EFFECTS OF CULTURAL WORLDVIEW BELIEF AND THE ACHIEVEMENT OF CULTURAL STANDARDS OF VALUE ON SELF-ESTEEM, ANXIETY, AND ADAPTIVE BEHAVIOR OF NATIVE HAWAIIAN STUDENTS

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI'I IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION MAY 2005

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Dedication

This is dedicated to

Jose, Hi'ilei, and Hōkū
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Abstract

The purpose of this study was to examine the psychological framework called the Terror Management Theory (TMT) applied to Native Hawaiian students. TMT is a framework that provides an explanation of relationships between cultural factors, self-esteem, and anxiety (Solomon, Greenberg, & Pyszczynski, 1991). The hypotheses of this study was that Native Hawaiian students who identify or seek to identify with "being Hawaiian" and are assisted in achieving its standards of value (high cultural values) will (1) have higher levels of self esteem if they see themselves achieving cultural standards following treatment (2) have lower levels of anxiety following treatment (3) increase "adaptive" behaviors such as achieving academic standards, positive social interactions and making positive contributions to their families and communities.

The design of this study was both quantitative and qualitative. The design of this study was a quasi-experimental nonequivalent comparison-group design, consisting of two intervention groups and two comparison groups of 24 Native Hawaiian students from ages 9-16 years. Intervention participants engaged in Native Hawaiian cultural interventions for 10 hours over a six-week period, while comparison participants engaged in academic tutorial sessions. Measures for
self-esteem, anxiety, and adaptive behavior were taken before and after intervention. Qualitative and anecdotal data were also collected and analyzed. Intervention group results indicated that Hawaiian identity increased, anxiety decreased and positive behavior increased. Findings were mixed for self-esteem. Qualitative measures indicated increase in self-esteem, participants felt “good” about themselves and were “proud,” but quantitative indicated a decrease. Comparison group indicated a decrease in Hawaiian identity, anxiety and self-esteem. Overall, there were positive indicators to conclude that the TMT framework is applicable to the Native Hawaiian population.
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Chapter 1. Introduction

Statement of Problem

Since the time of Western colonization, Native Hawaiians have continued to demonstrate social, political, economical and educational disparities. Twenty percent of the state of Hawai‘i population is made up of Native Hawaiians according to the 2000 U.S. Census Report (Office of Hawaiian Affairs (OHA), 2000). However, Native Hawaiians continue to be overrepresented in our state prisons and state welfare system (OHA, 2000). They have higher levels of inadequate health care and exhibit higher rates of disparate health risk behaviors (e.g., violence, alcoholism, substance abuse, tobacco use, and unhealthy eating), risk factors (e.g., anxiety, obesity, poverty, and unhealthy nutrition) and conditions (e.g., asthma, high cholesterol, diabetes, cardiovascular disease, and depression) (OHA, 2000; Yuen, Nahulu, Hishinuma, & Miyamoto, 2000).

Native Hawaiian adolescents, grades six through twelve, displayed higher rates of antisocial behaviors in risk areas such as school suspensions, intoxication of alcohol and drugs in school, solicitation of drugs, vehicle theft, arrests, and firearm possession. According to the 2000 Hawaii Student Alcohol,
Tobacco and other Drug Use Study, these adolescents also report higher lifetime prevalence for tobacco, alcohol and marijuana use (OHA, 2000).

“The data for alcohol and other drugs and tobacco use indicated significant and progressive substance usage from grade eight through twelve. In nearly all categories, the percentages of usage among Native Hawaiians are higher than the rest of Hawai'i students.”

(OHA, 2000, p. 16).

Native Hawaiian children continue to be disproportionately victimized by child abuse and neglect (Native Hawaiian Education Act, 2001).

Native Hawaiians comprise twenty six percent of the students served by the Department of Education (Kamehameha Schools, 2004). From an educational perspective, Native Hawaiian students often face education risk factors before they are born (Native Hawaiian Education Act, 2001). These factors include late or no prenatal care, high rates of births by Native Hawaiian women who are unmarried and high rates of births to teenage parents. They are and will continue to reside in geographically rural and isolated areas with high Native Hawaiian population density (Native Hawaiian Education Act, 2001).
Native Hawaiian students score below national norms and lower than other students in the state on standardized education achievement test at all grade levels. They show a pattern of lower percentages in the uppermost achievement levels and in gifted and talented programs in private and public schools (Native Hawaiian Education Act, 2001). Native Hawaiian students continue to be overrepresented among students qualifying for special education programs (Kanaiaupuni & Ishibashi, 2003) and are underrepresented in institutions of higher education and among adults who have completed four or more years of college (OHA, 2000). They are more likely to be retained one grade level and to be excessively absent in secondary schools. The findings are inconsistent with the high rates of literacy and the integration of traditional culture and Western education that were achieved by Native Hawaiians through a language-based public school system established by Kamehameha III in 1840. However, following the overthrow of the Kingdom of Hawai'i in 1893 until 1986, use of Hawaiian language as an instructional medium was declared unlawful (Native Hawaiian Education Act, 2001).

Risk for maladaptive behaviors and negative social outcomes among today's Native Hawaiian population, especially its school-aged youth, may be the
result of their marginalization from traditional Native Hawaiian culture and the
dominant Western culture (Hishinuma, Andrade, Johnson, McArdle, Miyamoto,
order to succeed in a Western school setting, Native Hawaiian students have had
to leave their culture and values at home and assume Western values and
behaviors associated with success (Kawakami, 1999).

Research Questions

It is necessary to seek solutions that would attempt to reverse the
adversities that Native Hawaiians have faced throughout the generations since
Western invasion. Finding solutions that would impact and empower Native
Hawaiian youth is a sensible place to start. The youth are the future of the
Native Hawaiian population and may be able to facilitate positive change. It
would be highly beneficial for Native Hawaiians to reconnect to their culture and
core values that once defined them.

The Native Hawaiian Curriculum Development Project Curriculum
Guidelines sponsored by Nā Pua No‘eau: Center for Gifted and Talented Native
Hawaiian Children, state that raising self-esteem is important for the successful
functioning of Native Hawaiian families and that those who have a better attitude
toward “self,” achieve more than those who have a poor attitude toward “self” (Kawakami, Aton, Glendon, & Stewart, 1999). In surveying Hawaiian educators, Kawakami (2003) found that there are two key elements in successful Hawaiian learning experiences: (1) successful learning experiences for Hawaiian students must take place in a culturally authentic physical and social learning environment and (2) those experiences must involve experienced-based, hands-on activity structures. Therefore, it is important for Native Hawaiian students to identify with and have opportunities to live Hawaiian culture and values in order to increase a better attitude toward “self,” thus raising self-esteem, increasing chance of success and lowering risk of failure.

Research on determinants of self-esteem, age, gender and ethnic variation in self-esteem, and interrelatedness between self-esteem with these specific demographic variables, has been investigated for Hawaiians and non-Hawaiian students (Miyamoto, Hishinuma, Nishimura, Nahulu, Andrade, Goebert, & Carlton, 2001). However, research on Native Hawaiian students, having faith in a cultural worldview and living to the standards of that worldview (values of that culture) on self is lacking or even non-existent in the literature.
This study attempted to answer questions surrounding the psychological framework called the Terror Management Theory (TMT) in direct relation to Native Hawaiian students. TMT is a framework that provides an explanation of relationships between cultural factors, self-esteem, and anxiety (Solomon, Greenberg, & Pyszczynski, 1991). Research questions to be answered by this study based on the Terror Management Theory, in relation to culture are

1. Will self esteem increase if Native Hawaiian students believe in and achieve the standards (e.g., core values) of Hawaiian culture?

2. Will Native Hawaiian students have lower levels of anxiety?

3. Will there be an increase in “adaptive” behaviors and decrease in maladaptive behavior, such as substance abuse, truancy, academic failure and destructive behaviors in family and community?

**Hypotheses**

This study tested the applicability of the Terror Management Theory (TMT) and its principles to Native Hawaiian students and Native Hawaiian culture.

Based on the TMT, the hypotheses of this study was as follows:

Native Hawaiian students who identify or seek to identify with “being Hawaiian” and are assisted in achieving its standards of value (high cultural values) will
1. Have higher levels of self esteem if they see themselves achieving cultural standards following intervention

2. Have lower levels of anxiety following intervention

3. Increase “adaptive” behaviors such as studying, achieving academic standards, making positive contributions to their families and communities.

Limitations of the Study

The study was limited by the following:

1. Participating Native Hawaiian students were purposively selected; therefore, generalization to other populations was not indicated.

2. Most participants were from transitional housing with two-year residency limitations. This designated a particular socio-economic community.

3. Participants may not have highly identified with being Native Hawaiian, because of the factors surrounding homelessness, such as limited education and employment and anti-social behavioral characteristics.

4. Parents of participants did not always follow through with insuring that their children participated consistently due to the characteristics of this population. This affected the sample size.
Definition of Terms

For the purpose of this study definitions of frequently used terms are provided.


2. Native Hawaiian or Hawaiian: The descendents of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now comprises the State of Hawai'i (Native Hawaiian Education Act, 2001) or referred to as kanaka maoli.

3. Self-esteem: "A sense of personal value that consists of two components: (a) faith in a cultural worldview and acceptance of the standards of the value inherent in that worldview, (b) the perception that one is meeting those standards of value therefore has a significant role in the cultural conception of reality" (Solomon, Greenberg, & Pyszczynski, 1991, p. 22).

4. Terror Management Theory (TMT): A psychological defense theory that explains how cultures allow people to control the potential terror of death by convincing them that they are beings of enduring significance living in a meaningful reality (Pyszczynski, Solomon, & Greenberg, 2003).

5. Values: A set of standards that define a cultural worldview.
Chapter 2. Review of the Literature

The literature related to the Terror Management Theory (TMT) and Hawaiian cultural worldview and values will be presented and discussed in this chapter. This chapter will discuss

1. The relationship of culture, self-esteem, and anxiety using the TMT
2. Culture and anxiety,
3. Culture and self-esteem,
4. Self-esteem as an anxiety buffer,
5. Anxiety not buffered because of low self-esteem
6. Empirical support for TMT
7. The Hawaiians encounter with existential terror and its affects,
8. TMT Implications for Education and Healthy Hawaiian Youth Development
9. Other perspectives of self-esteem,
10. Hawaiian values,
11. A Framework for Understanding Hawaiian Values,
12. A perspective on distinguishing Hawaiian values from Western values and how they are notably different,
13. Educational interventions for Hawaiians in a Western society, and


The Relationship of Culture, Self-Esteem and Anxiety Using the TMT

The TMT is a psychological framework that explains how we as human beings defend against anxiety and existential terror inasmuch as humans are prone to anxiety, TMT attempts to give an explanation of social behavior by focusing on our essential being and circumstances (Solomon, Greenberg, & Pyszczynski, 1991). TMT considers relationships among and between cultural factors, self-esteem, and the terror in human existence (anxiety). TMT suggests that culture serves as a psychological defense by providing a potential buffer against anxiety/terror (Salzman, 2001).

Culture and Anxiety

To understand culture is to first understand that and why humans are so different from other animals. We both have an instinct of self-preservation. However, humans have larger brains than other creatures that provide them behavioral flexibility to specific stimuli, imagination of things that do not exist, and allow them to be conscious (awareness of their awareness) and self-conscious (Pyszczynski, Solomon & Greenberg, 2003). Self-consciousness, our cognitive
ability, causes us to wonder or worry about who we are and what is our worth (our self)? Where are we going (our future)? Why do things occur the way they do (causality)? We are aware of our mortality and know that to live forever is impossible. This awareness is terrifying (existential terror) (Salzman, 2001).

Becker quoted in Solomon, Greenberg, and Pyszczynski (1991) suggested that humans confront the physical problem of death and tragedy through the creation of culture to minimize the anxiety associated with the awareness of death.

Anything that threatens our human existence is terrifying; therefore, we need to adopt a cultural worldview in order to buffer that terror/anxiety (Solomon, Greenberg, & Pyszczynski, 1991).

We as human beings need to find higher meaning. We, therefore, create and maintain the social construction of culture, by providing a shared symbolic construct. “Cultural worldviews imbue the universe with order, meaning, predictability and permanence (Salzman, 2001, p. 174).” “Cultural worldviews are constructed so that security can be maintained through the belief that one is a valuable member of the universe (Salzman, 2001, p. 7).” Culture worldviews serve as an anxiety-reducing function by providing a sense of meaning and how one can attain immortality (Pyszczynski, Solomon & Greenberg, 2003).
Although cultural worldview varies, it offers a description for what people should do to live "good" and "valuable" lives and with them realize some promise of immortality. Culture provides standards by which an individual can be judged to be of value; an enduring place in the culture, and the promise of immortality for those who live up to those standards (Solomon, Greenberg, & Pyszczynski, 1991). Kanahele (1986) stated that values as standards define for a person how he or she should behave in life, what actions merit approval/disapproval, what patterns of relations should prevail among people or institutions. Therefore, cultural values as standards tells us what we want to be, what kind of world we want to live in, or how we evaluate ourselves and the world.

**Culture and Self-Esteem**

It is necessary to view self-esteem as being universal. Self-esteem is the belief that one is a person of value in a world of meaning (Pyszczynski, Solomon & Greenberg, 2003). Self-esteem is the sense of one's value in living a good life and is significant in the cultural construction of meaning (Salzman, 2001). Self-esteem can only be derived from meaningful action in this world and consists of viewing oneself as a valuable participant in a culture.
Self-esteem is acquired when one accepts the standards of a cultural worldview and views themselves as achieving those standards (Solomon et al., 1991). Salzman (2001) simply stated that self-esteem is the result of having faith in a culturally prescribed worldview and living up to its standards. Self-esteem cannot be procured for the self through self. It is culturally contrived (Pyszczynski, Solomon & Greenberg, 2003).

Basic values may vary amongst cultures, but self-esteem is always achieved by the belief of a cultural worldview and the achievement of those standards (values). Similarly, Kanahele (1986) claims that every society's ideal has a concept of a "good life," a desirable and ideal way of living that produces a highly acceptable state of well-being. Members of societies who share and have faith in common beliefs, practices, values, and standards strive to obtain the "good life." The more values members of societies accept and respond to, the more needs they fulfill, thus allowing them to be happier beings (Kanahele, 1986) thereby raising self-esteem, their sense of value.

**Self-Esteem As An Anxiety-Buffer**

We may be terrorized by the realization that we are "corporeal creatures - sentient pieces of bleeding, defecating, urinating, perspiring, exfoliating..."
meat...no more...significant than cockroaches” (Pyszczynski, Solomon & Greenberg, 2003, p. 16). The recognition of this vulnerability, as well as, inevitable death could lead to overwhelming terror. However, people rarely experience this terror directly because culture saves us. Culture provides ways to view the world and consists of constructed belief about the nature of reality, shared by a group of individuals functioning to mitigate the horror of the human condition (Pyszczynski, Solomon & Greenberg, 2003). Cultural worldview provides the standards for the possibility of living a good, enduring existence, which is accomplished by being a valuable participant in the culture (Solomon, Greenberg, & Pyszczynski, 1991). When this occurs much of the social behavior is directed toward preserving faith in the culture.

According to TMT, the primary function of self-esteem is to buffer anxiety associated with vulnerability and death. Positive self-esteem is the feeling that one is a valued participant in a culture. When self-esteem is raised, anxiety is managed and adaptive action occurs (Salzman, 2001). Likewise, low levels of self-esteem result in higher levels of anxiety, which can lead to behaviors that may be maladaptive for an individual.
Anxiety is heightened when we as humans do not do the “right things,” the expectations of the social construct of culture. When we adhere to the standards culture set up for us, we sustain approval by those around us, thus elevating self-esteem. Self-esteem as an anxiety buffer has two aspects. First, an individual must have faith in a cultural worldview and second, one must see oneself as achieving a set of standards/values of that cultural worldview. Self-esteem can only be achieved in these circumstances, which allows the anxiety-prone human to escape feelings of inferiority (Salzman, 2001). When self-esteem is high, anxiety is managed and actions are taken to preserve faith in cultural worldview. If faith in cultural worldview is preserved, standards can be achieved to heighten anxiety-buffering self-esteem.

Anxiety Not Buffered Because of Low Self-Esteem

Conversely, TMT also explains the reasons for maladaptive anxiety management strategies utilizing the cultural anxiety buffer aspects. First, if one has faith in the cultural worldview and has not achieved the set of standards for being and acting in that world, self-esteem cannot be achieved. This results in having no cultural anxiety buffer, and anxiety goes unmanaged. The second reason for maladaptive anxiety management strategies is if a cultural worldview
is challenged, fragmented and not believed. Whether or not standards for being and acting are achieved, self-esteem is not achieved, thus providing no cultural anxiety buffer and anxiety is not managed (see Figure 1). Anxiety (terror of human vulnerability and death) cannot be managed when self-esteem is low, leading to maladaptive behaviors for an individual or community (Salzman, 2001).

**Empirical Support for Terror Management Theory**

When Pyszczynski, Solomon, and Greenberg (2003) formulated TMT, they came up with two basic hypotheses that would lead to empirical predications and the design of studies and collecting data to test predictions. The first concerned self-esteem as an anxiety-buffering function (Pyszczynski, Solomon and Greenberg, 2003). When people believe they are valuable in a world of meaning, “they should be able to function securely” (Pyszczynski et al., 2003, p. 39). In their search for empirical support, Pyszczynski, Solomon, and Greenberg (2003) found that there were hundreds of studies already available that found negative correlation between self-esteem and anxiety; high self-esteem is associated with low anxiety and low self-esteem is associated high
The Human Condition & Existential Terror

Buffer versus No Buffer

Cultural World View coherent & believed & standards achieved
Anxiety managed adaptive action probable

Cultural World View fragmented or not believed or standards not achieved
Anxiety not managed maladaptive anxiety management strategies

1. Cultural World View coherent & believed + Standards Achieved = Self Esteem Achieved cultural anxiety buffer anxiety managed

2. Cultural World View coherent & believed + Standards Not Achieved = Self Esteem Not Achieved no cultural anxiety buffer anxiety not managed

3. Cultural World View fragmented or not believed + Standards Achieved or Not Achieved = Self Esteem Not Achieved no cultural anxiety buffer anxiety not managed

Figure 1 (Salzman, 2002)
anxiety. Other existing experiments examined the effects of bolstering or threatening self-esteem.

Their first hypothesis was that raising one's self-esteem would lead one to experience less anxiety following a threat. To test this hypothesis, college students were brought to the laboratory. They were told that they would be watching a short video and they would be asked their reactions to it. Students were given personality tests, personalized psychological assessments and the Rosenberg self-esteem inventory. Half of the students watched a 7-minute video of *Faces of Death* that included an actual autopsy and electrocution, which served as the anxiety-provoking situation. The other half of the students watched a 7-minute video from the same documentary that was non-threatening and had no references to death. Then all the students completed anxiety tests. It was found that those in the raised self-esteem condition did not report elevated levels of anxiety in response to graphic depictions of death (Pyszczynski et al., 2003).

A second study was done to replicate and extend findings from the first study. The second study, involved students in a laboratory situation who were physically aroused by electrical shocks. Physiological effects, such a skin conductance, the small electric current traveling between a person’s fingers,
were measured. Greater anxiety in a person causes greater perspiration; water causes the electric current between fingers to travel faster. Half the students were told that they would receive electrical shocks (threat) while the other half of students were placed in a non-threatened situation, the physical stimulation of light waves. The results of this study supported that of the first. Students in the raised self-esteem condition who expected to receive electrical shocks exhibited no higher skin conductance than their counterparts, the non-threatening control condition. High self-esteem causes a reduction of anxiety in stressful situations (Pyszczynski et al., 2003).

Studies also investigated the effects of self-esteem on defensive perceptions of vulnerability to illness and death. Two studies were conducted to test people's distorted perceptions in vulnerability to illness and death. In one study, participants were given positive or neutral feedback. Half the participants were told that emotionality lead to a shorter or longer life. Those subjects who were given neutral feedback were engaged in vulnerability-denying defensive distortions. They reported being more emotional when they were told that emotionality lead to longevity, less emotional when emotionality was associated with a shorter life expectancy. When self-esteem was raised by positive
feedback, participants did not report differences in emotionality whether it affects longevity or short life expectancy. Raising self-esteem reduced the need to engage in vulnerability-denying defensive distortions (Pyszczynski et al., 2003).

Multiple studies have provided support for the TMT proposition that self-esteem functions reduce anxiety in stressful situations (Pyszczynski et al., 2003).

Pyszczynski, Solomon and Greenberg (2003) stated that over 120 studies in different countries were conducted to test the second basic hypothesis of TMT. This hypothesis was that TMT proposes cultural “worldviews assuage the potentially paralyzing terror associated with the awareness of our mortality” (p. 45). Reminders of death should cause people to increase their defense and bolstering of cultural worldviews. In studies that tested this second central hypothesis of TMT, participants were asked to think about their own death, called mortality salience. Mortality salience and moral transgression were tested, as well as mortality salience and worldview defense (Pyszczynski et al., 2003).

The goal of this part of the research program for TMT was to empirically assess the hypothesis that cultural worldviews serve in part to appease the anxiety associated with awareness of death. According to Pyszczynski, Solomon, and Greenberg (2003), mortality salience should produce a strong
need for the protection that worldview provides and consequently provokes especially strong positive reaction to anything and anyone who upholds the personal vision of reality diffused through culture and strong negative reaction to anything and anyone who violates this reality. In support of the theory, a body of research has shown that to ask for people to contemplate their own mortality does produce such responses. Beliefs about the nature of reality served to alleviate the concerns of mortality (Pyszczynski, Solomon & Greenberg, 2003).

The adherence to a cultural worldview serves to keep potential terror from becoming manifest and the reminders of mortality signal a need in securing a defensive structure. “After all, people certainly seek self-esteem and faith in their worldviews in the absence of direct reminders of their mortality” (Pyszczynski et al., 2003, p. 56).

The Hawaiians Encounter with Existential Terror and Its Effects

Kanahele (1986) speaks of the years of degradation for the Hawaiians since Western contact. He speaks of the “ghost of inferiority” that plagues today’s generation of Hawaiians. Generations of Hawaiians after Western contact were made to feel that they were heathens or pagans in need of refinement from the white man. Salzman (2001) stated “indigenous peoples and
the cultures that support them psychologically have been traumatized by contact with European peoples" (p. 183). Such was the case for Hawaiians, who were forced to give up their language, traditions, myths, cosmology, religion, and rituals after Western contact. The Hawaiian population also dwindled following contact, which led to a surrender of political and economical power (Kanahele, 1986).

In the application of TMT, Salzman (2001) speaks of the death threat Native Hawaiians have encountered with the introduction of new diseases, suffering a culturally traumatic experience. The kahuna lapa‘au, experts of medicine, could have not been prepared for the invasion of new diseases (Salzman, 2001). The Native Hawaiians did not have immunity from these Western diseases and died by the tens of thousands, virtually wiping out the population. The Hawaiian population decreased from approximately 800,000 to 40,000 a century after contact (Kane, 1997): their existence was threatened.

By their own standards and values regarding death, many Hawaiian must have felt that they were evil and had done something evil to deserve such desecration. The Western missionaries assisted the Hawaiians toward self-degradations, leading them to believe that their sinful ways were to blame for the
disaster. The Westerners made Hawaiians feel like they needed to turn from their savage ways, their "culture." Over time the Hawaiian's cultural worldview was fragmented and a set of values and standards was not available to achieve. The Hawaiians were thus vulnerable to question the legitimacy of their cultural worldview, thus shattering their faith in it. As a result, anxiety-buffering self-esteem was unavailable to the Hawaiian people, leaving them with feelings of inferiority to Caucasians, thus, psychologically defenseless.

According to TMT, the Hawaiian's lack of psychological defense would then lead to maladaptive anxiety reducing behaviors that would be a quick relief but in the long term cause more grief and pain. Such anxiety-prone behaviors would result in Hawaiians having the greatest number of citizens on welfare, lowest paying jobs and with the highest incarceration rates in proportion to total population, ranked first for most Western diseases, highest high school drop out rates and shortest life expectancy amongst all peoples in the islands (Dudley & Agard, 1993).

Another example using TMT explanatory model in relation to the ancient Hawaiian population was the stifling of the Hawaiian language after Hawai'i was colonized by Westerners. The written word introduced to the Hawaiians by
Westerners was a way to disseminate information quickly and a means of achieving power. Kane (1997) stated that this was "incompatible with the belief that knowledge was sacred power, a manifestation of mana that must be guarded as sacrosanct to those worthy of it" (p. 41). Therefore, to make information readily accessible through the written words could be misused. However, ali'i realized that literacy was the key to understanding and using the power of the Western culture. After the missionaries arrived in 1820, they published a reader in Hawai'i. Queen Ka'ahumanu learned to read in five days and schools were set up throughout the kingdom. By 1824, two fifths of the entire population had graduated from school, and by 1834, the majority of the population had become literate. The Kingdom of Hawai'i soon achieved the highest literacy rate of any nation in the world at that time (Kane, 1997).

However, Native Hawaiian children who attended school in Hawai'i were later prohibited in 1893 from using their native language and forced to speak English, which was a second language to most Native Hawaiian students (NHEA, 2001). The cultural worldview that Native Hawaiians held was that their language was important for their very existence and perpetuation of their culture. However, this worldview was shattered making the Hawaiians feel that they
needed to speak English in order to be deemed important by society and speaking the native language and subscribing to the culture were not good enough to exist in the colonized Western world. Hawaiians were made to feel that English was superior. Being compliant to colonization, the Native Hawaiian students did not speak the native language in school. As a result, a high sense of self-esteem was not achieved.

As a result of lower self-esteem, there was no cultural anxiety buffer, and anxiety was not managed. The majority of Native Hawaiian students found it hard to participate in a westernized school setting that forced them to leave their cultural values at home (Kawakami, 1999) often exhibiting non-participating behaviors. They were labeled as being “lazy” and deemed unmotivated. Throughout the years, their reading achievement scores have been affected, and sometimes students were labeled as “dumb.” This group soon believed and acted out these negative labels. They strove to become westernized by practicing Western culture. Most Native Hawaiians discontinued the practice of Native Hawaiian culture resulting in cultural degradation and the loss over generations until the emergence of a Hawaiian renaissance in the mid to late seventies (Kanahele, 1982).
It is clearly evident that the cultural worldview of Hawaiians was shattered over generations; the Hawaiian "ways" have always been threatened, seemingly inferior to the superiority of the Western ways. This may explain the reason for lack of anxiety buffering self-esteem and the constant internal struggle to overcome generational stereotypes about them. Nainoa Thompson, the first Hawaiian in centuries to become a open ocean deep sea navigator, the most important job in the ancient days of Polynesian voyaging (Harden, 1999), stated that, "The loss of culture, loss of beliefs---you end up feeling second-rate in your homeland...there's a strong connection between self-esteem and physical health, and sometimes we define that as spirit" (p. 223). The lack of self-esteem, not in all Hawaiians, but in the consciousness of the Hawaiian people, has hindered their ability to buffer against anxiety over the span of generations.

**TMT Implications for Education and Healthy Hawaiian Youth Development**

TMT suggests that if a people have faith in a cultural worldview and see themselves as achieving its standards, they will have access to anxiety-buffering self-esteem, thus making adaptive behavior more probable (Salzman, 2001).

Bean (1992) noted that children with high self-esteem will behave in ways that are self-satisfying. Children with high-self esteem are able to accept more
responsibility more comfortably and experience more personal satisfaction from doing so. Children with high self-esteem have better interpersonal relationships and are more likely to be chosen for leadership roles. Children with high self-esteem usually have the confidence to demonstrate their creative inner process and expect to be appreciated for what they have done (Bean, 1992).

The 1997, 1999, and 2001 Hawai‘i Youth Risk Behavior Surveys (YRBS) indicated that self-identified Hawaiian youth generally reported greater percentages of practicing negative health behaviors in comparison to their non-Hawaiian peers (Saka & Lai, 2004). Such behaviors involve tobacco use, sexual intercourse, marijuana and alcohol use, and weight issues. Hawaiian youth also exhibit greater anti-social behaviors related to drug and alcohol use than the state’s average that is often. In 2000, percentages of Native Hawaiian juvenile arrests were greater in comparison to other ethnic groups (OHA, 2000).

Children with lower self-esteem may cover feelings of inadequacies by exhibiting bad behavior (Bean, 1992). The TMT empirical framework may explain the reason for Hawaiian maladaptive behavior in our society. However, this psychological defense explanatory model can also help create solutions for promoting positive healthy adaptive behavior that leads to a more productive
lifestyle for Hawaiian students. Variables within the empirical formula of the TMT framework, such as faith in a cultural worldview and achieving the standards of that view may be manipulated to yield more anxiety-buffering self-esteem.

The Hawaiian renaissance, an attempt to recover culture (Kanahele, 1982), is an example of returning to self-appreciation and of trying to mend a fragmented cultural worldview. It includes self-determination efforts, the revival of the language through language immersion schools, the hula, the martial arts, the music, ancient voyaging, and the return to indigenous healing practices (lā‘au lapa‘au – healing therapies, lomilomi - massage, and ho‘oponopono – mediation / “to correct”). However, this effort to revitalize Hawaiian culture could not “upstage the debilitating effects of more than 200 years of political, social, cultural and psychological trauma” (Kanaiaupuni & Ishibashi, 2003).

Kanahele (1986) stated that members of the generation of the Hawaiian renaissance have more pride in being Hawaiian than the preceding generation. Therefore, according to TMT, if we allow Hawaiian students who identify with being Hawaiian to re-establish a cultural worldview that they have faith in and help them to achieve its standards/values, this condition will help them achieve anxiety-buffering self-esteem, leading them to exhibit adaptive behavior, instead
of maladaptive behavior. These positive behaviors may affect academic achievement, reduce health risk behaviors, enhance pro-social behavior and facilitate greater community involvement to perpetuate the culture amongst broader global audiences. Therefore, to help raise a Hawaiian students' self-esteem is vital to their success and very existence.

Another scenario of today's Hawaiian students is that they may be so surrounded by the dominant Western culture and have subconsciously or even consciously, marginalized their Hawaiian identity (Kanaiaupuni & Ishibashi, 2003). They don't feel like they belong to either of the two cultures, have no faith in any cultural worldviews, cannot achieve any cultural standards, are unable to achieve anxiety-buffering self-esteem, thus leading to maladaptive anxiety-buffering actions. Interventions using the TMT explanatory model may help Hawaiian students renew their cultural identity that allows them to access its standards and values to live by, thus being able to achieve anxiety-buffering self-esteem.

Many examples exist of cultural interventions that could well promote anxiety buffering self-esteem. Among these are selected charter schools. Charter schools have been established to better educate Hawaiian and non-
Hawaiian children using culturally appropriate strategies, using Hawaiian values. The Kamehameha Schools also provide a learning environment that ensures that Hawaiian students' experiences and learning styles are welcomed. The Kamehameha Schools strive to institutionalize and practice cultural perspectives throughout the organization instilling a strong sense of pride, self-esteem, and identity with culture for Native Hawaiian children (Kanaiaupuni & Ishibashi, 2003).

Programs sponsored by the Polynesian Voyaging Society and other Hawaiian agricultural programs are a few examples of programs that are effective in connecting Hawaiian students with cultural "roots" (Harden, 1999). Their participation in these programs gives them a sense of accomplishment that makes them feel proud of their heritage, boosts anxiety-buffering self-esteem thus leading to adaptive actions.

Bi-culturalism is also recognized. The Native Hawaiian population doubled from 1990 to 2000 and has become more diverse than ever according to U.S. Census data (Malone & Corry, 2004). Nearly two of three Native Hawaiians reported multiple races (Malone & Corry, 2004). Therefore, many Hawaiian students may identify with both Western culture and Hawaiian culture. There are actions that can be taken with these students to have bi-cultural competence
without sacrificing their cultural foundation (Salzman, 2001). It is important to help these students become skillful at identifying and achieving Hawaiian standards and values they are comfortable with in order to achieve anxiety-buffering self-esteem.

Other Perspectives of Self-Esteem

Bean (1992) states that research has indicated that there are four conditions that make up a child's self-esteem. They are connectiveness, uniqueness, power, and models. Connectiveness is when children have a sense of belonging, related in important ways to specific people, places or things, identify with a group, feeling connected to a past or heritage, sense of ownership, feel good about the things they feel part of, know the people or things they feel connected to are thought well of by others. Uniqueness is when children know what is special about themselves, are able to enjoy being different, feel they are affirmed for what they are as opposed to judged for what they are not, feel they respect self, know that other people think they are special, feel creative and imaginative, and have opportunities to safely express that. Power is when children feel that they are in charge of their own lives, believe that they can do what they set out to accomplish, feel others can't make them do things they really
don’t want to do, know they’re not going to lose control of themselves under
pressure, know they can get what they need to do what they have to do. Models
are when children know people they feel are worthy of being emulated, feel
confident they can tell right from wrong, have consistent values and beliefs that
guide and direct their actions in different situations, feel a sense of purpose and
know where they are headed, are able to make sense of what’s going on in their
lives, know the standards being used to judge them and have a sense of their
own standards and a sense of order enabling them to organize their environment
in order to accomplish tasks.

It is evident that upon contact with Western civilization, the conditions that
build self-esteem according to Bean (1992) and TMT were completely all taken to
a debilitating degree. Their land, possessions, reputation, political power and
dignity were stripped.

This information, combined with TMT can help to facilitate rebuilding
anxiety-buffering self-esteem within Hawaiian students. Knowing that efforts
towards cultural recovery for the Hawaiians is a condition which will enable them
to achieve anxiety-buffering self-esteem, it is imperative to continue to help
Hawaiian students re-create and/or re-evaluate their world of meaning
(connectiveness, uniqueness, models), help them achieve its standards and values (power) to increase anxiety-buffering self-esteem thus providing them with an opportunity to develop into healthy human beings.

Hawaiian Values

In the review of the literature, the definitions and semantics of the terms Hawaiian “values,” “traditions” and “culture” overlap. There have been many literary contributions that address Hawaiian values and the need to understand and apply them. There are many schools of thought on primary Hawaiian values, but to discuss values exclusively without addressing the culture’s philosophy is non-productive.

With the introduction of Christian missions to Hawai‘i in 1820, the study and comprehension of Hawaiian thought came to an end (Ka’ano‘i, 1992). Anti-Hawaiian sentiment, colonialism, and institutional racism permeated every aspect of Hawaiian society (Kanaiaupuni & Ishibashi, 2003). In much of the literature regarding Hawaiian values, references are made toward pre-Western or pre-missionary/Christian exposure and post-Western or post-missionary/Christian exposure. Because ancient Hawaiian society communicated orally, there is consensus amongst writers that some of the Hawaiian antiquities, mana‘o
(thoughts/insights) of pre-Western exposure could have been diluted or
misinterpreted by following generations. The recordation and understanding of
Hawaiian culture by David Malo, a Native Hawaiian scholar, was a very
significant literary contribution. His work was later translated into English,
*Hawaiian Antiquities* by Emerson and *Ka Mo'olelo Hawai'i, Hawaiian Traditions*
by Chun (1996).

It is through understanding the philosophy of Hawaiian culture that values
can be identified. However, scholars continue to search for answers concerning
Hawaiian values, asking questions such as: what were the values of Hawaiians
before Cook? Can traditional values be known? How have those values
changed since and to what extent are they practiced? What is their present day
validity (Kanahele, 1986)?

Kanahele (1986) polled a cross section of a Hawaiian community and
asked them to identify what they thought were Hawaiian values. The results
were a list of twenty-five values. They were aloha (love), ha'aha'a (humility),
lokomaika'i (generosity), ho'okipa (hospitality), haipule or ho'omana (spirituality),
wiwo (obedience), laulima (cooperativeness), ma'ema'e (cleanliness), 'olu'olu
(graciousness/pleasantness/manners), pa'ahana (industriousness/diligence),

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ho'omanawanui (patience), le'ale'a (playfulness), ho'okuku (competitiveness), ho'ohiki (keeping promises), huikala (forgiveness), na'auao (intelligence), kūha'o (self-reliance), maika'i or kela (excellence), koa (courage), kōkua (helpfulness), lōkahi (harmony/balance/unity), hanohano (dignity), alaka'i (leadership), kū i ka nu'u (achievement), and kūpono (honesty) (Kanahele, 1986). When participants were asked to rank these values, aloha was first, then followed by humility, spirituality, generosity, graciousness, keeping promises, intelligence, cleanliness and helpfulness. However, before 1778, Hawaiians would have placed hospitality, courage and excellence high on the list (Kanahele, 1986). Kanahele (1986) claims that historical conditions account for these differences. For example, spirituality was listed as a value, but in ancient Hawai'i it was not a value, but spirituality was a guiding principal and integrated throughout the culture itself (Ka'ano'i, 1992). Modern day Hawaiians may think differently because living in a Western society has diluted their sense of ancient Hawaiian culture.

A Framework for Understanding Hawaiian Values

Ka'ano'i (1992) gave another interesting perspective in regards to Hawaiian values. According to him, the subjective orientation of our
understanding of the environment, our relationship to nature; that man should empower (ho'omanamana) nature not overpower nature and man is a part of nature and affected by nature is very new to Western culture but fundamental to Hawaiian culture. For example, the central concept for ancient Hawaiians that most clearly demonstrates the connection between their cosmology and their values is mana (Kanahele, 1986). Mana is a universal energy, the force that animates all life and elements of the universe, a divine supernatural force available to humans for perfectibility (Kanahele, 1986). Knowing that Hawaiians believe in the divine interconnectedness of nature of their culture, Ka'ano'i believes that Hawaiian religious philosophy ("Kahunaism") is the foundation of Hawaiian values. He argues that to understand a culture's values is to understand that culture's philosophy (Ka'ano'i, 1992).

Ka'ano'i (1992) proposed a philosophical framework of values, a kind of organizer, via religious philosophy. He suggests that the cornerstones of Hawaiian Kahuna values are 'ohana (family), aloha (love), pa'ahana (industry) and maika'i (excellence), sometimes referred to as kela. These values will help Hawaiians understand and succeed in areas regarding family, health, education, nature, business and government.
For example, 'ohana, family, is the foundation of Hawaiian culture; the root of origin was a deeply felt and unifying force (Pukui, Haertig, & Lee, 1972, v.1). The core values applied to family would be aloha (love), ho’okipa (hospitality), pa’ahana (industry), ho’oponopono (setting right), and lōkahi (unity). The concept of ‘ohana is a sense of unity, shared involvement and responsibility, mutual interdependence and help, loyalty, solidarity and cohesiveness (Pukui et al., 1972, v. 1). Parents should set examples for love, unity and industry within the ‘ohana (Ka'ano'i, 1992).

Another cornerstone Hawaiian Kahuna value is aloha, interpreted to mean love. A warm welcome, hug and touching nose to cheek is often a display of aloha. “Alo” meaning face and “ha” means to breathe, to breathe upon the face (Ka'ano'i, 1992). To define aloha is to live it. Aloha describes the highest level of emotional, romantic and sexual love between husband and wife. The perpetuation of this love is found in their children, who in turn carry on the ideals of aloha. In this way, love is everlasting.

Work ethics are also important to Hawaiians. The value of work, pa'ahana (industry) in a family establishes a foundation for lōkahi (unity). Work was regarded honorable and worthwhile to Hawaiians. An activity must have been
socially productive to be deemed as work, it must have provided benefit to a
group or community. Related to pa'ahana, Hawaiian values reflect in striving for
maika'i, personal excellence. Personal excellence increased personal mana.
This mana in turn would reflect the quality of one's family and culture. Personal
excellence applies to one's health; dress or talents; in aloha, as love and in
making love; as a friend or family member, as well as in education, business, and
government. It was more important to Hawaiians to increase mana than to
receive any material compensation.

A Perspective on Distinguishing Hawaiian Values From Western Values

The difference between Hawaiian and Western values is also exhibited in
Ka'ano'i's (1992) perspective of a subjective culture versus an objective culture.
Cultures are primarily subjective, human and personal, or culture is objective
(Ka'ano'i, 1992). A subjective culture values family, nature, mutuality and the
celebration of life, while an objective culture values quantitative emphasis,
technology, or individualism (Ka'ano'i, 1992). For example, Western culture may
discredit spiritual phenomenon but hail scientific or concrete theory as the only
form of explanation. However, Hawaiian culture values both spiritual
phenomenon and scientific theory, both being a system of explanation that
works. In Hawaiian Kahuna values, scientific theory and the hope spirituality gives are not separate but one in the same. This is an example of the subjectivity of the Hawaiian culture. Western culture also may value science and technology, while the Hawaiians value the inspiration of science that is wonder and the reward that is discovery (Ka'ano'i, 1992).

Another example of the contrast between subjective and objective is the concept of pa'ahana, the work ethic. Hawaiians worked toward personal excellence, maika'i, that begot mana, power, influence, prized attributes while the Westerner works to gain money. Accolades and recognition of personal excellence increased one's mana, which can only be given subjectively for the Hawaiians. In contrast, Western work ethic equates personal excellence with the increase of money. Money doesn't increase mana (Ka`ano`i, 1992). Therefore, one's success does not lie in how much money they earn. Intangible rewards such as respect and praise from the community give greater satisfaction than any tangible reward. This not only demonstrated the difference between subjective (mana) versus objective (money) but also pluralism versus individualism. For example, although there was sometimes competition amongst individuals to be the best workers in comparison to others in the same line of work, the Hawaiians'
self-interests did not dominate their sense of communal responsibility. Family
unity and general welfare had prior claims upon an individual in the group
(Kanahele, 1986). The Hawaiian values promote family/group benefits compared
to western values that promote individual benefits.

There are however, subjective notions of the Hawaiian culture that
appeared in the Bible as noted by Pukui and Malo. An example is the Hawaiian
notion of na'au. Na'au, intestines, bowels, gut, by association, character,
intelligence, emotions, and later heart, is a pre-missionary Hawaiian value or
concept that is also reflected in the Bible in phrases “bowels of compassion”
(Pukui, Haertig, & Lee, 1972, v.1). In Hawaiian culture, the head contained
spirits, but the emotions and intelligence existed in the na'au, the gut. Malo as
translated by Chun (1996), records that Hawaiians may be from the Israelis (not
necessarily Western), because several customs are similar such as circumcision,
“cities of refuge,” the prohibitions of burials, menstruation, and pregnant mother.
Educational Interventions for Hawaiians in a Western Society: Implications of the Existence of the Current Mixtures of Values

To address bi-culturalism, the mixture of Hawaiian and Western cultures, Ka'ano'i (1992) states that the "secret of a subjective culture existing within an objective one is simply to draw a circle bigger than the one that shuts you out (p. 7)." Ka'ano'i (1992) states that Hawaiians shouldn't be afraid of objective (Western) tools or systems because it is the subjective self that empowers them, not the other way around.

If Hawaiian values and self-identity are intact, we will not be intimidated by Western ideals but be able to filter them and use them for our benefit through our values, the subjective self. For example, a college education, which is objective, is a great tool for to use in order to kū i ka nuʻu (achieve), to become naʻauao (intelligent), to become kūhaʻo (self-reliant), to increase mana (personal attributes, skill, wisdom), which in turn reflects the quality of the ʻohana (family) and community. One can obtain a college degree, which is objective, and accomplish this in haʻahaʻa (humility) and with maikaʻi, kela (excellence), which is subjective. There is a need to foster cultural identity, the subjective self, in
Hawaiian youth so that they can be empowered to use Western tools and systems that is objective for their benefit instead of being intimidated by them.

A groundbreaking example of educational intervention using Hawaiian values was the creation of *Nā Honua Mauli Ola, Hawai'i Guidelines for Culturally Healthy and Responsive Learning Environments* (2002), developed by the Native Hawaiian Education Council (NHEC) in partnership with Ka Haka 'Ula o Ke'elikolani College of Hawaiian Language, University of Hawai'i, Hilo. This document encourages the application of cultural guidelines within the communities serving Native Hawaiian students and their families.

*Mauli ola* means life force exhibited through a sense of spirituality; nurturing the *mauli* supports the cultural base from which an individual grows to serve family, community, and other. The development and renewal of one's *mauli* and personal power or *mana* should be respected at all times. *Honua* are the environments that foster our connections to people that anchor our cultural identity and where *mauli* is nurtured. The *honua* that we experience during our lifetime are family, community and global/universal (NHEC, 2002).

*Nā Honua Mauli Ola* (NHMO) guidelines are the framework of a comprehensive student support system for student-centered learning.
environments. These guidelines support the practices and learning experiences that foster the development of responsible, capable, caring, healthy (social, mind, soul and body) human beings who have a strong cultural identity and sense of place (NHEC, 2002). NHMO guidelines, based on Hawaiian philosophy (subjective) also enhance and compliment the Hawai’i State Content and Performance Standards (HCPS II - objective). The guidelines aim to facilitate the growth of Hawaiian education, as well, as improve the quality of educational opportunities for Hawaiians and their communities (NHEC, 2002).

They are as follows

1. “Incorporate cultural traditions, language, history and values in meaningful holistic processes to nourish the emotional, physical, mental, intellectual, social and spiritual well-being of the learning community that promote health mauli and mana.

2. Maintain practices that perpetuate Hawaiian heritage, traditions and language to nurture one’s mauli and perpetuate the success of the whole learning community.
3. Sustain respect for the integrity of one's own cultural knowledge and provide meaningful opportunities to make new connections among other knowledge systems.

4. Instill a desire for lifelong exploration of learning, teaching, leading and reflecting to pursue standards of quality and excellence.

5. Provide safe and supportive places to nurture the physical, mental/intellectual, social, emotional, and spiritual health of the total community.

6. Foster understanding that culture and tradition constantly evolve and are grounded in the knowledge of the past to address the present and future.

7. Engage in Hawaiian language opportunities to increase language proficiency and effective communication skills.

8. Engage in activities independently or collaboratively with community to perpetuate traditional ways of knowing, learning and teaching; sustaining cultural knowledge and resources.
9. Utilize multiple pathways and multiple formats to assess what has been learned and honor this process to nurture the quality of learning within the community.

10. Support lifelong aloha for Hawaiian language, history, culture, and values to perpetuate the unique cultural heritage of Hawai‘i.

11. Promote personal growth and development to strengthen cultural identity, academic knowledge and skills, pono decision-making and ability to contribute to one’s self and family, and local and global communities.

12. Develop an understanding of Hawaiian language, history, culture, and values through an indigenous perspective to foster sense of self, place, community and global connection.

13. Promote respect for how the Hawaiian cultural worldview contributes to diversity and global understanding to enhance one’s sense of self, family and local and global communities.

14. Plan for meaningful learner outcomes that foster the relationship and interaction among people, time, space, places and natural
elements around them enhance one’s ability to maintain a “local” disposition with global understandings.

15. Engage in experiences which mālama the entire learning community and the environment to support learning and good practices of stewardship, resource sustainability and spirituality.

16. Cultivate a strong sense of kuleana to one’s past, present and future to enhance meaningful purpose and to bring about joy and fulfillment for one’s self and family, and local and global communities.”

(NHEC, 2002, pp. 17-20)

NHMO guidelines are culturally relevant and can be used by schools, communities, health, mental and social service providers, families, churches, hālau, museums, community organizations and educational programs. These cultural guidelines are a true example on how we empower ourselves subjectively via Hawaiian values to manipulate the use of an objective tool or system that is Western education.

Another educational intervention is the creation of the Na'imiloa Curriculum Model developed by the Center for Gifted and Talented Native
Hawaiian Children at the University of Hawai'i at Hilo (Kawakami, Aton, Glendon, & Stewart, 1999). This curriculum development project attempted to implement a values based curriculum that was designed to provide opportunities for Native Hawaiian students to display and practice values throughout the school year and eventually in their daily lives (Kawakami et al., 1999).

The Kamehameha Schools strives to rebuild cultural and social stability for Hawaiians students by restoring cultural literacy. Students feel most comfortable in a learning environment created for Hawaiians by Hawaiians. Students are able to succeed academically in learning environments that facilitate cultural pride and practice. They don't have to fear culturally biased classroom practices (Kanaiaupuni & Ishibashi, 2003). Hawai'i charter schools have also provided opportunities for innovative educational approaches for Native Hawaiian youth (Kana`iaupuni & Ishibashi, 2005). Students have performed better on SAT-9 reading tests than those in mainstream public school. Students in charter school also tend to be more engaged and have higher attendance rates (Kana`iaupuni & Ishibashi, 2005).
Summary

The literature reviewed supported that the Terror Management Theory (TMT) begins to explain how humans psychologically defend themselves against the terror or anxiety of inevitable death. Humans create worldviews (culture) in which they can see themselves as valued participants in a meaningful reality (Solomon et al., 1991). When a person feels valued, a person obtains self-esteem that helps them to buffer anxiety, thus allowing them to exhibit healthier, more adaptive behaviors. Therefore, cultural values and practices are imperative and provide a set of standards for humans to achieve. By achieving those standards, defined by cultural values, humans obtain anxiety-buffering self-esteem. They see themselves as a valued participant of that particular cultural reality.

The literature reviewed also indicated how Native Hawaiian culture and its existence were threatened by the arrival of foreigners, particularly of Western influence. This influence overshadowed the practice of ancient cultural practices and degraded it. This influence caused many Hawaiians to feel inferior (Kanahele, 1986). This feeling of inferiority lead many Hawaiians to suppress cultural practices and assimilate to the Western dominant culture, resulting in the
marginalization of Native Hawaiians. However, in the mid-1970s through this present day, Native Hawaiians have revived those cultural practices that were once lost (Kanahele, 1986).

The resurgence of the Hawaiian language, music, dance, and other cultural practices provoked Native Hawaiians to re-visit cultural values. Native Hawaiian organizations and institutions re-visit Hawaiian values and cultural practices to establish guidelines and standards that if practiced, would help increase the chances for Hawaiians to overcome socio-economical disparities and be productive contributing citizens in this present society.

Existing educational institutions and programs have also institutionalized and embedded cultural opportunities within educational practices to ensure academic and social success for Native Hawaiian children. The literature surrounding Native Hawaiian values, active restoration of those values, and the establishment of cultural standards support the notion that TMT can be used as an explanatory model for the social behaviors that are manifested in the Native Hawaiian community.
Chapter 3. Methodology

This study was a collaborative project with the Hawai'i Department of Education (HIDOE), Office of Curriculum and Instruction Support Services, Special Programs Branch. The hypotheses of this study was that Native Hawaiian students who identify or seek to identify with “being Hawaiian” and are assisted in achieving its standards of value (high cultural values) will (1) have higher levels of self esteem if they see themselves achieving cultural standards following intervention; (2) have lower levels of anxiety following intervention; (3) increase “adaptive” behaviors such as achieving academic standards, positive social interactions and making positive contributions to their families and communities.

Native Hawaiian cultural values were taught to and practiced by Native Hawaiian participants through cultural teachings. Cultural teachings included 10 hours of instruction that addressed Native Hawaiian value-based underpinnings of physical environment, social interactions and identity. The dependent variables of self-esteem, anxiety and behaviors were measured before and after the experiment.
The proposed quantitative design of this study was a quasi-experimental nonequivalent control-group design, consisting of two intervention groups and two comparison groups that were identified by natural assembly (Martella, Nelson, & Marchand-Martella, 1999). Natural assembly of participants was based on residency at selected sites that HIDOE conducts after school tutorial reading services. The proposed design also incorporated the collection of qualitative and anecdotal data to support findings. By research design, the sites involved were in located communities that have higher ratios of Native Hawaiian students. This section will describe arrangements for the study, participants, methods of data collection and analysis, and procedures of the study.

Arrangements for the Study

There were three meetings with the Hawai‘i Department of Education (HIDOE) state resource teacher of the Special Programs Branch to discuss enrichment activities for transitional housing students who regularly receive after school tutoring and academic services from the HIDOE. The HIDOE resource teacher supervised the after school enrichment tutorial programs in several transitional housing facilities throughout the State of Hawai‘i. Most of these facilities were in geographic areas most populated by Native Hawaiians. This
study was of considerable interest to the HIDOE Special Programs Branch. The HIDOE resource teacher felt that a cultural intervention to increase self-esteem would benefit the students. So, she asked to participate in this study.

A meeting to discuss the timeline, logistics, and implementation of the study was conducted. The type of intervention was discussed to inform the HIDOE of the time and resources needed to conduct the research. The probable sites and participants were discussed. The HIDOE resource teacher assessed the sites, participants and the likelihood of each site’s ability to coordinate the logistics to successfully participate in the study.

Site possibilities were selected from transitional housing sites that are serviced by HIDOE Special Programs Branch. The sites for the study were purposively selected to yield the greatest chance of having a Native Hawaiian student population. It was decided that a Waimānalo, Ma‘ili, and Wai‘anae site would be best. These geographic have higher percentages of Native Hawaiians than other areas on the island of Oahu (Kamehameha Schools, 1999).

The transitional housing facilities were operated by non-profit organizations that accommodate the need of the State of Hawai‘i to provide housing for homeless families and transition them to their own residence. These
agencies had social services (e.g., legal and financial planning, job search, parent workshops) available on site to prepare families to become self-sufficient and acquire a permanent home. These sites also worked in collaboration with the HIDOE to provide academic tutoring for school-aged children.

Families at these sites were required to be sober and clean from substance use. Families were required to verify homelessness, have minor dependent children, participate in programs provided by agencies, and be able to pay a minimal housing fee. Participants and their parents were permitted to live at the facility for a maximum of two years.

The HIDOE resource teacher made arrangements to discuss the research proposal in detail with housing directors and case managers from selected sites. The site directors welcomed the idea of the experiment. The site directors and HIDOE resource teacher then made contact with parents of possible participants.

There was a meeting with the parents to establish personal relationships and trust. The parents were given the details of the study in an informal meeting with the investigator and HIDOE personnel. As an incentive for participation, the parents of control groups were also offered an opportunity for their children to
participate in cultural interventions after the completion and publication of the study.

Twenty-four parents were given consent forms (refer to Appendix A) to sign if they were interested in having their children participate. Parents did consent to their children's participation and signed the necessary consent forms. The HIDOE also provided consent for transportation forms for treatment participants. It was then decided that the HIDOE resource teacher, two part-time teachers and site directors/case managers would serve as primary contacts for parents throughout the course of the study. This helped increase probability for consistent participation and attendance.

Special arrangements needed to be made for the Ma'ili comparison group. After the site was selected, their youth activity coordinator had resigned. The case manager who helped make contact with different families was assigned responsibilities that did not allow her to help as had been intended originally. A concerted effort was made to establish contact and communication with participants and families. The HIDOE state resource teacher and investigator stood in the courtyard waiting for potential participants' parents. Only one family was present. So, another effort was made to make contact with other parents.
The HIDOE resource teacher went to participants' homes to elicit greater participation prior to the initiation of the study. Contact was made with the parents and participants were gained.

Experts were also contacted and asked to provide the Native Hawaiian cultural-based intervention for the intervention groups. The two experts were Bumpy Kanahele, long-time community activist from Waimānalo, leader of the Nation of Hawai'i, a Native Hawaiian sovereignty group, and Kumu Eric Enos from Ka'ala Farms Incorporated, a Native Hawaiian cultural learning center in the mountains of Wai'anae. Bumpy Kanahele agreed to address the historical and current issues of Native Hawaiians and their traditions. Kumu Eric Enos agreed to provide cultural lessons about the 'āina and Hawaiian social interactions (protocol) that are from the Ka'ala Farms, Inc. Curriculum. They both agreed to conduct interventions and dates for the interventions were scheduled.

Participants

Initially, this study included 24 students from ages 9 to 16 years. They attended Hawai'i DOE public schools. All participants but one resided at transitional housing facilities that the HIDOE serviced for after school reading tutorial programs. Twenty of 24 students were Native Hawaiian. Native
Hawaiians are descendants of the aboriginal people who inhabited the Hawaiian Islands prior to 1778, the date of Captain James Cook's first contact with the islands (Native Hawaiian Education Act, 2001). The participants were purposively selected and placed into groups by the site directors or case managers, HIDOE state resource and part-time teachers. They were selected to form comparison groups matched for factors, such as age, place of residency, socio-economic status and ethnicity.

Students were selected to form four groups, two intervention groups participating in a Native Hawaiian cultural intervention and two comparison groups participating in tutorial sessions. There were intervention and/or comparison groups from each transitional housing facility. The Windward O'ahu, Waimānalo intervention and comparison groups resided at the same transitional housing facility. The Leeward O'ahu intervention group resided at a Wai'anae transitional housing facility. The Leeward O'ahu comparison group resided at a Ma'ili transitional housing facility. There was one comparison group participant who did not live in the Ma'ili housing facility, but in the neighboring community. Every participant from the Leeward O'ahu groups was Native Hawaiian. Although there was a concerted effort to insure maximum comparability, the
non-equivalence of the Leeward O'ahu groups should be noted. The Leeward groups were from separate transitional housing facilities. Table 1 exhibits the participants' descriptions.

**Table 1**

<table>
<thead>
<tr>
<th>Participant Description</th>
<th>Wai'anae/Ma'ili Groups</th>
<th>Waimānalo Groups</th>
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Measures

The following section will describe the independent and dependent variables that were measured using both quantitative and qualitative self-reported questionnaires/inventories, a parent/teacher pro-social behavior inventory, observations, and interview responses, as well as, student daily logs and journal reflections.

Quantitative Measures

There were a total of six quantitative measures. Three measured the independent variables of ethnic identification, belief in cultural worldview, and living cultural standards. Three measured the dependent variables of self-esteem, anxiety, and behavior.

Belief in Hawaiian Culture and Hawaiian Identity

The He`Ana Mana`o O Nā Mo`omeheu Hawaiʻi: Survey of Hawaiian Cultural Practices (HEI) (Crabbe, 2002) was used to measure an independent variable of participants’ identity with Hawaiian culture (“being Hawaiian”), more specifically, the participants’ “belief” in the Hawaiian cultural worldview. The HEI is a 135-item questionnaire that surveys a person’s knowledge in, belief in, and frequent participation in Hawaiian cultural practices (Crabbe, 2002).
one of many measures; therefore, it would have been too lengthy to administer the entire HEI. So, for the sake of this study, only the “Belief” sub-scale items were administered to measure the independent variable, “having faith in the cultural worldview.” It was only necessary to measure the students’ belief in Hawaiian cultural practices to support the premise of the hypothesis.

There were a total of twenty-seven belief sub-scale items and each using a five-point response format ranging from 1 = No belief at all, 2 = Some belief, 3 = Average belief, 4 = Strong belief, 5 = Very strong belief. A sample of the item was, “Do you believe in the tradition of giving a person a Hawaiian name is an important part of Hawaiian culture” (Crabbe, 2002). This questionnaire also included items on demographic variables such as gender, age, Hawaiian blood quantum, and identification of other ethnic make up (refer to Appendix B). The HEI has recorded validation (Crabbe, 2002) with an adult population of 237 Native Hawaiians. The “Belief” sub-scale was administered alone. However, when the HEI was administered in its entirety, the “Belief” sub-scale recorded internal consistency of .97 using Cronbach’s alpha.

In combination with the HEI subscale, the Multi-group Ethnic Identity Measure (MEIM) by Jean S. Phinney (1992) will be used. This scale was
modified to consist of fourteen items assessing three aspects of ethnic identity; positive ethnic attitudes and sense of belonging (5 items); ethnic identity achievement (7 items), and ethnic behaviors or practices (2 items). Six items were eliminated from the original scale, because it measured "other group orientation," how individuals feel in comparison to other groups (Phinney, 1992). Those items did not measure self-identification. Items are rated on a four-point scale ranging from 4 = strongly agree, 3 = agree, 2 = disagree, to 1 = strongly disagree. A sample item was "I feel good about my cultural or ethnic background" (1992). For more sample items refer to Appendix C. The MEIM (Phinney, 1992) includes demographic items such as ethnic identification, paternal and maternal ethnicity (not scored). Overall reliability (Cronbach’s alpha) was .81 for a high school sample and .90 for a college sample (Phinney, 1992).

The items for each participant were totaled and the mean score calculated. Data were analyzed by comparing the pre and post group mean of mean scores and standard deviation to describe the effects. Pre and post inventory results were compared for both intervention and comparison groups.
Practice of Hawaiian Values

Another independent variable that was measured was the consistent practice of cultural values. Students were required to keep a record of their practice of self-selected Hawaiian values throughout the course of the study. They were given weekly logs, the Hawaiian Value Daily Log (HVDL) (Refer to Appendix D). Each day they rated themselves in response to the following statement, “I am “living” / practicing my selected Hawaiian value of *aloha* well.” This item had a five-point response scale ranging from 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, to 5 = strongly agree. In addition to completing this item everyday, the participants were asked to record evidence of their practice of their selected value at home, school, and in the community. This measure was to insure that students were practicing the Hawaiian values and to gauge how well students see themselves living their self-selected value.

All data were analyzed by calculating the mean of daily scores per week. The group mean of mean scores were compared by weeks. The qualitative information elicited from the daily log was also compared and categorized in similar themes. No validation was recorded for this measure.
Self-Esteem

The dependent variable of self-esteem was measured using the Rosenberg self-esteem scale (RSES). The RSES is a 10-item scale designed to measure adolescents’ global feelings of self-worth or self-regard. The RSES uses a four-point Likert response format ranging from 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree. Scores on the 10 individual items are combined resulting in a total score from 10 to 40 with higher scores indicating higher self-esteem. Five of ten items were positively worded (e.g., “I take a positive attitude toward myself.”) and the other five items were negatively worded (e.g., “I feel I do not have much to be proud of”). For additional items refer to Appendix E. The Cronbach alpha was 0.78 (Rosenberg, 1961).

The data were analyzed by comparing the pre and post group mean of mean scores and standard deviation to describe the effects.

Anxiety

The dependent variable of anxiety was measured using the Spielberger State and Trait Anxiety Inventory for Children (STAIC). The STAIC has two parts. Each part is a 20-item inventory for upper elementary, grades 4 - 6 (Spielberger, 1970). The STAIC-State Anxiety scale consists of 20 statements
that ask children how they feel at a particular moment in time. The STAIC-Trait Anxiety scale consists of 20 item statements to measure anxiety proneness. Refer to Appendix F for sample items. This measure was selected as an age appropriate revision of the adult version of the State and Trait Anxiety Inventory. The adult version of the STAIC is one of the most frequently used self-report measures of anxiety (Makini, Andrade, Nahulu, Yuen, Yate, McDermott, Danko, Nordquist, Johnson, Waldron, 1996). For the populations of fourth, fifth, and sixth grade males (N = 456) and females (N = 457), the Cronbach alpha reliability .82 for males and .87 for females. The STAIC Trait Anxiety Scale recorded Cronbach alpha reliability of .78 for males and .81 for females of the same population (Spielberger, 1973).

The data were analyzed by comparing the pre and post group mean and standard deviation scores to describe effects.

Behavior

The dependent variable of adaptive behavior was measured using the Behavioral and Emotional Rating Scale (BERS): A Strength-Based Approach to Assessment. The BERS is a standardized norm-referenced scale designed to assess the behavioral and emotional strengths (instead of deficits) of children
The SERS is a 52-item behavior checklist. The stated items describe specific, observable, and measurable behavioral and emotional strengths. The BERS was designed so that adults can accurately and efficiently identify behaviors. Dimensions of the childhood strengths assessed by the BERS are interpersonal strength, family involvement, intrapersonal strength, school functioning, and affective strength (refer to Appendix G).

Respondents were asked to rate each of the items on a four-point Likert-scale ranging from 0 to 3; 0 = not at all like, 1 = not much like, 2 = like, 3 = very much like. This measure was given to parents and teachers to complete about each participant. Parents were given the BERS to complete for their own child. Classroom teachers and after school teachers were also given the BERS to complete for each participant.

The means of the pre and post standard scores of the BERS Strength Quotient were analyzed for after school teachers and parents responses for student behavior. The Strength Quotient is the most useful and reliable score, because it provides an overall rating of a child’s behavioral and emotional strength (Epstein & Sharma, 1998). This score has a mean of 100 and a standard deviation of 15 (Epstein & Sharma, 1998). The Strength Quotient for
each participant was computed by converting the sum of the raw score of the subcales into a quotient provided by the manual of standard scores.

Qualitative and Anecdotal Measures

Qualitative data and anecdotal information were used to support the findings of the quantitative data. Teacher and investigator observations, student interviews, and students' reflections were compared.

Interviews

To gather supplemental data, students were informally interviewed regarding the Native Hawaiian cultural treatment and its effects. Participants were asked two questions upon completion of the intervention. These questions were (1) What was worthwhile/valuable about the experience at Ka'ala Farms? (2) Name one thing that you learned and can apply to your life.

Participants were also asked guiding questions during their last session to help them create a memory page. These questions were (1) How does living the Hawaiian values and visiting Ka'ala Farm make a difference in your life? (2) How does this experience make you feel? (3) Are there any changes in behavior in school, with your family or with others? Participants' responses were transcribed, themes identified, patterns identified, and compared.
Observations

Field notes and reflective observations by investigator and HIDOE teachers were recorded. Information was transcribed, themes identified, patterns identified, and compared to describe effects. The field notes and reflections will not appear in the appendixes due to the small sample size of the groups as description in field notes and reflections may compromise participant confidentiality. Also, it was important that the teacher's candid reflections are not misunderstood and interpreted as negative remarks.

Hawaiian Value Daily Log

The Hawaiian Value Daily Log (HVDL) was also used to collect qualitative data. Participants recorded evidence of behavior that demonstrated selected Hawaiian value (e.g., wash dishes, help the teacher in school, demonstrated good sportsmanship in a game situation) (refer to Appendix D). Information was compared and themes and patterns were identified.

Researcher Bias

Researcher bias should be noted and may impact interpretation of all observable events. I am Native Hawaiian and believe in its cultural values. As a Native Hawaiian female, I strongly believe that cultural interventions or a
culturally-based learning environment are effective means to assist Native Hawaiian students to become productive and contributing beings. I am also a health educator who works proactively to find means that help decrease health risk behaviors among youth. Therefore, interpretation of participant responses to cultural interventions and impact of interventions on dependent variables may be biased by my experiences.

Procedures

The following section will discuss the overall implementation of the study. This includes discussion on arrangements, schedules, details of the cultural intervention, and comparison group settings.

Implementation of the Study

Upon consent from parents, preliminary meetings were convened with HIDOE part-time teachers to explain the study, the administration of the measures for participants and parents, and define their responsibilities. It was decided that HIDOE personnel in collaboration with site staff would administer pre-measures of the STAIC, MEIM, HEI, RSES and BERS. It was also decided that the HIDOE resource teacher and part-time teachers would be present and involved in the cultural intervention and comparison group tutorial sessions. The
HIDOE personnel also agreed to transport intervention group and provide refreshments for participants.

Meetings with participants were scheduled and coordinated in collaboration with HIDOE personnel. It was decided that HIDOE personnel were the primary liaisons between participants and researcher, because of their previous and existing relationships with the participants. Participants were comfortable with their part-time teachers and these relationships were important to the process of the study, especially for intervention groups.

Participant meetings were convened. The participants were informed of the study and given an assent form (refer to Appendix H) agreeing to participate in the study. The form included a media release so that pictures could be taken and used for display. Most meetings took place during the regularly scheduled after school tutoring session. A special time needed to be scheduled for the Ma'ili participants, because they no longer had a regularly scheduled tutoring session and youth activities coordinator.

Identification numbers were assigned to participants to insure confidentiality. The comparison group participants, like their parents, were
informed that they would be given an opportunity to participate in a cultural intervention at a later date.

The HIDOE personnel placed all pre-measures for the STAIC, MEIM, HEI, and RSES in a packet. The students were given these packets to complete during a tutoring session and a special session for the Ma'ili group. The HIDOE personnel administered pre-measurements to all participants. The DOE resource teacher and part-time teachers decided to administer the pre-measures one-on-one or in groups of two. The instructions for each measure were read to participants. Participants were assured that all responses would remain confidential. They were encouraged to be as honest as possible and were told there were no right or wrong responses.

The DOE personnel also administered the BERS to the parents, sent the BERS to the participants' classroom teachers (see Appendix J) and completed a BERS themselves for the participants. The response rate for classroom teachers was very poor, due in part to the timing of the study. The study was conducted during the end of the school year. Once school was out for summer session it was difficult to follow up. Only 4 of 6 classroom teachers responded for the Waianae group for pre-measures and 2 of 6 for post. There were 3 of 5 pre-
measure responses for the Mai'ili group and 2 of 5 for post-measures. There were zero responses for Waimānalo group. However, I had phone calls from schools telling me that school was out for summer. Therefore, only the site teachers' BERS were used for data analysis. Findings were affected, because data could not be compared between intervention and comparison groups.

The Ma'iili group neglected to have BERS assessment, because parents did not complete the BERS and the youth coordinator was not there to rate the Ma'iili participants. There were not enough data to justify analysis.

**Intervention**

The intervention group participants were assisted to live the standards of Hawaiian culture by identifying Hawaiian core values and living them daily. They participated in a series of Hawaiian cultural lessons. The intervention consisted of ten contact hours: two one-hour sessions and four two-hour sessions over a six-week period.

The premise for this intervention was based on the Na'imiloa Curriculum Model developed by Nā Pua No'eau; Center for Gifted and Talented Native Hawaiian Children (Kawakami, Aton, Glendon, & Stewart, 1999). Kawakami met with the investigator to decide on a viable cultural intervention that would be
appropriate for the study. The Na'limiloa Curriculum is research-based and value-based, designed to provide opportunities for students to practice core Hawaiian values. The foundation of the Na'limiloa Curriculum Model is a body of values that originate in beliefs about the relationships cultivated by all Native Hawaiians (Kawakami et al., 1999). The values are identity, social interactions, physical environments and artifacts. Experts who conducted cultural interventions would address physical environment, social interactions and identity.

**Wai'anae Intervention**

The cultural sessions were as follows. HIDOE personnel were present at all sessions.

Session 1 (one-hour session): The investigator facilitated the first session. The intent was for the investigator to establish rapport with the participants. First, the group participated in a “getting to know you” activity (refer to Appendix H). Second, participants were asked to identify their ‘ohana (family), because this is culturally appropriate and important to Native Hawaiians. They were asked to create and share a family web/tree.

The investigator led a discussion with participants, asking them to identify traits or characteristics they deemed important for a person to possess. Example
prompts were, “What kind of traits do you think is important for a person? How should a person behave? What could others do to demonstrate respect toward them? What do you think is important?” Participant responses were written on the board. A pre-determined list of Hawaiian values taken from the Na'imiloa Curriculum (Kawakami et al., 1999) and cited by Kanahele (1986) was given to the participants (refer to Appendix I). These values were discussed and aligned participant their responses on the board.

The participants were given time to select a Hawaiian value that they would be able to practice living. After the participants selected a value, they were given instructions for keeping a daily record of how well they were “living” the value selected. They were asked to rate themselves using the following statement, “I am “living” / practicing my selected Hawaiian value of (name of value) well.” This item had a five-point response ranging from 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree. In addition to completing this item everyday, they were required to record the evidence of practice of that value at home, school, and/or in the community. Throughout the entire intervention, participants turned in their logs at the end of each week to the DOE part-time teachers. Refer to Appendix H for session agenda.
Session 2 – Session 5 (four two-hour sessions): Kumu Eric Enos from Ka'ala Farms, Incorporated was recommended to provide cultural interventions for the students in Waianae. The Ka'ala Farms, Inc. is a Hawaiian cultural learning center. During weeks two through five, Kumu Eric taught a series of lessons where participants learned about the value of wai (water), the ‘āina (land), respect and protocol, cooperative efforts, the science of agriculture and ethnobotany (Ka'ala Farms, Inc., 2004). The ‘āina means the “that which feeds.” Nature feeds man and man takes care of nature in return. The word ‘āina brings forth deep emotion from ancestral times when nature was an integral part of Hawaiians' lives (Harden, 1999). Lessons were intended to renew participants understanding and appreciation of the world around them.

Wai (water) is the most fundamental element in Hawaiian culture and very precious to the Hawaiian people (Harden, 1999). Wai symbolized their sustenance. Wai was important not only for consumption, but for irrigation and cleaning. Kumu Eric emphasized the importance of wai when he noted place names in Hawai‘i like Wai'anae, Waipahu, Waikele, Waimānalo, Waikīkī, Waipi‘o. The Waianae participants hiked to the watershed to clean the auwai (ditch) or the alawai (waterway). The participants learned about the ahupua‘a, ancient Hawaiian
land division from mountain to ocean. The watershed was at the top of the mountain where water flow began for the rest of the ahupua'a below it. Therefore, it was very important to keep the auwai (ditch) clean, so water would flow freely down below.

Participants observed the pounding of kalo (taro). They also learned about Hawaiian artifacts (e.g., ahu (altar), equipment used to pound kalo and kapa), and worked in the lo'i (irrigation terrace, especially for taro). The caring for the lo'i is important to the Hawaiians, because it symbolizes their connection to the 'āina and to mālama 'āina (take care of the land). The cultural interventions in Wai'anae focused on the Hawaiian values addressing physical environment, artifacts and social interactions (e.g., protocol). Details of weekly activities and their significance are located in Appendix H.

Session 6 (one one-hour session): The investigator with HIDOE personnel led this last session for the Wai'anae group. Participants were asked to reflect on their entire experience throughout the study. The Wai'anae group was provided photos of their visit to Ka'ala Farms. They were asked to provide a caption describing their experience at Ka'ala Farms.
Each week, participants met at their housing facility after school. The investigator and DOE personnel transported the participants to their cultural intervention site. If a student was absent, it was recorded. Two participants from the Wai'anae group had abandoned the study. One participant with an anxiety disorder opted not to continue after the first session. The other participant attended the first session at Ka‘ala Farms, Inc. and enjoyed it but couldn’t continue due to a heart condition that would put her in harm’s way. The Wai‘anae group decreased from 8 to 6 participants. The remaining Wai‘anae participants had good attendance. Three of six participants were absent only once throughout the entire study. Wai‘anae group parents attended weekly meetings and were reminded of their commitment to the study. Also, the director and case manager often kept track of the participants to ensure their attendance.

The investigator interviewed Wai‘anae participants after the last session. The interview prompts were (1) What was worthwhile/valuable about your experience at Ka‘ala Farms? (2) Name one thing that you learned and can apply to your life (refer to appendix D). Another teacher had taken photos to make a memory book for the students. For reflections, she asked the participants two questions and recorded their response. The questions were; (1) How does living
Hawaiian values and visiting Ka‘ala Farm make a difference in your life? (2) How does this experience make you feel? (3) Are their any changes in your behavior?

The DOE personnel also administered post measures of the STAIC, MEIM, HEI, and RSES to all participants. Parents were asked to complete the post measure of the BERS. The DOE personnel also completed the BERS and observation reflections of each participant (refer to Appendix D) for post-measure.

**Waimānalo Intervention**

The cultural sessions were as follows. HIDOE personnel were present at all sessions.

Session 1 (one-hour session): The investigator facilitated the first session. It was important for the participants to establish rapport with the investigator. The group participated in a “getting to know you” activity. Second, participants were asked to identify their ‘ohana (family), because this is culturally appropriate and important to Native Hawaiians. They were asked to create and share a family web/tree.

The investigator led a discussion with participants, asking them to identify traits or characteristics they deemed important for a person to possess. Sample prompts were, “What kind of traits do you think is important for a person? How
should a person behave? What could others do to demonstrate respect toward them? What do you think is important?” Participant responses were written on the board. A pre-determined list of Hawaiian values taken from the Na'i'mi'loa Curriculum and cited by Kanahele (1986) was given to the participants (refer to Appendix H). These values were discussed and aligned with their responses on the board.

The participants were given time to select a Hawaiian value that they would be able to practice living. After the participants selected a value, they were given instructions for keeping a daily record of how well they were “living” the value selected. They were asked to rate themselves using the following statement, “I am “living” / practicing my selected Hawaiian value of ___(name of value)___ well.” This item had a five-point response ranging from 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree. In addition to completing this item everyday, they were required to record the evidence of demonstration of that value at home, school, and/or in the community. Throughout the entire intervention participants turned in their logs at the end of each week to the DOE part-time teachers. Refer to appendix H for session agenda.
Sessions 2 – 4 (two-hours each): Bumpy Kanahele was recommended and agreed to facilitate cultural interventions for the Waimānalo participants. Once homeless, Bumpy Kanahele led the effort to build and establish a village community whose purpose was to re-establish Native Hawaiian rights.

Participants visited the Village of the Nation of Hawai‘i, a community established through the Hawaiian sovereignty movement. The State of Hawai‘i agreed to lease land to the Nation of Hawai‘i.

Kanahele was able to share the history of the village’s struggle toward sovereignty and their efforts to become self-sufficient. He reinforced the importance for the participants of identifying with their Hawaiian ethnicity.

Participants learned about the importance of being Hawaiian and knowing Hawaiian’s rights. They were able to hike to the watershed of the Waimānalo stream and see the lo‘i (irrigation terrace, especially taro) and ti leaf farm. They were also able to see and clean the wahi pana (sacred place), the place where the remains of many kūpuna (elders) from all over the world were laid to rest. The cultural interventions in Waimānalo focused on the Hawaiian values addressing identity and pride, as well as history and rights of Native Hawaiians in today’s society. Details of weekly activities are found in Appendix H.
Session 5 & 6 (combined three hours): Sessions 5 and 6 were modified because of the participant's schedule. There was only one participant by the fifth week. She wasn't able to complete the last hour of the intervention if extended another week. So, it was decided by Bumpy and the investigator to finish the intervention by combining the total hours of session 5 and 6. Kanahele led a one-on-one session with the remaining participant. He spoke with her about being on a youth council for the village. He talked more about Hawaiian rights. We also talked more about the future of the Hawaiian government. The investigator spoke with participant about her thoughts about the visitation.

Each week, participants met at their housing facility after school. The investigator and DOE personnel transported the participants to their cultural intervention site. The Wai'anae group decreased from 8 to 6 participants. The Wai'anae participants had good attendance. Three of six participants were absent only once throughout the entire study. Wai'anae group parents attended weekly meetings and were reminded of their commitment to the study. Also, the director and case manager often kept track of the participants to further encourage their attendance.
In contrast to the Wai'anae group, four of six participants from the Waimānalo group dismissed themselves from the intervention before the second session. Their father wanted them to participate in canoe paddling. Their paddling practice conflicted with the time of the intervention. Fortunately, two new participants were recruited and were brought up-to-date with forms and procedures but missed the initial session.

Despite this effort to replace the Waimānalo intervention group, participant attendance for the group became a problem throughout the study. Often participants were not ready to be picked up for sessions or had to be sought out from around the housing facilities. Frequently, case managers from the housing facility could not locate the participants or their parents. Unlike was the case at Wai'anae, there was no systematic way to remind parents and participants about their commitment to the study. To increase probability of attendance, the DOE part-time teacher began picking up some students from school. Only one student attended three of four cultural intervention sessions.

By the sixth week of the study, all but one of the Waimānalo participants abandoned the treatment. Therefore, the last session for the Waimānalo group was a one to one session conducted in collaboration with Bumpy Kanahele. Post-
measures of participants for the STAIC, MEIM, HEI, and RSES were difficult to obtain and deemed invalid. Data collected from the Waimānalo intervention group were inconsistent and were not analyzed. However, the qualitative and anecdotal data for the intervention group will be reported.

Comparison

The comparison groups at both sites met for the same amount of hours as the intervention group. No cultural intervention was given to participants. No formal instruction or meetings were conducted, but the time was used for tutorial or study sessions. The HIDOE resource teacher, part-time teachers and investigator conducted comparison group sessions. The investigator facilitated study sessions with Ma'ili participants, because HIDOE did not have a part-time teacher on site. The HIDOE part-time teacher facilitated the Waimānalo comparison group sessions, as a part of his regular workload. Comparison groups were offered to receive delayed intervention upon the completion of the publishing of study.

The Ma'ili comparison group had a total of five participants. In the second week, one participant abandoned the study and new participant was added to the Ma'ili comparison group. The new participant was administered pre-measures and
given additional tutoring hours to make up for the original session missed. Four of
five Ma'ili participants were present for all sessions. The fifth participant was
absent for one and a half sessions. After the final session, post measures were
administered to participants.

The Waimānalo group consisted of four participants from the original
intervention group and two original comparison group participants. Similar to the
intervention group, the Waimānalo comparison group was inconsistent and
continued to miss sessions. It was a challenge for the DOE part-time teacher to
keep record of hours spent tutoring the Waimānalo participants. Therefore, the
lack of participation made it difficult to collect reliable post measures. Data
collected from the Waimānalo comparison group were unreliable, inconsistent and
were not analyzed.
Chapter 4. Results

The hypotheses of this study was that Native Hawaiian students who identify or seek to identify with "being Hawaiian" and are assisted in achieving its standards of value (high cultural values) will (1) have higher levels of self esteem if they see themselves achieving cultural standards following intervention; (2) have lower levels of anxiety following intervention; (3) increase "adaptive" behaviors such as achieving academic standards, positive social interactions and making positive contributions to their families and communities.

The results of the pre and post-measures used to test the hypotheses are reported in this chapter. Attendance rates of participants are also reported in this chapter. Results will be presented using descriptive statistics (mean scores for central tendency) and standard deviation (for dispersion). Insufficient quantitative data for the Waimānalo study site were collected due to participants' abandonment of the study. Completion rates and hours among participants are exhibited in Table 2. Only the Leeward intervention and comparison groups' quantitative data were analyzed. All quantitative data presented in this chapter are for the Leeward intervention and comparison groups only. The qualitative and anecdotal data from
teacher observations, interviews and field observations for both groups will also be presented in this chapter.

### Table 2

**Participant Completion Rate**

<table>
<thead>
<tr>
<th>Group</th>
<th># Started</th>
<th># Completed</th>
<th># Mean Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeward Intervention</td>
<td>8</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Leeward Comparison</td>
<td>6</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Waimānalo Intervention</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Waimānalo Comparison</td>
<td>6</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

*Note: Mean hours were calculated by averaging total group hours for participants who completed the study*

**Belief in Hawaiian Culture and Hawaiian Identity**

Participants in the intervention group needed to identify with their Hawaiian culture as a condition of the hypothesis. The Phinney Multigroup Ethnic Identity Measure (MEIM) was used to measure the independent variable of Hawaiian identity. The He ‘Ana Mana’o O Nā Mo’omeheu Hawai‘i: a Hawaiian
Ethnocultural Inventory (HEI) was used to measure participants “faith” or “belief” in Hawaiian cultural worldview. In Table 3, the MEIM pre-measure mean of mean scores was lower than 3.0. This indicated that participants had not highly identified with their culture. However, the HEI pre-measure mean of mean scores, indicated that the intervention group had an “average” belief in Hawaiian cultural practices. Therefore, the intervention group met the first condition of the hypothesis.

After the cultural intervention, the intervention group mean of mean scores for both identity scales (MEIM and HEI) increased and the variance decreased indicated by the decrease in standard deviation. The pre-measures of the comparison group indicated higher mean of mean scores of Hawaiian identity than that of the intervention group. Similar to the intervention group, the pre-measure identification scores for the MEIM were lower than the identification scores of the HEI. The post-measure mean of mean scores decreased from an “average belief,” and “almost strong belief” of Hawaiian culture (3.93) to “some belief” in Hawaiian culture (2.79) (refer to Table 3).
Table 3

Numbers for Hawaiian Identity

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre M</th>
<th>Pre SD</th>
<th>Post M</th>
<th>Post SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phinney Multigroup Ethnic Identity Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention (n=6)</td>
<td>2.91</td>
<td>0.85</td>
<td>3.14</td>
<td>0.46</td>
</tr>
<tr>
<td>Comparison (n=5)</td>
<td>3.17</td>
<td>0.34</td>
<td>2.44</td>
<td>0.27</td>
</tr>
<tr>
<td>He 'Ana Mana'o O Nā Mo'omeheu Hawai'i</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention (n=6)</td>
<td>3.53</td>
<td>1.07</td>
<td>3.83</td>
<td>0.79</td>
</tr>
<tr>
<td>Comparison (n=5)</td>
<td>3.93</td>
<td>0.75</td>
<td>2.79</td>
<td>0.62</td>
</tr>
</tbody>
</table>

*Note.* Students were selected based on their Native Hawaiian ethnicity.

Student's Native Hawaiian's identity was confirmed by student and/or parent.

a. One student in the comparison group did not complete the post inventory.

The remaining scores were averaged.
The qualitative and anecdotal data collected through interviews revealed that participants felt better about being Hawaiian after the intervention (refer to Appendix L). The numerical data were supported by qualitative data. One participant expressed, "...happy to know that your ethnicity has a lot to do and makes you feel proud." The part-time teacher recalls a student declaring his Hawaiian aloud with pride during the intervention even if other students didn't believe that he was 100% Hawaiian. Students felt that learning about "Hawaiian stuff" was worthwhile and valuable. Another male participant said, "Eric acknowledged me and made me feel better about being Hawaiian."

**Practice of Hawaiian Values**

The independent variable of living/practicing the standards of Hawaiian values increased as the intervention progressed. Table 4 exhibits the mean of mean scores for the Hawaiian values log. Mean of mean scores increased from 3.31 in week one to 4.14 in week four.

Individual scores (refer to Appendix M) indicated that most participants consistently rated themselves throughout the week (e.g., if participants rated themselves a "4" (agree), they tended to rate themselves a "4" throughout that week). The quantitative data indicated that students did not view themselves as
living to the standards for two of four weeks. The qualitative data of the Hawaiian values logs indicated that participants were able to record evidence of their practicing the values that they selected (refer to Appendix M). Sometimes the quantitative scores indicated that participants felt that they were uncertain about living the Hawaiian value, but they recorded evidence of living that value (refer to Appendix M). For example, a participant rated himself a “2” (disagree) for the Hawaiian value of wiwo (obedience), but recorded “I did all my stuff without being told to do it...I went to class on time.”

The higher the mean of means scores, the greater the participants saw themselves living/practicing the Hawaiian value. The fourth week scores did not include the scores of 2 of 6 participants. The rest of the scores were averaged.

Participants were asked to log evidence for behavior at home, school and in the community that demonstrated living/practicing standards. Most participants logged positive behavior in their weekly logs (refer to Appendix M). Hawaiian weekly logs were compared and tasks categorized. Table 5 exhibits the values selected and the types of tasks recorded for home, school, and community. The evidence gathered here supported the values the participants chose. Those who selected wiwo (obedience), recorded evidence of helping around the home and
practicing expected responsibility. A participant who chose kūha‘o (self-reliance) recorded evidence of independent action without adult intervention.

**Table 4**

**Numbers for Weekly Hawaiian Values**

<table>
<thead>
<tr>
<th>Week</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>First (n = 6)</td>
<td>3.31</td>
<td>0.96</td>
</tr>
<tr>
<td>Second (n = 6)</td>
<td>3.63</td>
<td>0.97</td>
</tr>
<tr>
<td>Third (n = 5)</td>
<td>4.02</td>
<td>0.75</td>
</tr>
<tr>
<td>Fourth (n = 4)</td>
<td>4.14</td>
<td>0.86</td>
</tr>
</tbody>
</table>

*Note.* The higher the mean of mean scores, the greater the participants saw themselves living/practicing the Hawaiian value.

a. The 4th week scores does not include the scores of 2 of 6 participants. The rest of the scores were averaged.

b. If daily score was not available the rest of the scores in the week were averaged.
Table 5  
Qualitative Descriptors for the Practice of Hawaiian Values

<table>
<thead>
<tr>
<th>Hawaiian Values selected</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloha (love) (n=1)</td>
<td>Household chores (e.g. cleaning, cooking, washing clothes, dishes, yard work)</td>
</tr>
<tr>
<td>Koa (courage) (n=1)</td>
<td>Care for siblings</td>
</tr>
<tr>
<td>Wiwo (obedience) (n=3)</td>
<td>Listened to parents (mom and/or dad)</td>
</tr>
<tr>
<td>Kūhao (self-reliance) (n=1)</td>
<td>Helped parents</td>
</tr>
<tr>
<td></td>
<td>Did not fight</td>
</tr>
<tr>
<td></td>
<td>Did not argue</td>
</tr>
<tr>
<td></td>
<td>Did not cuss</td>
</tr>
<tr>
<td>Home</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listened to teacher</td>
</tr>
<tr>
<td></td>
<td>Finished class work</td>
</tr>
<tr>
<td></td>
<td>Not getting in trouble</td>
</tr>
<tr>
<td></td>
<td>Help teacher and peers in school</td>
</tr>
<tr>
<td></td>
<td>Did not fight</td>
</tr>
<tr>
<td></td>
<td>Be on time</td>
</tr>
<tr>
<td>School</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended tutoring</td>
</tr>
<tr>
<td></td>
<td>Helped at Ka`ala Farms</td>
</tr>
<tr>
<td></td>
<td>Helped grandparents</td>
</tr>
<tr>
<td></td>
<td>Yard work around the facilities</td>
</tr>
<tr>
<td></td>
<td>Did not bother other people</td>
</tr>
<tr>
<td></td>
<td>Play sports</td>
</tr>
<tr>
<td></td>
<td>Did not go outside</td>
</tr>
<tr>
<td>Community</td>
<td></td>
</tr>
</tbody>
</table>

90
Note. Recorded evidence was very subjective. Students interpreted actions for their value. There weren't any criteria for what type of actions demonstrated a value. For example, a participant recorded helping his mom as evidence for aloha (love).

Self Esteem

The RSES mean of mean scores for both treatment and comparison groups decreased, displayed in Table 7. RSES was used to measure the effects of cultural intervention on self-esteem. The score decreased by 0.46 for the intervention group and 0.18 for the comparison group.

Teacher reflections and students' interviews' exhibited that a sense of personal pride was instilled in most of the participants. In particular, there was a participant who did not know how to socialize with the group and often was not fully accepted by the group. However, his confidence increased, and he was able to "gained comradeship with others." By the end of the intervention, he was "assertive rather than aggressive and irritating." A teacher recalled that the participants were telling each other jokes in the van. The boy yelled, "I got one." The other participants let him tell the joke, and they all responded with laughter.
The teacher stated that this was a great breakthrough. This participant was better able to interact with the group and become a part of them.

Table 6
Numbers of Rosenberg Self-Esteem Survey

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention (n=6)</td>
<td>2.7</td>
<td>2.43</td>
</tr>
<tr>
<td>Comparison (n=5)</td>
<td>2.88</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note. The RSE scores are the means of the means the raw score. The higher the score is, the higher the self-esteem.

Other participants expressed how good they felt. For example, “Going to the watershed; got to clean the auwai; made you feel good...” Another participant stated, “Working in the lo'i, cleaning weeds – makes you feel good and proud.” Another participant in his private interview stated something similar. It was, “…help other people; help clean the auwai and lo'i; make you feel alright or good about it.” Refer to Appendix L for other comments.
Anxiety

Mean scores of the STAIC are presented in Table 6. STAIC was used to measure the effects of cultural intervention on anxiety. The mean scores of intervention group for both state and trait anxiety measures decreased by 2.5 after the cultural intervention. The mean scores of comparison group decreased by 0.6 on the state measure and 3.6 on the trait measure. Although both groups' mean scores exhibited a decrease in anxiety for both state and trait, the SD for the comparison group increased, while the SD for the intervention group decreased for both measures. This indicated less variance of scores for the intervention group and greater variance in the comparison group. Group scores of the intervention group were less varied and closer to the group mean after intervention.
Table 7

Numbers of State Trait Anxiety Inventory for Children Responses

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre M</th>
<th>Pre SD</th>
<th>Post M</th>
<th>Post SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAIC -1 (State Inventory)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention (n=6)</td>
<td>33.67</td>
<td>6.74</td>
<td>31.17</td>
<td>6.01</td>
</tr>
<tr>
<td>Comparison (n=5)</td>
<td>25</td>
<td>3.37</td>
<td>24.4</td>
<td>3.78</td>
</tr>
<tr>
<td>STAIC - 2 (Trait Inventory)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention (n=6)</td>
<td>34</td>
<td>15.98</td>
<td>31.5</td>
<td>6.80</td>
</tr>
<tr>
<td>Comparison (n=5)</td>
<td>37.2</td>
<td>10.28</td>
<td>33.6</td>
<td>12.74</td>
</tr>
</tbody>
</table>

Note. The higher the score is, the higher the anxiety. The maximum score is 60.

Effect size for STAIC – state is 1.79 and SAITC - trait

a. One student in comparison group did not complete the pre STAIC-1 (state inventory). The remaining four scores were averaged.

b. Mean and SD were rounded to the nearest 0.01.
The participants' reflections and teachers' observations also indicated a decrease in anxiety (refer to Appendix L). Students felt that the meditation techniques learned at Ka'ala Farms helped them to focus and relax when stress or confused. Teachers noticed how well behaved and engaged students were during the time of intervention. They were amazed at how well the students participated and were not withdrawn. Some students who initially hesitated became fully immersed in the activities as the study progressed. One participant diagnosed with Attention Deficit Hyperactive Disorder (ADHD) was always anxious. However, the teachers were amazed at his behavior when he was at Ka'ala Farms with Kumu Eric. He participated in discussions and stayed still. There was an incident where this participant came to Ka'ala Farms “bouncing off the wall.” However, after the meditation and pule (prayer) in the hale na'auao (house of knowledge), he settled and calmed down immediately. Participants also felt that their experience with cleaning the lo'i (irrigation terrace, especially for taro) and the auwai (ditch) made them feel "good." Also, observations indicate that participants had lots of "fun." Participants often times did not want to leave the intervention to go home.
Behavior

Participant behavior improved (refer to Table 8). The BERS was used to measure the effects of cultural intervention on behavior. Parent ratings indicated a 12.34 increase in positive behavior. Due to such a poor response from regular classroom teachers, only after school teacher responses were calculated and included in the results. Teacher responses exhibited a 5.17 increase. The parent responses marked a greater improvement than that of teachers.

Teacher reflections indicated that they noticed marked improvement in participants' behaviors. The teacher reflections indicated that participants listened during the Ka'ala Farms visit. Usually disruptive participants behaved during the intervention sessions. A participant diagnosed as having Attention Deficit Hyperactivity Disorder (ADHD) had a short temper and was easily irritable. However, during the time of the intervention, none of these traits were exhibited. The teachers were "amazed." Another participant stated, "I forgot about being obedient, but with Uncle Eric it was easy being obedient for him..." Another male participant stated," I made changes in my life like listening to my parents and being obedient to my parents and family. It made a difference in school after we
started to go to Ka’ala Farms. I do a lot better in school like from bad grades I went up to good grades."

Table 8

Numbers for Behavioral and Emotional Rating Scale

<table>
<thead>
<tr>
<th>Scores</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>107.83</td>
<td>13.96</td>
</tr>
<tr>
<td>Post</td>
<td>120.17</td>
<td>18.48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>97.67</td>
<td>8.19</td>
</tr>
</tbody>
</table>

Note. Scores represent strength quotient. The higher the score the more positive the behavior.

a. Behavior measures were only completed for the intervention group.

b. Behavior measures were incomplete for comparison group and could not be calculated.
There were other significant changes in behavior according to the Wai'anae teachers. Few participants had a tendency of non-participatory behavior and became readily involved in all stages of the intervention. For example, there was a participant who had a very low tolerance for rambunctious behavior, especially that of boys. She was known to quit activities in the past to avoid these kinds of situations. Her family also has a history of avoidant behavior when confronted with issues that are uncomfortable for them. Usually, her mother would side with her and pull her out of the after school class activities for spurious reasons. However, during the intervention, there was an incident in the van when another participant sprayed a fragrance in the air that made her feel nauseous. She told her mother of the incident, and her mother threatened to pull her from the intervention. The participant, however, insisted that her mother let her continue with the intervention. Her mother granted her wishes. The teachers felt that this was a significant difference of behavior. This participant had demonstrated some independence from her mother's protective and sheltering behavior that prior to intervention she used to her advantage. Her willingness to continue with the intervention was beyond the expectation of those familiar with her previous behavior.
There was another incidence when a participant hid the after school teacher's papers. He later called the teacher to his house and confessed to the prank. He not only confessed but also apologized. The teachers noted that she never witnessed the participant apologize for anything.

The student Hawaiian Value Daily Logs reflected that their behavior at home was positive (refer to Appendix M). The assignment to provide evidence of practicing values encouraged participants to make deliberate attempts to exhibit positive behaviors. They often noted that they listened to parents, helped with chores and avoided acting negatively (e.g. no fighting, and no cussing). Log entries corroborated with the BERS strength quotient scores.

**Waimānalo Intervention**

Quantitative data was insufficient for analysis for the Waimānalo participants. All but one participant abandoned the cultural intervention. The control group participation also waned as time progressed. Therefore, it became difficult to collect sufficient data, but the qualitative data for the single participant was informative and will be shared.

She was 16 years old and a sophomore in high school. She was the eldest sibling of three, and her father was incarcerated. She had problems and
conflict with her mother with whom she was living. This participant worked at a fast food restaurant, also. She was enrolled in the STAR program, a college prep program for students whose parents did not graduate from high school. She was drug free and trying to set an example for her younger siblings by being successful in school. In private conversation, she disclosed that she struggled with life a year prior and was a juvenile delinquent. This participant decided to turn her life around with the help of a caring teacher. She decided that she didn't want to be a statistic like her parents. She needed to succeed to lead the way for her siblings.

At the time of the intervention, this participant had overcome many previous barriers and was doing well in school. Her only problem was home. During the first session with Mr. Bumpy Kanahele, this participant became intrigued with the self-determination and self-betterment issues he shared with the participants. Mr. Kanahele shared the history of the village. He shared how the village operated and how residents became self-sufficient. The participant questioned Mr. Kanahele about the cost of living in the village. She expressed her desire to live in that environment. She was able to connect with Mr. Kanahele by finding mutual acquaintances and family. By discussing
acquaintances and family, she was able to find personal connections to Mr. Kanahele. The process is frequently used among Hawaiians when they meet to establish a connection. In fact, the participant disclosed that her father was incarcerated once.

From this starting point, Mr. Kanahele was able to share his mistakes and experiences. He was especially proud to share what he had learned through these experiences. Mr. Kanahele shared about his growth as a Hawaiian individual who was proud of his koko (blood). He expressed his ability to understand what being Hawaiian is about. Mr. Kanahele talked about Hawaiian rights. He was able to share his life with the participant. He was able to encourage them not become like him when he was as a teenager, but encouraged them to become productive citizens.

Mr. Kanahele also talked about the children in their village. They are at the top of their class in local schools. This was a great example for participants to see. He felt that Hawaiians should be academically successful to help their community.

After the first session with Mr. Kanahele, he suggested that the participant serve as a representative on their youth council. He suggested that she would
be able to travel to council meetings around the world if her mother allowed. The investigation team was excited for her. She became interested and came to all except one session.

This participant was encouraged throughout the course of the intervention. She was the only one to show up at the last session. So, Mr. Kanahele was able to have a one-on-one session. He inspired her to persevere towards success no matter what challenges arose. He encouraged her to stay out of trouble and do well for the sake of herself, as well as other Hawaiians. Mr. Kanahele also left her an open door to the village if ever she wanted to visit or participate in Hawaiian self-determination issues. The participant expressed her hope and enthusiasm in getting involved with Mr. Kanahele's project. This experience resonated with this student.

Summary

The quantitative and qualitative measures indicated that TMT is an effective framework. Although the quantitative results did not indicate an increase in self-esteem, but the qualitative and anecdotal data indicated otherwise. Intervention group participants felt good about themselves and their participation in the intervention. Anxiety decreased in both intervention and
comparison groups, but the variance of the intervention group scores decreased while the variance of the comparison group scores increased. Behavior improved among intervention group participants, also. Findings indicated that the intervention worked for the short-term on those who completed the program.
Chapter 5. Discussion

This chapter will discuss relationships among results, as well as their implications, and recommendations for future research. This chapter will also summarize the findings of the study.

The findings supported the hypotheses, that Native Hawaiian students who identified or seek to identified with “being Hawaiian” when assisted in achieving its standards of value would have higher levels of self esteem if they see themselves achieving cultural standards following intervention, lower levels of anxiety following intervention, and increase “adaptive” behaviors. The quantitative findings indicated that self-esteem decreased; however, qualitative and anecdotal results indicated that participants felt better about themselves and self-confidence increased. Results also indicated that anxiety decreased and adaptive behavior increased after treatment. The findings also indicated that Hawaiian identity increased after intervention.

Hawaiian Identity, Living Standards and Self Esteem

Hawaiian identity and practice of the Hawaiian values were key components of the hypothesis. Participants had to believe in Hawaiian cultural standards (values), as well as see themselves achieve those standards (values).
The Phinney MEIM indicated that the intervention group did not highly identify with their culture. However, the HEI results indicated that the intervention group had an "average" belief in Hawaiian culture. This difference in the results of the MEIM and HEI may be due to the specific cultural context of the instruments. In conversation with the author of the HEI, he felt that the HEI would naturally result in a higher identity score because it was designed to include items specific to Hawaiian culture. The MEIM was designed for use across any culture therefore items were more general (e.g. "I eat my ethnic food."). Refer to Appendix B to view items.

Findings also suggested that Hawaiian identity and belief in culture increased after intervention versus the decrease of Hawaiian identity and belief in the comparison group. These findings support the notion that increased practice of Hawaiian cultural experiences increases identity to, belief and faith in Hawaiian cultural worldview. Findings also may suggest that if someone identifies with and has faith in a cultural worldview but is not allowed to live/practice that culture, their identity to that culture may wane over time. This finding has significance pertaining to perpetuating that Hawaiian culture and its practices. If opportunities for practice of the culture are limited, identity to and
faith in Hawaiian cultural worldview will decrease. According to TMT, if belief in a
cultural worldview decreases or is fragmented, the standards for how to live and
act in that world of meaning cannot be achieved. Therefore, self-esteem will not
be achieved.

Although the intervention group believed in Hawaiian values, the
quantitative findings indicated that they did not see themselves living/practicing
the standards. Only half the group saw themselves as consistently living the
standards throughout the treatment (refer to appendix C). Qualitative and
anecdotal findings indicated that participants made concerted efforts to
live/practice values, but their quantifiable ranking did not match the qualitative
recorded behavior. For example, a participant listed that he listened to his mom,
listened to the teacher, but ranked himself "2" (disagree) as seeing himself
living/practicing the standard of wiwo (obedience) that day. This may be due to
the cultural inappropriateness of the instrument. Hawaiian culture does not value
individualism; therefore, an instrument that makes a Hawaiian answer about self
to report individual accomplishment may be awkward (e.g., "I am living/practicing
my selected value well."). Answering an item positively may have made a
participant felt that they were bragging. The results also indicated there were no 5s or "strongly agree."

However, if the quantitative data was an accurate account of the participants' practice of Hawaiian values, then it may be suggested that self-esteem measures may have been affected when participants did not meet this condition of the hypothesis. Although they were assisted to live standards via cultural intervention, if they did not see themselves living/practicing the standards everyday, self-esteem could not be raised (Pyszczynski, Solomon, & Greenberg, 2003).

Another speculation can be made about self-esteem results. Qualitative and anecdotal data suggested that self-esteem was achieved. Participants expressed their sense of "feeling good" about themselves, having a sense of cultural and personal pride, and increase in confidence. Teacher observations also suggested that participants felt better during the intervention, exhibiting signs of increased self-esteem and confidence. Therefore, the RSES may not be an accurate quantitative measure. The RSES may not be a culturally appropriate measure for self-esteem as defined in this cultural context. The RSES is worded with many "I" forms (refer to Appendix B). Having to rank
yourself as achieving or excelling is very hard for Hawaiians. In fact, it is looked at as being boastful. Participants may have been instructed to be as honest as possible and there were no right or wrong answers. However, a Hawaiian may feel uncomfortable expressing self-esteem according to items given on the RSES. Therefore, it is possible that self-esteem was raised as a result of cultural intervention but that participants were reluctant to rate themselves accordingly.

Self-esteem decreased for the comparison group also. Researcher observations did not indicate that the sense of personal pride and confidence increased for control group. On the contrary, students were often bored and did not enjoy their circumstances at school and in the community.

Self-esteem may be a variable that needs more time to develop (Telljohann, Symons, & Pateman, 2004). It may mean that cultural interventions need to be more frequent and consistent over a longer period of time. The HIDOE personnel assisting in the study strongly believed that the time of the intervention was too limited. They were beginning to observe positive changes. The teacher reflections indicated that participants' attitudes were changing from hesitation to participate in teen classes to anticipation of Ka'ala Farm visits. The HIDOE personnel expressed feeling of continuing intervention through a summer
The participants also expressed their displeasure about the termination of the study. This reality may have impacted self-esteem negatively knowing that they were no longer able to easily participate in cultural practices. In the after school teacher's reflection, she stated that the students were sad to leave on the last visit to Ka'ala Farms. In fact, there was a participant who was not feeling well and insisted on attending the last session. When he was told that he should stay back, he became very angry. So, the teacher brought him to the last session. He did not participate in any of the activities, but wanted to be in the midst of everyone on the farm. Eventually, his parents came to pick him up, but they were able to see for themselves what their two sons had been experiencing. The parents of this boy were impressed. Their facial expression exhibited pride in what their other son had accomplished that day (building the mud wall for the lo'i). Another participant noted that he wanted to return to Ka'ala Farms and do voluntary work on the farm. After the intervention, he continued to ask the teacher if he could go back to the farm. Knowing that an enjoyable and meaningful experience would end could have had an effect on participants' self-esteem.
A limitation to be noted was the participant's socio-economic status (SES) and the circumstance of living at a transitional housing facility. Maslow's heirarchy as cited in (Telljohan, Symons, & Pateman, 2004) suggests that self-esteem cannot be achieved until a students' essential needs are met. These needs are physiological needs (food, water and sleep), safety needs (security, order, and stability), and a need for love and belonging. Therefore, this may be another explanatory model used to explain the reason that self-esteem could not be achieved. Maybe lack of stability of living conditions affected self-esteem. Also, the end of the intervention may have also created sadness and added to their insecurity of losing good things, lowering self-esteem.

Anxiety

Anxiety measures indicated positive effects for intervention and comparison groups. It may be speculated that decrease in anxiety was attributed to mere attention given to both groups over 10 hours in an extra-curricular setting. One may guess that involvement in an after school activity (with significant adult or having extra attention) may serve as the basis to why intervention and comparison groups demonstrated decreased anxiety. It should be noted that the intervention group already were involved in weekly tutorial
sessions before intervention and still indicated a decrease in anxiety after intervention.

Qualitative and anecdotal findings also suggested that participants felt calmer after weekly interventions. Participants also indicated that techniques taught in the intervention were helpful in relieving anxiety and stress. Meditation and pule (prayer) were standard Hawaiian protocols practiced each week at Ka`ala Farms. Therefore, participants were more focused and able to stay on task at the farms. This suggests that the cultural intervention had an affect on their anxiety.

Behavior

It was evident that participant behavior improved after intervention as indicated by teachers and parents. Based on the qualitative and anecdotal data, participants stated that “it was easy to listen to Kumu Eric” at Ka`ala Farms (refer to Appendix L). The experience of being at the farm and the respect it elicited forced participants to change their behavior. Participants were made aware of culturally appropriate social interactions such as protocols when entering the farms and engaging in cultural activities. Every week participants had to meditate and focus on their surroundings, respecting everything around them.
Teacher reflections indicated that students who tended to have bad attitudes or tended to act "too cool," did not exhibit that type of disposition on the farm. Also, a participant who was identified as ADHD, demonstrated his ability to stay on task by creating a great kapa design on his bark. He also took a leadership role in cleaning the waterway. He immediately jumped in the water and started to clear the waterway. This participant guided the other students when cleaning the waterway. Another student who was usually introverted and who other members don't socialize with was able to share a joke. Not only did the group listen, but they also laughed at his joke. Before this intervention, most group members did not include him in discussions and also teased this participant.

Behavior measures could also be correlated with behaviors recorded in participants' Hawaiian Value Daily Logs (HVDL). Participants were consciously living/practicing the values at home, school and in the community. Parent responses derived from how participants were living at home. Most responses suggested that participants were helping with household chores, family responsibilities, and listening to parents. Participants' completion of class work and homework was also reflected in HVDL. This behavior may have impacted their behavior and achievement in the after school classes. In fact, a participant
noted that he was promoted to the ninth grade. It is not known if this is a result of the treatment. However, he noted this accomplishment, because he felt supported.

There may be a limitation on behavior results due to the fact that comparison group measures were difficult to collect. There were only two of five pre and post BERS teacher responses for the comparison group. Therefore, scores were not compared, and no inferences were made.

Self Esteem, Anxiety and Behavior

If the speculation of qualitative findings for self-esteem and RSES inappropriateness is believed, self-esteem was achieved after intervention. Anxiety was managed and behavior improved after intervention. Therefore, findings would support the hypothesis. However, if the previous speculation is not believed, self-esteem was not achieved in the findings of this study. Anxiety and behavior changes would need another explanation. Another hypothesis must be given for the decrease in anxiety and increase in adaptive behavior. Is self-esteem necessary to manage anxiety and increase adaptive behavior?
Implications of the Study

The findings indicated that this study was valuable and beneficial to the participants involved, especially the intervention groups. The participants enjoyed the intervention and indicated specific learning, for example, mālama the ‘āina, which is caring for the land and the importance of wai (water) to Hawaiians. Most participants acknowledged the importance to take care of the environment, not to pollute the environment, land and water. For example, one participant said, “No litter; Keep the land clean; makes you want to take care of it.” The Waianae participants did not want the experience to end. Most of them expressed their desire of returning to Ka‘ala Farms. It was most evident through observations that the participants were able to connect to their cultural roots while at Ka‘ala Farms. Also, that one remaining participant in Waimanalo consistently listened to Mr. Kanahele with great intention to pursue a future that would allow her to become a successful Hawaiian that would help the plight of her community.

Participants displayed pride when learning more about the ancient Hawaiian ways and how these practices relate to their present situations and communities. It was not surprising that participant Hawaiian identification
increased as a result of the intervention. Cultural relevance was important to build a sense of self (The Kamehameha Schools Policy Analysis & System Evaluation, 2003).

Also, most parents were excited about this study and the opportunity presented to their children. In Wai'anae, there was a mother of a participant who hesitated to let her child participate in any extracurricular activity. This mother was known to be overbearing. When the participant's father heard about the cultural intervention for this study, he asserted himself to volunteer his daughter. He said, "On no, she's going!" According to the HIDOE teachers, for the father to make the decisions and possibly override the mother's decision almost never happens. This demonstrated parents' eagerness to have their children participate.

The findings support the need for continued cultural interventions for the Native Hawaiian youth. When Native Hawaiian youth are involved in cultural interventions, ethnic identity increases, self-esteem is achieved, anxiety decreases and adaptive behaviors may increase. To facilitate change to risk and maladaptive behaviors of Native Hawaiian youth, as explained in the introduction,
cultural interventions seem to be key. There should be increased opportunities and accessibility of on-going cultural interventions for all Native Hawaiian youth.

The Department of Education may want to explore more options of providing on-going culturally appropriate interventions for Native Hawaiian students who are enrolled in special education programs and alternative learning programs. They may also want to integrate Hawaiian cultural understandings and values in their mainstream curriculum in schools of heavily populated Hawaiian communities.

Limitations of the Findings

There were barriers that may have limited the reliability of the findings. These barriers included:

1. Inconsistencies in data collection – Participants failed to show up for all of the post measures, most parent and teacher BERS weren't completed and turned in for either the pre measure or post measure for Waimānalo and Ma'ili groups.

2. Accessibility to participants and parents (e.g., lack of liaison in Ma'ili and, on occasion, Waimānalo) – It was difficult to round up participants and ensure consistency of participation because some sites could not provide a manager
who could insure consistent participation through the study. The Wai‘anae after school sessions conducted by the DOE were more structured deliberate, and strongly recommended by site director versus the Waimānalo after school sessions that were more random and voluntary.

3. Parents insuring child’s participation differed amongst sites. The Wai‘anae site had weekly parent classes and constantly reminded parents to insure their children were present for the intervention. However, Waimānalo parents consented to participation but did not enforce their children’s participation.

4. Different interventions yielded different participant response. The Wai‘anae intervention was more structured around ancient Hawaiian practices in comparison to the Waimānalo intervention that dealt with current Hawaiian identity issues as explained in Chapter 3. This difference may explain the difference of group response and motivation to continued intervention. First, it would seem that the Wai‘anae group delighted in the “hands-on” activities. They were also able to make connections of ancient practices to today’s society on Oahu. The relationships of Hawaiian values were more defined and concrete versus the Waimānalo intervention. The Waimānalo intervention dealt more with race identity causal effects. For example, issues
surrounding current disparities amongst Native Hawaiian communities and colonization issues. That intervention definitely appealed to the older student who had already suffered societal woes of juvenile offenses and homelessness. It, however, may not have appealed to the other Waimānalo participants who were younger and some non-Hawaiian.

5. The sample size compromised statistical analysis since variation of one participant can influence group means heavily. The limitations of sample size, non-equivalence of groups and differences of cultural intervention may have limited the findings. Also, the study was conducted with specific culture, age, and socio-economic status. Findings cannot be generalized beyond this population.

Recommendations

Teacher education programs would benefit from the findings of this study to address educational needs of Native Hawaiian students by effectively preparing the teachers who teach them. It would also benefit the Native Hawaiian community to conduct further research of TMT and its implications for Native Hawaiian youth prevention and intervention programs. Recommendations for application of the findings are the following:
1. Teacher education programs need to emphasize the need for teachers to create meaningful instruction for students, specifically culturally (ethnic, community, socio-economic, etc) relevant and appropriate.

2. Teacher education programs need to emphasize the need for teachers to create learning environments that are nurturing and safe. Environments that facilitate their students to “feel good about themselves.” Environments that allow all students to feel valued and worthwhile. Environments that allow for students to make connections to their surroundings, experiences, as well as people. Environments that facilitate trust and equity.

Recommendations for future research are the following:

1. Increase sample size and randomize Native Hawaiian participant selection from a designated population.

2. Increase treatment period.

3. Design the experiment that uses a single control group and treatment group. Groups should be equivalent to maximize reliability of results.
4. Use cultural interventions that are exactly the same. Differences in interventions may lead to too much speculation and results may not be conclusive.

5. Review pre and post measures and their function. Excessive measures may result in incomplete and inconsistent responses.

6. Select pre and post measures that are most culturally appropriate.

The RSES may not have been suitable for the context of this study. Therefore, it is recommended that another instrumentation be used to measure self-esteem. It is also recommended that the HEI be solely used to establish faith/belief in the cultural worldview.

7. Validate instrumentation to measure how a person sees him/herself living the standards/values of a believed cultural worldview. The Hawaiian values log was cumbersome for the participants. The DOE teachers made an extensive effort to insure that participants completed the log on a weekly basis. There must be a better way to measure this variable.
8. Replicate this study to test the TMT hypothesis within other cultural
settings such as HIDOE charter schools, The Kamehameha Schools
and community programs that focus on Hawaiian culture.

9. Replicate study with other transitional housing groups of students in
other parts of the State, including islands other than O`ahu, with a
longer treatment period.

Summary

The problem explored in this study was to test the applicability of the
Terror Management Theory (TMT) and its principles for Native Hawaiian students
and Native Hawaiian culture. The hypothesis of this study was Native Hawaiian
students who identify or seek to identify with "being Hawaiian" and are assisted in
achieving its standards of value (high cultural values) will (1) have higher levels
of self esteem if they see themselves achieving cultural standards following
treatment (2) have lower levels of anxiety following treatment (3) increase
"adaptive" behaviors such as achieving academic standards, positive social
interactions and making positive contributions to their families and communities.

This study was a collaborative project with the Hawai`i Department of
Education (HIDOE), Office of Curriculum and Instruction Support Services,
Special Programs Branch. The design of this study was a quasi-experimental nonequivalent control-group design, consisting of two treatment groups and two control groups that were identified by natural assembly. The investigator, DOE personnel and cultural teachers led cultural interventions for treatment groups and tutorial sessions for control groups for ten contact hours over a five to six week period. Cultural interventions in Wai'anae included weekly visitations to Ka'ala Farms and in Waimānalo weekly visitations to the Nation of Hawai'i Village. Native Hawaiian cultural values were taught to and practiced by Native Hawaiian participants through cultural teachings. The effects on self-esteem, anxiety and behaviors were measured before and after the experiment.

Based on the data presented and within the limitations of this study, the following conclusions were made:

1. Hawaiian identity and belief in Hawaiian culture increased after intervention.

2. Qualitative and anecdotal data suggested that self-confidence and personal pride were raised in the intervention group. It must be noted that the quantitative self-esteem measure (RSES) did not indicate an increase, perhaps because it may not be culturally appropriate for Native Hawaiian participants and the sample was small.
3. Anxiety decreased after intervention. Anxiety also decreased for comparison groups. However, the intervention did have an impact on anxiety of the treatment group, because this group was in a tutorial setting for eight months before intervention. Therefore, the difference in anxiety measures can be attributed to the new intervention.

4. Adaptive behavior increased after intervention. Both parent and teacher BERS responses indicated an improvement in behavior.

There is positive indication that findings support that the TMT framework is applicable to Native Hawaiian youth. Quantitative findings indicated that participants did not see themselves living/practicing values. However, participants recorded evidence for living/practicing values. In relation to this finding, the RSES did not indicate an increase in self-esteem, but qualitative and anecdotal data indicated increase in self-esteem. Anxiety decreased and scores reflecting adaptive behaviors increased. Specific results can definitely be justified using TMT. Variables of TMT can be manipulated and studied. It is worthwhile to continue further research in this area to obtain more substantive data supporting these hypotheses.
Appendix A

AGREEMENT TO PARTICIPATE IN:

An investigation of the relationship of cultural identification and the achievement of cultural values on anxiety, self-esteem and adaptive behavior among Native Hawaiian youth

A Study being conducted by
Alethea Ku'ulei Serna, University of Hawai'i, College of Education
223A Wist Annex 2, Honolulu, HI 96822
Phone: (808) 956-4412

I am Ku'ulei Serna, a Native Hawaiian graduate student and instructor at the University of Hawai'i, who is concerned about the health and self-esteem of Native Hawaiian children. I am interested in learning about how to assist Native Hawaiian children to practice Hawaiian values daily to help them increase self-esteem and lower anxiety. Children will be placed in two groups. Children will participate in a tutorial study session or a session where they will learn about Native Hawaiian values and the Hawaiian history of the community that they live in.

Children will be meeting for total of ten hours, two times for one hour each time and four times for two hours over the course of six weeks. Sessions will be offered this spring and again next fall. I will conduct the sessions with the help of invited guests from the Native Hawaiian community, who will share Native Hawaiian historical facts and values. Meetings will be held on the village or shelter site or at a Hawaiian cultural site with a cultural expert once a week. The meetings may be video taped and photos may be taken. Portions of the tapes,
photos and written responses may be used in reporting results. Children's
names will not be used in the report.

The study will also involve taking a series of surveys at the beginning and
end of the study about Native Hawaiian identification and self-esteem. Children
will be asked to keep notes that show their activity of living Hawaiian values.
Parents and teachers will be asked to fill out simple checklists on positive
behavior. The information from these surveys and written responses may be
used in reporting results. You or your child may withdraw from the project at any
time, if so desired.

I certify that I have read and that I understand the foregoing, that I have
been given satisfactory answers to my inquiries concerning project procedures
and other matters and that I have been advised that I am free to withdraw my
consent and to discontinue participation in the project or activity at any time
without prejudice.

I consent to the participation of my minor child or ward in this project with
the understanding that such consent does not waive any of my legal rights, nor
does it release the principal investigator or the institution or any employee or
agent thereof from liability for negligence.

______________________________________________________________
printed name of minor________________________________________

______________________________________________________________
signature of parent or guardian________________________________

Date_________________________ Date___________________________

If you cannot obtain satisfactory answers to your questions or have comments or complaints
about this study, contact: Committee on Human Studies, University of Hawai‘i, 2540 Maile Way,
Honolulu, Hawaii, 96822. Phone: (808) 956-5007.
Appendix B

He ‘Ana Mana’o O Nā Mo’omeheu Hawai‘i; Survey of Hawaiian Cultural Practices (Crabbe, 2002)

Sample items include:

<table>
<thead>
<tr>
<th>No Belief</th>
<th>Some Belief</th>
<th>Average Belief</th>
<th>Strong Belief</th>
<th>Very Strong Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>At All</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

How strong is your belief in carrying on the practice of hula ‘auana or modern hula dances? 1 2 3 4 5

Do you believe that lauhala weaving is an important Hawaiian tradition? 1 2 3 4 5

To what extent do you believe that traditional canoe navigation helps one to connect with the Hawaiian culture? 1 2 3 4 5

To what extent do you believe that lā‘au lapa‘au or traditional healing help person to identify with the Hawaiian culture? 1 2 3 4 5

How strong is your belief in carrying on the practice of surfing as part of Hawaiian culture? 1 2 3 4 5

Do you believe that the practice of hānai or rearing children is an important part of Hawaiian culture? 1 2 3 4 5

Do you believe that preparing and eating traditional Hawaiian foods is an important part of Hawaiian culture? 1 2 3 4 5
Appendix C

The Multigroup Ethnic Identity Measure (Phinney, 1992)

Please fill in:
In terms of the ethnic group, I consider myself to be __________________________

Use the numbers given below to indicate how much you agree or disagree with each statement:

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>Somewhat agree</td>
<td>Somewhat disagree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs. 4 3 2 1

2. I am active in organizations or social groups that include mostly members of my own ethnic group. 4 3 2 1

3. I have a clear sense of my ethnic background and what it means for me. 4 3 2 1

4. I think a lot about how my life will be affected by my ethnic group membership. 4 3 2 1

5. I am happy that I am a member of the group I belong to. 4 3 2 1

6. I am not very clear about the role of my ethnicity in my life. 4 3 2 1

7. I really have not spent much time trying to learn more about the culture and the history of my ethnic group. 4 3 2 1

8. I have a strong sense of belonging to my own ethnic group. 4 3 2 1
9. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups. 4 3 2 1

10. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group. 4 3 2 1

11. I have a lot of pride in my ethnic group and its accomplishments. 4 3 2 1

12. I participate in cultural practices of my own group, such as special food, music, or customs. 4 3 2 1

13. I feel a strong attachment towards my own ethnic group. 4 3 2 1

14. I feel good about my cultural or ethnic background. 4 3 2 1

15. My ethnicity is
(1) Asian, Asian American, or Oriental
(2) Black or African American
(3) Hispanic or Latino
(4) White, Caucasian, Haole
(5) American Indian
(6) Native Hawaiian or part Native Hawaiian
(7) Other ___________________________

16. My father’s ethnicity is (use number above): __________________________

17. My mother’s ethnicity is (use numbers above): __________________________
Hawaiian Value Daily Log

<table>
<thead>
<tr>
<th>Day of Week</th>
<th>Evidence of Behavior: &quot;What did you do to show this value....&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>At home:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>At school:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;I am &quot;living&quot; / practicing my selected Hawaiian value of</td>
</tr>
<tr>
<td></td>
<td>well.&quot;</td>
</tr>
<tr>
<td></td>
<td>Circle one of the following:</td>
</tr>
<tr>
<td></td>
<td>1 = strongly disagree</td>
</tr>
<tr>
<td></td>
<td>2 = disagree</td>
</tr>
<tr>
<td></td>
<td>3 = uncertain</td>
</tr>
<tr>
<td></td>
<td>4 = agree</td>
</tr>
<tr>
<td></td>
<td>5 = strongly agree</td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>At home:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>At school:</td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;I am “living” / practicing my selected Hawaiian value of</td>
</tr>
<tr>
<td></td>
<td>well.&quot;</td>
</tr>
<tr>
<td></td>
<td>Circle one of the following:</td>
</tr>
<tr>
<td></td>
<td>1 = strongly disagree</td>
</tr>
<tr>
<td></td>
<td>2 = disagree</td>
</tr>
<tr>
<td></td>
<td>3 = uncertain</td>
</tr>
<tr>
<td></td>
<td>4 = agree</td>
</tr>
<tr>
<td></td>
<td>5 = strongly agree</td>
</tr>
</tbody>
</table>
Appendix E

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself. SA A D SD
2. At times, I think I am no good at all.* SA A D SD
3. I feel that I have a number of good qualities. SA A D SD
4. I am able to do things as well as most other people. SA A D SD
5. I feel I do not have much to be proud of.* SA A D SD
6. I certainly feel useless at times.* SA A D SD
7. I feel that I am a person worth, at least on an plane with others. SA A D SD
8. I wish I could have more respect for myself.* SA A D SD
9. All in all, I am inclined to feel that I am a failure.* SA A D SD
10. I take a positive attitude toward myself. SA A D SD

*Reversed items
Appendix F

State Trait Anxiety Inventory for Children (Speilberger, 1970)

The following are sample items that measure state and trait anxiety.

State Items:

I feel ............................very clam calm not calm

I feel ............................very terrified terrified not terrified

Trait items:

I worry about making mistakes ...........hardly ever sometimes often

I worry about my parents ...............hardly ever sometimes often

I am secretly afraid ........................hardly ever sometimes often
Behavioral and Emotional Rating Scale

The following are sample items that measure behavior in the following categories: Interpersonal Strength (IS), Family Involvement (FI), Intrapersonal Strength (laS), School Functioning, and Affective Strength (AS)

Rating Scale:
3 = very much like the child
2 = like the child
1 = not much like the child
0 = not at all like the child

1. Accepts responsibility for own actions (IS) 3 2 1 0
2. Interacts positively with siblings (FI) 3 2 1 0
3. Talks about positive aspects in life (laS) 3 2 1 0
4. Attends school regularly (SF) 3 2 1 0
5. Expresses affection for others (AS) 3 2 1 0
Appendix H

AGREEMENT TO PARTICIPATE IN:

An investigation of the relationship of cultural identification and the achievement of cultural values on anxiety, self-esteem and adaptive behavior among Native Hawaiian youth

A Study being conducted by
Alethea Ku'ulei Serna, University of Hawai'i, College of Education
223A Wist Annex 2, Honolulu, HI 96822
Phone: (808) 956-4412

I am Ku'ulei Serna, a Native Hawaiian student and teacher at the University of Hawai'i. I care about the health and self-esteem of Native Hawaiian children. I want to help Native Hawaiian children practice Hawaiian values everyday. This may help their self-esteem.

I would like to meet with you to help me with this study. You will be placed in two groups. Some of you will participate in a group study meeting and others in a meeting where you will learn about Native Hawaiian values and the Hawaiian history of the community that you live in.

You will meet with me a total of ten hours, two times for one hour each time and four times for two hours. For you who start in the group study meetings, you will be able to have the Hawaiian values meetings in the fall. I will invite guests from the Native Hawaiian community, who will share Native Hawaiian historical facts and values. Meetings will be held on the village or shelter site once or twice a week. The meetings may be video taped and photos may be
taken. Portions of the tapes, photos and written responses may be used when I write about my experiences with you. Your name will not be used in the report.

You will also take simple surveys at the beginning and end of the study about Native Hawaiian identification and self-esteem. You will be asked to keep notes that show that you are living Hawaiian values. Your parents and teachers will be asked to report your positive behavior to me, also. The information from these surveys and written responses may be used when I write my report. You may withdraw from the project at any time, if so desired.

I certify that I have read and that I understand the foregoing, that I have been given satisfactory answers to my inquiries concerning project procedures and other matters and that I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time without prejudice.

I consent to the participation in this project with the understanding that such consent does not waive any of my legal rights, nor does it release the principal investigator or the institution or any employee or agent thereof from liability for negligence.

__________________________ ____________________________
printed name of minor signature of minor

__________________________
Date

If you cannot obtain satisfactory answers to your questions or have comments or complaints about this study, contact: Committee on Human Studies, University of Hawai‘i, 2540 Maile Way, Honolulu, Hawaii, 96822. Phone: (808) 956-5007.
April 26, 2004

Dear Teacher,

Aloha. My name is Ku`ulei Serna, a graduate student and acting Assistant Professor at the University of Hawai`i at Manoa, College of Education, Institute for Teacher Education. I am studying about how the cultural worldview and practice of culture affects self-esteem, anxiety and behavior of Native Hawaiian students. I am working, in collaboration with Department of Education Special Programs, with Native Hawaiian students and assisting them to practice Native Hawaiian values by involving them in cultural activities.

I am pleased that your student, ______________________, with consent from his/her parent(s) has agreed to participate in this project. I am interested in their pro-social behaviors before and after the project. Therefore, I am kindly asking for your assistance in assessing their behavior by completing the attached Behavioral and Emotional Rating Scale (BERS) to the best of your ability. I will also request assistance to fill out another BERS after the student has received a series of cultural activities in another five weeks.

The information you will provide is vital to this study and will be kept confidential. I understand that your time is precious, and I appreciate your kokua (help). If you have any questions or concerns, you may contact me at 956-4412 or email, kserns@hawaii.edu. You may also email, Judy Tonda at Judy_Tonda@notes.k12.hi.us.

Mahalo nui loa (Thank you much).

Sincerely,

A. Ku`ulei Serna
University of Hawai`i at Manoa
College of Education
1776 University Avenue, WA-2, 223
Honolulu, HI 96822
Appendix J

Wai'anae Intervention

Agenda for Session 1 (1 hour)

Objectives:
1. Students will be able to express what is important to them and express a value system.
2. Students will be able to make a family tree to the best of their ability.
3. Students will select one Hawaiian value that they will practice throughout the course of six weeks.
4. Students will be able to understand their task for the six-week project.
5. Students will gain introductory understanding of the History of the Hawaiian people.

I. Four things to remember (5-10 minutes) – Students will introduce themselves and share four things about themselves to a partner who will then remember the information and share information to the entire group. The four things to remember are name, favorite movie, favorite hobby, and “what is important.”

II. Students will make a name tent that exhibits what is important to them and what they want to be remembered for (10 minutes).

III. Students will make a family tree and share information about their family (10 minutes)

IV. Students will brainstorm list of values and match Hawaiian values – Guiding questions: What is important to you? What do you value most? How should you conduct yourself? If you pick characteristics or the way people should behave or act, or need to show respect or be respected, what would it be? What does it mean to be Hawaiian? What do you think makes you a Hawaiian?

V. Use guided discussion to have students select Hawaiian value from list.

VI. Review expectations of the study

VII. Prepare students for Ka`ala Farms – read handout from Ka`ala Farm
Session 2 - Ka‘ala Farms, Inc. (2 hours)
1. Participants met Kumu Eric Enos and learned about the history of the Ka‘ala Farms. Kumu talked about removing koa trees, uncovering and restoring the lo‘i (taro patch). This restoration project took 25 years.
2. Participants learned about the ‘āina (land), ahupua‘a (land divisions from the mountain to the ocean), and how the land sustained the Hawaiians. They learned about the ancient Hawaiians and some terms that were derived from the land. For example, ‘āina translated as land. ‘Ai is translated as food. The land was important to Hawaiians, because it supplied food and sustenance for them. Wai (fresh water) was essential to the livelihood of the Hawaiians. The Kai (salt water) and wai (fresh water), water was very precious to the Hawaiians. Many place names start with wai (e.g. Waipahu, Waianae, Waieka, Waipio, Waikiki, etc.)
3. Participants learned some protocol to ask for permission, to be welcomed into the Hale Na‘auao (House of Knowledge). They meditated. They opened with prayer for ask help from God.
4. Kumu Eric talked about stream (honua), about the goddess who gathers the mist in Waianae and why the wai comes from the mountain. Whenever one enters on the land you have to quiet yourself for your spirit, mind and body will be in tuned with your surroundings. Be watchful and alert. He prepared us to enter in the Hale. Talked about getting someone’s attention. You must be invited. Kids introduced themselves. Hui...Aloha e Aloha mai.
5. Kumu talked about the ahu (altar). He mentioned to the participants not to u‘e or complain. He showed two stones that looked like feet, one big and one baby. He asked, “Where’s the other foot of each? Where’s the other foot?” The other foot is us. We have to take initiative and put our best foot forward. We can’t expect others to do things first. We need to take action and not to cry or complain.
6. Kumu showed us dried kalo. He showed us how to make pai‘ai (pounded, but undiluted taro). People traveled far in ancient Hawaii. So, they would eat the kalo (taro) in that form. It would last long.

Session 3 - Ka‘ala Farms (2 hours)
1. Participants crossed the honua.
2. Participants practiced protocol by greeting Kumu. “Aloha mai...como mai.
3. Everyone entered in
4. Kumu Eric made us center ourselves; pule
5. Kumu reviewed what was going to be done. He talked about the wai (water), honua (honu – world rest on the turtle’s back).
6. Kumu prepared us to go to the place where the water came from. We hiked 1 mile up in the mountain to the watershed. The students cleaned the alawai (water way), the limu (moss) with their feet. He talked about the forest like a big sponge. Then he took us to another peak to view the entire valley. Participants played in the water where the fresh water comes from the mountain.

Session 4 – Ka‘ala Farms (2 hours)
1. Participants practiced protocol before entering property and Hale Na‘auao (House of Knowledge), asking permission to enter, centering and pule.
2. Kumu Eric showed participants mulberry paper tree and bark to make kapa (bark cloth), which was used for the clothing. He showed us the different techniques on how to make the kapa. Using an opihi (limpet) shell we scraped the green part off the bark. Participants pounded the bark. Participants had to be very patient while pounding the bark.
3. Kumu Eric taught participants to respect tools. Never walk over your tools and you always ask permission.

Session 5 – Ka‘ala Farms (2 hours)
1. Participants practiced protocol
2. Kumu Eric demonstrated lauhala (pandemus leaf) weaving. He talked about lauhala baskets. It was used for containers and carriers. He asked “who was the first basket makers?” Kumu noted that the birds were the first basket makers.
3. He talked about the lo‘i (irrigated terrace, especially taro). He talked about a mud wall. So, that water could drain out of the lo‘i. Participants entered the lo‘i and built a mud wall.
4. Kumu Eric went over the mālama ‘āina. He asked how people should treat the land. The participants talked about littering. Kumu reviewed all the students’ learnings. He talked about nature and why it’s cool at the farms. Compared that to the city where there is a lot of concrete.
5. The students reviewed everything they learned about the ‘āina and the centering of the mind. Kumu talked about how we have to watch look and
listen. He talked about a girl who took a dive in shallow water. We need to pay attention, watch. The Kūpunas say that you should talk 1/5 of the time. If you don’t listen, you can’t learn. Kūpuna is a symbol of knowledge that existed. The Kūpuna are the holder of all the preceding knowledge that needs to be handed down. Kūpuna is like a new book. Books are derived from knowledge in preceding books. Kumu talked about the importance of water. There are springs, Punawai. Kūpuna is like a spring of knowledge.

6. Students were asked to share their appreciation.

**Session 6 – Final session at housing facility (1 hour)**

1. Participants shared their learnings from Ka'alā Farms.
2. They were lead by Linda Uehara, a teacher, to create memory pages using photos from their visit. Linda asked the students to respond to a question, “How does living the Hawaiian values and their experience make a difference in their life?”

**Waimanalo Intervention**

**Agenda for Session 1 (1 hour)**

Objectives:

6. Students will be able to express what is important to them and express a value system.
7. Students will be able to make a family tree to the best of their ability.
8. Students will select one Hawaiian value that they will practice throughout the course of six weeks.
9. Students will be able to understand their task for the six-week project.
10. Students will gain introductory understanding of the History of the Hawaiian people.

1. Four things to remember (5-10 minutes) – Students will introduce themselves and share four things about themselves to a partner who will then remember the information and share information to the entire group. The four things to remember are name, favorite movie, favorite hobby, and “what is important.”
II. Students will make a name tent that exhibits what is important to them and what they want to be remembered for (10 minutes).

III. Students will make a family tree and share information about their family (10 minutes)

IV. Students will brainstorm list of values and match Hawaiian values – 
   Guiding questions: What is important to you? What do you value 
   most? How should you conduct yourself? If you pick characteristics 
   or the way people should behave or act, or need to show respect or 
   be respected, what would it be? What does it mean to be Hawaiian? 
   What do you think makes you a Hawaiian

V. Use guided discussion to have students select Hawaiian value from 
   list.

VI. Review expectations of the study

**Session 2 – Nation of Hawai’i Village (2 hours)**

1. Bumpy Kanahele had a heart to heart talk with participants about Hawaiians and his past history. He spoke about what it is to be Hawaiian. Also to be a productive Hawaiian. Bumpy told us about the history of the village. There are no drugs. Everyone had to work hard. The children in the village excel in school. They put the women in charge of running the village. Women hold that part of humanity. If people have domestic issues, the village helps settle it. It's about $200 to live there. If you're homeless, you can stay there is you learn and understand Hawaiian rights.

2. Bumpy urged the students to stay out of trouble and not to become a Hawaiian youth statistic.

3. Bumpy took participants to the wahi pana (sacred place) – where the kūpuna remains are. There's an ahu (altar). He explained to the students how kūpuna remains were buried there. These remains were retrieved from all over the world. He talked about there was much mana (spiritual power) from the kūpuna (ancestors) buried there.

**Session 3 - Nation of Hawai’i Village (2 hours)**

1. Bumpy took participants on a hike to the watershed for the Waimanalo stream. While hiking, participants saw the lo‘i, watersprings, and various plant life. Bumpy continued to show participants the land that the Department of Land and Natural Resources leases to the village. Bumpy
shared how people have offered him money to develop the land, but he
won't take it and "sell out."

2. Bumpy explained how they have their own ID's that state the "Hawaiian
Nation." When they pay bills, they stamp a disclaimer that says that they
are paying under distress.

Session 4 – Nation of Hawai‘i (2 hours)
1. Participants cleaned the wahi pana (sacred place) with Uncle Stephen
from the village.
2. Participants cleaned the ahu (altar)

Session 5 & 6 – Nation of Hawai‘i (2 hours)
1. Bumpy had a one to one session with the remaining participant.
2. He invited her to become a part of the youth council of the village.
3. Bumpy encouraged her to study her rights as a Native Hawaiian.
4. Bumpy talked to participant about her personal issues, what was important
to her, and her future.
### Appendix K

**List of Hawaiian Values**

<table>
<thead>
<tr>
<th>Hawaiian Value</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloha</td>
<td>(love)</td>
</tr>
<tr>
<td>Ha'aha'a</td>
<td>(humility)</td>
</tr>
<tr>
<td>Lokomaika'i</td>
<td>(generosity)</td>
</tr>
<tr>
<td>Ho'okipa</td>
<td>(hospitality)</td>
</tr>
<tr>
<td>Ho'omana</td>
<td>(spirituality)</td>
</tr>
<tr>
<td>Wiwo</td>
<td>(obedience)</td>
</tr>
<tr>
<td>Laulima</td>
<td>(cooperation)</td>
</tr>
<tr>
<td>Ma'ema'e</td>
<td>(cleanliness)</td>
</tr>
<tr>
<td>'Olu'olu</td>
<td>(graciousness; pleasantness)</td>
</tr>
<tr>
<td>Pa'ahana</td>
<td>(industrious)</td>
</tr>
<tr>
<td>Ho'omanawanui</td>
<td>(patience)</td>
</tr>
<tr>
<td>Le'ale'a</td>
<td>(playfulness)</td>
</tr>
<tr>
<td>Ho'ohiki</td>
<td>(keeping promises)</td>
</tr>
<tr>
<td>Huikala</td>
<td>(forgiveness)</td>
</tr>
<tr>
<td>Na'auao</td>
<td>(intelligence)</td>
</tr>
<tr>
<td>Kūha'o</td>
<td>(self-reliance)</td>
</tr>
<tr>
<td>Kela</td>
<td>(excellence)</td>
</tr>
<tr>
<td>Koa</td>
<td>(courage)</td>
</tr>
<tr>
<td>Kōkua</td>
<td>(helpfulness; relief)</td>
</tr>
<tr>
<td>Lōkahi</td>
<td>(Harmony; unity; balance)</td>
</tr>
<tr>
<td>Hanohano</td>
<td>(Dignity)</td>
</tr>
<tr>
<td>Alaka'i</td>
<td>(Leadership)</td>
</tr>
<tr>
<td>Kū i ka nu'u</td>
<td>(achievement)</td>
</tr>
<tr>
<td>Kūpono</td>
<td>(honesty)</td>
</tr>
<tr>
<td>Ho'okūkū</td>
<td>(competitiveness)</td>
</tr>
</tbody>
</table>
Appendix L

Questions and Answers for Informal Interview (Wai'anae Treatment Group)

1. What was worthwhile/valuable about the experience at Ka'ala Farms?
2. Name one thing that you learned and can apply to your life.

ID O002
1. Working in the lo'i, cleaning weeds – makes you feel good and proud
   Meditation; it can make you relax and think straight
2. Relaxing – meditation, breathing for all times when feeling stressed or confused

ID O004
1. To learn about Hawaiian stuff; go hiking; look at fresh water; fun
2. Ask permission from people for things

ID O005
1. No litter; Keep the land clean; makes you want to take care of it
2. How to help other people; help clean the a wai and lo'i; make you feel alright or good about it

ID O006
1. More information about the Hawaiians and how they lived, survived, clothing, food, animals (resources); Happy to know that your ethnicity has a lot to do and learn makes you feel proud
2. Information use it; kapa to make clothes, rags, pa’s; use kalo for food environmentally friendly; feel better about your ethnicity

ID O007
1. Going to the watershed; got to clean the auwai; made you feel good; fresh water/used the water plants
2. Keep the land clean/mālama the land; don't litter; without the land you wouldn't have any thing; makes you feel good.
ID O011

1. The lo'i, you have to take care of it; take care of the plants; if you didn't have any plants, you wouldn't have oxygen; mālama
2. When we had bad grades; when we started to focus; focus from Kumu Eric; focus in school; you had good grades – being promoted to 9th grade

Questions and Answers for Debriefing and Memory Page for Book:

1. How does living the Hawaiian values and visiting Ka'ala Farm make a difference in your life?
2. How does this experience make you feel? Are there any changes in behavior in school, with your family or with others?

Students' Comments for Book:

I forgot about being obedient. But with Uncle Eric was easy being obedient for him because he was going to take us hiking in the mountain.

I did my homework when Summer gave us the permission form for Ka'ala Farm because I wanted to go. I still do my homework. The crayfish at the farm look like lobsters.

Eric acknowledged me and made me feel better about being Hawaiian. He taught me how the Hawaiians survived and depended on the land. They learned to make food build homes and respect the land. This is what we should continue to do now.

Going to Ka'ala Farms was a review for my Hawaiian Studies class in school. The kalo roots are like the beard because it hands down from the bottom. The stems are like the children growing around the kalo. If you want to replant this, you need to cut off the leaves.

I made changes in my life like listening to my parents and being obedient to my parents and family. It made a difference in school after we started to go to Ka'ala Farms. I do a lot better in school like from bad grades I went up to good grades.
### Hawaiian Values Daily Log Data

<table>
<thead>
<tr>
<th>WK</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wed</th>
<th>Thursday</th>
<th>Friday</th>
<th>Sat</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No score I helped my mom put my baby sister to sleep</td>
<td>4 I helped put up the TV with my mom I broke up a fight with my friends I helped my grandma pull out puppyes (puppies)</td>
<td>5 I helped my mom cook spaghet ti I complet ed my homework and decided to help others I helped brother put up the table, chairs, and food for Boy Scouts</td>
<td>4 I helped my brother fix his bike I helped my grandm a cut down trees</td>
<td>5</td>
<td></td>
<td>5 I helped my mom choose the right dress for church I helped people cross streets and helped people cook lunch</td>
</tr>
</tbody>
</table>

ID ALOHA 00 02
<table>
<thead>
<tr>
<th>2</th>
<th>5</th>
<th>I help my sister play basketball, because she didn't know how</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>I have played with my big sister I helped my teacher with her work I helped climb up big rocks</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>I helped my mom with her groceries I helped stop a fight I played a racing game with my brother</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>I helped my sister cook dinner I helped my friend with his homework I helped my boy scouts set up the tables and chairs</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I helped my mom rearrange the house around I helped my friend when he wanted help I massaged my grandmother and fed her dogs</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>I helped my mom with brother I played army with Levi</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>I helped my mom with the baby I went to church and I helped brother with stuff like instruments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>5</th>
<th>I gave my mom a big kiss in the morning I wrote my girlfriend a love</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>I helped grandma with Dakota my baby brother I check my brother if he</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>I helped my mom with my baby sister I corrected people's</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Helped Summer carry her stuff</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Helped my brother clean up his room</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Helped my brother get out of a fight</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Helped my mom folding and washing the clothes</td>
</tr>
<tr>
<td></td>
<td>letter</td>
<td>wanted</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>I helped my sister put up the basketball rim</td>
<td>a ride to go home</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I teach summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>how to make the kapa or tapa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>when it is wet and ripped</td>
</tr>
<tr>
<td></td>
<td></td>
<td>at Kaala Farms</td>
</tr>
</tbody>
</table>

The text seems to describe various activities and contributions, possibly by a student or a young person helping their family at home and school. The activities range from helping with schoolwork, taking care of babies, helping with chores, and making ice cream and marshmallows.
<table>
<thead>
<tr>
<th>WK</th>
<th>Monda y</th>
<th>Tuesday</th>
<th>Wed</th>
<th>Thurs</th>
<th>Friday</th>
<th>Sat</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I do what my mom tells me to do. Do what my teacher tells me to do. Do what my community tells me to do.</td>
<td>Wash clothes and hang the clothes. Did all my work in school. Didn’t go outside.</td>
<td>Help my friends with math. Went to Mary’s (tutor) class.</td>
<td>Help do the clothes and put into the washer. Didn’t go to school because I had asthma. Couldn’t go outside.</td>
<td>We have a pot luck.</td>
<td>Bought mom a cake and a card. And help clean windows.</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Listen to my mother. Listen to my teacher. Grounded 1</td>
<td>I listen to my mom and dad. I listen to my teacher and do all my work. Grounded 1</td>
<td>Clean up Help people None</td>
<td>Clean up and listen to my mom and dad. Help people, listen to my teacher and do</td>
<td>Clean up around the house. Help people None</td>
<td>4 Help clean up around the house and yard. None Play basketball</td>
<td>5 Help clean up and play game. Play basketball</td>
</tr>
<tr>
<td></td>
<td></td>
<td>all my work</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
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<td>-------------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Clean around the house</td>
<td>Help my friend do his homework</td>
<td>Played basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Clean up the house</td>
<td>Listen to my teacher</td>
<td>Played basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Clean up around the house</td>
<td>Help Jason do his work</td>
<td>Play basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Clean up</td>
<td>Help pickup rubbish in the classroom</td>
<td>Play basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Clean up</td>
<td>Did all my work</td>
<td>Play some basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Clean, clean, clean</td>
<td></td>
<td>Basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Clean the paler (parlor)</td>
<td></td>
<td>Basketball</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | |</p>
<table>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Help clean up</td>
<td>Help clean up</td>
<td>Help clean up</td>
<td>Help clean up</td>
<td>Help clean up</td>
</tr>
<tr>
<td>1</td>
<td>Did a lot of work</td>
<td>Did a lot of work</td>
<td>Did a lot of work</td>
<td>Did a lot of work</td>
<td>Did a lot of work</td>
</tr>
<tr>
<td>1</td>
<td>Stay in the house</td>
<td>Stay in the house</td>
<td>Stay in the house</td>
<td>Stay in the house</td>
<td>Stay in the house</td>
</tr>
<tr>
<td>5</td>
<td>Help clean up around the house</td>
<td>Did some work</td>
<td>Stayed in the house</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
</tr>
<tr>
<td>4</td>
<td>Help clean up around the house</td>
<td>Did some work</td>
<td>Stayed in the house</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
</tr>
<tr>
<td>3</td>
<td>Help clean up around the house</td>
<td>Did some work</td>
<td>Stayed in the house</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
</tr>
<tr>
<td>1</td>
<td>Clean all day</td>
<td>Did some work</td>
<td>Stayed in the house</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
</tr>
<tr>
<td>5</td>
<td>Clean up all day</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
<td>Did a lot of work</td>
<td>Stayed in the house</td>
</tr>
<tr>
<td>WK</td>
<td>Monday</td>
<td>Tuesday</td>
<td>Wed</td>
<td>Thursda</td>
<td>Friday</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
<td>---------</td>
<td>-----</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>I did my chores without being told</td>
<td>I helped my brother with his homework and cleaned the yard</td>
<td>Helped my teacher when she didn't ask me to help her</td>
<td>Watched my brother today &amp; helped him with his work</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>I cleaned the yard when we got</td>
<td>2</td>
<td>I did all my stuff at home without being</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>cleaned the yard without being told to</td>
<td>4</td>
<td>I did my chores without being told to</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>I listened to my parents at home. I turned in my homework and class work on time. I did the yard when I came back from kaala Farms and my parents let me play outside. I went to all my classes on time and did all my work.</td>
<td>I did the dishes. I didn’t go to school because I was sick.</td>
<td>I washed my clothes. I was still sick.</td>
<td>I cleaned the house. No more school on the wknd.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>I did my homewo</td>
<td>I cleaned</td>
<td>I cleaned</td>
<td>I did the bathroo</td>
<td>I did the same</td>
</tr>
</tbody>
</table>
rk and did my chores I did all my work
house and did all my homework from school I did all my school work and turned it in on time
the house today Was sick again
m because I threw up all over the floor Was sick again
thing as above Sick
yard No school the front of my house

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5 I did my rice
5 I made dinner
5 I made dinner
5 I cleaned the house
5 I cleaned my room
5 I raked the leaves
5 I watered the grass
I raked the leaves
I raked the beans
I watered the grass

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I raked the beans

the leaves
I watered the grass
I raked the beans

I watered the grass
I raked the beans

I washed my clothes
I cleaned the house
I rearranged my room
I raked the leaves
I watered the grass
I raked the beans

I raked the beans
References


properties of the Hawaiian culture scale-adolescent version.

*Psychological Assessment, 12*(2), 140-157.


