health care, or their tendency to combine Samoan traditional treatment with modern medicine. Policy makers need to address the health issues of these immigrants in order to improve their health and well-being. While assimilation did not have a strong relationship to health status, beliefs, or utilization, it did matter for a few health behaviors, including the use of emergency rooms by Samoan Immigrants.

Appendix A: Map of the South Pacific



Appendix B: IRB Approval

APPENDIX B

IRB Approval

CONCURRENCE OF EXEMPTION

To: Miriama Bracken
Sociology

For: Dr. Scott Millis *H. Campbell-Vogt*
Chairperson, Behavioral Institutional Review Board (B3)

Date: September 27, 2012

RE: IRB #: 093512B3X

Protocol Title: The Health Beliefs and Health Behaviors of the Samoan Immigrants in the United States

Sponsor:

Protocol #: 1209011289

The above-referenced protocol has been reviewed and found to qualify for **Exemption** according to paragraph #2 of the Department of Health and Human Services Code of Federal Regulations [45 CFR 46.101(b)].

- Revised Protocol Summary Form (received in the IRB Office 9/27/12)
- Protocol (received in the IRB Office 9/6/12)
- The request for a waiver of the requirement for written documentation of informed consent has been granted according to 45 CFR 46.117(1)(2). Justification for this request has been provided by the PI in the Protocol Summary Form. The waiver satisfies the following criteria: (i) the research involves no more than minimal risk to participants, (ii) the research involves no procedures for which written consent is normally required outside of the research context, (iii) the consent process is appropriate, and (iv) an information sheet disclosing the required and appropriate additional elements of consent disclosure will be provided to participants.
- Research Information Sheet – English Version and Samoan Version (dated 9/27/12)
- Recruitment Script – English Version and Samoan Version
- Study Flyer – English Version and Samoan Version
- Data collection tools: Questionnaire – English Version and Samoan Version

This proposal has not been evaluated for scientific merit, except to weigh the risk to the human subjects in relation to the potential benefits.

-
- Exempt protocols do not require annual review by the IRB.
 - All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.
 - Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the IRB Administration Office Policy (<http://irb.wayne.edu/policies-human-research.php>).

NOTE: Forms should be downloaded from the IRB Administration Office website <http://irb.wayne.edu> at each use.

Appendix C. Letters of Invitation and Permission



708 E. Laurel Street, Compton, CA 90221
P.O. Box 5266, Compton, CA 90221
Phone - (310) 669-8363

Compton Samoan SDA

July 9, 2012

To the University Board of

This letter is an invitation for Miriama Brackens to conduct research at the Compton Samoan Seventh-day Adventist Church in California. We understand the research titled "Does the level of Acculturation impact the health beliefs and health behaviors of Samoan immigrants in the United States?" will be conducted through a written survey and that data will be collected for the sole purpose of this research project during a time period extending from July 2012 through December 2012.

Data collected will not be anonymous for the purpose of this study, but we do expect confidentiality for the protection of our members. Please contact Pastor Lafo if anything else is required to assist Miriama Brackens with this research project.

Eliu Lafo, Pastor

Compton Samoan SDA Church
(714) 697-0122 or lou_lafo@yahoo.com



SEVENTH-DAY
ADVENTIST
CHURCH

SO. SAN FRANCISCO SAMOAN



209 Country Club Drive
South San Francisco, CA 94080
Phone (650) 588-1698
E-mail: manuao@ssfsamoa.org
Pastor Manuao Maui'a
Cell (310) 508-4864

Miriama Bracken
1762 Iroquois St,
Detroit, MI. 48214
7/10/12

Dear Miriama,

It is my pleasure to welcome you to do your research at the two churches that I pastor, the San Francisco Seventh-day Adventist Samoan church and San Jose Seventh-day Adventist Samoan church in San Francisco, California. I do support your research on the health belief system and health behaviors of the Samoan immigrants in the United States. If I can be of further assistance do not hesitate to let me know.



Manuao Maui'a
Pastor

YUCAIPA SAMOAN SEVENTH  DAY ADVENTIST CHURCH

July 3, 2012

Miriama Bracken
1762 Iroquois Street
Detroit, MI 48214

Questionnaires/Surveys on the Health of the Samoan Communities in America

It is my pleasure to assist you with your questionnaire and whatever you need to do with our New Hope Samoan Seventh-day Adventist Church members for your Master degree thesis. I do pray that your study of our Samoan people and their health condition with their access to Western methods of treatment when they moved to live in America may contribute to their understanding of what is best for their health.

We hope to see you soon in the perennially cool California weather to meet our Samoan communities in the West Coast. You are welcome to come with your husband, Charles to stay with us here at Redlands while you are to be doing your study with our churches.

Yours sincerely,



Aleni Fepuleai
Pastor of Samoan Church District
Southeastern California Conference

VISTA SAMOAN SEVENTH  DAY ADVENTIST CHURCH

July 3, 2012

Miriama Bracken
1762 Iroquois Street
Detroit, MI 48214

Questionnaires/Surveys on the Health of the Samoan Communities in America

It is my pleasure to assist you with your questionnaire and whatever you need to do with our New Hope Samoan Seventh-day Adventist Church members for your Master degree thesis. I do pray that your study of our Samoan people and their health condition with their access to Western methods of treatment when they moved to live in America may contribute to their understanding of what is best for their health.

We hope to see you soon in the perennially cool California weather to meet our Samoan communities in the West Coast. You are welcome to come with your husband, Charles to stay with us here at Redlands while you are to be doing your study with our churches.

Yours sincerely,



Aleni Fepuleai
Pastor of Samoan Church District
Southeastern California Conference

SANTA ANA SAMOAN SEVENTH  DAY ADVENTIST CHURCH

July 3, 2012

Miriama Bracken
1762 Iroquois Street
Detroit, MI 48214

Questionnaires/Surveys on the Health of the Samoan Communities in America

It is my pleasure to assist you with your questionnaire and whatever you need to do with our New Hope Samoan Seventh-day Adventist Church members for your Master degree thesis. I do pray that your study of our Samoan people and their health condition with their access to Western methods of treatment when they moved to live in America may contribute to their understanding of what is best for their health.

We hope to see you soon in the perennially cool California weather to meet our Samoan communities in the West Coast. You are welcome to come with your husband, Charles to stay with us here at Redlands while you are to be doing your study with our churches.

Yours sincerely,



Aleni Fepuleai
Pastor of Samoan Church District
Southeastern California Conference

NEW HOPE SAMOAN SEVENTH  DAY ADVENTIST CHURCH

July 3, 2012

Miriama Bracken
1762 Iroquois Street
Detroit, MI 48214

Questionnaires/Surveys on the Health of the Samoan Communities in America

It is my pleasure to assist you with your questionnaire and whatever you need to do with our New Hope Samoan Seventh-day Adventist Church members for your Master degree thesis. I do pray that your study of our Samoan people and their health condition with their access to Western methods of treatment when they moved to live in America may contribute to their understanding of what is best for their health.

We hope to see you soon in the perennially cool California weather to meet our Samoan communities in the West Coast. You are welcome to come with your husband, Charles to stay with us here at Redlands while you are to be doing your study with our churches.

Yours sincerely,



Aleni Fepuleai
Pastor of Samoan Church District
Southeastern California Conference

Appendix D: Information Sheet in English

Research Information Sheet

Title of Study: *Health Beliefs and Health Behaviors of Samoan Immigrants to the United States*

Principal Investigator (PI): Miriama (Posala) Bracken
Sociology
(313)-331-1638

Purpose:

You are being asked to be in a research study of Health Beliefs and Health Behaviors of Samoan Immigrants in the United States because you are 18 years of age or older and a Samoan immigrant. This study is being conducted at Wayne State University.

Study Procedures:

If you take part in the study, you will be asked to complete a 91 question questionnaire about the following: language (Samoan/English) preference and usage, maintaining extended family connection and importance of history of country; diet and exercise routine; health condition; perceived stress; social support; and demographics such as age, gender, education, et cetera. This questionnaire will take approximately 25-30 minutes to complete and no additional participation after completion of the questionnaire is needed.

Benefits

As a participant in this research study, there will be no direct benefit for you; however, information from this study may benefit other people now or in the future.

Risks

There are no known risks at this time to participation in this study.

Costs

- There will be no costs to you for participation in this research study.

Compensation

- You will not be paid for taking part in this study.

Confidentiality:

- All information collected about you during the course of this study will be kept without any identifiers.

Voluntary Participation /Withdrawal:

Taking part in this study is voluntary. You are free to not answer any questions or withdraw at any time.

Questions:

If you have any questions about this study now or in the future, you may contact Miriama Bracken or one of her research team members at the following phone number 313-331-1638. If you have questions or concerns about your rights as a research participant, the Chair of the Human Investigation Committee can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

Participation:

By completing the questionnaire you are agreeing to participate in this study.

APPROVED

SEP 27 2012

**WAYNE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD**

Appendix E: Information Sheet in English

Talitonuga tau soifua maloloina ma masaniga poo amioga e tusa ma le soifua maloloina o tagata Samoa o loo aumau i Amerika.

Faamatalaga e talafeagai ma le Su'esu'ega

Autu o le Su'esu'ega:

Talitonuga tau i le soifua maloloina ma masaniga e tusa ma le soifua maloloina o tagata Samoa o loo aumau i Amerika.

Ta'ita'i o le su'esu'ega (PI): Miriama (Posala) Bracken

Sociology

(313) – 331-1638

Faamoemoega:

Ua valaauina oe e te auai i le su'esu'ega i talitonuga tau le soifua maloloina ma masaniga e faatatau i le soifua maloloina o tagata Samoa o loo aumau i Amerika ona e 18 pe sili atu tausaga o lou soifuaga ma na e soifua mai i Samoa poo Amerika Samoa. O lenei su'esu'ega o loo faafoeina e le lunivesite o Wayne State.

Taualumaga o le Su'esu'ega:

Afai e te 'au ai i lenei su'esu'ega o le a e tali mai i fesili (91) e pei ona tusia i lalo: faatatau i le gagana (Samoa/Faaperetania) e te faaogaina i taimi uma ma aiga lautele; mea'ai tausami; polokalame faamalosi tino ma le tulaga o lou soifua maloloina; mafatiaga e lagonaina ma le felagolagoma'i lautele ma fesili faaopoopo e faatatau ia te Oe. E tusa ma le 25-30 minute e te faaogaina e tali mai ai i le su'esu'ega. O lou auai i lenei su'esu'ega e faamutaina pe a ma'ea ona e tali mai i fesili uma.

Aoga:

E leai se aoga tuusa'o mo Oe i lou auai i lenei su'esu'ega; peita'i o manatu o le a maua mai i lenei su'esu'ega e faamoemoe o le a aoga lea mo tagata lautele i le taimi nei poo le lumana'i fo'i.

Faafitauli

I le taimi nei e leai se faafitauli e aafia ai lou au ai i lenei su'esu'ega.

Tau

E leai se tupe e te totogiina e te 'auai i le su'esu'ega.

Tau

E leai se totogi e te maua i lou au ai i le su'esu'ega

Submission/Revision Date: 09/27/12 Page 1 of 2

Protocol Version #: 1

Talitonuga tau soifua maloloina ma masaniga poo amioga e tusa ma le soifua maloloina o tagata Samoa o loo aumau I Amerika

Faaliloliloga:

O ni tali poo ni manatu e maua mai i lenei su'esu'ega o le a faamauina e aunoa ma ni faailoga.

Loto malie e au ai/Tuumuli:

O lou auai i lenei su'esu'ega e afua mai I lou loto malie. Ete maua le sa'olotoga e te le tali mai ai i ni fesili ma e mafai ona e tuumuli i soo se taimi.

Fesili:

Afai e iai ni fesili e tusa ma lenei su'esu'ega i le taimi nei poo le lumana'i, faafesoota'i Miriama (Posala) Bracken poo se tasi o loo aafia i lana vaega su'esu'e i le numera – 313-331-1638. Afai e i ai ni fesili poo ni popolega e tusa ma lou auai i lenei su'esu'ega, fesoota'i le ta'ita'i o le komiti tau su'esue'ga e faatatau i "tagata" (Chair of the Human investigation Committee) ile telefoni (313) 577.1628. Afai e te le maua se fesootaiiga ma le 'au su'esu'e, pe e te fia talanoa i se tasi e le aafia i le 'au su'esu'e, faafesoota'i (313)577-1628 mo ni fesili, popolega, poo ni faitioga.

Auai:

O lou tali mai i fesili o lenei su'esu'ega, ua e ioe ma taliaina ai lou au ai i le su'esu'ega.

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Page 2 of 2

SEP 27 2012

Appendix F: Recruitment Script in English

Recruitment Script

My name is Miriama (Posala) Bracken, a graduate student at Wayne State University in Detroit, Michigan. I am doing a Master's thesis on **the health beliefs and health behaviors of Samoan immigrants in the United States**. To achieve this goal I need your help by volunteering to answer a questionnaire that will take about 25 minutes to complete. Your responses will be anonymous and confidential. Your name will not be used in any way. You are **eligible to participate if you are 18 years old or older, and was born in Samoa or American Samoa**. You can utilize the Samoan or English version of the questionnaire according to your preference. Thank you for your support. (Dates, Locations, and Times of meetings will be decided and included in the script after IRB approval).

(Appendix 2)

APPROVED

SEP 27 2012

WAYNE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

LOOKING FOR VOLUNTEERS
TO PARTICIPATE IN A
STUDY ABOUT THE
HEALTH BELIEFS and HEALTH BEHAVIORS
OF SAMOAN IMMIGRANTS IN THE UNITED STATES.

You can participate if you are 18 or older years of age, and born in Samoa or
American Samoa.

This study is important to the Samoan community and your help is needed.
If you are willing to complete a Questionnaire, please call Miriama Bracken
at (313) 331-1638 or check the church bulletins in your area for more information

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SEP 27 2012

WAYNE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Appendix G: Recruitment Script in Samoan

Faasalalauga

Ma le ava e tatau ai ua ou talosagaina ai la outou fesoasoan. I le taimi nei o loo ave ni a'u mataupu i le luniversite o Wayne State I Detroit, Michigan. O le autu o la'u su'esu'ega (master's thesis) o **talitonuga tausoufua maloloina ma amioga tau le soifua maloloina o tagata Samoa o loo aumau ma alaala I Amerika.** E mafai ona e fesoasoani i lou finagalo malie e tali mai i fesili o lenei su'esu'ega (questionnaire). O le su'esu'ega o loo tusia I le faasamoa ma le faaperetania mo lau filifiliga I le gagana e talafeagai ai ma Oe. E tusa ma le 25-30 minute le taimi e te faaaluina e tali ai fesili o le su'esu'ega. O tali o le a e tusia I lenei su'esu'ega o le a teu faalilolilo ma e le faaaogaina lou suafa i soo se mea. E mafai ona e 'au ai I le su'esu'ega pe afai e **18 pe sili atu tausaga o lou soifuaga, ma na e soifua mai i Samoa poo Amerika Samoa.** (Aso, nofoaga, ma taimi o fonotaga o le a filifilia pe a maua mai le faaiuga a le IRB). Faafetai tele mo le tou lagolagoina o la'u taumafaiga. O Miriama (Posala) Bracken.

(Appendix 2)

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MANAOMIA NISI E OFO MAI
E 'AUAI ILE SU'ESU'EGA I TALITONUGA
MA MASANIGA TAU ILE SOIFUA MALOLOINA O
TAGATA SAMOA OLOO AUMAU I AMERIKA.

E mafai ona e 'auai i leni su'esu'ega pe afai e 18 pe sili atu tausaga o
lou soifuaga ma na e soifua mai i Samoa poo Amerika Samoa.

O se su'esu'ega taua leni mo tagata Samoa ma e mana'omia lau fesoasoani.

Afai e te fia 'auai i le su'esu'ega faamolemole fesoota'i Miriama Bracken -313-3311638

pe taga'i i puletini a lotu i lou pitonuu mo ni faamatalaga faaopoopo.

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Appendix H: Questionnaire in English

Questionnaire - English

Instructions: Respondents must be 18 years of age or older and born in Samoa or American Samoa.

Section A

1. Place an **X** in the box that best describes you.

		All of the time	Some of the time	None of the time
a.	I speak English...			
b.	I understand English...			
c.	I read English...			
d.	I speak Samoan...			
e.	I understand Samoan...			
f.	I read Samoan...			

2. Place an **X** in the appropriate box.

- a. Indicate the language you use most frequently –

	Samoan	English	Both	Not Applicable
With your children.				
With your spouse or partner.				
With other family members.				
With your neighbors.				
With your friends.				

		Samoan	English	Both	Not Applicable
b.	In what language are the radio stations you listen to most frequently?				
c.	In what language are the T.V. programs you watch most frequently?				
d.	In what language are the books and magazines you read most frequently?				

Section B

In this section you are required to identify how you feel by placing an **X** in the appropriate box.

	How important is it to . . .	Not Important	Somewhat Important	Important	Very Important	Extremely important
1.	know something about the history of Samoa?					
2.	maintain the Samoan customs and way of life?					
3.	maintain a relationship with extended family – aunts, uncles, cousins, and grandparents?					
4.	acquire the American culture and way of life?					

Section C

Food and Diet

- How many meals do you have on a typical day? () one; () two; () three; () 4 or more; () don't know
- How many days a week do you have the following:

		0	1	2	3	4	5	6	7
1.	Traditional Samoan foods (palusami, taro, pisupo, fa'i)?								
2.	Fast foods – hamburgers, pizzas, fries, tacos?								
3.	“low fat” meals – no oils, butter, coconut cream, mayonnaise, or salad dressing?								
4.	“vegetarian” meals – no meat, fish, poultry?								
5.	“vegan” meals -- no dairy, meat, fish, poultry, sugar?								
6.	“low carb” meals – no bread, rice, grains?								
7.	“high protein” meals – mainly fish, meat, poultry, eggs?								

- Given a choice, which diet do you prefer? (check one)

- () traditional Samoan diet () fast food diet () vegetarian diet
 () vegan diet () low fat diet () high protein
 () Other

Specify: _____

4. Please respond “Yes” or “No” to the following questions.

		Yes	No
a.	In your opinion, do the foods you eat contribute to your health?		
b.	Do you pay attention to the quality of the foods you eat daily?		
c.	Do you pay attention to the quantity of your daily food consumption?		
d.	Are you willing to modify your diet for improved health?		

Section D.

This section of the questionnaire is about your health.

1. Would you say your health is –

() excellent; () very good; () good; () fair; () poor

2. Would you say you are physically –

() more active
 () less active
 () about as active as other persons your age.

3. Please respond “Yes” or “No” to the following questions.

		Yes	No
a.	Do you follow a regular routine of physical exercise?		
b.	Have you done any exercise, sports, or physical hobbies in the past two weeks?		
c.	Do you think annual health care check-ups are important?		
d.	Have you had an annual physical exam in the past year?		
e.	Have you had a health screening for the following conditions in the past year?		
	1. High blood pressure	—	—
	2. Diabetes	—	—
	3. Cancer	—	—

4. How often do you do vigorous or light to moderate physical activity of at least 10 minutes duration?
 (Vigorous activity means activities that result in heavy sweating or a large increase in your heart rate or breathing. Light to moderate activity means activities that result in light sweating or a slight to moderate increase in your heart rate or breathing.)

		Days per week							
		0	1	2	3	4	5	6	7
a.	Vigorous physical activity for at least 10 minutes								
b.	Light to moderate physical activity -- at least 10 minutes								

5. The next questions ask about difficulties you have doing certain activities because of health problems. For each activity, indicate if the activity is – a) not at all difficult; b) only a little difficult; c) only somewhat difficult; d) very difficult; e) can't do at all.

	Not at all difficult	A little difficult	Somewhat difficult	Very difficult	Can't do at all
Walk up 10 steps without resting.					
Stand or be on your feet for about 2 hours.					
Sit for about 2 hours.					
Stoop, bend, or kneel.					
Reach up over your head.					
Use your fingers to grasp or handle small objects.					
Lift or carry something as heavy as 10 pounds, such as a full bag of groceries.					

6. During the past 12 months, how many times have you been to --

		0	1	2	3	4	5	More than 5 times
a.	the hospital emergency room about your health?							
b.	the doctor's office, clinic, or elsewhere about your health (do not include overnight hospital stays, home visits, dental visits, or telephone calls)?							

7. When you are sick enough to need a doctor, where would you go? (check one)

- The health clinic at my community; Hospital or emergency room;
 Private doctor; Traditional Samoan healer (fofo/taulasea),
 Don't know where to go; Other/Specify _____

8. How much do you weigh? _____ pounds. Height: _____ ft: _____ inches.

9. Do you weigh more or less now than when you first arrived in the United States?

- more; less; same

10. Has your weight changed in the past year?

- Yes, No

If "yes" please check one.

- gained 5 pounds
 gained 10 pounds
 gained more than 10 pounds
 lost 5 pounds
 lost 10 pounds
 lost more than 10 pounds

11. Are you happy with your weight?

Yes No

If no, do you want to gain weight? Yes No

If yes, how many pounds? _____

If no, do you want to lose weight? Yes No

If yes, how many pounds? _____

Section E

(a) Perceived Stress

The questions in this scale ask you about your feelings and thoughts during the last month.

In each case, please indicate with a check how often you felt or thought a certain way.

1. In the last month, how often have you felt that you were unable to control the important things in your life?

___0=never; ___1=almost never; ___2=sometimes; ___3=fairly often; ___4=very often

2. In the last month, how often have you felt confident about your ability to handle your personal problems?

___0=never; ___1=almost never; ___2=sometimes; ___3=fairly often; ___4=very often

3. In the last month, how often have you felt that things were going your way?

___0=never; ___1=almost never; ___2=sometimes; ___3=fairly often; ___4=very often

4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

___0=never; ___1=almost never; ___2=sometimes; ___3=fairly often; ___4=very often

(b) Social Support

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Circle one number on each line.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone you can count on to listen to you when you need to talk.	1	2	3	4	5
Someone to confide in or talk to about yourself or your problems.	1	2	3	4	5
Someone who understands your problems.	1	2	3	4	5
Someone to help you if you were confined to bed.	1	2	3	4	5
Someone who shows you love and affection.	1	2	3	4	5

Section F.

Finally, tell us a little about yourself. Place an **X** where appropriate.

1. Gender: () male; () female
2. Country of birth: () Samoa; () American Samoa
3. Year moved to the United States:
4. Age: () since last birthday; () at migration
5. Reasons for moving to the United States: (check all that apply).

() to find work
() to be with family
() education
() other/specify _____

6. Martial status:

- () married
- () widowed
- () separated/divorced
- () single
- () living together
- () other/specify _____

7. Highest level of education completed and where completed:

		Samoa	A/Samoa	U.S.	Other
a.	Some elementary				
b.	8 th grade				
c.	Some high school				
d.	High school degree, or GED				
e.	Vocational college				
f.	Some college				
g.	Associate Degree				
h.	Bachelor's degree				
i.	Graduate degree Specify _____				

8. Do you work outside of the home? () Yes; () No

If yes, what do you do? _____

9. Which interval represents your annual total household income - \$US?

- 0 – 19,999
- 20,000 – 39,999
- 40,000 – 59,999
- 60,000 – 79,999
- 80,000 – 99,999
- 100,000 – 119,999
- 120,000+

10. (a) Do you have health insurance? Yes No

(b) If yes, what type _____

11. (a) Do you send money to relatives back home -- Samoa/American Samoa?

- Yes; No

(b) If yes, how often do you send money?

- every week
- every month
- once a year
- twice a year
- when asked
- other

Specify: _____

12. Are you a citizen of the –

- a. United States; b. Samoa; c. American Samoa;

d. Other. Specify _____

Appendix I: Questionnaire in Samoan

Questionnaire - Samoan

Su'esu'ega

Faatonuga: Faamolemole tali mai i nei fesili pe afai e 18 pe sili atu tausaga o lou soifua ma na e

Soifua mai i Samoa poo Amerika Samoa.

Vaega A

1. Tusia se ekise (X) i le vaega e talafeagai ma Oe.

		Taimi uma	Nisi Taimi	Leai se taimi
a.	Oute tautala faaperetania			
e.	Oute malamalama i le faaperetania			
i	Oute faitau faaperetania			
o.	Oute tautala ile gagana Samoa			
u	Oute malamamama i le gagana Samoa			
f	Oute faitau I le gagana Samoa			

2. Tusia se ekise (X) i le vaega e talafeagai ai.

	Gagana ma -	Samoa	Peretania	Sam/Pere	E le talafeagai
a.	Ou alo				
e.	Lou aiga/paaga				
i.	Nisi o lou aiga				
o.	Ou tuaoi				
u.	Au uo				

	O le gagana o:	Samoa	Peretania	Sam/Peret.	E le talafeagai
a.	Faasalalauga leitio faafogaina				
e.	Polokalame .T.V. maimoaina				
i.	Tusi ma nuispepa faitauina				

Vaega E

Faailoa mai lou manatu i se ekise (X) i le vaega e talafeagai ai.

	E taua ia te Oe..	E le taua	Laitiiti	Taua	Taua tele	Taua Silisili
a.	Ona iloa talaaga o Samoa					
e.	Tausi aganuu Samoa/faa-Samoa					
i.	Fesoota'i ma aiga lautele					
o.	Aganuu/olaga faa-Amerika					

+

Vaega I

Mea tausami

Faailoa mai I se ekise (X) I le avanoa e talafeagai

1. E faafia ona e tausami ile aso?

() tasi; () lua; () tolu; () ou te le iloa

2. E faafia i le vaiaso ona e tausami

	Taumafataga:	0	1	2	3	4	5	6	7
1.	Samoa – talo, pisupo, palusami								
2.	burgers, pisa, tacos, fries								
3.	Leai se ga'o, pata, peepee, mayonaise								
4.	Leai se povi, i'a, poo se moa								
5.	Auinoa ma se susu povi, povi, moa, i'a								
6.	Leai se falaoa, araisa, fatu o pi								
7.	Tele I povi, i'a, moa, fuamoa, mamoe								

3. Afai e te maua se avanoa e filifili ai, o fea o nei mea taumafa e te filifilia?

() hamburgers, pisa, fries, (fast food)

Polokalame faamalositi tino		
Faamalositi tino lua vaiaso talu ai		
E taua le vaai o le foma'i i tausaga uma		
Tausaga ua mavaea: Vaai foma'i soifua maloloina (exam)		
Vaai foma'i toto maualuga		
Vaai le foma'i suka		
Vaai foma'i I le kanesa		

() mea'ai Samoa; () mea'ai fualaa; () mea'ai faaitiitia le ga'o (low fat)
 () leai se susu, sisi, fuamoa, suka, manu, i'a, moa (vegan)
 () aano manu, I'a, fuamoa, moa (high Protein)

() nisi e le o ta'ua. Ta'u mai _____

4. Faamolemole tali mai ile "ioe" poo le "leai" I fesili nei e ttusa ma lou manatu.

	O mea'ai e:	Ioe	Leai
a.	E aafia ai lou soifua maloloina		
e.	Taua ona lelei		
i	E te manatu I le tele/laitiiti		
o.	Suia mo le soifua maloloina		

Vaega O

Soifua Maloloina

- I lou manatu o lou soifua maloloina e le:
 - () Lelei silisili; () lelei tele; () lelei; () feololo; () e le lelei.
- O le a le malosi o le gaioi o lou tino?
 - () malosi tele
 - () le malosi
 - () malosi e pei o isi o lau tupulaga
- Faamolemole tali mai ile "ioe" poo le "leai" .

4. E faafia i le vaiaso ona e faia se faamalosi tino mamafa, poo se faamalosi tino mama pe feololo mo se 10 minute?

(faamalosi tino mamafa e tta vave ai lou fatu/faatopetope ail au manava ma e afu tele ai). Faamalosi tino mama i le feololo - afu la'itiiti ma tata laitiiti ai le fatu ma le manava.)

	Faamalosi tino:	0	1	2	3	4	5	6	7
a.	mamafa								
e.	Mama pe feololo								

5. O fesili e sosoo ai e faatatau i le malosi o lou tino e tusa ma ni aafiaga o lou soifua maloloina.

Faailoa mai pe: (a) e le faigata; (e) faigata laitiiti;

(i) faigata feololo; (o) faigata tele; (u) e le mafaia.

		E le faigata	Faigata litiiti	Faigata feololo	Faigata tele	E le faigata
1.	Savali sitepu e 10 aunoa ma se malolo					
2.	Tu mo se umi e lua (2) itula					
3.	Nofo mo se lua (2) itula					
4.	Lolo'u, punou pe tootuli					
5.	Aapa i luga a'e o lou ao (ulu)					
6.	Ao mai mea laiti i ou tamatama'i lima (fingers)					
7.	Sii ma tauave se 10 pauna e pei o se taga pepa e tumu I se faatauga mea'ai (grocery bag).					

6. I le 12 masina ua mavae na faafia ona e

		0	1	2	3	4	5	Sili atu
a.	Alu faavavevave i le falema'i (emergency room)							
e.	Vaaia le foma'i, e tusa ma lou soifua malolina (e le aafia ai taimi na e nofo ai i le falema'i Mo se po e tasi, sau ai le foma'i i le fale, asiasi ai i le foma'i fai'inifo poo taimi sa telefoni ai i le foma'i).							

7. O fea e te alu I ai pe a e gasegase?

() falema'i i lou pitonuu; () falema'i (emergency room); () falema'i tele;

() taulasea; () oute le iloa; () nisi; Ta'u mai _____

8. O le a lou mamafa? _____ pauna. Maualuga: _____ (futu); _____ (inisi)

9. O lou mamafa i le taimi nei, e sili atu, tutusa, pe laitiiti ai lo lou mamafa i le taimi na e taunuu mai ai i Amerika?

() sili atu; () tutusa; () laitiiti

10. (a) Sa iai se suiga i lou mamafa i le tasuasga ua mavae?

() Ioe; () leai

(e) Afai o le "ioe" faailoa mai se vaega e asi e talafeagai ai.

() faaopopo le 5 pauna

() faaopopo le 10 pauna

() faaopopo pauna e sili atu.

lusi le 5 pauna

lusi le 10 pauna

Lusi pauna e sili atu

11. (a). O e fiafia i lou mamafa? Ioe; leai

(e).i. Afai e “leai” e te mana’o e faaopoopo ou pauna? Ioe;; Leai

ii. Afai e “ioe” e fia pauna? _____

iii. Afai e “leai” e fia faaititia ni ou pauna? Ioe; Leai

iv. Afai o le “Ioe” e fia pauna? _____.

Vaega U

(a) Mafatiaga Lagona.

O fesili e totoo ai e faatusa I ou manatu ma lagona i le masina ua mavae.

Ta’u mai pe faafia ona e manatu/lagona e tussah ma fesili o loo tusia i lalo.

Aunoa = leai se lagona/manatu; seasea = e le lagona tele; nisi taimi -naitaimi;

Soo feololo = e lagona soo ae feololo; soo tele = e lagona i le tele o taimi).

1, I le masian ua mavae, e faafia ona e lagona ua le mafai ona e pulea vaega taua o lou

olaga? aunoa; seasea; nisi taimi; soo feololo; soo tele

2, I le masina ua mavae, e faafia ona e lagona lou agavaa atoatoa e pulea ai ou faafitauli?

aunoa; seasea; nisi taimi; soo feololo; soo tele

3. I le masina ua mavae, e faafia ona e lagona o loo solosolo lelei mea uma e tusa ma lou manatu?

() aunoa; () seasea; () nisi taimi; () soo feololo; () soo tele

4. I le masina ua mavae, e faafia ona e lagona ua tele faafitauli ma ua le mafai ona e tau'aveina?

() aunoa; () seasea; () nisi taimi; () soo feololo; () soo tele

e. Felagolagoma'i Lautele

O nisi taimi tatou te mana'omia ai se mafutaga, fesoasoani poo se felagolagoma'i lautele isi tagata. E faafia ona e maua se fesoasoani pe a e manaomia? Tusia se li'o i le numera e tasi e talafeagai ma lou manatu.

	Leai se taimi	Taimi laitiiti	Nisi taimi	Tele o taimi	Taimi Uma
Se tasi e faalogologo pe a e fia talanoa.	1	2	3	4	5
Se tasi e ta'u i ai ou faafitauli ma mea lilo o lou olga.	1	2	3	4	5
Se tasi e malamalama i ou mafatiaga	1	2	3	4	5
Se tasi e fesoasoani pe a le mafai ona e tuua le moega	1	2	3	4	5
Se tasi e faailoa lona alofa faamaoni ia te Oe.	1	2	3	4	5

Vaega F

Tali mai i nei fesili e faatatau ia te Oe. Faailoga mai se ekise (X) I tali e talafeagai ai.

1. Ituaiga: () alii; () tama'ita'i

2. Nuu na fanau ai: () Samoa; () Amerika samoa

3. Tausaga (lou matua): () I lou aso fanau talu ai

() I le taimi na e siitia mai ai i Amerika

4. O le a le tausaga na e siitia mai ai i Amerika? _____

5. Mafuaaga na e siitia mai ai i Amerika?

() su'e galuega

() faatasi ma aiga

() a'oa'oga

() nisi

Ta'u mai _____

6. Tulaga faaiipoipo

() faaiipoipo

() maliu le toalua/ava

() tete'a

() le'I faaiipoipo (single)

() nonofo fapouliuli

() nisi

Ta'u mai _____

7. Aoaoga ma nofoaga ma nofoaga na ausia ai.

		Samoa	A/Samoa	U.S.	Other
a	Tulaga lua (elementary)				
e	Tausaga valu (8 th grade)				
i	Tausaga 9-10 (high school)				
o	Tusi pasi tausaga 12 (high school)				
u	A'oa'oga faapitoa (vocational college)				
f	Nai tausaga I se kolisi				
g	Faailoga (tikeri) Associate				
l	Faailoga (tikeri) BA/BS				
m	Faailoga (tikeri) maualuga atu (MA/Ph.D.)				
	Ta'u mai: _____				

8. E te galue i fafo o lou fale? () Ioe; () Leai

9. Afai o lau tali o le Ioe, ole a lau galuega? _____

10. E fia le tupe maua a lou aiga i le tausaga e tasi? – Tala Amerika?

() 0 – 19,999; () 20,000 – 39,999;

() 40,000 – 59,999; () 60,000 – 79,999

() 80,000 – 99,999; () 100,000 – 119,999; () 120,000+

11. (a) E iai su inisua (insurance) mo lou soifua maloloina? () Ioe; () Leai

(e) Afai o le “Ioe” o le a le ituaiga o le inisiua? _____

12. (a) O e lafoina tupe i aiga i Samoa poo Amerika Samoa? () Ioe; () Leai

(e) Afai o lau tali o le Ioe, e faafia ona e lafoina tupe?

() vaiaso ta'itasi

masina ta'itasi

faatasi i le tausaga

faalua i le tausaga

pe a iai se mana'oga

Nisi taimi

Ta'u mai _____

13. O le a lou tagata nuu (sitiseni)?

Amerika; Samoa; Amerika Samoa

Se isi nuu.

Ta'u mai _____

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Abstract**THE RELATIONSHIP OF ASSIMILATION ON THE HEALTH BEHAVIORS,
HEALTH BELIEFS, AND USE OF HEALTH CARE SERVICES BY THE SAMOAN
IMMIGRANTS IN THE UNITED STATES.****By MILIAMA BRACKEN August 2017****Advisor:** Dr. Janet Ruth Hankin**Major:** Sociology**Degree:** Master of Arts

This study accepts the null hypothesis that there is no relationship between assimilation and the health behaviors, health beliefs, and use of health care services of the Samoan immigrants in the United States. The target population included Samoans who immigrated from Samoa or American Samoa and were 18 or more years of age. A total of 150 questionnaires were distributed and 126 respondents were included in the study. The respondents were asked how often they visited the doctor during the year. Would they seek the help of a medical doctor if they were sick, or a Samoan healer? They were also asked about their eating habits, kinds of food they consumed, and did they think diet is important to their health. Did they have an exercise routine and did they think exercise help improve one's health? In addition, the respondents were asked about their use of health care services that are available to them. Assimilation was measured by five scales: 1) interest in culture/history of Samoa, 2) language of media listened, watched, and read, 3) language use with children, spouse, family, and friends, 4) fluency in the Samoan language, and 5) fluency in the English language. The correlations between the assimilation scales and health behavior

variables, health beliefs variables and use of health care services were not robust. Regression analysis were conducted but the results were not significant.

Autobiographical Statement

My name is Miliama Bracken. I was born at Tufuiopa, Samoa on July 21, 1947. I entered elementary school at the age of five, where I was introduced to the English language. Most of my early childhood life was spent at my maternal grandparent's household. There I learned about the Samoan chiefly language and culture. My grandparents were devout Methodist, and my grandfather and great grandfather were lay preachers for the church. Family worships was a daily routine, at the end of my high school years I had the privilege of attending Fulton College, a Seventh-day Adventist College in Tailevu, Fiji. I was there from 1965 – 1967 where I completed two courses – Elementary teaching and Commercial. The student population was made up of young people from the different islands in the South Pacific who shared similar cultures but very different languages.

After graduation, I received a call to serve at the Seventh-day Adventist Mission school in Samoa. I worked at the school for nine years – 1968 – 1977. During the nine years, I taught elementary level classes, high school bookkeeping and typing. A few times I was sent to American Samoa (U.S. Territory) and to Savaii the biggest island of Samoa to relieve teachers who went on leave.

In June of 1977, I got married to my husband Charles Bracken. That same year I migrated to the United States where I worked at Friends School in Detroit, as a substitute teacher and as a secretary to the assistant head master for two years. I also worked at a dental office at the Fisher Building as a clerk for a few months. Recently, I had the privilege of working with the Samoan women in Australia and California primarily sharing information about health – diet and exercise. After raising two children I decided to attend Wayne State University. It is my desire to share what I have learned with the Samoan Community and others.