



## **A systematic review of culturally focused interventions for Native Hawaiian youth**

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### **Abstract**

Native Hawaiians are a resilient nation with a rich history and culture with specific health and wellbeing needs and disparities, particularly for youth. This study presents a review of published literature focusing on culturally focused interventions for Native Hawaiian youth to better understand key components, service gaps, and concerns that may improve future health interventions tailored to Native Hawaiian youth that protect and promote positive health outcomes, a sense of agency, and self-determination. The purpose of this article is to (a) present a review of the literature focusing on culturally focused interventions as it relates to health and wellbeing of Native Hawaiian youth and (b) identify limitations and gaps to promote future research. This systematic review focuses on 19 distinct culturally focused interventions geared toward Native Hawaiian youth. The findings provide a summary of culturally focused interventions geared toward Native Hawaiian youth including interventions' aims, components (youth participants description and methods), outcomes, and cultural components, while exposing gaps in the literature. Most interventions were education and substance use/misuse prevention oriented, on the island of O‘ahu, geared toward older youth, and qualitative in nature. The cultural components utilized in the interventions varied in description and type. All of the studies reported

positive results to support the effectiveness of the intervention. This review enriches the field of study for researchers (past, present, and future) by building awareness, encouraging collaboration, and identifying where culturally focused intervention efforts are underdeveloped or nonexistent to provide direction for future interventions.

The worldviews of Native Hawaiians, the Indigenous Peoples of Hawai‘i, emphasize health as the ability to maintain balance amongst the physical, mental, and spiritual realms. Health and wellbeing extend to include the relationships one has with kānaka (people), ‘Āina (land/ocean), and akua (spiritual realm). These conceptualizations of health have been expressed through frameworks such as the Kūkulu Kumuhana framework, which proposes wellbeing as six dimensions: Ea (self-determination), ‘Āina Momona (healthy and productive land and people), Pilina (mutually sustaining relationships), Waiwai (ancestral abundance and collective wealth), ‘Ōiwi (cultural identity and native intelligence), and Ke Akua Mana (spirituality and the sacredness of mana), which are particularly important to instill in our present and future generations (Kūkulu Kumuhana, 2017).

Today, Native Hawaiians experience considerable health disparities, with lower life expectancy and increased mortality at younger ages for chronic health conditions (Kaholokula et al., 2019; Wu et al., 2019). Native Hawaiian youth also experience considerable health disparities, with increased prevalence of chronic health conditions including obesity, concerns related to mental health, and risky health behaviors, such as smoking (“Community Snapshot for Native Hawaiian Race/Ethnicity (DOH) - Community Profiles”, 2020). Despite differences that exist among and between Indigenous Peoples, increased exposure to adversity, including the shared adversity of colonization and ongoing cultural and historical trauma, may further exacerbate negative health outcomes and the psychosocial, emotional, and spiritual health of Indigenous Peoples (Sotero, 2006). Yet, the continued survivance of Native Hawaiians and Indigenous communities demonstrate their ongoing resilience, while striving toward a sense of agency and self-determination.

Based on existing developmental models and frameworks, it is clearly understood that youth and adolescence is a critical time period when individuals are exploring their identity, values, and place in society (Spielman et al., 2020). Furthermore, healthy habits established early in life are more likely to contribute to healthier lifestyles throughout the lifespan. Indigenous youth may experience a period of identity questioning due to the dissonance that is experienced while exploring their identity in a culture that may not acknowledge Indigenous beliefs and practices,

resulting in concerns related to mental, behavioral, social, and emotional wellbeing. Cultural identity and access to cultural resources, on the other hand, have been shown to be an important component for youth resilience among Native Hawaiians and other Indigenous communities (Chandler & LaLonde, 2008; McCubbin, 2003; McMullin, 2005; Scanlan, 2013). Preventative efforts that incorporate culture, while facilitating positive youth development has been shown to be effective in improving the health and development of children and youth (Antonio et al., 2015; Antonio & Chung-Do, 2015; Burrage et al., 2021; Edwards et al., 2010).

Incorporating the strengths and assets of communities into interventions have shown positive effects on the psychosocial development of youth. Maslow and Chung (2013) provide a Positive Youth Development framework that focuses on the strengths of youth, thereby decreasing risk factors and promoting protective factors. According to Antonio et al. (2020), this framework may be helpful to guide Native Hawaiian youth to success by focusing on protective factors, factors that promote youth ea or sovereignty such as supportive families and communities, youth leadership, and self-efficacy.

In a report by Medeiros and Tibbetts (2008), Native Hawaiian youth described receiving a large amount of emotional and moral support by various community members, thereby enhancing youth outcomes such as positive cultural identity, ability to make healthy choices, and increased self-efficacy. Revitalization of Native Hawaiian culture and traditions have also continued to perpetuate Hawaiian ways of knowing as a result of significant events and kūpuna (elders) leading the way for decades, including movements such as the Hawaiian Renaissance of the 1970s, which helped to sustain the momentum of culture and traditions that ultimately uplift the Native Hawaiian community (Kaholokula et al., 2020).

Native Hawaiian health is prioritized under state and federal law via the Native Hawaiian Health Improvements Act of 1988, the United States Code (the official compilation of permanent U.S. federal law) states the following with respect to Native Hawaiian health:

The Congress hereby declares that it is the policy of the United States in fulfillment of its special responsibilities and legal obligations to the indigenous people of Hawaii resulting from the unique and historical relationship between the United States and the Government of the indigenous people of Hawaii— (1)to raise the health status of Native Hawaiians to the highest possible health level; and (2)to provide existing Native Hawaiian health care programs with all resources necessary to effectuate this policy. (§11702. Declaration of policy)

Increased efforts have been made to provide health interventions that promote health and facilitate positive youth development among Native Hawaiian youth. The promotion of health and wellbeing for Native Hawaiian youth is crucial as they are the current and future generations of Native Hawaiians. In fact, much care is given to children as successors of a familial and genealogical lineage. This belief is demonstrated through the ‘ōlelo no‘eau, or Hawaiian proverb and saying: “He lani ke keiki, he milimili na ka makua, The child is a chief to be fondled by the parents. A child requires as much care as a chief.” (Pukui, 1983). Nonetheless, minimal systematic literature reviews exist to assess interventions geared toward Native Hawaiian youth. Additional information is needed to determine what is being done, how it is being done, where are the gaps, and what can we do to better address this need.

### **Purpose**

The literature relating to the health and wellbeing of Native Hawaiian youth is growing; however, a review of the existing literature is needed in order to understand the specific key components, identify service gaps, and highlight concerns that can improve future work related to health interventions tailored to Native Hawaiian youth. A systematic review of this literature will also likely protect and promote positive health outcomes for these youth. The purpose of this article is to (a) present a comprehensive review of culturally focused interventions for Native Hawaiian youth, and (b) identify limitations and gaps to promote future research.

### **Methods**

#### ***Study Design***

This systematic literature review search was conducted through the EBSCOhost, PsycINFO, PubMed electronic databases. The use of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was employed to follow guidelines to complete a systematic literature review (Moher et al., 2009). This systematic review applied a Boolean search mode using the following search terms: Hawaiian AND “youth OR adolescents OR young people OR teen OR young adults OR child OR kids” AND “intervention OR prevention OR program” AND “Cultur\* OR Positive youth development OR socio-ecological model”. Peer-reviewed journal articles were included in this study; gray literature was not included.

### ***Study Inclusion and Exclusion Criteria***

Studies were included if they were classified as a culturally focused intervention for Native Hawaiian youth. Culturally focused interventions utilize a tailored approach for ethnic backgrounds and are designed specifically to reflect the worldviews of the populations they are intended to serve (Botvin et al., 1994; Okamoto, 2014). Culturally focused interventions connect programming with cultural constructs such as values, behaviors, and norms. While the inclusion of cultural constructs can vary based on the approach, all types of culturally focused interventions (e.g., culturally grounded, culturally adapted, and culturally modified) were included in this study. Examples of culturally focused health interventions created for Native Hawaiians/Pacific Islanders (NHPI) communities in Hawai‘i include the PILI ‘Ohana project, a culturally adapted version of the Diabetes Prevention Program–Lifestyle Intervention aimed to address obesity and diabetes disparities, as well as the KaHOLO Project, a culturally grounded hula (indigenous dance)-based intervention aimed to address cardiovascular disease (Kaholokula et al., 2018).

The population of interest (i.e., the audience intended to benefit from the culturally focused intervention) had to be described as Native Hawaiian youth; however, studies that did not disaggregate data so that Native Hawaiians were considered separately from related populations (e.g., Pacific Islanders, other Indigenous groups) were still included. Only empirical articles reporting on the outcome findings of a culturally focused intervention for Native Hawaiian youth were included; studies detailing population data and pre-intervention activities such as needs assessments, theoretical papers, and literature reviews were excluded.

Articles were excluded in this study if they were (1) not peer-reviewed; (2) not an original culturally focused intervention; (3) focused on populations other than Native Hawaiian youth, including articles with Native Hawaiian youth, but the focus was on a broader ethnic categorization (e.g., Asian/Pacific Islanders); (4) not focused on youth, including interventions for parents and other caregivers; (5) non-empirical in nature.

### ***Data Extraction***

The initial search yielded 1015 peer-reviewed articles. After eliminating 183 duplicates from the pool of articles, 832 unique article abstracts were obtained. Using Rayyan Software (Ouzzani et al., 2016), the abstracts were then individually screened by the two primary researchers based on the inclusionary and exclusionary criteria, and the discrepancies were synthesized via

discussion. Sixty-four eligible articles remained after this screening process. The research team then conducted a thorough assessment of the full-text articles, after which, 32 articles were identified to be included in this review as studies reporting results on a culturally focused intervention for Native Hawaiian youth. Further assessment revealed that 13 studies were conducted on duplicated interventions. Considering these articles as overlaps resulted in a total of 19 distinct interventions. Figure 1 illustrates a flowchart of the process of identifying articles for this systematic literature review.

### **Findings**

The 32 peer-reviewed articles which met the inclusionary criteria for this study are summarized in Figure 2. The articles are summarized in terms of the interventions' aims and components (youth participants description and methods), outcomes, and cultural components.

<FIGURE 2. Table of Interventions>

#### ***Intervention Aims and Components***

The culturally focused interventions for Native Hawaiian youth ranged in their specific aims and purposes, and some interventions addressed multiple aims. According to the problem definitions and conditions, the interventions can be categorized into the following seven focus areas: education (n=6), substance use (n=6), empowerment/self-esteem (n=5), sexual health (n=2), violence and crime prevention, including suicide prevention (n=2), and physical health (n=2) such as obesity and healthcare access/health literacy.

Youth participant descriptions also varied. Not surprisingly, most of the interventions were located on the island of O'ahu (n=8), followed by Hawai'i Island (n=4), Maui (n=3), Moloka'i (n=3), and Kaua'i (n=1). Some interventions serviced the entire State of Hawai'i (n=5), a few were geared toward rural areas (n=3), and a few identified communities with a large Native Hawaiian population such as Wai'anae and Waimānalo. There were no interventions located on the island of Lāna'i. When broken down by school-aged ranges, interventions tended to be geared toward older youth. The high school (grades 9-12, ages 15-18) category was the most serviced, followed by middle school (i.e., Grade 6-8, ages 12-14), elementary (i.e., Grade k-5, ages 5-11), and lastly, preschool (i.e., age 5 and under).

Methodologically, research designs tended to use less quantitative and more qualitative approaches. The majority of studies incorporated the use of individual and/or focus group

interviews. Several studies incorporated surveys completed by participants and/or their family members. Three studies utilized a randomized control trial (RCT). Two studies utilized Photovoice. A number of studies also included a community-based participatory research approach.

### ***Outcomes***

Due to the qualitative nature of research, results were often framed in a thematic structure, outlining strengths, lessons learned, and future implications. A prevalent emphasis on the importance of culture (e.g., values, beliefs, knowledge, practices, activities, language, etc.) and community (e.g., family, peers, groups, etc.) was echoed in many studies. Furuto, San Nicolas, Kim, and Fiaui (2001) highlight the importance of successful initiatives for Native Hawaiians to be community-based, community-driven, and culturally competent. The understanding that communities ultimately know their own strengths and capabilities and have their own solutions may enhance the *pilina* (relationships) within the community, thereby enhancing the collective *kuleana* (responsibility) of communities to take the lead to nurture a system of abundance. After all, culture is a central part of identity and has the power to influence health and health-related issues.

### ***Cultural Components***

Per the inclusionary criteria, all interventions were culturally informed by some means; however, it is unclear, given the information provided in the articles, exactly where most of the interventions fell on Okamoto et al.'s (2014) continuum of approaches (i.e., culturally grounded, deep-structure cultural adaptation, and non-adaption/ surface-structure cultural adaptation). To clarify, Okamoto et al. (2014) provides three types of culturally focused interventions—culturally grounded, deep-structure cultural adaptation, and non-adaption/surface-structure cultural adaptation. Culturally grounded approaches “utilize methods that place the culture and social context of the targeted population at the center of the intervention” (Okamoto et al., 2014, p. 107). Here the intervention is founded upon cultural components. Deep-structure cultural adaptation interventions use “systematic methods to infuse the unique cultural worldviews, beliefs, values and behaviors of a population” (Okamoto et al., 2014, p. 106). Here the intervention alters its original model to add cultural components. Non-adaption/surface-structure cultural adaptation interventions make no major modifications to the actual intervention; rather, it provides “changes

to images or phrases throughout its content or lessons, in order to align the program with familiar concepts or references of a specific cultural group” (Okamoto et al., 2014, p. 104). Here cultural concepts are added to the original intervention model. Whereas culturally grounded interventions provide a ground-up approach, non-adaptation/ surface-structure cultural adaptation interventions provide a top-down approach, and deep-structure cultural adaptations uses an infusing approach of integrating culture into the intervention.

Most interventions could not be classified with confidence. Culturally grounded approaches, like Ho'ouana Pono (Okamoto et al., 2016) and the Farm (Trinidad, 2009), were easily distinguished. On the other hand, the remaining interventions provided vague information. Thus, it was difficult to determine the intensity of the cultural adaptation/modification/infusion to decipher between the intervention being a deep-structure cultural adaptation or a non-adaptation/surface-structure cultural adaptation intervention. Few studies justified how the cultural components were relevant to the intervention, and even fewer studies quantitatively measured the impacts of the cultural components. Given the importance of building on cultural identity as a protective factor in youth's sense of self and its importance as a positive influencer in health promotion, few studies described how and the extent to which cultural components were used in the culturally focused interventions for Native Hawaiian youth.

The cultural components utilized in the interventions also varied in description and type. Cultural values, practices, and history/education were commonly identified but were rarely explained. Where some studies were general in describing the cultural components, others provided rich descriptions. The Children's Healthy Living (CHL) program mentioned the use of cultural protocols in the recruitment process, but provided no further details (Fialkowski et al., 2013). Similarly, Hui Mālama O Ke Kai mentioned the use cultural protocols, but did not expand upon this component; however, this study was extensive in providing other cultural values such as connecting the youths to their family ('ohana), land ('aina), community, and spirituality through experiential learning (Sy et al., 2015).

Other noteworthy cultural components included 'ōlelo Hawai'i (Hawaiian language) and a service-learning component. Given the education setting for a large portion of the interventions, it would be expected that programs like Puni Ke Ola (Helm et al., 2015), Papahana Kaiapuni (Yamauchi et al., 2008), Hawaiian focused charter schools (Kana'iaupuni, 2008), and the Hawaiian Studies Program (Yamauchi et al., 2008) were grounded in 'ōlelo Hawai'i. This emphasizes the



importance of the Hawaiian language. I ka ‘ōlelo nō ke ola, i ka ‘ōlelo nō ka make (In language there is life, in language there is death) (Pukui, 1983, #1191). Given the youth audience, it would be expected that programs like The Hawaiian Studies Program (Yamauchi et al., 2008), the Imi Pono no ka Aina program (Thomas et al., 2014), and I Mua Mau Ohana (Kim & Jackson, 2009) incorporated a service-learning component. Experiential learning activities emphasize the cultural practice of ma ka hana ka ‘ike (in working one learns) (Pukui, 1983, #2088).

### **Discussion**

Several key findings resulted from this study. First, while a variety of different interventions were highlighted, showing the diversity and expansion of the field of study, this review revealed the many gaps in focus areas and demographic populations. Most of the interventions reviewed were narrow in focus, primarily within the field of education and substance use/misuse interventions with Native Hawaiian youth. By contrast, literature from other Indigenous communities, such as Australia and New Zealand (Abel et al., 2015; Broughton et al., 2016; Capp et al., 2001; Jamieson et al., 2011; Martin & Walker, 2017; Thurber et al., 2018), covered a more holistic view of health about Indigenous youth including dental health, sexually transmitted diseases, sexual behaviors, suicide, and parenting (first years). Additionally, there was a relative shortage of studies on each of the different focus areas suggesting a lack of depth in full trials rather than pilot studies. This suggests the need for more expansive as well as more intensive research to cover [with adequacy] more focus areas and demographic populations.

Secondly, the inability to clearly categorize the cultural approaches of the interventions as well as the varied descriptions and types of cultural components within the interventions suggest the need for a clearer and more comprehensive definition for culturally focused interventions. In other words, researchers need to be sharper in their descriptions about how interventions are cultural (i.e., on what level/intensity was culture considered and applied, and what are the specific ways culture was included in the intervention?), and how culture is effective in addressing Native Hawaiian health and wellbeing (i.e., measuring and identifying effective practices). Furthermore, the field of study needs a more comprehensive framework, specific to Native Hawaiians, to better define and provide a best practice model for the use of Native Hawaiian culture within interventions. This review recognizes the existence of numerous other models, frameworks, and approaches to defining, describing, and categorizing culturally focused interventions, and

admittingly, this review's application of Okamoto et al.'s (2014) continuum of approaches may not fit the 19 included intervention models. Despite this, it is clear, as Okamoto et al. (2014) suggests, future research is needed to identify best practice as well as examine the developmental process of the three approaches. This encourages researchers, from an interdisciplinary background, to work together collaboratively in developing such a framework and model to advance the use of culturally focused interventions for Native Hawaiians.

Thirdly, studies included in this review used a variety of research designs, suggesting the need for flexibility in the methodology of culturally focused intervention research to balance community aspects and scientific rigor. Given Native Hawaiians' mistrust with research due to past negative experiences, it is interesting the prevalent research design was RCT, a classical experimental design in which participants are randomized into either a treatment group or a control group used for comparison. Yet, the field of study seems to be advancing into a more progressive RCT approach in that "the construction of a no-treatment control group (a hallmark of earlier research) was not considered" (Mokuau et al., 2008, p. 10). For example, some studies waitlisted or delayed intervention for the control group participants, suggesting the need for RCT to create a "less intensive control condition" for the control groups (Mokuau et al., 2008, p. 10).

Finally, various studies were found to relate to culturally focused interventions for Native Hawaiians but were excluded from this study because they did not report on the results of an original culturally focused intervention for Native Hawaiians. The focus of these studies were pre-intervention activities, post intervention follow-ups, intervention implications, lessons learned, design strategies, and the needs, attitudes, and preferences of the population. An aggregated review of these studies could provide advancement of culturally focused interventions for Native Hawaiians.

### **Limitations**

There were several limitations to this study. First, this study may have excluded a number of culturally focused interventions for Native Hawaiian youth. This review included published peer reviewed journal articles and excluded gray literature, leaving out community-based, pre-publication, or unpublished interventions. Given the mistrust Native Hawaiians have for Western systems including research methods (Mokuau et al., 2008), perhaps more interventions, not captured in this study, could have been detailed in gray literature. In addition, publication bias, or

the acceptance of articles reporting significant findings, is a barrier for studies without significant findings to be published in a peer reviewed journal (Boland et al., 2014). These studies, regardless of its non-significant findings and scientific rigor, could add to the body of literature on culturally focused interventions for Native Hawaiian youth. To create a complete depiction of all the culturally focused interventions for Native Hawaiian youth, this study could benefit from a review of the ongoing or unpublished gray literature as well as consulting with experts or community members in the field, who may be aware of additional culturally focused interventions for Native Hawaiian youth.

### **Conclusion**

Taking a holistic approach to health aligns with Native Hawaiian ontologies and epistemologies of health, while emphasizing the importance of taking a strengths-based approach to wellbeing. Strengths-based approaches to wellbeing also emphasize the importance of bolstering health by focusing on community strengths, cultural values, and healing from historical trauma. A foundational understanding of health and community strengths from a Native Hawaiian perspective is important to consider for Native Hawaiian communities and community healing. Consequently, our review considers the incorporation of community engagement, positive youth development, and cultural components.

The key to achieving quality health for Native Hawaiian youth is to understand the historical facts that negatively influence traditional lifestyles and promote health interventions tailored to Native Hawaiian youth to support Native Hawaiians' ability to reclaim their health in ways that are meaningful and acceptable. Culturally focused interventions provide a platform to achieve meaningful and sustainable change resulting in positive health outcomes to achieve quality health for all. Research focusing on culturally focused interventions specifically for Native Hawaiians is an expanding field of study. This study presents a review of published literature focusing on culturally focused interventions for Native Hawaiian youth to understand the specific key components, identify service gaps, and highlight concerns that can improve future work related to health interventions tailored to Native Hawaiian youth are likely to protect positive health outcomes and promote a sense of *ea*, or self-determination, for these youth. The findings provide a summary of the culturally focused interventions for Native Hawaiians in terms of the interventions' aims and components (youth participants description and methods), outcomes, and

cultural components, and it also exposes limitations and gaps in the field of study to which more research needs to be dedicated.

Results indicated most of the interventions were education and substance use/ misuse prevention oriented. Most of the interventions were located on the island of O‘ahu with less attention to the neighboring islands. Interventions tended to be geared towards older youth, particularly high school aged youth. Research designs tended to use less quantitative and more qualitative approaches, and all of the studies reported positive results to support the effectiveness of the intervention. The cultural components utilized in the interventions were varied in description and type. Emphasis on the importance of culture and community resounded in the results and outcomes.

By aggregating and examining the use of culturally focused interventions for Native Hawaiian youth, this study enriches the field of study for researchers (past, present, and future) by building awareness and identifying where culturally focused intervention efforts are underdeveloped or nonexistent to provide direction for the future development of these types of interventions. More research on culturally focused interventions for Native Hawaiians is needed to identify specific key components, evaluate the gaps in service areas, describe and evaluate the use of culture, develop a future framework for best practice, aggregate other related studies, and include interventions that may have been excluded from this review.

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**Figure 1.**  
*PRISMA flow diagram*

