

‘ĀINA (LAND) AS A LEADER: A SCOPING REVIEW OF CONTEMPORARY NATIVE HAWAIIAN LITERATURE

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Culture frames individual and community well-being. Among Kānaka ‘Ōiwi, or the Native people of Hawai‘i, ‘āina (land) is a significant pillar of culture and community. Like other Indigenous peoples, Kānaka share a profound connection with ‘āina. With the root word ‘ai (to eat), ‘āina directly translates to that which feeds. Throughout this paper, ‘āina encompasses land, ocean, water, sky, and natural resources – primary sources of nourishment, healing, learning, and identity for all Kānaka. ‘Āina and leadership are interconnected in Native Hawaiian worldview, but the complexity of this relationship is not clearly defined in existing literature. Thus, this scoping review explored the ways ‘āina exemplifies leadership. Five themes emerged, with implications for Kānaka well-being. ‘Āina as elder, healer, educator, and role model embodies leadership. Together, these themes indicate that Kānaka well-being is interdependent with ‘āina leadership. For community psychologists working on a global scale, it will be important for ‘āina leadership to be recognized in social justice initiatives with Kānaka ‘Ōiwi, and potentially with other Indigenous and Pacific peoples.

Keywords: ‘āina/land, Indigenous well-being, Native Hawaiian leadership, literature review

1. Introduction

Kānaka ‘Ōiwi¹ are the Native people of Hawai‘i. Similar to other Indigenous peoples, Kānaka share a profound connection with their kulāiwi, or homeland. With the root words of kula (field) and iwi (bone), kulāiwi describes the ‘āina (land) where the bones of ancestors are buried (Pukui & Elbert, 1986). Through an ‘āina-based way of life, Kānaka have remained close to their ancestors and culture. Historically, ‘āina has

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¹ Note on Language Use: ‘Ōlelo Hawai‘i (Hawaiian language) and English are recognized as the two official languages of the State of Hawai‘i. While this article is primarily written in English, the topic focuses on Native Hawaiian culture. Therefore, ‘Ōlelo Hawai‘i is prominently used throughout the text. English translations are provided following the first use of a Hawaiian word. However, it is important to note that an English translation cannot fully capture the meaning(s) and true essence of certain Hawaiian words. The following uppercase terms are used to refer to descendants of the Native people of Hawai‘i: Kānaka (‘Ōiwi, Kānaka (plural), and Kanaka (singular). Kanaka, meaning human, and ‘Ōiwi (root word iwi for bone), meaning native or indigenous, come together to describe the Native people of Hawai‘i who trace ancestry to the land (Pukui & Elbert, 1983). Kānaka, ‘Ōiwi, and Native Hawaiian are used as adjectives.

nourished Kānaka and sustained vitality, while serving as a foundation for ‘Ōiwi (Native Hawaiian) practices, traditions, and values, all of which significantly influence well-being. In ‘Ōlelo Hawai‘i (Hawaiian language), ‘āina holds deeper meaning beyond soil or earth. With the root word ‘ai (to eat), ‘āina directly translates to that which feeds. Throughout this paper, ‘āina encompasses and refers to land, ocean, water, sky, and natural resources – essentially, that which feeds.

Kānaka’s relationship with ‘āina begins with the Kumulipo, the Hawaiian Creation Chant. In the Kumulipo, the story of Hāloa records the creation of the first kalo (taro) plant, followed by the birth of its younger sibling, Hāloa. As the first Kanaka, Hāloa becomes the first chief and progenitor of all Kānaka (McDougall, 2016). Kalo, an elder to Kānaka and staple Hawaiian food, nourishes Kānaka and fosters well-being. The story reminds Kānaka of their inherited responsibility to care for their elders – in essence, all forms of ‘āina – by living in accordance with mālama ‘āina (caring for the land) and aloha ‘āina (love of the land). This pilina (connection, relationship) is reflected in the ‘Ōlelo no‘eau (Hawaiian proverb & poetical saying), “He ali‘i ka ‘āina; he kauwā ke kanaka (The land is a chief; man is its servant)” (Pukui, 1983, #531).

Within a Native Hawaiian worldview, well-being and ‘āina are deeply connected (e.g. Crabbe et al., 2017; McDougall, 2016; McGregor, 2007; Pukui, 1983; Yamane & Helm, 2022). However, the impacts of colonization, including land dispossession, cultural loss, and historical trauma, have subverted the significance of Kānaka ties to kulāiwi and compromised well-being. Bolstering Native Hawaiian well-being, such as through cultural kipuka and kua‘āina (country persons), exemplifies resilience and colonial resistance. Cultural kipuka are culturally sacred places that have “withstood destructive forces of change” (McGregor, 2007, p. 7), and perpetuate traditional knowledge and ways of life in contemporary society. Previously a term that disparaged rural Hawaiian persons as unsophisticated, kua‘āina now inspire others through subsistence lifestyles, intimate connections to ‘āina, and their embodiment of ‘Ōiwi culture (McGregor, 2007). Kua‘āina rely on their relationship with ‘āina for guidance and leadership as fundamental aspects of health justice and health sovereignty. Drawing on Native Hawaiian literature, the purpose of this paper is to explore the ways ‘āina exemplifies leadership, with future application to Native Hawaiian well-being.

1.1 The present study: Scoping literature review

While certain leadership qualities are universal, culture largely impacts leadership styles, attributes, and behaviors (House, 2002). ‘Ōiwi leadership remains an integral part of Native Hawaiian society and well-being (Warfield, 2020). Six relevant aspects of ‘Ōiwi leadership have been identified and are useful to the present scoping review: mo‘okū‘auhau (genealogy), spirituality and mana (supernatural power), piko within honua (connections within environments), ‘Ōiwi values, ‘ike kupuna (ancestral knowledge), and pono (moral) and servant leadership (Alden & Helm, 2023). Together, these ‘Ōiwi leadership aspects provided a structured approach for a scoping review to explore the relationship between ‘āina and leadership, which may inform future Native Hawaiian well-being initiatives and practice. For example, programs such as those for leadership development, health, and well-being may benefit from incorporating ‘āina leadership and ‘āina-based programs, which would also be reflected in process and outcome evaluations. Scoping reviews aim to “clarify key concepts/definitions in the

literature, identify key characteristics or factors related to a concept, [and] identify and analyze knowledge gaps” (Munn et al., 2018, p. 2).

2. Methods

The review followed a structured process of identifying, screening, selecting, and analyzing relevant sources. Two research questions guided the review: How do Kānaka ‘Ōiwi relate to ‘āina as a leader? How does ‘āina demonstrate leadership and serve as a leader? This scoping review was conducted by a primary reviewer, who is a Native Hawaiian emerging scholar, in consultation with a review team, consisting of a Native Hawaiian emerging scholar and a Native Hawaiian mid-career scholar.

2.1 Review search strategy

Potential sources were identified in a systematic search using the premier academic library in the State of Hawai‘i. Specifically, the review utilized OneSearch, a discovery tool and search engine from the Hamilton Library at the University of Hawai‘i at Mānoa. OneSearch catalogs a broad range and high concentration of resources related to ‘Ōiwi culture, worldview, history, and community health. OneSearch drew from a diverse range of resources, including Hamilton Library’s physical collections, institutional repositories, and electronic resources from various literature databases across a broad array of disciplines. The following databases produced results for the initial step of identification: Academic Search Complete, Ingenta Connect, Web of Science, Project MUSE, PubMed, EBSCOhost, ProQuest, Ebook Central, Journals@Ovid, DOAJ, JSTOR Arts & Sciences, SAGE, and ScholarSpace. OneSearch resources identified books, journals, articles, theses, and dissertations, with a primary focus on peer-reviewed publications.

The search strategy employed the following parameters and key terms: (1) published date between January 2000 and December 2021, and (2) four combinations of the search terms “Hawaiian,” “land” or “aina,” and “leader” or “leadership.” January 2000 was chosen as the starting date because the review focused on the contemporary literature of scholars who had performed deep excavations of historical knowledge, drew connections between the past and present, and applied concepts in a modern context. The search omitted the diacritical marks of the Native Hawaiian word ‘āina to ensure retrieval of all relevant sources. A total of 681 results, including duplicates, were retrieved.

Because unpublished sources would provide valuable and relevant contributions to the review, a second systematic search was conducted through ScholarSpace, a digital institutional repository for the University of Hawai‘i, to retrieve dissertations and theses. Within ScholarSpace’s Dissertations & Theses collection, the same parameters were used to retrieve an additional 377 results, including duplicates. Altogether, the search terms yielded 1,058 results.

2.2 Inclusion and exclusion criteria

As shown in the review flowchart (Figure 1), three steps of review determined the final sources included in this review. The inclusion process tracked each source (title, author, date) and the decision to include or exclude with reason for exclusion (if

applicable), along with an article summary. In the first step of “identification,” duplicate sources were removed, yielding 351 unique sources from OneSearch. Next, ScholarSpace sources that were duplicates of OneSearch were removed, yielding a total of 257 unique sources from ScholarSpace. Together, 608 unique sources were identified.

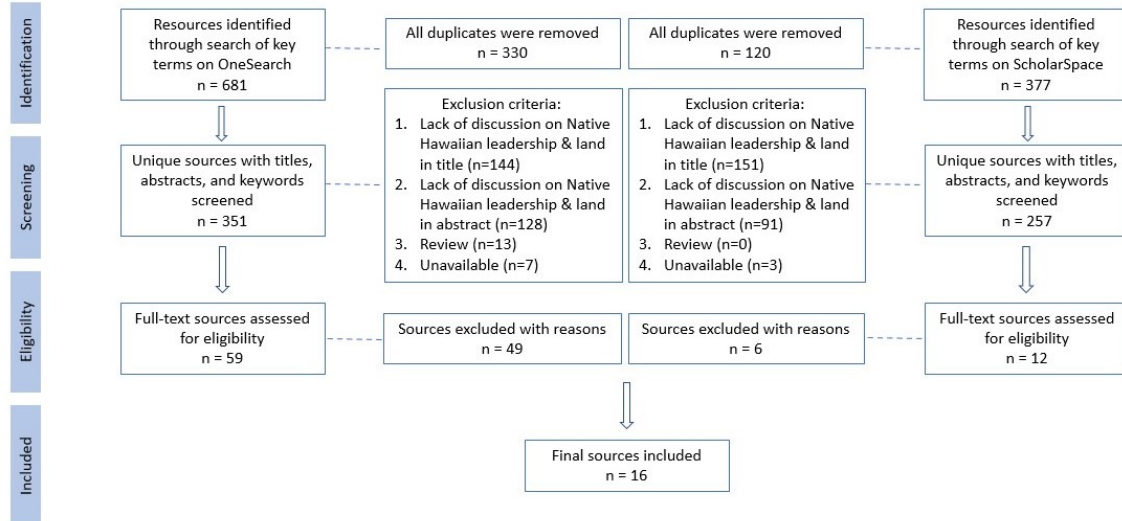


Figure 1. Inclusion and exclusion review flowchart

In the second step, titles and abstracts of the remaining sources were “screened” by the primary reviewer. Sources were included if they presented relevant discussion on the value of ‘āina to demonstrate leadership and serve as a leader. Sources were excluded for the following reasons: (1) a review or commentary of another text of literature, (2) unavailable as an online resource, and (3) titles and abstracts did not focus on Native Hawaiian culture nor discussed ‘āina or leadership concepts. A total of 71 sources remained (537 excluded): 59 from OneSearch and 12 from ScholarSpace.

In the third step to determine “eligibility,” the full texts of the 71 remaining sources were reviewed by the primary reviewer in consultation with the review team: verification and questions regarding inclusion/exclusion were resolved through discussion.

Sources were excluded if (1) discussion on ‘āina and leadership in Native Hawaiian culture was not present, (2) ‘āina and leadership were mentioned peripherally or briefly, (3) discussion on ‘āina did not relate to leadership, and (4) discussion on leadership did not include ‘āina. Examples of excluded ‘āina items were sources about land tenure, Hawaiian homestead lands, Native rights, environmental management, tourism, and the development and evaluation of ‘āina-based programs. Sources about leadership were excluded for their focus on community leaders, institutional leadership, sovereignty, community activism, and current events unrelated to ‘āina.

Sources were included when there was a central focus on ‘āina as it related to being a leader and exemplified leadership. Selected sources either explicitly discussed leadership or implicitly referenced leadership through discussion of leadership forms and concepts, such as teaching ‘Ōiwi values, improving health and well-being, and raising community leaders.

A total of 55 sources were excluded, while 16 final sources – ten from OneSearch and six from ScholarSpace – were selected for inclusion in the review presented in the results.

In all, there were three articles, three book chapters from *I Ulu I Ka 'Āina: Land*, three book chapters from *Kanaka 'Ōiwi Methodologies: Mo'olelo and Metaphor*, five dissertations, and two theses.

2.3 Source analysis

The research questions (How do Kānaka 'Ōiwi relate to 'āina as a leader? How does 'āina demonstrate leadership and serve as a leader?) guided the annotation of each source by scope, key findings, and contribution to the review. The analysis identified definitions of 'āina and leadership and characteristics of 'āina that reflect leadership. Once annotations were completed, key themes across the literature were identified and organized with exemplary excerpts, while tracking which sources contributed to each theme.

3. Results

The scoping review yielded 16 relevant sources, which are presented here. Although this may be perceived as a narrow pool of sources, these represent the past two decades of published and unpublished (i.e., theses and dissertations) scholarship on the topic. Notably, these sources share new knowledge, while also reflecting and building upon a foundation of 'ike kupuna (ancestral knowledge), such as oral traditions and written sources from past scholars.

As an orientation to the results, all but one of the 16 sources provided explicit definitions or English synonyms of 'āina. Sources defined 'āina as the environment or natural world, encompassing land, sea, fresh and brackish waters, streams, skies, weather, plants, animals, and elements. 'Āina is alive and dynamic with spiritual and physical elements. In 10 of the 16 sources, 'āina signified that which feeds (Andrade, 2014; Baker, 2018; Keli'iholokai et al., 2020; Lee, 2014; Maunakea, 2016; Maunakea, 2019; Meyer, 2001; Naone, 2008; Osorio, 2020; Saffery, 2019). As such, 'āina carries more depth and meaning than the physical definition of land. Land only transforms into 'āina through interactions with Kānaka.

All 16 sources either explicitly or implicitly discussed leadership concepts in varying capacities. Ten sources specifically defined 'Ōiwi leadership. 'Ōiwi leadership, among other Indigenous cultures, was recognized as distinctive from Western styles and approaches. 'Ōiwi leaders use their strengths in service of the collective and help others recognize their gifts. Guiding values and principles include stewardship, mentorship, resourcefulness, compassion, laulima (teamwork), kuleana (responsibility), and pono (integrity, righteousness). Family, 'āina, community, spirituality, and culture are important pillars of 'Ōiwi leadership.

Ultimately, five themes emerged with presentation in a conceptual order that distinguishes broad Native Hawaiian worldviews (Themes 1-3) from Kanaka application and practice (Themes 4 and 5): (1) Genealogical connection & reciprocal kuleana, (2) Physical, mental, & spiritual nourishment from 'āina, (3), 'Āina as teacher, guide, & role model, (4) 'Āina in 'ike kupuna, and (5) Mālama 'āina & 'āina-based programs. Table 1 provides definitions and example excerpts of these themes. In alphabetical order by author's last name, Table 2 outlines definitions of 'āina and leadership by source and

identifies themes represented in each source. These 16 sources are listed in the reference section and indicated with an asterisk (*).

Table 1. Summary of Themes

Theme	Definition	Example Excerpts
Concept: Native Hawaiian worldview		
Theme 1 Kanaka-‘āina genealogical connection & reciprocal kuleana (responsibility, privilege)	The story of Hāloa names ‘āina as the elder sibling of Kānaka. ‘Āina cares for & nourishes its kaikaina (younger sibling). In return, Kānaka have the kuleana to care for & cultivate ‘āina, their kua‘ana (older sibling).	“The ‘āina there continues to teach me mo‘okū‘auhau—that I descend from Hāloanakalaukapalili, that I am kaikaina to these islands and to the elements, and that therefore have a kuleana to learn and serve” (Maunakea, 2017, p.144). “Genealogy has an always will be a cornerstone of our Hawaiian worldview...it is through genealogy that our people understand our familial and reciprocal relationship to the natural world, including land, sea, sky, and all creatures that live in these environments” (Saffery, 2019, p.58).
Theme 2 Physical, mental, & spiritual nourishment from ‘āina	Through connection and interaction, ‘āina provides sustenance & nourishment to Kānaka in the physical, spiritual, and mental aspects of holistic well-being.	“The role and understanding of ‘āina does not cease at the fundamental physical feeding of kanaka maoli, however ‘āina also feeds and nourishes other mental and spiritual aspects” (Lee, 2014, p.14). "Healthy ‘āina and a healthy connection to ‘āina was a clear indication of the health of Kānaka, or people" (Keli‘iholokai et al., 2020, p. 9).
Theme 3 ‘Āina as teacher, guide, & role model	When Kānaka engage with their surroundings & use their senses, ‘āina holds many lessons, values, & skills to learn.	"I thought the ‘āina was 'talking' to me, counseling me, directing my actions as I restored the place where ancestors cared for the kalo and found their sustenance" (Andrade, 2014, p.12). "The conception and organization of works of exceptional scale required leadership of uncommon ability: as always, the ‘āina is an excellent teacher" (Beamer, 2014, p.58).
Concept: Kanaka application and practice		
Theme 4 ‘Ike kupuna (ancestral knowledge) captures & communicates the value of ‘āina as leader.	Kūpuna (‘Ōiwi ancestors) understood the value of ‘āina to instruct & lead, evident in ‘ike kupuna like mo‘olelo (story, history, literature), ka‘ao (fiction, tale), mele (song), oli (chant), hula (dance), ‘ōlelo no‘eau (Hawaiian proverbs, poetical sayings), & wahi pana (legendary places).	“‘Ike kupuna, or ancestral knowledge, is embedded in all that surrounds us. It is inscribed in the names of the many places that constitute our physical and spiritual landscapes” (Peralto, 2014, p.78). “‘He ‘a‘ali‘i kū makani mai au, ‘a‘ohe makani nāna e kūla‘i’ (I am the wind withstanding ‘a‘ali‘i. No wind can topple me over; p. 60). The ‘a‘ali‘i has long been used as a Hawaiian metaphor and model for strength, resiliency, and flexibility because it can survive challenging environments and elemental forces and still bloom to become a beautiful and useful resource” (Lipe, 2016, p.57-58).

Theme 5 Mālama ‘āina (caring for the land) & ‘āina- based programs foster ‘āina as leader and cultivate leadership qualities.	Through Kanaka-led initiatives, ‘āina becomes a vehicle for Kānaka to heal & cultivate leadership qualities.	“‘Āina-based curriculum teaches ethical values, ideas of reciprocity between people and land, and the specifics of the environment in which students learn. Learning takes place in the environment so that practices are not removed from experience” (Naone, 2008, p.187). “Ho‘oulu ‘Āina provides an important space to build and strengthen community by giving them access to land where people can learn, practice, and share the important cultural knowledge that connects them” (Aldana, 2018, p.58).
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Table 2. ‘Āina and leadership definitions and themes by source

Source Manuscript author, date	“‘āina”	“leadership”	Themes					
			1	2	3	4	5	
1 Growing Leadership at Ho‘oulu ‘Āina: Matching up Gifts and Kuleana in Order to Heal Land, People, and Community Aldana, 2018	“Land, sky, clouds, plants, & ancestors” (90)	Leadership is influenced by cultural & social identities, such as class, race, & gender. Indigenous leadership is defined as “holistic in nature, characterized by strong spiritual orientations, & are reflective of, & often include, traditional protocol & practices” (29). “Leadership is the ‘weaving of gifts & strengths & purpose” (50), creating space for people to find their gifts & to connect their gifts to kuleana. “People's strengths serve a greater purpose for the community” (76).		X	X			X
2 A Hawaiian Geography or a Geography of Hawai‘i? Andrade, 2014	‘Āina encompasses, the seas, the streams, the skies, the land, & everything else that feeds & nourishes Kānaka.	Resourcefulness & adaptability are strong assets of Native Hawaiian ancestors.	X	X	X	X		
3 Ho‘oulu ‘Āina: Embodied Aloha ‘Āina Enacting Indigenous Futurities Baker, 2018	“That which feeds us” (1) “Non-human existents, which include land, plants, animals, clouds, rain, & the multitude of	“Leadership at Ho‘oulu ‘Āina instills in everyone who works [there] the importance of respecting kuleana that they hold to land	X	X	X	X	X	

	geological & meteorological elements of place” (65)	& community & the kuleana held by others” (94). Horizontal leadership allows “individuals [to] participate in decision-making based on mutual & shifting authority” (95).						
4 ‘Ōiwi Leadership and ‘Āina Beamer, 2014	Land Natural environments, weather, unique features, such as mountains & valleys ‘Āina is alive.	“‘Āina has shaped ‘Ōiwi & ‘Ōiwi leadership as long as we have been a lāhui” (55). “Stewards of our people, ‘āina, & community” (61) “Importance of family, setting a foundation, & mentoring ‘ōpio [students] to surpass you” (61) “A leader must have passion as well as compassion, vision as well as action, courage as well as humility” (61).	X	X	X	X	X	
5 Land and Genealogy of ‘Ioleka’a: Mapping an Indigenous Identity Camvel, 2012	“The land includes everything above & below it, the inner & outer core, the fresh, salt & brackish waters, the heavens, the sky, clouds, winds, rains, all of the Kumulipo in its oratory of the genealogy of all life from the beginning or birthing of Pō to the genealogies of kānaka ‘ōiwi” (27). There are “spiritual & elemental forms of the living ‘āina” (118).	Loyalty to leaders, including chiefs, kings & queens, were “based on the supreme commitment to the land & resources” (12). Spirituality is a component of leadership.	X	X	X	X		
6 Reclaiming ‘Āina Health in Waimānalo Keli’iholokai, et al., 2020	“The land, the ocean, the sea, all the elements, plants, people, & their interconnection” (8) “Sustenance, that which feeds Kānaka” (8) “‘Āina is everything, &	“Core of Kānaka Maoli well-being: Ea (self-determination), ‘āina momona (healthy & productive land & people), pilina (mutually sustaining relationships), waiwai (ancestral abundance, collective wealth), ke	X	X	X			X

	therefore, we as people are ‘āina” (5).	akua mana (spirituality & the sacredness of mana), & ‘ōiwi (cultural identity & native intelligence)” (14) Stewardship Preservation & perpetuation of intergenerational knowledge & ‘āina or ‘āina-based activities (5)					
7	Reconnecting Kūāhewa with Kua‘āina: Toward the Establishment of an ‘Āina-Based Program in Kahalu‘u Mauka, Kona, Hawai‘i Lee, 2014	“Although Pukui initially defines ‘āina as ‘land’ & ‘earth,’ she further refers that ‘āina stems off of the root word ‘ai, or to eat, signifying that ‘āina is an aspect that feeds. ‘Āina pertains to all of the things that feed, including land, sea, streams, & ponds” (13). “For the kanaka to be physically connected with the land, either dwelling on it and/or tending to it, is fundamental for the land to properly function as ‘āina, an entity that provides food & nourishment” (81).	Instilling values, such as “hard work, responsibility, & caring for the land” (15) Leading by example, like “hands in the work” (93) Promotion of “self-efficacy, accountability, & responsibility; morals & values that have the potential to uplift communities, harboring social change” (95) Communitarian values	X	X	X	X
8	Mo‘olelo for Transformative Leadership: Lessons from Engaged Practice Lipe, 2016		Transformational leadership incurs a “breadth & depth of change that creates space for a variety of ontologies, epistemologies, & pedagogies to emerge & affect people on campus, as well as the families, communities, & natural environments surrounding institutions of higher education” (69). “Strength, resiliency, & flexibility” (57) Mentorship & guidance		X		X

		Collective team player				
9 Arriving at 'Āina Aloha Research Framework: What is our kuleana as the next generation of 'Ōiwi Scholars? Maunakea, 2015	"All that feeds" (146)	Compassion & care for community With regard to research, living up to the trust of community, being respectful to community, & advocating for the collective "He ali'i ka 'āina, he kauwā ke kanaka. The land is chief, man is its servant" (143).	X	X	X	X
10 Nē Huli Ka Lima I Lalo Piha Ka 'Ōpu: 'Ōiwi Agency and Outcomes of 'Āina-Based Education Maunakea, 2019	"'Āina encompasses land, earth – that which feeds & that which signifies a sense of homeland relations between people & the land" (20).	Servant leadership Mentorship Raising others to be leaders Having pono (right, integrity) intentions behind actions Observational skills	X	X	X	X
11 Our Own Liberation: Reflections on Hawaiian Epistemology Meyer, 2001	The environment; land, sky, & ocean Land that feeds	Hawaiian epistemology can be used to guide Kanaka leaders.	X	X	X	
12 The Pilina of Kanaka and 'Āina: Place, Language, and Community as Sites of Reclamation for Indigenous Education the Hawaiian Case Naone, 2008	"'Āina, "that which feeds," encompasses the entire cosmos including the land, sea, sky, & spiritual dimensions which our kūpuna celebrated in place names, stories, songs & other orature" (vii). Land & place	Hawaiian values Use of feelings & intuition to make sense of surroundings & circumstances Using knowledge to give back to community	X	X	X	X
13 Ka Wai Ola: The Life Sustaining Water of Kanaka Knowledge Oliveira, 2015	'Āina as innately alive; a deeper meaning than just land 'Āina can speak for itself through Hawaiian practices. Ecosystems, including streams, ocean, land, wind, rain, animals, plants	Unity for a cause Integrity & responsibility in research, striving to reach standards of community Open collaboration with others Observation as an invaluable skill			X	
14 Gathering Stories of Belonging: Honouring the	Land, that which feeds	"Resistance & refusal to heteropaternalism	X		X	X

Mo'olelo and Ancestors that Refuse to Forget Us Osorio, 2020	"The living of Kānaka on a moku (island) is what transforms it into 'āina" (6).	& heteronormativity" (3) Gathering & retelling the mo'olelo (stories) of those who have been marginalized						
15 'O Koholālele, He 'Āina, He Kanaka, He I'a Nui Nona ka lā: Re-membering Knowledge of Place in Koholālele, Hāmākua, Hawai'i Peralto, 2014	Noted as land & physical landscapes, but possesses deeper spiritual value alongside akua (gods) & Kānaka Places Kānaka are from Land is used separately with a strictly physical meaning distinct from 'āina.		X	X	X			
16 Mai Ka Piko a Ke Mole: Clearing Paths and Inspiring Journeys to Fulfill Kuleana through 'Āina Education Saffery, 2019	"There were two names used by our kūpuna for land or islands: when inhabited by people, land is called 'āina... as opposed to "moku," which he distinguishes as uninhabited islands isolated by ocean" (40). "That which feeds" (41) "The natural world, including the land, sea, sky, & all creatures that live in these environments" (58)	Resilience Commitment to others Active participation in the work Inspiration to others	X	X	X	X	X	
Total Sources			12	11	16	12	9	

3.1 Theme 1: Kānaka-'āina genealogical connection and reciprocal kuleana

Mo'okū'auhau, or genealogy, "has and always will be a cornerstone of our Hawaiian worldview...it is through genealogy that [Kānaka] understand our familial and reciprocal relationship to ['āina]" (Saffery, 2019, p. 58). Of the 16 sources, 12 expressed the significance of the mo'okū'auhau between Kānaka and 'āina, as reflected in Saffery's assertion (Andrade, 2014; Baker, 2018; Beamer, 2014; Camvel, 2012; Keli'iholokai et al., 2020; Maunakea, 2016; Maunakea, 2019; Meyer, 2001; Naone 2008; Osorio, 2020; Peralto, 2014; Saffery, 2019). Furthermore, based on these 12 sources, Kānaka view such genealogical relationships as sacred, whose balance must be continuously maintained and honored. Sources also expressed that interconnectedness fosters

intimacy between Kānaka and ‘āina, asserting that Kānaka are part of and inseparable from ‘āina.

While these 12 sources articulated the importance of Kānaka-‘āina ancestral connections, six of them recounted the story of Hāloa presented in the Kumulipo. The Hāloa story shares the mo‘okū‘auhau that establishes Kānaka’s familial connection to ‘āina (Andrade, 2014; Camvel, 2012; Keli‘iholokai et al., 2020; Maunakea, 2019; Maunakea, 2016; Saffery, 2019). In the story, Papa (Earth Mother) and Wakea (Sky Father) conceived a daughter named Ho‘ohōkūlani. Ho‘ohōkūlani then mated with Wakea, giving birth to a stillborn son. The family grieved and buried him in the ‘āina. In time, a kalo plant grew from the ‘āina where the son was buried, who they then named Hāloanakalaukapalili. Ho‘ohōkūlani conceived a second time, giving birth to another son. Named after his respected elder brother, the second Hāloa enjoyed good health and became the first Hawaiian human and chief (Camvel, 2012; Maunakea, 2019; Saffery, 2019).

Of these 12 sources, 11 indicated that interdependence and reciprocal kuleana between Kānaka and ‘āina ensue from mo‘okū‘auhau (Baker, 2018; Beamer, 2014; Camvel, 2012; Keli‘iholokai et al., 2020; Maunakea, 2016; Maunakea, 2019; Meyer, 2001; Naone 2008; Osorio, 2020; Peralto, 2014; Saffery, 2019). Kuleana is described as “an individual’s responsibility to care for place or knowledge, which is recognized in that person through their genealogical connection to that place or knowledge” (Baker, 2018, p. 13). In the Hāloa story, Hāloanakalaukapalili, the kalo plant, represents ‘āina and that which nourishes its kaikaina (younger sibling). In return, Hāloa, ancestor to all Kānaka, fulfills the duty of kaikaina to love, serve, and care for his kua‘ana (older sibling) (Camvel, 2012; Keli‘iholokai et al., 2020; Maunakea, 2016).

A dynamic, generative relationship with ‘āina helps to inform Kānaka of their kuleana. Acts of aloha ‘āina sustain relationships between Kānaka and ‘āina, thereby establishing kuleana (Baker, 2018; Osorio, 2020). Aloha ‘āina is a complex concept with political implications. Essentially, it is “an internal love for place and community so strong that it cannot be overcome...a Kānaka Maoli’s natural and imbedded practice of relating to one’s home” (Osorio, 2020, p. 7). Kānaka may continue to strengthen relationships with ‘āina through physical and spiritual connection, such as farming Native foods, protecting sacred sites, and participating in traditional ceremonies (Saffery, 2019; Naone, 2008). The action of “huli ka lima i lalo,” to turn your hands down, is one form of physical connection. The value of hands turned down to productively work imbues Kānaka-‘āina relationships with shared consequence and reveals ‘āina-related kuleana, which ultimately leads to “more than just an abundance of food” (Maunakea, 2019, p. 11; Meyer, 2001). Through reciprocal cultivation of and care for each other, Kānaka and ‘āina secure mutual health and abundance.

Two sources asserted that an understanding and application of mo‘okū‘auhau allows Kānaka to access the mana (supernatural power) of a place and experience (Maunakea 2019; Osorio 2020). Kānaka were encouraged to “remember the reciprocal pilina [relationship] between our ‘āina and Kānaka - that both have the mana (power, authority) to transform and feed each other” (Osorio, 2020, p. 6). When nurtured, these relationships manifest positive teachings and consequences. Kānaka also acquire “mana inherent in the ‘āina...through the deepening of cultural skills, knowledge, and exercise of kuleana” (Maunakea, 2019, p. 36). In a positive feedback system, as Kānaka fulfill

‘āina-related kuleana, they simultaneously gain cultural knowledge, practice cultural skills, and draw on the mana of a place.

3.2 Theme 2: Physical, mental, and spiritual nourishment from ‘āina

The Native Hawaiian worldview of maui ola has been defined as a holistic and balanced well-being that includes physical, spiritual, and mental aspects of health (Maunakea, 2019). Interactions with ‘āina improve and maintain all aspects of maui ola. More precisely, ‘āina is not only the fundamental source of physical nourishment, but it also nourishes Kānaka mentally and spiritually, a prominent theme in 11 of the 16 sources (Aldana, 2018; Andrade, 2014; Baker, 2018; Beamer, 2014; Camvel, 2012; Keli’iholokai et al., 2020; Lee, 2014; Maunakea, 2019; Meyer, 2001; Naone, 2008; Saffery, 2019).

For example, ‘Ōiwi educational leaders, who participated in interviews with Meyer (2001), gave praise to the ‘āina that feed them both literally and spiritually. It follows that the interdependent Kānaka-‘āina relationships, born out of genealogical connection, are essential to maui ola. Similarly, Andrade (2014) suggested that nourishment comes from a “heightened sense of awareness to the voices of ancestors in the seas, the streams, the skies, and everything else that comprises, ‘āina in its broadest sense: that which feeds and nourishes Kanaka” (p. 20). Land transforms into ‘āina only through Kānaka’s presence on and engagement with the land physically, mentally, and spiritually (Lee, 2014; Maunakea, 2019; Naone, 2008; Saffery, 2019). This belief acknowledges the importance of Kānaka to engage with ‘āina to unify all aspects of maui ola.

Absence of connection to ‘āina, a widespread consequence of colonization, leads to negative health outcomes, taking form as physical, mental, and spiritual sickness and suffering (Keli’iholokai et al., 2020; Naone, 2008). For example, the Waimānalo Limu Hui sought to restore connection to ‘āina among community members by engaging them in endemic limu (seaweed) restoration. With respect to the community members who participated, “healthy ‘āina and a healthy connection to ‘āina was a clear indication of the health of Kānaka” (Keli’iholokai et al., 2020, p. 9). As evidenced in several sources, a relationship with ‘āina healed trauma and disease rooted in imbalance between Kānaka and ‘āina. Moreover, it extended beyond healing to improve quality of life and ensure healthy well-being, inclusive of ‘Ōiwi sense of identity, spirituality, and leadership (Andrade, 2014; Aldana, 2018; Baker, 2018; Beamer, 2014; Camvel, 2012; Meyer, 2001; Saffery, 2019).

3.3 Theme 3: ‘Āina as teacher, guide, and role model

The theme of ‘āina as a teacher, guide, and role model emerged from all 16 sources (Aldana, 2018; Andrade, 2014; Baker, 2018; Beamer, 2014; Camvel, 2012; Keli’iholokai et al., 2020; Lee, 2014; Lipe, 2016; Maunakea, 2016; Maunakea, 2019; Meyer, 2001; Naone 2008; Oliveira, 2016; Osorio, 2020; Peralto, 2014; Saffery, 2019). Accordingly, Kānaka may become students to ‘āina. Termed by ho‘omanawanui (2003), ‘ike ‘āina is the knowledge one gains through learning from the land (Maunakea, 2019). ‘Ōiwi educational leaders described the land, sky, and ocean as “the classroom of their most

vivid lessons, the home of metaphors that they continually draw on” (Meyer, 2001, p. 129). Baker (2018) likened ‘āina to a “true teacher [where] the pedagogy is focused on listening to the land” (p. 106).

Across sources, ‘āina was characterized as alive, responsive, and communicative with a consciousness of its own. As Kānaka seek mentorship from living sources other than people, it is their responsibility to be attentive to ‘āina, thereby allowing ‘āina to share knowledge and provide direction. A source of strength in tumultuous times, a relationship with ‘āina is essential. A powerful and symbolic example from the early 1880s, Queen Emma² traveled to the summit of Maunakea to ‘ike maka – to experience ‘āina firsthand and gain insight (Saffery, 2019):

The only way for Emma to achieve these goals of revitalization, reconnection, and empowerment was to travel to and literally immerse herself in the sacred, regenerative waters of her ancestors... If she was going to reconnect with kupuna and gain the ‘ike (knowledge, skills, teachings) needed to return to her people and make pono [right] decisions for the future of the nation, she needed to ‘ike maka iā Waiiau. (p. 101)

Queen Emma’s experiences rejuvenated her spirit and body, confirmed her ancestral relationship to ‘āina, and clarified her responsibility to serve the people of Hawai‘i.

Seven sources encouraged Kānaka to have an awareness of their surroundings and to use their senses to garner lessons, skills, and guidance from ‘āina (Andrade, 2014; Camvel, 2012; Maunakea, 2019; Meyer, 2001; Naone, 2008; Oliveira, 2016; Saffery, 2019). Oliveira (2016) named “nine sense abilities [she] believes all Kānaka are born with: sight, listening, taste, touch, smell, na‘au, kulāiwi, au ‘āpa‘apa‘a, and mo‘o” (p. 78, Hawaiian terms defined below). Intentionally using sight, listening, taste, touch, and smell to fully experience ‘āina, its vastness, and its intricacies provides a greater understanding of ‘Ōiwi practices, language, and history than can be learned in an academic setting. Naone (2008) further articulated the mind-body integration by explaining, “When we feel the dirt in our hands and between our toes, our visceral response and analytical analysis help us to form our understanding of the experience” (p. 58). The sense ability of na‘au, or gut, from which instincts and intuition originate, allows for direct communication with various elements of ‘āina. For example, Master navigator Mau Piailug once said that he “knows the dimensions of different parts of the canoe when building one [because] the trees tell him” (Andrade, 2014, p. 12). Oliveira explains that kulāiwi honors ancestral relationships with Native lands and the unique knowledge of different places, while au ‘āpa‘apa‘a preserves ‘Ōiwi methods that rely on environmental observation to track time. In a research setting, when Kānaka employ their senses as a methodology, ‘āina leads the research process (Camvel, 2012; Oliveira, 2016; Saffery, 2019).

Eight sources indicated that ‘āina as an educator demonstrates ‘Ōiwi values (Aldana, 2018; Baker, 2018; Beamer, 2014; Keli‘iholokai et al., 2020; Lee, 2014; Lipe, 2016; Maunakea, 2019, Saffery, 2019). For instance, ‘āina exemplifies the value of laulima: “One literal translation of the term laulima is four hundred hands. Two hundred bodies working in unison can accomplish great things. The conception and organization of works

² Emma Kalanikaumaka‘amano Kaleleonālani Na‘ea Rooke was queen of Hawai‘i as the wife of King Kamehameha IV

of exceptional scale required leadership of uncommon ability: as always, the ‘āina is an excellent teacher” (Beamer, 2014, p. 58). Just as the seed of a koa tree remains viable in the ground for several years, often having “to be scarred or cracked first” (Baker, 2018, p. 116) to germinate and grow, Kānaka learn the values of resilience and ho‘ouma (perseverance). Students of kalo farming learn and practice “lāulima (cooperation), mālama ‘āina (caring for ‘āina), and pu‘uhonua (safe haven)” (Lee, 2014, p. 75). These citations illustrate ‘āina as an exemplar of ‘Ōiwi leadership values.

3.4 Theme 4: ‘Ike kupuna captures and communicates the value of ‘āina as leader.

‘Ike kupuna, or ancestral knowledge, emerged as a theme in 12 of the 16 sources (Andrade, 2014; Baker, 2018; Beamer, 2014; Camvel, 2012; Lee, 2014; Lipe, 2016; Maunakea, 2019; Maunakea, 2016; Naone, 2008; Osorio, 2020; Peralto, 2014; Saffery, 2019). Peralto (2014) captured its essence by explaining,

‘Ike kupuna...is embedded in all that surrounds us. It is inscribed in the names of the many places that constitute our physical and spiritual landscapes...Derived from the ‘āina itself, it represents the collective experiences of generations of kūpuna [ancestors], interacting intimately with, and closely observing the environments we are kama‘āina [native-born] to—the ‘āina we are born of. (p. 78)

Experiences with ‘āina served as the foundation of ancestral methods to gather, organize, and share knowledge. Maunakea (2016) stated, “It is the ‘āina that teaches us, and the oral traditions that document our relationships with the ‘āina” (p. 143). Kānaka ancestors thus understood the value of ‘āina, evident in ‘ike kupuna like mo‘olelo (story, history, literature), ka‘ao (fiction, tale), mele (song), oli (chant), hula (dance), ‘ōlelo no‘eau (Hawaiian proverbs, poetical sayings), and wahi pana (legendary places).

Storytelling through these forms of ‘ike kupuna transmits and preserves ancestral and ‘āina-based knowledge. Equally important, storytelling has the power to connect Kānaka to ‘āina and each other, forming a sense of identity, belonging, and community (Baker, 2018; Camvel, 2012; Lee, 2014; Osorio, 2020; Maunakea, 2019). As an example, Osorio (2020) analyzed the mo‘olelo of Hi‘iakaikapoliopole, which relies on metaphors of ‘āina to illustrate ‘Ōiwi intimacy and relationships. Through diverse descriptions of ‘āina and pleasure, the Hi‘iakaikapoliopole mo‘olelo creates a “pu‘uhonua (a place of refuge), a gathering for Indigenous queers to see ourselves” (Osorio, 2020, p. 12) represented in historical literature, while illuminating their relationship with ‘āina as the “greatest model of intimacy” (p. 1). ‘Ike kupuna, like the Hi‘iakaikapoliopole mo‘olelo, perpetuates lessons kūpuna have acquired from the ‘āina for future generations to learn. Other stories, passed down through generations, carry the genealogies that ground Kānaka in who they are and the ‘āina they come from. Beyond knowledge transmission, Kānaka have used mele, oli, and hula in ceremony as mediums to intimately interact and communicate with a place, “observing and finding meaning in the responses of winds, rains, birds, waves, or stones” (Saffery, 2019, p. 67).

‘Ōlelo No‘eau are Hawaiian proverbs and poetical sayings, often derived from nature, and serve as cultural instructions for living. Naone (2008) reported that, in Mary Kawena

Pukui's compilation of 2,942 'ōlelo no'eau, there are "36 entries related to land and 1,200 entries on specific places" (p. 8). 'Ōlelo no'eau may be utilized to draw inspiration from 'āina, such as the 'a'ali'i plant. The 'ōlelo no'eau "He 'a'ali'i kū makani mai au, 'a'ohe makani nāna e kūla'i (I am the wind withstanding 'a'ali'i, no wind can topple me over)" illuminates the 'a'ali'i as a "model for strength, resiliency, and flexibility" and metaphor for 'Ōiwi survivance (Lipe, 2016, p. 57). Despite harsh environmental conditions, the 'a'ali'i survives and moreover blossoms into a beautiful shrub with widespread use. Like the 'a'ali'i, Kānaka must find strength in their roots to overcome histories of colonization, and in essence, practice survivance as an aspect of contemporary Indigenous well-being (Lipe, 2016).

Wahi pana are "given names for geographical and geological features within an area with historical significance and genealogy bound to its name" (Lee, 2014, p. 25). Place names and the names of winds and rains reflect cultural knowledge and characteristics of 'āina in that place. Through wahi pana and place names, Kānaka may intimately relate to and draw identity from 'āina (Naone, 2008).

'Ike kupuna fundamentally bonds learners to 'āina (Maunakea, 2019; Naone, 2008). For example, in retelling the "Kaaoo Hooniua Puuwai no Ka-Miki (The Heart-Stirring Story of Ka-Miki)," Peralto (2014) shared knowledge of a place named Koholālele. Peralto's findings culminated in the following reflection: "In this process of re-remembering the 'ike kupuna embedded within our kulāiwi, we re-member ourselves" (p. 90). 'Ike kupuna reminds Kānaka that they are intrinsically part of 'āina. In resonance, Kānaka are encouraged to "learn the names, chants, stories, and local sites that make up the area in which we live and thus to become those places" (Andrade, 2014, p. 9). This challenge validates the sense of identity and direction Kānaka gain from 'ike kupuna and 'āina itself.

3.5 Theme 5: Mālama 'āina and 'āina-based programs foster 'āina as leader and cultivate leadership qualities.

Of the 16 sources, nine evinced that mālama 'āina and 'āina-based programs are ways to experience 'āina as a leader and to grow leadership qualities among Kānaka (Aldana, 2018; Baker, 2018; Beamer, 2014; Keli'iholokai et al., 2020; Lee, 2014; Maunakea, 2019; Maunakea, 2016; Naone, 2008; Saffery, 2019). 'Āina-based programs allow Kānaka to practice reciprocity in their relationship with 'āina. In restoring and caring for 'āina, Kānaka heal and develop themselves. At Ho'oulu 'Āina, a program for community learning and development, 'āina "helps people actualize their gifts for a greater purpose, and it helps those [who] come to this place heal their relationship to the land, with themselves, and with others" (Aldana, 2018, p. 55). Furthermore, 'āina-based programs critically function as a medium for community engagement, which initiates the sharing of intergenerational knowledge, strengthens community, and "asserts identity, appreciation, and sense of place" (Lee, 2014, p. 13). Through Kānaka-led initiatives, 'āina becomes a vehicle for Kānaka to heal, build meaningful relationships, gain cultural knowledge, and cultivate leadership qualities.

It is necessary to learn from 'āina, not simply about 'āina. Evidence from a number of sources affirmed that Kānaka must not only honor their familial relationship with 'āina, but also respect 'āina as an active participant in their experiences (Aldana, 2018; Baker, 2018; Maunakea, 2019; Lee, 2014; Naone, 2008; Saffery, 2019). With Kānaka-'āina

mo'okū'auhau as the foundation, mālama 'āina programs and 'āina-based education immerse participants in culturally significant 'āina. Mālama 'āina resembles lo'i cultivation, reforestation, fishpond restoration, and community gardening (Aldana, 2018; Baker, 2018; Keli'iholokai, 2020; Lee, 2014; Maunakea, 2019; Maunakea, 2016; Naone, 2008). Several academic disciplines use 'āina-based education to advance their learners: Hawaiian language revitalization, sustainability & STEM, Indigenous leadership, native plant restoration, food sovereignty, biocultural restoration, workforce development, public health, intergenerational education, and cultural literacy (Maunakea, 2019).

Across disciplines and programs, direct experience with 'āina imbues abstract concepts with meaning and purpose, bridges learned knowledge with cultural principles, and develops critical thinking and problem-solving skills. As Saffery (2019) articulated, "Students learn about and engage in a variety of practices...in the contexts and with the purposes originally intended so that they see practices as relevant to our contemporary time" (p. 102). With the space and tools to experience an 'āina firsthand, students also practice 'Ōiwi values, including lōkahi (sharing), hō'ihi (respect), kuleana (responsibility), laulima (teamwork), and ma ka hana 'ike (learn by doing).

Moreover, mālama 'āina and 'āina-based practices reinforce the accountability and responsibility that come with newly acquired knowledge (Maunakea, 2019; Naone, 2008; Saffery, 2019). For example, "restoring and caring for the lo'i was a means not only to bring relevance to academic subjects but to ground students in their kuleana" (Maunakea, 2019, p. 41). Hands-on experiences "increase the probability that participants apply these concepts and perpetuate these practices long after the program [is] over" (Saffery, 2019, p. 105). Equally important, 'āina-based learning brings awareness and urgency to the consequences of human actions on environmental and human health. As it strengthens kuleana and kinship to 'āina, it prompts further action to care for 'āina in a positive feedback loop (Maunakea, 2019; Naone, 2008; Saffery, 2019).

4. Discussion

Sixteen sources met the inclusion criteria for the review on 'āina as a leader in Native Hawaiian culture with implications for Native Hawaiian maui ola (holistic and balanced well-being). Based on the content analysis, five themes emerged. These themes have been organized to approximately mirror the macro-cultural organization used by Alden & Helm (2023) that moves from cosmology, ontology, and axiology, to epistemology, praxeology, and etiology. The following three themes highlight Native Hawaiian worldviews and provide a conceptual foundation for 'āina leadership in maui ola: (1) Kānaka-'āina genealogy and kuleana, (2) physical, mental, and spiritual nourishment from 'āina, (3) 'āina as teacher, guide, and role model. These two themes capture the practical and applied aspects of 'āina leadership in maui ola: (4) 'āina in 'ike kupuna, and (5) mālama 'āina and 'āina-based programs.

These five themes challenge the Western concept of private land ownership, embedded in historical and ongoing colonial practices that have harmed maui ola. Kānaka and 'āina well-being are interconnected and inseparable. Mo'okū'auhau, a cornerstone of 'Ōiwi worldview, establishes interdependence and familial connection. The story of Hāloa shares the mo'okū'auhau that named the first Kanaka as the younger

sibling of 'āina. It also recounts that the chiefly line descended from the first Kanaka and its predecessors. Therefore, 'āina is both an elder and leader.

As Kānaka reap the benefits of 'āina, they are reminded that ancestral relationships hold influence in the present day. Connection to 'āina as an ancestor is a form of connection to honua and piko, which are people and places across time that ground one's cultural identity and equip Kānaka with knowledge of the past to build a foundation for the present and future. Thus, 'āina as an ancestor serves as a path to 'Ōiwi leadership, necessary for well-being initiatives and practice transformation that contribute to social justice.

The Kānaka-'āina familial connection culminates in an interdependence with reciprocal kuleana, requiring time and effort. 'Āina feeds Kānaka, while Kānaka care for and cultivate its resources. 'Āina not only nourishes Kānaka physically, but mentally and spiritually as well. With 'āina as a reservoir of spiritual strength, Kānaka may acquire mana from 'āina. When Kānaka-'āina interactions are severed, dismembered suffering occurs proportional to the depth of connection. A healthy kinship with 'āina helps to heal chronic disease and historical trauma while it restores maui ola. Through its continuous fulfillment of kuleana, 'āina as a healer enacts pono and servant leadership.

Beyond improving maui ola, 'āina as a teacher leads its learners in the practices of observation, education, and navigation. 'Ike 'āina embodies knowledge one can gain from the land, sky, ocean, and other aspects of nature. Hands-on experience and mind-body integration, guided by nine sense abilities – sight, listening, taste, touch, smell, na'au, kulāiwi, au 'āpa'apa'a, and mo'o – allow Kānaka to gain skills and guidance from 'āina. Like a prosperous ecosystem, productive and healthy communities rely on teamwork and reciprocity. 'Āina as a role model thus exemplifies 'Ōiwi values, such as laulima (teamwork) and ho'omau (perseverance), for Kānaka to observe and emulate. Through huli ka lima i lalo, or turning your hands down to cultivate 'āina, students learn and practice other 'Ōiwi values, such as mālama, lōkahi, and hō'ihī, that can be applied to all aspects of life.

'Ike kupuna comprises all ancestral knowledge, much of which documents the significance of connection to 'āina and imparts the value of 'āina as a leader. Through 'ike kupuna, 'āina models leadership qualities, while fostering a sense of identity, belonging, and community. It also reminds Kānaka that they are not separate from 'āina, suggesting that dismemberment from colonization is a vital threat to their well-being. Kānaka offer 'ike kupuna in the form of mele, oli, and hula to intimately connect with, communicate with, and find spirituality in nature.

While 'ike kupuna shares historical knowledge about 'āina, 'āina-based programs provide the space and tools for Kānaka to learn from 'āina in present day. An integrative approach used in various fields, such as primary education, STEM, Hawaiian language, and public health, 'āina-based education gives abstract concepts relevance and meaning, reinforces cultural values, and teaches accountability and responsibility with newly acquired knowledge.

'Āina as a leader is also in practice among community-based, mālama 'āina programs. Mālama 'āina efforts bring together Kānaka and 'āina to strengthen kuleana, 'Ōiwi values, and leadership qualities. Common programs include lo'i kalo cultivation, Native reforestation, community gardening, and fishpond restoration. Several sources identified in the scoping review mentioned these programs by name (Aldana, 2018; Baker, 2018; Keli'iholokai et al., 2020; Lee, 2014; Maunakea, 2019; Maunakea, 2016;

Naone, 2008; Saffery, 2019). In other programs, ‘āina leadership may be added if it is not already an existing component, and then aligned in process and outcome evaluations.

For example, Puni Ke Ola is a culture-based program that facilitates culturally-immersive, hands-on excursions to significant ‘āina (Helm & Davis, 2017). Ultimately, Puni Ke Ola promotes health and prevents substance use among Native Hawaiian youth who become healers and leaders (Davis et al., 2021). In another youth development program grounded in ‘āina and ‘ike kupuna, MA’O Organic Farms financially supports college student interns while they gain entrepreneurial and leadership skills through farming (Brekke, 2015). Puni Ke Ola and MA’O would benefit from using concise and easy-to-use scales (i.e., Native Hawaiian Leadership Scale by Borofsky, 2010) with an additional item based on this scoping review: “I am guided to lead by my relationship with ‘āina.”

Other culture-based and ‘āina-informed programs implicitly include ‘āina leadership in their curricula and services. Such programs may benefit from an explicit and intentional focus on ‘āina leadership in programs and evaluation. For example, an alternative approach to incarceration, ‘Ohana Ho’opakele, advocates for “culturally restorative justice” (Brown & Marusek, 2012, p. 237). Comparably, Kawailoa offers a decarcerated approach to juvenile justice by providing cultural and therapeutic services (Opportunity Youth Action Kawailoa, 2023). Similarly, in a culturally grounded school-based drug prevention curriculum, Ho’ouana Pono helps rural youth build verbal and nonverbal communication skills in substance use and peer pressure situations (Okamoto et al., 2019).

Through ‘āina-based programs, Kānaka invigorate cultural identity and develop leadership, which are important for health justice and health sovereignty among Kānaka. While various programs that use ‘āina as a foundation exist, ‘āina-based learning and leading should be expansively implemented in leadership development programs, social justice initiatives, such as youth and emerging adult development, child and family nutrition, restorative justice, substance use, sustainability and conservation, and cultural literacy. Given ‘āina is fundamental to Native Hawaiian leadership, leadership programs for Native Hawaiians (e.g., Council for Native Hawaiian Advancement (Hawaiian Council, 2023), Association of Hawaiian Civic Clubs (AOHCC, 2023), Office of Hawaiian Affairs (OHA, 2023)) and leadership programs based in the state of Hawai‘i (e.g., Center for Tomorrow’s Leaders (CTL, 2023), Hawaii Leadership Forum (HLF, 2023), Hawaii State Department of Education Leadership Institute (HIDOE, 2023)) may benefit from adding an ‘āina-based component to programs and evaluation if they presently lack one. This is applicable for Kānaka in Hawai‘i, and has the potential to create positive impact among other Indigenous people globally.

The results of this scoping review support Indigenous Culture-as-Health, which is the next iteration in culturally informed health interventions (Yamane & Helm, 2022). Culture-as-Health is comprised of four modalities: (1) Indigenous ways of knowing primarily through intergenerational knowledge transmission (2) linked with Indigenous cultural practices (3) in place-based/sacred sites (4) enveloped by Indigenous spirituality (Yamane & Helm, 2022). ‘Āina leadership as a policy and practice will further advance Indigenous Culture-as-Health.

Table 3 describes prominent Native Hawaiian health frameworks (Lōkahi Triangle, Pili nahā, Nā Pou Kihī, and Indigenous Culture-as-Health) and demonstrates the application of ‘āina leadership within each framework.

Table 3. Applying ‘Āina Leadership in Prominent Native Hawaiian Health Frameworks

Prominent Native Hawaiian Health Frameworks & Brief Description	‘Āina Leadership Application	
Lōkahi Triangle [1]	The Lōkahi Triangle concept has been applied in numerous health and education settings and posits that lōkahi (balance, harmony, unity) across multiple connections (spiritual, relational, and physical environment) are essential for well-being.	As a leader (relational harmony), one would be in harmony with the physical environment, including the ‘āina, which is derived from harmonious spiritual connections.
Pilinahā [2]	Pilinahā also focuses on connections: place (kinship with ‘āina), community (to love and be loved; to understand and be understood), past-present-future (to have kuleana or purpose in the world), and self (to find and know one’s self).	As a leader via connections to past-present-future (kuleana, purpose), a person would strive to be connected to oneself as well as their community, and to do so through kinship with ‘āina.
Nā Pou Kihi [3]	Nā Pou Kihi refers to four cornerstones. As a crosswalk to the National Institutes of Health research framework, nā pou kihi reflect essential determinants of health. (1) Ke ao ‘Ōiwi refers to cultural determinants, (2) ka wai ola refers to sociopolitical determinants, (3) ka mālama ‘āina refers to socio-environmental and economic determinants, and (4) ka hana pono refers to biological, behavioral, and psychological determinants.	As a leader, one would strive to understand and advocate for each of these four cornerstones.
Indigenous Culture-as-Health [4]	Indigenous C-as-H interventions emphasize: indigenous ways of knowing, indigenous cultural practices, place-based sacred sites for these practices, and Indigenous spirituality.	As a leader, one would affiliate with other leaders whose practices are rooted in Indigenous ways of knowing and occur in culturally relevant places or sacred sites, all of which would be guided by spirituality.

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4.1 Limitations & opportunities for future opportunities

First, a scoping review is not intended to meet the rigorous requirements of a systematic review (Grant & Booth, 2009). In addition, this scoping review was exploratory in its approach to clarify how contemporary scholars have conceptualized ‘āina as a leader. To increase rigor, we used a team approach with three Indigenous reviewers familiar with Native Hawaiian health. Second, a relatively narrow pool of sources about Native Hawaiian subjects is available when compared to other ethnocultural groups. Therefore, we selected the University of Hawai‘i’s OneSearch and ScholarSpace as the best resources to retrieve relevant sources. Notably, the small diversity of literature sheds light on white supremacy, systemic patriarchy, and the

academic marginalization of minority ethnic groups within academia, which has limited the scholarly work around Native Hawaiian well-being from a Native Hawaiian perspective (Okamoto, 2010). Although the present scoping review comprises a narrow pool of sources from contemporary scholars, future reviews may expand the search criteria to include historical and primary sources published before 2000, such as newspapers, books, and oral traditions.³ Third, the search criteria were limited to Native Hawaiian culture. Future reviews may expand to include other Pacific Islander and Indigenous cultures. Fourth, while the review defined ‘āina to include geographies beyond land itself (e.g. ocean), sources did not always provide a definition for ‘āina. Therefore, additional search terms may have been useful, such as kai (ocean) and wai (water). Fifth, the review focused on ‘āina and leadership as a narrow framework to shape future well-being initiatives and practice. Future reviews may expand to include health and well-being as search terms, but would need to include more population groups to yield sufficient results for a review. Lastly, the review was limited to primarily English language publications, although sources often included elements of ‘Ōlelo Hawai‘i.

4.2 Conclusion

As held in high regard elsewhere, this review highlights the deep importance of ‘āina to Native Hawaiian cultural worldview and the promise of ‘āina as a leader (Alden, 2020). The land, ocean, and sky are primary sources of healing, learning, and identity for all Kānaka. ‘Āina as an elder, healer, educator, and role model exemplifies pono and servant leadership. When Kānaka “cultivate ‘āina and their relationship to her, they will inevitably cultivate their minds, values, and leadership qualities” (Alden, 2020, p. 34). The ‘ōlelo no‘eau “Mōhala i ka wai ka maka o ka pua” instructs that “flowers thrive where there is water, as thriving people are found where living conditions are good” (Pukui, 1983, #2718). In other words, place and health are synonymous, thus Native Hawaiian well-being is interdependent with ‘āina leadership. For community psychologists working on a global scale, it will be important for ‘āina leadership to be recognized in social justice initiatives with Kānaka ‘Ōiwi, and potentially with other Indigenous and Pacific Peoples. ‘Āina leadership has applicability beyond community psychology to additional disciplines and fields (e.g. government, health, business, and education). Community psychologists, public health professionals, social workers, and applied anthropologists are well-positioned to promote ‘āina leadership due to their training, which includes social determinants of health, health justice, and wellness sovereignty (Office of Disease Prevention and Health Promotion, 2023).

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³ Historical archives can be found on the UH Mānoa Library website at: <https://guides.library.manoa.hawaii.edu/c.php?g=105808&p=685714>

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