

**The Perception of Physical
Activity and Social Support for
Physical Activity among Native
Hawaiians 55 Years and Older**

A Qualitative Ethnographic Research Study

by

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Background, Definition of Terms,
Problem Statement, Purpose, and
Significance of Study

Background

- Benefits of physical activity (PA) on healthy aging and increased longevity have repeatedly been identified (Sing, 2004; Brach et al. 2004; Warburton, et al. 2006)
- Despite known benefits of PA, sedentary living is a serious and pervasive health problem among older adults through out the United States (Centers for Disease Control and Prevention, 2007), including the Native Hawaiian older adults residing in Hawaii (Office of Hawaiian Affairs, 2006)



Background

- The health status of the Native Hawaiian population is far below that of other United States population groups, and they have one of the lowest life expectancies among the ethnic groups in Hawaii (Asian and Pacific Islander American Health Forum, 2010).
- Native Hawaiians are considered to be a vulnerable population at greater risk for poor physiological, psychological, and social health (Flaskerud & Winslow, 2010), and experience significant health disparities. They have a higher prevalence of obesity and chronic disease including diabetes, cancer, and cardiovascular disease than any other racial/ethnic group in Hawaii (Asian and Pacific Islander American Health Forum, 2010).



Background

- Previous research has identified social support as a major facilitator for participation in physical activity (Jackson, 2006; McAuley et al. 2003; Nies et al., 1998; Resnick & Nigg, 2003; Stead, et al. 1997).
- Social support is congruent with Native Hawaiian cultural core values, which emphasize “collectivism” rather than “individualism”, *ohana* (extended family) and *kokua* (to help) (Oneha, 2001)

Definition of Terms

- Native Hawaiian
 - Self-defined
 - Individuals who have actual genetic link with the inhabitants of Hawaiian Islands prior to the first contact with Europeans in 1778 (Casken, 2001).
 - Vulnerable, ethnic minority population with high rate of morbidity and mortality related to preventable diseases as result of unhealthy eating habits and physical inactivity (Boyd & Braun, 2007).
 - Holistic view of life (Kanahele, 1986); do not separate animate from inanimate; all things are interrelated; value harmony, integration, balance and continuity between person, nature and spiritual world (Mokuau, 1990)
 - In contrast, Western culture places individual first; favors assertiveness and competition (Kaanoi, 2001)
 - Community is emphasized; worldview emphasizes collective affiliation, and interdependence of the individual, family, community, environment and gods or spiritual realms (Browne, Mokuau, & Braun, 2009)



Statement of Problem

- Little is known about the motivator of social support for participation in physical activity among Native Hawaiian older adults over the age of 55 years.



Significance of Study

- Gaining a better understanding of the meaning and experience of physical activity and of social support as a motivator for participation in physical activity among the Native Hawaiian kupuna will aid in the development of culturally appropriate interventions to increase this health promotion behavior. It will have important health implications by helping to meet the overall goals of improving quality of life and longevity for this vulnerable population.



Purpose of Study

- To examine physical activity and social support for physical activity as perceived by Native Hawaiians 55 years of age and older
 - Age group of 55+ selected to capture insights and data of ageing population of *baby boomers* and well as the *kupuna* (elders)



Methodology

Design

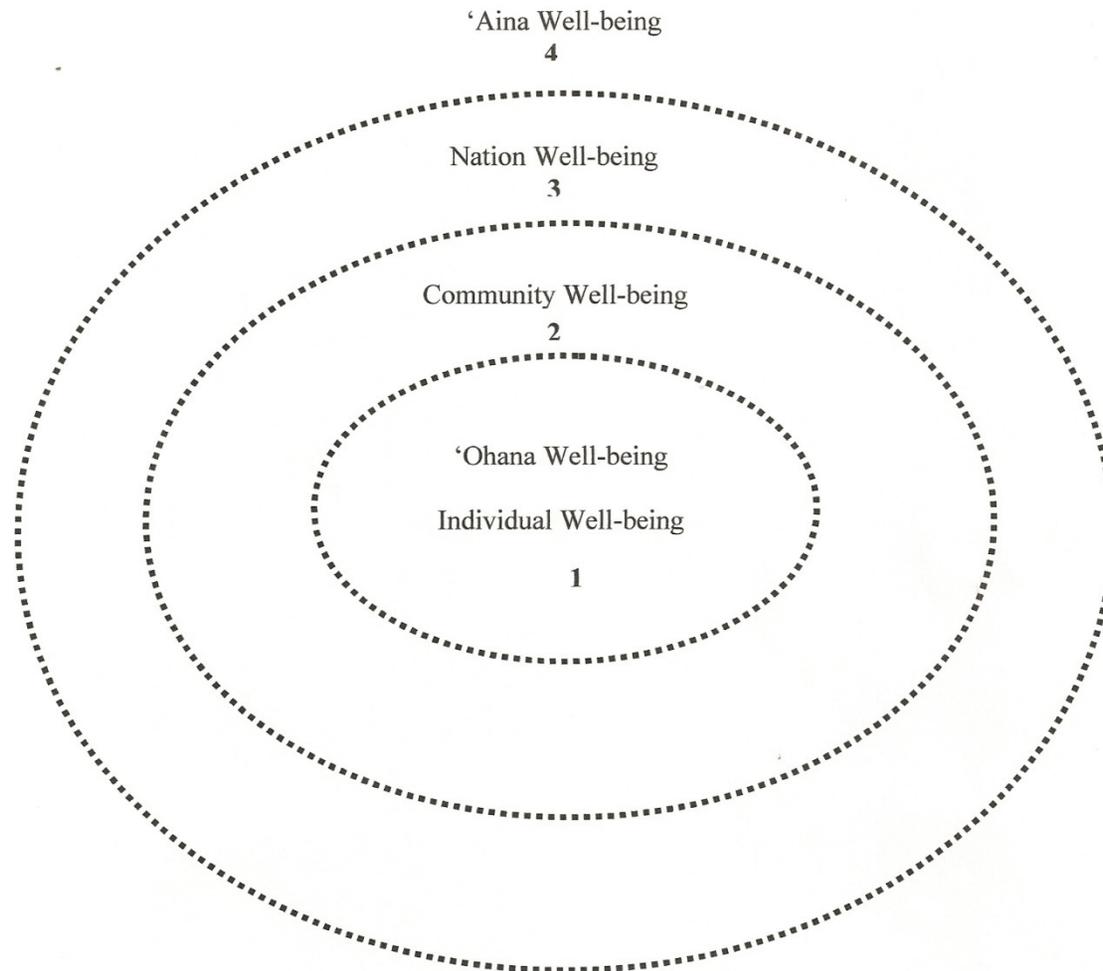
- Qualitative, Exploratory, Descriptive Study using Ethnography Method
- Data Collection Strategies
 - Focus groups
 - Two groups (one in Waianae and one in Waimanalo) ; each met two times
 - Participant Observation
 - Prolonged participant observation at two (one in Waianae and one in Waimanalo) Alu Like KOPP meal and exercise program sites

Theoretical Support

- Socio-ecological models widely used for studying participation in physical activity (Elder, et al., 2007).
- Ecological Model of Native Hawaiian Well-being (McGregor, et al. 2003)
 - Distinguishes the relational world view of Native Hawaiian, as opposed to linear world view of Western culture (cause always precedes effect)
 - Relational worldview includes:
 - Holistic view of life
 - Do not make distinction between animate and inanimate
 - Worldview values integration balance and continuity between person, nature and spiritual world
 - Emphasize the collective – family over individual and relationships are important

Figure 1: Ecological Model of Native Hawaiian Well-being

Ho'oulu Lahui Aloha
"Raising a Beloved Nation"
Ecological Model of Native Hawaiian Well-being



From: McGregor, D.P. et al., (2003). An ecological model of Native Hawaiian well-being. *Pacific Health Dialog*, 10(2), 106-128.

Population/Sample

- Non-probability, Convenience, Purposive sample
 - Participant Observation
 - Focus Groups
- 8 member Advisory Committee acted as Key Informants and liaisons with kupuna
 - Staff and Community Members of Health Centers
 - Staff of Alu Like KOPP program
- Gaining Access to the Population
 - May be most difficult part of study (Speziale & Carpenter, 2007)
 - This proved true for this study
 - Strong sense of distrust for research and researchers
 - Expressed need to provide protection for kupuna
 - Investigator needed to gain confidence and trust of gatekeepers and “give back” to kupuna and organization



Population/Sample

- Network or Snowballing technique used to recruit participants for focus groups
 - Takes advantage of fact that all human beings have social networks
 - Compatible with NH cultural concepts of *ohana* - sense of connectedness, unity and shared involvement (Mokuau, 1990)
 - NH not trusting of outsiders (Browne, Mokuau, & Braun, 2009),
 - Including Native Hawaiian kupuna participants in selection of sample made recruitment easier



Sample

- Inclusion criteria
 - Self-reported Native Hawaiian ethnicity
 - 55 years or older
 - Reside in Waianae or Waimanalo community
 - Cognitively intact
 - Read and write English
 - Demonstrate a willingness to be part of a focus group
- An incentive of \$25.00 gift certificate to Long's Drugs was given to each participant at the end of focus group sessions.

Data Collection

- Two focus groups consisted of 8 to 9 participants who attended Alu Like KOPP program and who were from the community surrounding the two health centers
 - Waianae Coast Comprehensive Health Center
 - Waimanalo Health Center
- Recruited focus group members from an established *kupuna* group, as well as *kupuna* from the community
- Led by investigator, an outsider of Native Hawaiian culture, with neutral research assistant observing and taking notes
 - Planning and implementation guided by Krueger's (1994) practical guidelines for applied research with focus groups.



**Waimanalo
Focus
Group**



**Waianae Focus
Group**

Data Collection

- Two 1 ½ hour focus group sessions with each of 2 groups
 - First sessions guided by semi-structured interview guide using open-ended questions addressing:
 - Purpose in Life
 - Understanding of physical activity, exercise, and social support
 - Understanding of relationship of social support and physical activity
 - Demographic data collected by a self-administered questionnaire
 - Tape-recorded, and transcribed verbatim
 - Second meeting was for review and validation of data (Member checking)

Data Collection

- Participant observation
 - At Waianae and Waimanalo Alu Like Inc. Ke Ola Pono No Na Kupuna (KOPP) congregate meal and program sites.
 - Three to four hours at each site once or twice a week from June 20, to August 29, 2011 (total of more than 65 hours)
 - Performed broad descriptive observations and collected data using unstructured direct observations of behaviors and events
 - Based on Grand Tour question “How do Native Hawaiian kupuna engage in physical activity and social support?”
 - Collection of descriptive data guided by Spradley’s (1980) nine dimensions of any social situation
 - Data also included reflective theoretical, methodological, and personal notes
 - Data recorded in field notes , drawings, and photos

Waimanalo
Alu Like
KOPP
Program





Waianae Alu Like
KOPP program
kupuna



Thanksgiving Celebration
at Waimanalo with Both
Alu Like KOPP Kupuna
groups



Data Analysis

- Data collection and analysis proceeded simultaneously using a thematic form of inductive content analysis
 - Based on Spradley's (1979) developmental research sequence method of identifying domains, categories, subcategories, and finally cultural themes
 - Iterative readings and re-readings; manual analysis of data for recurrent themes and domains
 - *Ethnograph 6.0* software utilized to assist with sorting, data management, and analysis



Data Analysis

- Member checking with focus group members
- Peer checking
 - Experts in qualitative research at University of Hawaii at Manoa School of Nursing, a nurse scientist consultant from NH community, staff members of Alu Like KOPP
- Demographic data was analyzed using descriptive statistics

Trustworthiness

- Criteria as outlined by Lincoln and Guba (1985) used to establish trustworthiness
- **Credibility**
 - Prolonged engagement
 - Triangulation of methods
 - External checks
 - Researcher credibility
- **Dependability and Confirmability**
 - Audit trail
- **Transferability**
 - “thick description” provided
 - Demographic findings of the kupuna
 - Network or snowball sampling technique supports generalizability (Speziale & Carpenter, 2007)



Findings

Focus Groups Demographic Data

Waianae Kupuna

- Average age 74.9 (69 – 83)
- Female 77%; Male 22%
- 55% married; 11% single; 33% widowed
- Number in household
 - 2 (33%); 3-4 (44%); 5-7 (11%); 8 (11%)
- 100% retired
- 77% more than high school education; 8-12 (22%)
- Income: 55% \$20,000 - \$40,000/yr
- Self-rated Health status
 - Very healthy 33%
 - Somewhat healthy 44%
 - Unsure 22%
- 77% walking; 66% household chores; 44% hula; 33% gardening

Waimanalo Kupuna

- Average age: 72.6 (67 -89)
- Female 75%; Male 25%
- 12.5% married; 37.5% single; 50% divorced
- Number in household
 - 1 (75%); 2 (12.5%); 5-7 (12.5%)
- 87.5% retired; 12.5% part -time
- 62.5% more than high school education; 8-12 (25%); less (12.5%)
- Income: 62.5% less than \$20,000/yr
- Self-rated Health status
 - Somewhat healthy 87.5%
 - Somewhat unhealthy 12.5%
- 87.5% walking; 100% household chores; 75% gardening



Qualitative Data

- 652 significant statements from the field notes and focus group transcription
- These statements sorted into five domains (with number of significant statements for each domain in parentheses)
 - Purpose in life (77)
 - Maintain health
 - Perpetuate culture
 - Physical Activity (129)
 - Exercise (38)
 - Social Support (183)
 - Native Hawaiian Culture (225)
- Each domain had from one to five categories
- These categories had from none to six subcategories

Major Cultural Themes

- Cultural Theme 1
 - Maintaining health (ola pono) is necessary to achieve the main purpose in life of helping (kokua) and caring for (malama) others, and continuing to perpetuate Native Hawaiian culture by practicing and sharing Native Hawaiian cultural values and practices with others. The opposite is also true. Helping (kokua), caring for others (malama), and practicing and sharing Native Hawaiian cultural values and practices is necessary to achieve and maintain health (ola pono).

Finding 1

- The kupuna highly value health of body, mind, and spirit. Their desire for optimal health coincides with their collectivist cultural values and practices of aloha, kokua, malama, lokahi and sharing their culture, rather than individualistic, competitive cultural values of personal gain.



Major Cultural Themes

- Cultural Theme 2
 - Participation in Physical Activity is necessary to maintain optimum health (*ola*) and function.



Finding 2

- Physical Activity is highly valued because along with other healthy lifestyle practices such as diet, it is perceived as a means to sustain health and longevity and the perpetuation and legacy of the Native Hawaiian culture.



Finding 3

- Physical Activity is perceived by the kupuna as anything that causes one to move about and exert energy. It also includes mentally stimulating activities. Although structured exercise programs or classes are perceived as physical activity, it is not necessary to participate in an exercise group to participate in physical activity. Structured exercise activities are perceived more negatively by the kupuna than unstructured physical activity.



Major Cultural Themes

- Cultural Theme 3
 - Culturally sensitive Social Support is essential to encourage participation in Physical Activity.

Finding 4

- Native Hawaiian cultural values and practices are an integral part of the lives of the kupuna, and they guide their everyday decision making and actions. Although this generation of Native Hawaiians experienced the prohibition to speak their native language and the suppression of their culture, they are the embodiment of the cultural practices of aloha, kokua, malama, and lokahi in all aspects of their lives.

Finding 5

- Social support is perceived by the kupuna as anything that involves interacting and socialization, and that helps others feel better about themselves. It is an essential component of encouraging, initiating, and participating in physical activity.
- The kupuna identified social support for physical activity as the same activities that provide social support for them in their everyday lives, and these activities are guided by and promote the Native Hawaiian cultural values and practices.
- Sources of social support include in descending order of importance to the kupuna: a) other kupuna (extended ohana), b) God and Akua and spiritual practices, c) family and children (immediate ohana), d) Alu Like (cultural social organization), and e) health care providers.



Major Cultural Themes

- Cultural Theme 4
 - An environment or “place” supportive of Physical Activity is essential to promoting participation in Physical Activity

Finding 6

- Kupuna in both communities felt a strong “sense of place” to their communities in the three categories of relationships to self and each other, God and Akua, and sense of belonging to a place. In the fourth area defining sense of place - relationship to the natural elements (land, ocean, and air) - the Waianae kupuna, who lived in individual homes throughout the Waianae coast community, had a stronger sense of place than the Waimanalo kupuna who lived in a more confined, centrally located apartment complex for kupuna.



Finding 7

- Different environmental barriers to participating in physical activity were identified by the kupunas from each community in this study, and were influenced by the characteristics of their living conditions in the community.
- Environmental barriers to participation in physical activity were identified by the Waianae kupuna as an unsafe walking environment caused by the presence of homeless persons and unleashed dogs, and by the Waimanalo kupuna as lack of transportation and lack of exercise programs that meet the physical activity needs of kupunas of all functional levels.



Future Research
Implications for Practice
Limitations



Recommendations for Future Research

- Need for more exploratory qualitative studies
 - Studies to include kupuna who are homebound; reside in urban or other rural settings; do not participate in senior citizen or cultural organization programs or activities.
- Future focus group research on socio-cultural determinants of physical activity could facilitate more “ethnic tailoring” (Maxwell et al., 2002) of Native Hawaiian physical activity programs
- Future research involving the development and utilization of assessment instruments is necessary
 - Important to indentify and include Native Hawaiian culturally specific activities such as the hula in the assessment instrument.
- Attention to the culturally relevant correlates of physical activity among Native Hawaiian kupuna will further the development of conceptual and theoretical models designed to promote physical activity in this population.

Implications for Practice

- This study provides useful cultural knowledge and information and offers a basis for nursing intervention development for gerontological and community health nurses and other health care providers.
- Nursing educators also need to realize that educational preparation in culturally competent care of the Native Hawaiian kupuna is critical to enable nurses to effectively serve this minority population.
- Gaining knowledge of the perceptions among Native Hawaiian kupuna about motivators and barriers to physical activity and social support is an essential first step in developing programs tailored to the values of this cultural group.
- Physical activity for the kupuna must be ethnically tailored to the Native Hawaiian culture.
- Nurses and health care professionals need to encourage the use of the term “physical activity” rather than “exercise”, to offer the kupuna more latitude in finding ways to become less sedentary and more active. It is very important to acknowledge that physical activity involved with daily home and work settings is a form of exercise.

Implications for Practice

- Any physical activity or physical activity program planned for the Native Hawaiian kupuna
 - must be guided by the Native Hawaiian collective cultural values,
 - must include Hawaiian music and hula as major activities,
 - must include Hawaiian food,
 - must be designed to allow for participation by all levels of functioning of the kupuna, and
 - must not foster individualistic goals of personal gain or be competitive. All activity must be done with the group and be beneficial to all of the group members.

Limitations and Strengths

- Limitations

- Generalizability of study may be limited.
 - Two instead of three focus groups for each group represented
 - Convenience sample of kupuna already using services provided by community agency – may not be representative of all older Native Hawaiians in urban, rural, or homebound settings

- Strengths

- Data obtained directly from the Native Hawaiian kupuna, who described their perceptions in their own words
- Helped gain insight into how Native Hawaiian kupuna perceive health, physical activity, exercise, and social support
- Findings of value to nurses, advanced practice nurses and other health care providers for developing physical activity and exercise programs for Native Hawaiian kupuna.



Mahalo & Aloha



References (upon request)