

**EXPLORING PAIWAN ELDER VIEWS OF HEALTH, AGING, AND SERVICE
PREFERENCES**

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Abstract

Little attention is paid by Taiwan's majority population to the economic development or health and long-term care systems of Taiwan's Indigenous communities (Lee Ming-Cheng, 2001). Indigenous Peoples in Taiwan represent less than 2.5% of the population of 23.57 million and struggle to maintain their customs and collective values in the face of colonization by China and other countries, especially following the establishment of Chiang Kai Shek's government on Taiwan in 1949. Occupation of Taiwan by Han Chinese has changed tribal ethics and negatively influenced the status of Indigenous health (Kasirisir, 2016). Indigenous populations are not asked to participate in localizing social and health-related resources (Tsai & Chang, 2018), and existing health community strategies have limited capacity for health promotion, service action, and Indigenous culture (Chang et. al., 2019). Thus, for Indigenous People, the care tends to reflect the world of their colonizers (Wang, 2019). As the Indigenous population in Taiwan ages, an Indigenous cultural lens for health and elder care is needed to guide the development of eldercare policies and services that fit these Indigenous communities (Rowe et al., 2020). Qualitative, participatory, and decolonizing research methods are needed to allow Indigenous elders to tell their stories and acknowledge their different worldviews and values (Braun et al., 2014).

The objective of this dissertation was to develop a cultural lens for the Paiwan tribe of Taiwan by exploring Indigenous definitions of health and healthy aging and preferences for eldercare. My interest in this topic stems from my membership in the Paiwan community and as a former employee and current volunteer with our local tribal elderly care center. I completed three studies for this dissertation.

In Study 1, I **explored definitions of elderhood among Indigenous Peoples through a systematic literature review**. To do this, I reviewed studies in which elderhood was defined and perceived within Indigenous communities. I found that the definition of elders within Indigenous communities predominantly revolves around their portrayal as symbols of wisdom, custodians and transmitters of cultural knowledge, and their ability to guide the sustainable development of tribes. Within Indigenous communities, elders are not only witnesses to history but also guardians of cultural values and traditional knowledge. This perspective of elderhood is critical for understanding healthy aging in Indigenous communities.

In study 2, I established a “conceptualization of healthy aging” among Indigenous Paiwan elders. To do this, I conducted a focus group with Indigenous elders on their perspectives and thoughts regarding Paiwan health and healthy aging. I found that healthy aging encompasses more than just physical well-being. It includes the following aspects: establishing connections and interactions with others, communities, and traditional cultures; engaging in lifelong learning; contributing to one's tribe and family; and generating additional value in traditional domains. Furthermore, this study discovered that among the Paiwan elders, the definition of elderhood is not solely based on chronological age but rather on personal achievements and contributions to the tribe. This definition differs from that of elderhood in mainstream Taiwanese society. Additionally, the establishment of cultural health stations was found in this study to be beneficial for elder health. However, elders wanted the stations to increase land-based activities and substantively involve the tribe in the operation of stations.

In Study 3, I identified the reasons that Paiwan elders participate and do not participate in the currently operating day care stations established by the Taiwan government. To do this, I administered a quantitative survey with the elders in daycare stations and elders not in the daycare stations to assess their reasons for participating or not and how services can be improved. I found that the elders, whether were or not they participated in the daycare stations, agreed that the current daycare stations were supportive and beneficial to their later lives. However, gender, age, living with others, personal economic status, and acceptance of the activities currently offered at the stations influenced their participation of daycare stations.

The findings from this dissertation will assist Indigenous Paiwan elders to improve the structure and cultural relevance of services and policy around long-term care for their communities.

Chapter 1: Introduction

It is important for Indigenous communities to develop a culturally based strategy to guide health programs, policy, and social welfare approaches. Indigenous Peoples have experienced centuries of colonization. Despite attempts by their conquerors to discredit their cultures and assimilate them into the conquerors' society, many Indigenous Peoples continue to live within their traditional social structures and honor their own belief systems. As a member of the Indigenous Paiwan people of Taiwan, I strive to help them express their own worldview and develop a Paiwan-centric strategy to guide elder care in my community. In this introduction, I first describe the public health challenges associated with an aging population, as well as history and culture of the Indigenous Paiwan people in Taiwan. I then present my conceptual framework for my dissertation and provide an overview of my three proposed studies: 1) a systematic literature review of studies that documented how Indigenous Peoples conceptualize health and eldercare; 2) a qualitative study with the Paiwan elders on their cultural and personal perspectives regarding health and eldercare; and 3) a quantitative survey to determine why elders attend the current daycare stations, why others do not, and how daycare station services can be improved. I then introduce my community partners, dissemination plan, and proposed timeline. Subsequent sections of this proposal outline the methods of the three studies.

Review of the Literature

Aging Globally and in Taiwan

The global population aged 60 years or over numbered 962 million in 2017, more than twice as large as in 1980 when there were 382 million older persons worldwide. The number of older persons is expected to double again by 2050, when it is projected to reach nearly 2.1 billion. Globally, the number of persons aged 80 years or over is projected to increase more than threefold between 2017 and 2050, rising from 137 million to 425 million (United Nations et al., 2017). The rapid aging of the population is of growing concern in every country, and countries need to develop actions to delay age-related disease and disability and build acceptable and affordable eldercare systems. In 2020, people that at age 65 years and above reached 16% of the total population in Taiwan. As the population of Taiwan is aging swiftly, it can be expected the aged population to grow 40% in 2060 (*Taiwan*, n.d.).

Brief History and Cultural Overview of Taiwan

Taiwan is a semi-tropical island in East Asia. Like many other countries in Asia, Taiwan is a densely populated land with a highly developed economy and advanced technology and transport systems. The population of Taiwan is 23.2 million, and most of the population is concentrated in the western lowlands, with the main cities of Taipei, New Taipei, Taoyuan, Taichung, Tainan and Kaohsiung accounting for over 15 million people (*MeetTaiwan--Introduction of Taiwan*, n.d.). The Indigenous population includes several very diverse tribes each with their special cultures and traditions, but overall accounts for less than 2.5% of the total population in Taiwan. Nearly 98% of Taiwan's population is Han Chinese.

Taiwan is located between China, Japan, and South Asia, a beneficial location for merchandise ships to stop and to store and transfer goods. In the 17th century, the Dutch and Spanish empires occupied Taiwan's coastlines, and Hakka People from Fujian and Guangdong areas of China migrated across the Taiwan Strait and occupied the flat areas of Taiwan. The Indigenous Peoples began to be concentrated on the east coast, central, and mountainous areas of Taiwan.

Koxinga, a Ming loyalist who resisted the Qing empire and led troops from China, defeated the Dutch in 1664. He established a dynasty, and many Han Chinese immigrated to Taiwan in this era. In 1683, the Qing Empire attacked the Ming Dynasty in Taiwan and controlled Taiwan for about 200 years. With the Sino-Japanese War in 1894, the Qing dynasty ceded the land of Taiwan to Japan according to the Treaty of Shimonoseki. Japan occupied the land, which then became the export base of sugar and rice for industrial and military needs. Additionally, the Japanese imposed their imperial education system so that children were immersed in Japanese language and culture, and many Taiwanese also fought for Japan during the Chinese Anti-Japanese War, known as World War II.

In 1945, Japan was defeated and accepted the Cairo Declaration returning Taiwan and Manchuria to the Republic of China (ROC), then under the rule of the Kuomintang (KMT). In 1949, after losing control of China to Mao Tse Tung in the Chinese Civil War, the ROC government under the KMT retreated to Taiwan, and Chiang Kai-shek declared martial law in Taiwan. Although Chiang Kai-shek died in 1975, Taiwan is still under the control of the ROC and is not recognized by the United Nations.

Indigenous Groups in Taiwan

According to the information from the Ministry of Interior of Taiwan, there are 16 official Indigenous Peoples in Taiwan (Figure 1.1). At the end of 2020, the Indigenous population was 577,000, an increase of 0.9% from the end of 2019. Among them, 215,000 Amis people accounted for 37.3% of the Indigenous population, followed by the Paiwan people with 104,000, accounting for 18.0%. The 93,000 Atayal people accounted for 16.1%, ranking third, and the three together accounted for more than 70% of the total number of Indigenous Peoples in Taiwan.

Taiwan is composed of administrative units called counties, and the concentrations of Taiwan's Indigenous Peoples differ by county (Figure 1.2). Hualien County has the largest number of Indigenous People with 93,000 (accounting for 28.8% of the county's population), followed by Taitung County's 79,000 (accounting for 36.5% of the county's population) (2019 (Department of Statistic, 2019). Of those registered as Indigenous Paiwan people, 49,340 people registered in Pingtung County, and 16,936 live in Taitung County.



Figure 1.1
The administrative cities and counties in Taiwan



Figure 1.2
The distribution of Indigenous Peoples in Taiwan

Aging in Taiwan

At the end of January 2021, the number of elderly people in Taiwan was 3.8 million, accounting for 16.2% of the total population in Taiwan, but this is expected to reach 40% by 2060 (Textor, 2021). Affected by the rapid increase in the elderly population and the decline in children, the aging index was 68.2 in 2010, meaning there were about 68 elders per 100 persons aged 14 or younger (CEIC Data, 2023). This has implications for the dependency ratio. For example, in 2018, there were approximately 5.0 people in their prime to support one elderly person (National Development Council, 2018). But by 2065, there will only be 1.2 people in their prime to support one elderly person. At the same time, the age structure of the elderly population is changing. In 2020, the super-aged (age 85+) population accounted for 10.7% of the elderly population, but this is projected to increase to 27.4% by 2070 (Taiwan National Development Council, 2018).

The aging index also varies by county. The highest aging index is in Taitung County, at 98.29, followed by Hualien County at 79.63. These two counties are home to the largest Indigenous populations, with 16.2% of Taiwan's Indigenous Peoples living in Hualien County and 13.6% living in Taitung County (Taiwan Department of Household Registration). A large proportion of the Paiwan people live in Taitung County (Figure 1.1).

The median age of Taiwan's Indigenous Peoples is 33.95 years, that is, half of the population is under 33.95 years old, which is relatively young compared to the median age of 42.68 years for all nationals. In Taiwan, only 8.3% of the Indigenous Peoples were over 65 at the end of March 2019, with a total number of about 46,000. According to the survey, women accounted for 60.8% of Indigenous elders at the end of March 2019 (Department of Statistics, 2019).

The Changing Role of Elders

Traditionally, elders played an important role in. They were the foundation of the culture, they had abundant knowledge of traditional practices, and they controlled and built the principles of traditional rituals in the communities. However, as cultures have modernized and embraced technology, the role of the elder is often diminished. To better contribute to the development of services for the growing number and percentage of older adults, social participation of older adults is needed to contribute to the wellness of the community (Viscogliosi et al., 2020)

General Health of Indigenous Peoples

As with other Indigenous Peoples, the colonization of Taiwan has led to several disadvantages for Indigenous communities, including poverty, marginalization, and changes in Indigenous cultural identity and environment (Antonio et al., 2020). Current data from the Taiwan National Development Council show that the life expectancy of Indigenous Peoples is 73.10 years, which is 7.76 years lower than that of the nation as a whole (80.86 years old). Liang-Yi Wang (2018) used 2013 data to quantify the contribution of the major causes of death and disease to the gap in life expectancy and healthy expectancy between Indigenous Peoples and the national population. At that time, the life expectancies at birth for the Indigenous and national population males were 66.7 and 76.91 years, respectively, while the healthy expectancies at birth for Indigenous and national males were 56.29 and 66.75 years, respectively. The difference observed in health expectancy was thought to be caused by a greater incidence of pneumonia, cirrhosis of the liver, heart disease, stroke, accidents, and injury among Taiwan's Indigenous People.

The Influence of Indigenous Culture in Health

The complexity of the discussion on the health of the Indigenous Peoples in Taiwan is not just about analyzing the health of the Indigenous Peoples from the mainstream Western perspective, but also must consider factors such as social and economic structures. In the past, most of the health research related to Indigenous Peoples was based on Western concepts of medicine and lifestyle, and Indigenous Peoples in Taiwan were often blamed for their health disparities compared to the Han Chinese (日宏煜 Umin Itei, 2014). However, Liu (2008) explored the impact of social class on the health equality of Indigenous Peoples and found that the lower socioeconomic position of Indigenous Peoples in Taiwan was an important determinant of their poorer health (Liu & 劉玉娟, 2008). Also, health studies do not consider the negative effects of colonization, which changed tribal ethics and negatively influenced the status of Indigenous health (Kui Kasirisir, 2016).

Due to the tendency of social welfare policies in Taiwan to marginalize Indigenous ways, there was little attention by the social work and public health professions to Indigenous communities. It was not until the establishment of the Council of Indigenous Peoples in 1996 and the disastrous earthquake in 1999 that there were more professionals in the fields of social work and public health. Still, 李明政 (2001) pointed out that the existing welfare policy of the

Taiwanese government is mainly based on the problems of the individual. Indigenous communities and the economic development of Indigenous areas are never the subject of attention. Also, Taiwan's social policy focuses on solving the "problem" of Indigenous communities, rather than relying on Indigenous People's traditional practices and knowledge to solve social problems. Thus, existing social welfare policy tends to support existing power structures that want to keep Indigenous Peoples as dependent objects in need of assistance.

Kui Kasirsir and social welfare researchers in Taiwan were commissioned by the Pingtung County Government to survey the living conditions and welfare needs of the Indigenous elderly in Pingtung County in 2017 (許俊才 et al., 2018a). Based on surveys and focus groups, the researchers found that Indigenous elders were not familiar or comfortable with the healthcare services organized and provided by the Han Chinese government. The report noted that the long history of colonization and marginalization experienced by Indigenous People, as well as the poor "fit" of mainstream services, led to reduced opportunity and desire to seek and use services, which negatively affects health status. They concluded that the "one-size-fits-all" model of the Han-based healthcare system has led to social exclusion and welfare marginalization of Pingtung's Indigenous People.

Mainstream researchers are now understanding the importance of learning about the meaning of health and wellness in Indigenous communities by deepening the exploration in the role of the Indigenous Peoples in their communities and prioritizing their lived experiences in developing Indigenous health-related programs and policy (Rowe et al., 2020). In the Paiwan community, traditional sharing and mutual aid are important. The community Chief (Mamazangiljan) is the primary route of obtaining assistance when a household has short- or long-term care needs (黃建霖, 2020). The highly collective ways of production and sharing that are used to compensate for needs have worked well for centuries. However, the tribal structure has been weakened in recent decades by economic and political factors.

In the Paiwan community, the elderly focus on the social aspects of health, rather than physical. Thus, they regard anyone who can participate in community gatherings as healthy, and they tend to disregard symptomless chronic diseases. In my personal experience, older adults in the Paiwan community enjoy social prestige and do not see themselves as in need of assistance.

Based on my previous ethnographic study of a Paiwan community in Taitung, today's chiefs in the Paiwan Mamazangiljan system are concerned that they are using private resources

to take care of the people in the tribe and to maintain the traditional systems (黃喻祺, 2016). Indigenous communities also are challenged by the decline of small-scale peasant industry, as tribal youth are leaving the community. The loss of traditional values also continued to increase the pressure on the chief to maintain the pattern of the traditional system.

When elderly parents in a family are no longer able to care for themselves and require assistance, it becomes a significant issue for the family to manage. However, for Paiwan families living in tribes, remaining within the tribe and being cared for by family members is the primary and sole option for tribal elders (鄭善如, 2018). Also, the traditional culture of the Paiwan people has an important vusam (the first child) system, which is an inheritance system based on family lineage. The vusam system determines who inherits the role of the main caregiver for the elderly in Paiwan families. (許俊才, 2013。原鄉部落照顧分工的變化與因應：排灣族生活經驗〉, 黃源協主編, 《部落、家庭與照顧：原住民族生活經驗》。臺北：雙葉。頁 283-306).

However, Indigenous Paiwan values have been weakened by the strong presence of the Presbyterian, Catholic, and Seventh-day Adventist churches, which promote values that conflict with traditional values and support the way of partitioning resources by today's local Han Chinese government system. For example, the government divided the Jingfong Township into villages with each village consisting of multiple tribes. In the Sinsin village, there are eight tribes with eight chiefs. When the government allocates resources to Indigenous Peoples, it is given to the villages and not directly given to the chiefs of each tribe. Receiving allocated resources from the government is not one of the Paiwan community's cultural norms. Allocating resources to each tribe rather than to the entire village would be more culturally sensitive, with chiefs still using their private resources to care for and provide supply to their people within the tribe. However, the government has rules and regulations, so it cannot give the resources to the chiefs to take care of their people. This way of partitioning resources conflicts with traditional values. In addition, church beliefs often conflict with traditional values, and the local Han Chinese government system often weakens the Indigenous Paiwan system's values.

Taiwan's Long-term Care Policy

Aging in place is a definite policy promoted by countries around the world in response to an aging society. It is also the main reform direction of Taiwan's long-term care policy. At the end of 2016, the government passed the Long-term Care Ten-Year Plan 2.0 (2017-2026) as a

blueprint for the long-term care policy for the next ten years (Ministry of Health and Welfare, 2016). The plan's goals include four major items: 1) establish a high-quality, affordable, and universal long-term care system; 2) establish a system in which families, homes, social districts, and institutions provide multiple services to support local aging; 3) extend the front-end primary prevention function to promote the health and well-being of the elderly; and 4) provide multi-target community-based services to reduce the pressure of family care.

For the Indigenous Peoples of Taiwan, the Long-Term Care Ten-Year Plan 2.0 has primarily supported the construction of cultural daycare stations for older adults. This was vigorously promoted by the Council of Indigenous Peoples as a care model of Indigenous Peoples taking care of their people as influenced by the community's people and conditions (Yang et al., 2019). By 2020, a total of 433 cultural health daycare stations were set up nationwide, employing 1,176 local people as caregivers, taking care of 13,853 elders to provide support for the Indigenous elders. However, an ethnographic study of the cultural health daycare centers in Taitung pointed out that the Han-controlled supervisors at these cultural health daycare centers constantly transfer administrative tasks to local workers, such as filling in complicated forms to meet quantitative indicators (賴秦瑩 et al., 2021). This has made it impossible for the locality to develop its own care model or adapt measures to local conditions, reducing the appeal of the daycare stations to Indigenous Peoples.

In addition, the cultural daycare station also need to provide primary care and health promotion services. However, the limited resource availability causes several problems in the delivery of these services. For example, the stations are unable to meet the care needs of seniors with disabilities or mobility impairments. Some stations cannot fill professional positions, there is a high turnover rate among staff, and there is unstable income of caregiving jobs. Finally, the stations focus on individual care and minimize collective care that is the fundamental need in the cultural lens (郭 et al., 2018). At the same time, research suggests that Indigenous groups want to participate in the stations to learn cultural practices and to preserve and pass the culture to the next generations, rather than just learn about and receive healthcare (蔡 & 張, 2018).

Strong voices that situate the significant and special needs of Indigenous communities come from these communities. In 2016, in response to President Tsai Ing-wen's seventh Indigenous People's Political Opinion, "The Promotion of Indigenous People's Right to Health," the Medical Association for Indigenous Peoples in Taiwan (MAIPAT) held a public hearing to

review various provisions of the "Taiwan Indigenous Health Law." The appeal is to create an evidenced-based health policy for Indigenous peoples and to export research regularly and steadily on the health of Indigenous Peoples. Further, the belief in law in Indigenous communities is to respect the diverse cultures and traditional systems that can be practiced in health and care delivery systems.

Motivation for Broadening the View of Health for Indigenous Paiwan People

How Paiwan people see health and healthy aging is one of the main important research questions that motivates me to broaden our view of health beyond the biomedical measures of health and illness. I have been inspired by several studies in Hawai'i. For example, the study by Sharon Ka'ulani Odom et al. (2019) established an Indigenous Framework for Health, called Pili nahā, to engage people in the community to work together to establish their principles and guide the work of healthcare providers. Pili nahā, a Hawaiian word for connection and relationship, broadens the definition of health and what people seek to feel whole and healthy in their lives (Odom et al., 2019).

Other literature supports that Native Hawaiians have a more holistic view of health, focusing on pono, loosely translated as goodness, uprightness, or moral qualities, and lōkahi, loosely translated as the balance between different domains of health and wellbeing, including biological, psychological, and spiritual aspects, which are interconnected through the individual's body, mind, spirit, and world (Mokuau, 2011). Other researchers have shown the benefits of using participatory and decolonizing research methods to engage and empower Indigenous elders as researchers (Braun et al., 2014).

Long-term Goal, Hypothesis, and Research Questions

The long-term goal of this line of research was to construct a tribal-based strategy for Indigenous communities in Taiwan as an essential approach to guide policy with and for Indigenous elders. My central hypothesis was that Indigenous elders have a different definition of health than Han Chinese, which may be used to challenge the present healthcare system and find better ways to care for Indigenous elders. I strived to work in partnership with my community on this research, recognizing the benefits of collaborative partnerships, including increased reliability and validity of collected data and taking a strength-based approach that can lead to action (Burns, 2011). My three research questions were:

1. How do Indigenous Peoples define elderhood? To answer this question, I conducted a systematic review of studies to explore the definition of an elder in Indigenous communities and how this related to health. I expected an in-depth understanding of what it means to be an elder from an Indigenous perspective would aid in assessing health issues surrounding the aging population in Indigenous communities through an Indigenous lens.
2. From the perspective of Paiwan elders, what constitutes healthy aging? To answer this question, I conducted focus groups with Paiwan elders on their perspectives and thoughts regarding health and healthy aging. I expected that this information would be useful in guiding culturally appropriate eldercare programs for the Paiwan community.
3. What were the reasons that Paiwan elders use or do not use the cultural daycare stations? To answer this, I conducted a quantitative survey of older adults who are and who are not participating in daycare stations to explore the reasons for their choices. I expected these findings would help identify ways to improve services to better fit the Paiwan community.

Conceptual Framework

The conceptual model for my dissertation was the triangulation of the findings from the three studies that were analyzed together to understand Paiwan elder views of health, aging, and service preference and to inform my conclusions and recommendations (Figure 1.3). I expected that the findings from this dissertation would assist the Indigenous Paiwan community to start exploring health policy structures that are culturally relevant to the Indigenous Paiwan community and support a dialogue about health policy and eldercare between Indigenous communities and the government.

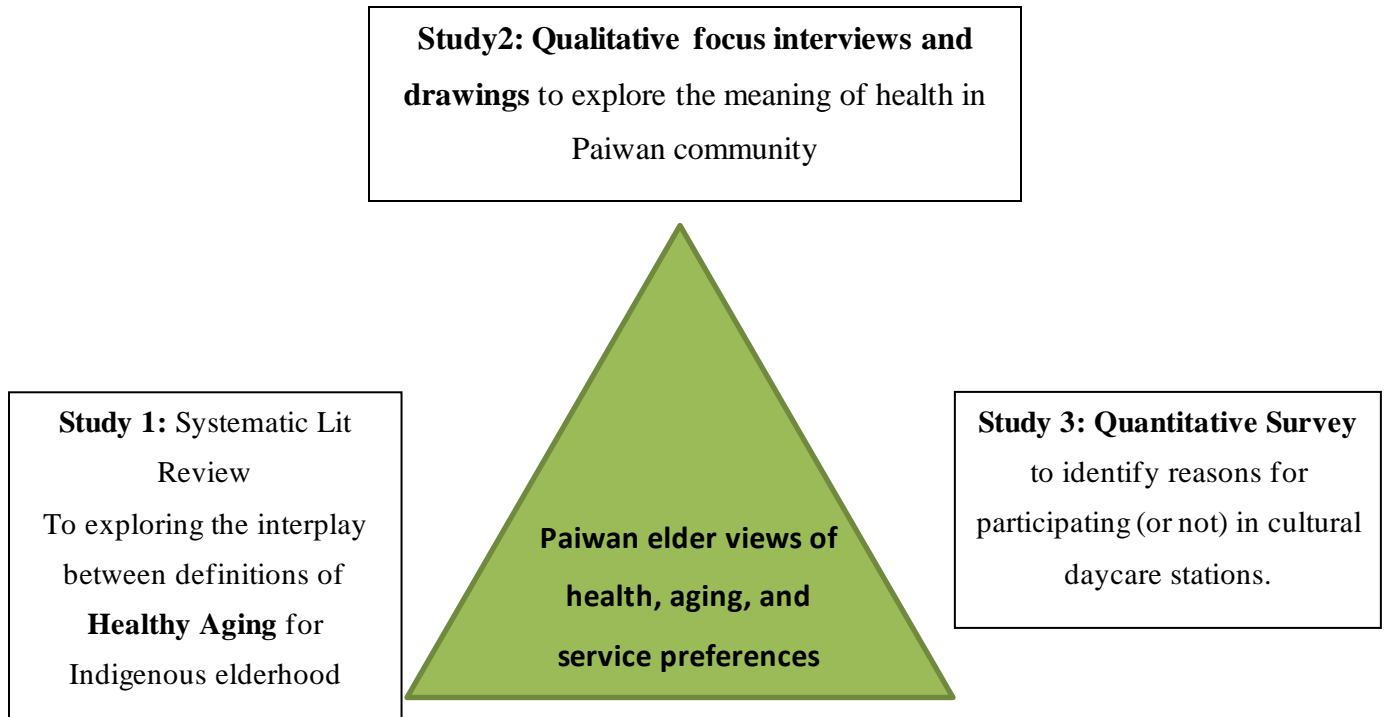


Figure 1.3: Triangulation Model for the Three Studies

Community Partners

This research had several partners. The Office of Public Health Studies at the University of Hawai'i at Mānoa provided academic support for completing these studies and the dissertation. The local government of Jinfong Township supported the research and provided a small amount of funding for research incentives. My village, Sinsin village, provided the information and knowledge of Paiwan culture to help me design and contextualize the findings from the research studies. Finally, the major partners that were represented throughout this study were the Paiwan people and communities in Taiwan, Taitung County, Jinfong Township, and the familial genealogies that they shared to support and inform the dissertation from the very start to its completion with joy.

Chapter 2: Exploring the Interplay Between Elderhood Definitions and Indigenous Health Aging

Introduction

Health disparities between Indigenous Peoples and non-Indigenous Peoples have shown ways that the dominant healthcare systems have failed Indigenous populations. These systems are often deficit-based and often do not consider the importance of the historical context and challenges that Indigenous communities face in today's society (Adelson, 2005). Indigenous perspectives on health and aging are often excluded by the dominant population (Strawbridge et al., 2002). Because the understanding of the Indigenous Peoples is not thorough, policies and health programs developed for the dominant population may not "fit" Indigenous needs or worldviews. By undermining traditional knowledge, Indigenous values, and beliefs, services developed for the dominant society can diminish Indigenous autonomy and impact cultural identities. This is true in Taiwan, as most of the research on the care of the elderly in Taiwan is based on the social and cultural context of the Han people (Zhao Shanru, 2001).

In the past few years, considerable effort has been made to define "successful aging." For instance, Rowe and Kahn's well-known gerontological model defines three main criteria that must be incorporated for successful aging: (1) relative freedom from disease and disease-related disability, (2) high cognitive and physical functioning, and (3) persistent engagement in life (Rowe & Kahn, 1987; 1997). However, other researchers suggest that without consideration of culture, spirituality, resilience and other factors, the definition is not complete (Crowther et al., 2002).

Different ethnic groups have different definitions of health and healthy aging, as well as different worldviews and lifestyles that affect the status of elders and the operation of family life. Compared with the current mainstream definitions of health and healthy aging, the definitions ascribed by Indigenous Peoples are different because they have different health experiences and put more emphasis on their home, land, and social connection (Quigley et al., 2022). Indigenous elders prefer to age in place and maintain strong social connections with community members, which may be based on a definition of healthy aging that differs from the biomedical health promotion approach (*Aboriginal Peoples, Health and Healing Approaches: The Effects of Age and Place on Health - PubMed*, n.d.).

A comprehensive review suggested elder care programs need to broaden their definitions of healthy aging to include elders' perceived resilience and capacity as older adults (Stephens et al., 2015). A review of literature exploring the perceptions of aging among older First Nations Australians gave a critique that the aging policy from the mainstream did not reflect the needs of Indigenous elders for whom cultural identity and resilience are important to successful aging (Yashadhana et al., 2022). In Indigenous communities, Indigenous elders' insights contribute to the reconciliation and resistance for the people living and moving forward, and Indigenous elders are the keepers of life in the community (Ballard et al., 2020). Thus, most elders feel that intergenerational approaches are essential to promoting health among Indigenous populations and communities. Research in Alaska found that, when defining healthy aging, Indigenous elders indicate the importance of relationships with children, mainly their grandchildren. Community involvement promotes healthy aging, as older generations are role models who encourage positive relationships among community members (Lewis, 2013).

Research for my master's thesis began exploring the meaning of health in my community, the Indigenous Paiwan community. The highly collective ways of production and sharing are used to compensate for needs arising from diseases or disabilities, but the tribal structure has been weakened by economic and political factors in recent decades. Today's Paiwan tribal chief (mamazangiljan) system has led to financial concerns, as the chiefs are using their resources to take care of people in their tribe and to maintain the traditional systems. This is straining the mamazangiljan family's finances. Also, the Paiwan tribal chiefs are neither legal entities nor incorporated into the national system. They cannot receive government subsidies and must fund the ritual activities themselves, which becomes a great burden and leads to inaction. Traditional ritual ceremonies and activities have been taken over by administrative agencies and religious groups, distorting cultural significance and causing the loss of leadership functions. Although culturally Paiwan tribal chiefs want to adhere to traditional beliefs and practices, the Indigenous leadership system is not incorporated into the national system or established as legal entities to fulfill the mission and functions of cultural inheritance and care for their people (吳清生, 2011). My early research also found that Paiwan elders focus on the social aspects of health and regard anyone who can participate in community gatherings as healthy. They tend to disregard symptomless chronic diseases. Paiwan elders enjoy social prestige and do not see themselves as needing assistance.

A recently published review of the literature by Quigley et al. (2022) explored Indigenous views of successful aging. The search yielded 31 peer-reviewed publications and one conference report on healthy aging in Indigenous populations. The findings demonstrated that aging well is a holistic concept in these communities, facilitated by spiritual, physical, and mental wellbeing, in which maintaining connections to individuals, place, and culture is crucial (Quigley et al., 2022). However, this review did not explore definitions of elderhood. While the significance of Indigenous elders' contributions to wellness is becoming more widely acknowledged, a rigorous synthesis of knowledge on Indigenous definitions of elders is lacking. Thus, the purpose of this literature review was to explore definitions of elderhood in Indigenous communities and how these definitions inform healthy aging.

Methods

Search Strategy

Quigley et al. (2022) examined the intricate topic of healthy aging among Indigenous communities, drawing insights from a pool of only 32 English-language articles. In contrast, this study takes a more focused approach, concentrating specifically on literature that discussed the definition of Indigenous elders within their communities and how this definition intersects with the concept of healthy aging. The primary objective was to determine how the literature identified from the 32 studies, along with their references, addressed the intersection of the Indigenous notion of elderhood and perceptions of healthy aging.

The 32 articles included in Quigley were first read in full to see if they addressed the definition of an elder in the examined Indigenous community. Then, the references of the articles that mentioned the definition of an elder were searched for additional studies. Alongside the exploration of academic literature, efforts were directed towards uncovering grey literature online. This involved thorough exploration of platforms dedicated to Indigenous perspectives, such as the Australian Institute of Aboriginal and Torres Strait Islander Studies, as well as consulting governmental reports from entities like Canada's First Nations. This multifaceted approach aimed to provide a holistic understanding of the relationship between Indigenous elderhood and healthy aging, drawing insights from both scholarly discourse and community-centric narratives found within grey literature sources.

Inclusion Criteria

While the United Nations does not provide a formal universal definition of "Indigenous peoples," they are characterized by distinct social, cultural, economic, and political traits that set them apart from dominant societies and often face marginalization within their own nations. Articles were considered if they identified participants as Indigenous or utilized alternative descriptors such as First Nations, Inuit, Métis, Aboriginal, Māori, Alaska Natives, American Indians, and Native Hawaiian. Articles also must have mentioned how elderhood was defined in the culture.

Data Screening

Relevant articles from Quigley et al. (2022) and the references were screened by title and abstract. Following this initial screening, the full-text articles of the remaining studies were meticulously examined, and once again, the exclusion criteria were rigorously applied. Finally, the articles that passed through these stringent selection processes were included in the comprehensive review, contributing valuable insights to the understanding of Indigenous perspectives on elderhood.

Data Extraction

In data extraction, I read the articles and extracted information for at least these categories:

- Full citation
- Name of Indigenous group and geographic location of the study
- The year of publishing
- Indigenous population
- Study design and approach.
- Summary of findings of definition on elder

Data Analysis

Relevant articles examining the meaning of being an elder in Indigenous communities were reviewed, and the findings were organized using Microsoft Excel. In reading through the article, I identified themes related to the definition of elderhood. I then identified quotes to illustrate each theme (Sirriyeh et al., 2012).

Results

Search Results

The literature search commenced with Quigley's 32 studies and was subsequently expanded by more than 100 documents from relevant references cited in these works (Figure 2.1). These were all reviewed in full. Ultimately, 20 publications were included in this review (Table 2.1).

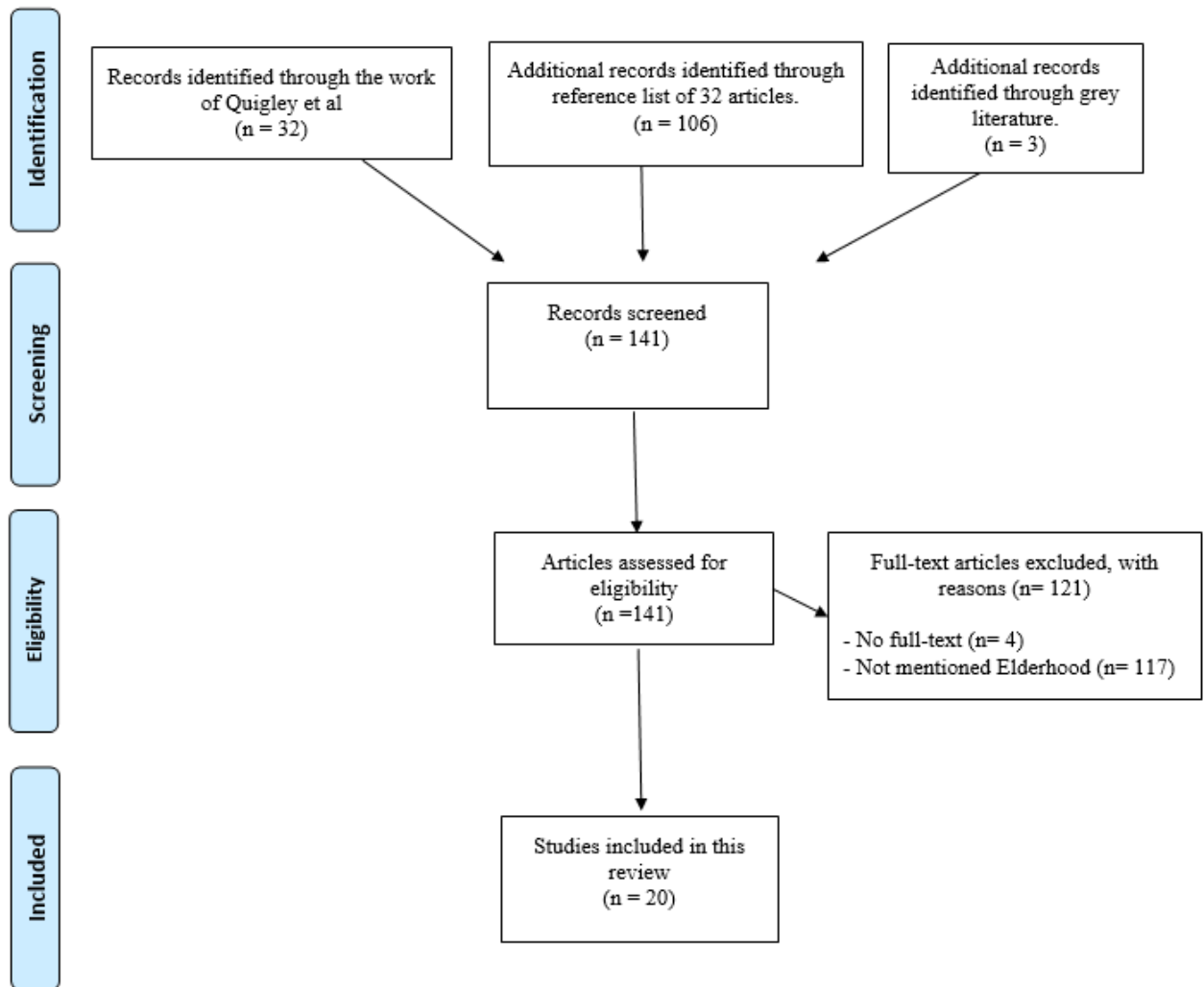


Figure 2.1 Flow Chart

Of the 20, eight were from Quigley et al. (2022), and the other 12 were identified by searching the references of the eight documents included in the Quigley review. Sixteen were peer-reviewed journal articles, one was a conference report, one was a dissertation, and three were government reports from Canada, including reports by the Assembly of First Nations (2007), Health Canada (1998), and the Royal Commission on Aboriginal Peoples (1996). Two publications were literature reviews (Dumont-Smith, 2010; Warburton & Chambers, 2007), providing valuable synthesis of existing knowledge. Nine reported on data collected using qualitative methods (Collings, 2001; Browne & Braun, 2017; Mokuau et al., 2015; Vakalahi, 2012; Edwards, 2010; Lewis, 2011; Lewis, 2010; Pearse et al 2016; Warburton & McLaughlin, 2007) and two utilized quantitative methods (Dyall et al., 2014; Gallardo-Peralta & Sánchez-Moreno, 2019). The conference report was conducted by biographical method. The governmental reports (Dussault et al., 1996; Health Canada 1998; Assembly of First Nations. 2007) and three other studies adopted a mixed methods approach to offer a more comprehensive understanding of the subject matter (Weibel-Orlando, 1989; Waldon, 2004; Delbaere et al., 2019).

The Indigenous populations under study showcased a diverse array of cultural backgrounds and geographical locations. From Canada, six studies involved Inuit, Metis, and other First Nation groups. In the U.S., two focused on Alaska Natives, two on Native Hawaiian populations, one on the Samoan and Tongan populations, and one of American Indians. Four studies focused on Aboriginal and Torres Strait Islander communities in Australia, and three on Māori populations in New Zealand. One focused on the Aymara tribe in Chile.

Themes

The analysis identified seven major themes, suggesting that an elder was someone who: 1) was recognized and respected for knowing, living, and teaching traditional knowledge, 2) was dedicated to transmitting wisdom to the next generations, 3) made ongoing contribution to the community, 4) provided a vision of the future based in tradition, 5) was not necessarily of a certain age, and 6) was a care provider.

Table 2.2 presents the six themes extracted from all the literature along with their corresponding study numbers. It can be observed from this table that the first four themes were mentioned most often (in 13 or more studies), while the other three themes were each mentioned less than ten times.

Table 2.1 Characteristics of the Literature

No.	Authors and Title	Indigenous population	Study design	Summary of findings of definition on elderhood
1	Weibel-Orlando (1989) Elders and elderlies: Well-being in Indian old age	American Indian	Mixed methods	<ul style="list-style-type: none"> • A person of substance and value, a person with inviolate dignity • A person held in great respect by his or her community members. Councils of elders were the active centers of tribal decision-making. • Elders held places of prominence in governmental and political affairs. • It was through the elders that the culture of the people was transmitted across generations.
2 Q	Abonyi & Favel (2012) Marie's story of aging well: Toward new perspectives on the experience of aging for Aboriginal seniors in Canada	Métis community in Saskatchewan, Canada.	Conference Report Biographical account	<ul style="list-style-type: none"> • Ongoing contributions to community life. She is valued in this role as she can scarcely keep up with the invitations to present in classrooms, workshops, and conferences. • Marie is dedicated to the transmission of her accumulated knowledge and wisdom to younger generations.
3	Dussault et al. (1996) Report of the Royal Commission on Aboriginal Peoples: Perspectives and Realities	Inuit and to First Nations and Métis people, Canada	Government report Mixed methods	<ul style="list-style-type: none"> • Are those recognized and respected for knowing, living, and teaching traditional knowledge. • They see the world through the eyes of their ancestors and interpret the contemporary world through lessons passed down through generations. • Their wisdom is transferred to young people who seek their teachings. • The elders are a living bridge between the past and the present. • Provide a vision for the future, a vision grounded in tradition and informed by the experience of living on the land, safeguarding and disseminating knowledge gained over centuries.

				<ul style="list-style-type: none"> • Have much to contribute in the quest for self-determination and a better relationship among all Canadians. • They are educators in the broadest sense of the word.
4	Dumont-Smith (2010) Aboriginal elder abuse in Canada	Aboriginals, Canada	Literature review	<ul style="list-style-type: none"> • Not all older people or seniors are deemed to be an Elder as defined above and, furthermore, some Elders can be quite young in terms of age.
5	Health Canada (1998) Reaching out: A guide to communicating with Aboriginal seniors	Aboriginals, Canada	Government Report Mixed methods	<ul style="list-style-type: none"> • Elder is capitalized when used to indicate honor or a title. • It is not capitalized when it is used to mean senior.
6	Assembly of First Nations. (2007) Sustaining the caregiving circle: First Nations people and aging.	First Nations, Canada	Government Report Mixed methods	<ul style="list-style-type: none"> • Guidance or healing and do not have the same expectations of them as those with the Elder title. • Both the acknowledgement of Elder roles by community members and the ability of Aboriginal seniors to contribute to their communities in a way that is consistent with traditional roles • Elders are perceived to have important wisdom and are respected and valued for their ability to offer guidance to younger generations.
7 Q	Collings (2001) If you got everything, it's good enough": Perspectives on successful aging in a Canadian Inuit community	Inuit, Canada	Qualitative	<ul style="list-style-type: none"> • Elders, being traditional, are also better people. • Places more pressure on the younger generation to live up elders in a political and economic situation.
8 Q	Browne & Braun (2017) Away from the islands: Diaspora's effects on Native Hawaiian elders and families in California	Native Hawaiians	Qualitative	<ul style="list-style-type: none"> • They spoke of the wisdom that comes with age and referred to the sharing of knowledge • The term kūpuna was closely connected to intergenerational learning and caring for mo ' opuna (grandchildren).
9	Mokuau et al. (2015) Native Hawaiian grandparents: Exploring	Native Hawaiians	Qualitative	<ul style="list-style-type: none"> • Native Hawaiian elders are recognized as major sources of knowledge and play a major role in caring for and raising grandchildren

	benefits and challenges in the caregiving experience			
10	Vakalahi (2012) Cultural context of health and well-being among Samoan and Tongan American Elders.	Samoa and Tongan	Qualitative	<ul style="list-style-type: none"> Elders are central to the daunting task of ensuring the transmission of traditional culture as well as assisting the young in negotiating cross-cultural identities.
11	Dyall et al. (2014) Te puawaitanga o nga tapuwae kia ora tonu - Life and living in advanced age: A cohort study in New Zealand	Kaumātua (Māori elder), New Zealand	Quantitative	<ul style="list-style-type: none"> Māori elders often experience an increase in their roles and responsibilities as they age. In advanced age, older Māori may be positioned as the main support of their whānau and hapū (Tribes).
12 Q	Edwards (2010) Taupaenui: Māori positive ageing (PhD dissertation)	Kaumātua, New Zealand	Qualitative	<ul style="list-style-type: none"> Older Māori have obligations to their whānau that they must balance while attempting to maintain a good life in older age. Older Māori live both in Te Ao Māori, the Māori world, and Te Ao Whanui, the wider society
13	Waldon (2004) Oranga Kaumātua: Perceptions of health in older Māori people	Kaumātua, New Zealand	Mixed methods	<ul style="list-style-type: none"> Older Māori often have an active role in marae activities and support the functions of the marae and hapū. Traditional roles as a traditional resource within their whānau They may also be expected to have regular whānau (family) Involvement and provide care for whānau.
14	Gallardo-Peralta & Sánchez-Moreno (2019) Successful aging in older persons belonging to the Aymara native community: Exploring the protective role of psychosocial resources.	Aymara, Chile	Quantitative Cross-sectional	<ul style="list-style-type: none"> Elders play a leading role in cultural transmission and maintaining Indigenous cultural practices is shown in their participation in the social tasks.
15 Q	Lewis (2011) Successful aging through the eyes of Alaska Native Elders. What it	Alaska Natives, UA	Qualitative	<ul style="list-style-type: none"> Four elements of “Eldership” are emotional wellbeing, community engagement, spirituality, and physical health, which are the characteristics of ANs who have reached

	means to be an elder in Bristol Bay, AK			“Eldership” and become a respected Elder in their community.
16 Q	Lewis (2010) Successful aging through the eyes of Alaska Natives: Exploring generational differences among Alaska Natives.	Alaska Natives, UA	Qualitative	<ul style="list-style-type: none"> Elders are the role model whom the Youngs think about successful aging. The elders place less emphasis on the biomedical aspects of aging and focused on respecting self and others, remaining active, and making a continuous contribution.
17 Q	Pearse et al (2016) Growing old in Kempsey: Aboriginal people talk about their aging needs.	Aboriginal, Australia	Qualitative	<ul style="list-style-type: none"> Elder are custodians of knowledge and experience that will help the community and organization to continue to develop was also discussed.
18 Q	Delbaere et al. (2019) Sharing the wisdom of our Elder	Aboriginal and Torres Strait Islander, Australia	Mixed methods	<ul style="list-style-type: none"> Elders spoke of how Sacred Grounds – Connection to Country, Spirituality, and Dreamtime are all interconnected; Elders are maintaining these connections is critical for older Aboriginal people to living a good life and ageing well.
19	Warburton & Chambers, (2007) Older Indigenous Australians: Their integral role in culture and community	Aboriginals, Australia	literature review	<ul style="list-style-type: none"> Roles include kinship relationships, support for the young, transmission of cultural knowledge, Identity and cultural link, and roles in education and childcare as well as the key concept of respect for older people as survivors.
20	Warburton & McLaughlin (2007) Passing on our culture: How older Australians from diverse cultural backgrounds contribute to civil society.	Aboriginals, Australia	Qualitative	<ul style="list-style-type: none"> Elder are having an important role in maintaining or promoting their culture; Elder are providing support across their communities based on common experience. Elders play in encouraging and supporting troubled young people.

Table 2.2: Overview of All Themes

	Elders are recognized & respected for traditional knowledge	Elders are dedicated to transmitting wisdom to next generation	Elders make ongoing contributions to the community	Elders provide a vision for the future grounded in tradition	Elders are not defined by age	Elders are care providers
1. Weibel-Orlando (1989)	X	X	X			
2. Abonyi & Favel (2012)		X	X			
3. Report of the Royal Commission on Aboriginal Peoples (1996)	X	X	X			
4. Dumont-Smith (2010)			X	X	X	
5. Health Canada (1998)				X	X	
6. Assembly of First Nations. (2007)	X	X		X	X	X
7. Collings (2001)	X	X	X			
8. Browne & Braun (2017)	X	X		X	X	X
9. Mokuau et al. (2015)	X	X				X
10. Vakalahi (2012)	X	X	X	X	X	
11. Dyllal et al. (2014)	X		X			X
12. Edwards (2010)	X		X			X
13. Waldon (2004)	X	X	X			
14. Gallardo-Peralta & Sánchez-Moreno (2019)	X	X				
15. Lewis (2011)	X	X	X			
16. Lewis (2010)	X	X	X	X	X	
17. Pearse et al (2016)	X	X	X			
18. Delbaere et al. (2019)	X	X	X			
19. Warburton & Chambers, (2007)	X	X	X	X	X	X
20. Warburton & McLaughlin (2007)	X	X	X	X	X	X
Total	17	15	14	12	8	7

Theme 1. Elders are recognized and respected for knowing, living, teaching traditional knowledge

Seventeen of the 20 studies defined Indigenous elders as those that are recognized and respected for knowing, living, and teaching traditional knowledge. Indigenous elders are pillars within their communities, revered for their profound understanding, expression, and transmission of traditional wisdom. Through their lived experiences and intimate engagement with Indigenous traditions, elders serve as custodians of invaluable teachings, passing down ancestral wisdom to younger generations. As noted by Waldon (2004) in his study of Māori, “Kaumātua [Māori elders] are crucial to the preservation of our taonga (treasures) for future generations and, most important, we must look after our older Māori, for they are a taonga for us all.” Similarly, among Samoan and Tongan elders, Vakalahi (2012) found that:

In relation to the traditional Samoan culture is key cultural values and practices taught and enforced by the elders, which includes familial connections; connection to the land; absolute respect for authority of the chiefs (matai) and ministers (faife’au); and a collective identity and worldview that is based on spirituality, physiology, and history.

In their study of the Aymara of Chile, (Gallardo-Peralta & Sánchez-Moreno, 2019) found that:

The significance of the role of older persons in maintaining Indigenous cultural practices is shown in their participation in the social tasks (attendance at community meetings, maintaining the native language, and so on) that represent an essential part of the routine of highland families.

The Report of the Royal Commission on Aboriginal Peoples in Canada (1996), which included voices from many Indigenous elders, noted the importance of elders as those recognizing and passing on the notion of Indigenous territory,

It is the foundation of everything. Without territory, there is no autonomy.

Without territory, there is no home. The reserve is not our home. I am in territory.

Language is territory. Belief is territory. It is where I come from. Territory can

also vanish in an instant. Before the colonization of the Abitibi our ancestors

always lived on the territory. My grandfather, my grandparents and my father

lived there. This is the territory that I am talking about.... (an Algonquin elder)”

Theme 2. Elders are dedicated to transmitting wisdom to next generations

Fifteen of the 20 studies defined elders as those older adults that showed a profound dedication to the intergenerational transmission of wisdom, serving as vital instruments for the preservation and dissemination of cultural heritage. Their commitment extends far beyond the confines of individual lifespans, as they tirelessly impart valuable teachings, insights, and experiences to the succeeding generations. As quoted by Collings (2001) in a study of successful aging in a Canadian Inuit community,

The best thing I like about being Inutquaq is just having the friendship of the other elders of the same generation, the elders around me now. What I enjoy most, too, is being able to talk to young people, people younger than I who have a long life ahead of them, about what life has to offer, what expectations they can have about life, what's good about life, how they can make that life good for themselves.

This is resonated the telling from Abonyi & Favel (2012) of Marie's story of aging well, in which Marie says:

...I see that I have moved through the medicine wheel; that my pursuit of more education and experience has taken me through all four quadrants as a teacher (mental and emotional), as a religious educator and sweat leader (spiritual), and in community health education (physical). And having searched the wheel I found the last piece in health education. And this is where I feel I can make the most contribution to the health and healing of my community. So today I am still involved in many things that are about sharing my life experiences, about helping our youth stay in school, about helping our young people parent well and drawing on the old ways, and about dealing with the hurt that is still there in the high suicide rates among our youth.

Through intimate mentorship, storytelling, and experiential learning, elders nurture the intellectual and spiritual growth of the younger members, guiding them along the pathways of identity formation and cultural belonging. Their teachings encompass a rich tapestry of Indigenous cosmology, traditional ecological knowledge, oral histories, and ceremonial practices, offering profound insights into the connection of all living beings. As Browne & Braun (2017) learned in their discussions with Native Hawaiian elders:

A kūpuna is one who teaches... a kūpuna is a respected elder to learn from, and it's not about age, but about knowledge and wisdom. Participants suggested that the term kūpuna was closely connected to intergenerational learning and caring for mo'opuna (grandchildren).

Theme 3. Elders make ongoing contributions to community

Fourteen of the 20 studies found that those that are Indigenous elders demonstrate ongoing contributions to community. Elders hold respected positions of leadership and authority within Indigenous communities, where their guidance is sought in matters of governance, policy-making, and community development. Their perspectives, grounded in traditional values and community priorities, contribute to informed decision-making processes that reflect the collective interests and aspirations of the community. Quantitative research from Weibel-Orlando (1989) found that elderhood involved many things, including active involvement in Indian community life, regular interaction with family (particularly grandchildren), continued community contribution and service, personal acts of altruism, and community recognition of such good works. In another example, Dyall et al. (2014) found that, "the role of kaumātua/kuia is very demanding on one's time and health: long hours spent at tangihaga and marae meetings." Vakalahi (2012), Samoan elders said,

Our self-esteem and self-worth increase when we give or help others. The more we give, the happier we are so when we accumulate wealth (foods, animals, land and crafts), it is to give and donate to others when needed for one day I may need help myself.

Warburton & McLaughlin (2007), in their study of Aboriginal Australians, heard this example of contributing to others:

I suppose in a nutshell we're extended families, so no matter who you are, what you are, where you come from, whether relations or non-relationships. Just treat everyone as extended family if you can help... you're always there to help [City Indigenous female]

Another instance from Lewis (2011) found that the meaning of community for elders, a focal point in this study, serves an important role in the Elders' lives. Community engagement provides the Elders with a sense of purpose and a role in the community. As the participants discussed in this study, "We get company. Like,

when you are sick, they'll help you. They don't leave you to be by yourself.” (P3 interview) “Because I don't see people not being sent home. Family, support systems are there.” (P25 interview).

Theme 4. Elders provide a vision for a future grounded in tradition.

Twelve of the 20 articles defined elders as those older adults who serve as visionary leaders that bridge the past, present, and future. Grounded in the wisdom of their ancestors, elders possess a unique ability to envision a future that is harmonious with the natural world and aligned with the principles of intergenerational equity and community well-being. As noted from the study of Warburton and Chambers of Aboriginal Australians (2007).

We are the women who are fighting to keep the culture going. We've been teaching the younger women and the women that were taken away, teaching the people the lost culture. We really know the land. We were born on the Manta, born on the Earth. And never mind our country is in the desert, that's where we belong, in the beautiful desert country. The learning isn't written on paper as whitefellas' knowledge is. We carry it instead in our heads and we're talking from our hearts, for the land.

Central to their role is the cultivation of a forward-looking mindset that acknowledges the connection of all aspects of life, including physical, mental, emotional, and spiritual health. As heard by Browne & Braun (2017) in their study of Native Hawaiians:

How do I think like a Hawaiian? I see the people I work with and I think I'm more patient than they are—we are a more giving people, more family oriented. Our children and family are most important... To us the land—we are in tune with sky and land. More with nature, I think.

The report of Assembly of First Nations (2007) from Canada concludes that the Indigenous perspective on the life course, as conveyed by Indigenous elders, is characterized by a cyclical rather than linear understanding. Additionally, it encompasses the belief in the continuity of life beyond death, wherein existence persists in the spiritual realm and through one's progeny. It is different from the view of mainstream population.

Moreover, elders play a crucial role in guiding community efforts to address contemporary health challenges, drawing upon traditional healing modalities and Indigenous ways of knowing to promote wellness and prevent illness. Their visioning for the future is a

critical and demanding responsibility, as heard by Waldon in his study of Māori elders, “As guardians of te reo Māori, ngā tikanga and nga iwi, Hapū, and Whānau, kuia and kaumātua have demands placed upon them which have no equivalent in Pākehā [White] society.”

Theme 5. Elderhood is not related to "age."

Eight of the 20 studies found that. in Indigenous cultures, the concept of elderhood is not defined by age. For example, in his study of Alaska Natives, Lewis (2010) heard, “I don’t think it is just age—you don’t determine if you are an elder, the community does.” and “some of us merely become elderly, but don’t become an elder.”

As previously mentioned, the cultural roles of Indigenous elders deserve significant recognition, emphasizing their esteemed position as custodians of wisdom, educators, and guides, as noted in the report of the Assembly of First Nations (2007).

It is important to acknowledge the distinction between the terms "Elder" and "older person" within an Indigenous context. "Elder" refers to individuals who hold distinguished roles within their community and serve as guardians of cultural heritage. In contrast, "older person" is a broader term used to describe individuals above a certain age, typically around 50 years old.

Thus, being an elder transcends chronological age, and rather encompasses a deep-seated respect for wisdom, experience, and cultural knowledge. While chronological age may be a factor, it is not the sole determinant of elderhood; rather, it is the embodiment of traditional teachings, values, and leadership qualities that distinguish individuals as elders within their communities. In many Indigenous societies, elders are sought after for their guidance and spiritual insight, drawing upon a lifetime of experiences and intimate connections with the land, ancestors, and community members. as heard by Collings (2001) in his study in Canada.

Elders doing good are always keeping busy with their life. I always see them in the community doing completely different things. I see them in one place doing one thing and then an hour, two hours later I see them somewhere else doing something else. I wonder where they get the energy from.”

Interestingly, engaged elders believe they have better health, as noticed in work with Aboriginal Australians of Delbaere et. al. (2019).

... I’m more like – 42... I certainly don’t feel 72. And I don’t behave like it... I’m still thinking about [joining] rock-and-roll bands... So, the age thing, I guess it

must literally be something that's individual, to a certain degree. Because I know people twenty years younger than me who have given up.

Theme 6. Elders are care providers.

Seven of the 20 studies noted that important role of Indigenous elders in providing care within the family. For example, Waldon (2004) surveyed older Māori and found that “90% reported caring for children, while 80% cared for sick whānau members.” As found by Mokuau et al. (2015), elders' role as caregivers extends far beyond mere physical assistance; it encompasses emotional, spiritual, and cultural care that addresses the well-being of the whole person.

I taught them to be humble, respectful, to say hi to everyone and kiss them hello [in the Hawaiian way].” The value of ‘ohana (family) also was transmitted... You have to take care of one another, love each other, help each other out. That's why you have ‘ohana, to help each other out.

Intergenerational care is expected as it was received. And this caring included the transmission of heritage, culture, and lessons through stories, songs, and teachings that have been handed down through the ages. For example, Warburton & McLaughlin (2007) heard from an Indigenous Australian elder:

My Grandmother lived with us and she taught us all the old ways and told us all the old Koorie stories. They'd always tell us kids all the stories when we was goin' to sleep. If your Mother didn't tell you stories, then your Grandmother did. All the kids would fight over who slept with Gran, she was such a good story-teller.

The study of Aboriginal Australians by Pearse et al. (2016) noted this about intergenerational caregiving:

It was clear that the relationship with their grannies was extremely important to the participants. Most participants said that these relationships add meaning to their lives and that it is these relationships that keep them going. Although it was clear that raising grannies puts a lot of pressure on older people, this was also seen by participants as a joy and strength. Some said that it makes life worth living.

Discussion

While Quigley et al. (2022) provided a comprehensive view of Indigenous elders' perspectives on healthy aging, this study focused on the definition of elderhood in Indigenous communities. Clearly, elderhood is not defined by age alone but rather an older person's commitment to preserving and transmitting culture, continuing to contribute to family and community, and providing a vision for the future based in tradition. These findings correspond with the research by Yashadhana et al. (2022), who found that conventional aging models fail to adequately encompass the needs and values of older First Nations Australians. This highlights significant considerations for aging policies and the development of culturally sensitive aged and healthcare services. This also reinforces the work from Ballard et al. (2020) that elder could be roles models for decision-making and providing recommendations towards reconciliation for Indigenous peoples in Canada.

The six themes identified in this study are clearly interconnected and overlapping. For example, those who are recognized and respected for knowing, living, and teaching culture (Theme 1) may also be providing care, especially to grandchildren (Theme 6), and this provides them the opportunity to transmit culture to the next generation (Theme 2). Those who are recognized and respected for knowing, living, and teaching culture (Theme 1) also are contributing to the community (Theme 3) and have the opportunity to provide a vision for the future based in tradition (Theme 4). Thus, Figure 2.2 shows the themes in a circle.

It also is clear that the definition of healthy aging in Indigenous communities is influenced by the definition of elderhood. Unlike in Western society where individuals try to stay healthy and engaged in order to age successfully, Indigenous elders have a vision of what an elder is, and if you can be someone that upholds, contributes to, and passes on the culture, then you have aged successfully, regardless of your physical health status (Rowe et al., 2020). The special roles assigned to elders provide not only a mission in their later years but also motivate them to maintain good health to safeguard the cultural vitality of their entire family and community,

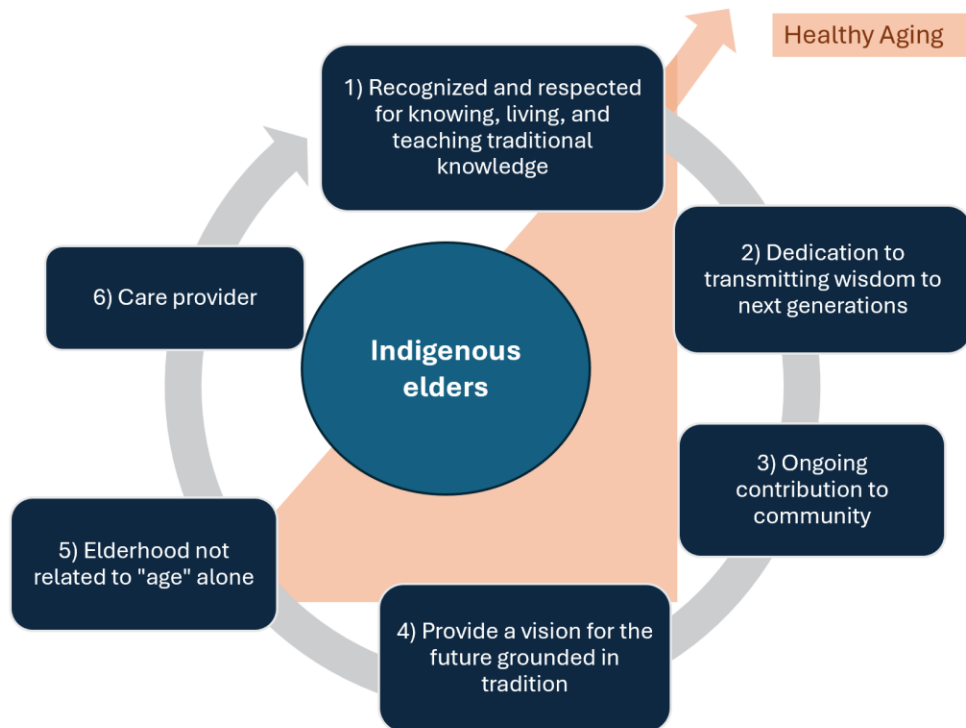


Figure 2.2: Concept of Interplay Between Elderhood Definitions

The cultural identity of elders and their resilience in both traditional and modern societies should be considered in policies for healthy aging. In a society characterized by multicultural integration, it is imperative for governments to acknowledge the values of each ethnic groups, particularly in the context of Indigenous populations. Due to often limited sample sizes, data from such studies may be deemed to lack research value. Therefore, it is crucial for governments and scholars to commence with an understanding of the ongoing harm inflicted by colonial policies on Indigenous communities and elders if their beliefs and research on these beliefs are discounted. This entails an initial grasp of the definition of Indigenous elders and its significance to the overall health of the community. Importantly, emphasis should not only be placed on the objectives of academic research, beneficiaries, and the enduring significance of the research, but there should also be a greater encouragement for scholars to adopt methods such as Community-Based Participatory Research (CBPR) and Participatory Action Research (PAR) (Braun et al., 2014). These approaches allow Indigenous peoples to take the lead in research and exploration, facilitating the integration of their traditional values into policy recommendations and formulation.

The primary focus of this study was to explore Indigenous definitions of elderhoods and the relationship of these definitions to healthy aging through the lens of cultural tradition. Such inquiry contributes to enhancing both the depth and breadth of academic research in this area. Continued research is needed, however, to enhance our understanding and awareness of the roles of elders within tribal contexts. Through more extensive research endeavors, we can gain a better understanding of the status and contributions of elders within tribal communities, thus facilitating efforts to promote healthy aging from a cultural perspective.

Strengths and Limitations

This review is subject to certain limitations. It exclusively included articles published in English, which may have resulted in the omission of studies involving Indigenous peoples from non-English speaking countries, including those in Africa, Asia, and Europe. Databases or websites dedicated to Indigenous research, or those available in languages other than English, might contain additional relevant publications that were not captured in this review.

In addition to being constrained by the limitation of including only English-language literature, this study did not further explore other research fields and methodologies to investigate the definition of Indigenous elders. This may result in a lack of diversity and depth in interpreting the data. However, the study still incorporates an autobiographical study from the field of anthropology and three government reports to supplement and elucidate the findings.

Conclusion

In conclusion, the interconnectedness and interrelation of these themes underscore the integral role of Indigenous elders as pillars of strength and wisdom within their communities. Recognized and esteemed for their deep understanding of traditional knowledge, elders dedicate themselves to transmitting this wisdom to future generations, ensuring the continuity of cultural heritage. Their ongoing contributions to the community extend beyond imparting knowledge, as they actively participate in community affairs and provide guidance rooted in cultural traditions. Grounded in tradition, elders offer a visionary perspective for the future, guiding the community towards sustainable development while preserving ancestral values. Importantly, elderhood transcends mere age, highlighting the unique status and authority bestowed upon individuals recognized as elders, who are sought after for guidance and healing. Moreover, elders serve as caregivers, offering holistic support that nurtures the well-being of community members. Thus,

these themes collectively emphasize the holistic and indispensable role of Indigenous elders in fostering cultural resilience, intergenerational continuity, and communal harmony.

Chapter 3: What is Healthy Aging for Indigenous Paiwan Elders?

Introduction

The meaning of healthy aging in Western medicine is somewhat different from Indigenous communities. In the Western medical view, the definition of healthy aging or successful aging is based on assessing markers such as longevity and successful cognitive function (Karasik et al., 2005). Studies based on the Western model suggest that healthy aging interventions focus on physical activity, caloric restriction, and involvement in cognitively and socially engaging activities to achieve healthy aging (Depp et al., 2007).

However, more holistic views on healthy aging are common in Indigenous communities (Hillier & Al-Shammaa, 2020). For example, research among Alaska Natives that explored the definition of eldership found that elders included emotional well-being, community engagement, spirituality, and physical health as characteristics of healthy aging (Lewis, 2011). Lewis and other researchers also found that optimism was considered the most essential element of healthy aging (Lewis, 2013). An Indigenous scholar, Chen, who is from the Bunun community in Taiwan, pointed out that the core of the knowledge of the Indigenous Peoples is composed of spirit, humans, and objects, which refers to the Indigenous interpretation of the "relationship" between the spiritual world, natural things, and the human world (Chen Zhang Peilun, 2011).

Based on the cultural norms, traditional beliefs, and special social structures that exist in Indigenous communities, Western healthy aging frameworks seem an inappropriate fit in the Indigenous worldview. The promotion of Indigenous elder services must be closely related to the traditional beliefs of the Indigenous Peoples and must integrate culture. To do so, researchers must strive to fully grasp the cultural lens and concerns of each specific Indigenous group. Also, current researchers of health studies need to consider and recognize Indigenous Peoples not as research subjects but as community partners with different views and needs for well-being (珊, 2007). My earlier work in the Paiwan community suggested that elders have predominant roles that are important to healthy aging, and they value the principle of "aging in place." However, in Taiwan, there is no research to assist Indigenous Peoples in defining healthy aging.

The purpose of this study was to identify Indigenous Paiwan elders' concepts about healthy aging. This cultural lens can help the Taiwan government recognize the differences in these concepts between the Indigenous Peoples and the Han Chinese people. If the government can recognize these existing differences, it can take more action to support Indigenous Peoples

and develop culturally appropriate services. These efforts must start with the construction of an Indigenous knowledge system to make Indigenous health policies and Indigenous care systems better.

Methods

Study Design

In this qualitative study, a focus group was conducted to collect data from Indigenous Paiwan elders. Focus group discussion is a recognized qualitative research method for gathering large amounts of narrative data arising from informal, moderated interaction between a small group of six to 12 individuals (Morgan, 1996). The focus group was chosen as the main data collection method in this study because it enables intercultural communication and understanding and allows participants to share and build on one another's ideas. Focus groups can empower participants by enabling them to guide the flow of the research questions, introduce culturally relevant concepts, and provide their own experiences in a confidential setting (Kitzinger, 1995).

The core values of the CBPR approach inspired this study. For example, the study applied the collaborative approach to explore a new view of health among the Paiwan people and applied cultural humility and cultural safety concepts to establish the research partnership (Israel et al., 2001; Minkler et al., 2012). Thus, before I started the study, I met with the village chiefs to provide an orientation to my dissertation. I shared the purpose and expected findings of the study, the predictable consequence, the desire to present results to them and the community, and compensation for participation in this study. They approved the study. In designing the study, I considered various factors including the preferred language of the participants, their life experiences, and their educational backgrounds. I also considered the potential effects of my role within the community as a member of the mamazangiljan (chief's family) in my area and the fact that my mother holds a leadership position in the local government's social welfare department.

IRB Approval

I received approval from the University of Hawai'i at Mānoa Institutional Review Board (IRB) for this study. The consent forms are provided in Appendix 5 (English) and Appendix 6 (Mandarin). Because the tribal-based daycare stations, where the focus group was held, are under the Department of Indigenous Peoples Social Welfare of the Taitung County Government (臺東縣政府原住民族行政處-原住民社會福利, n.d.). I reached out to the director of this

department and discussed my project, and the director and her team approved my research investigation in the tribes.

Research Setting and Participants

The study focused on the Eastern Paiwan people who are living in the administrative region of Jingfong Township. This includes the five villages of Sinsin, Chensin, Cialan, Binmao, and Riciou villages. This study engaged ten Paiwan people aged 55 years or older in Jingfong Township. I chose two participants from each of these five villages that met these criteria: 1) able to consent for themselves; 2) 55 or older; 3) living in Jingfong Township; 4) self-identifying as Indigenous Paiwan; and 5) able to attend and participate in a focus group meeting.

Measures

This study collected qualitative data through a focus group to discuss Indigenous Paiwan elders' meaning of healthy aging. It was guided by 15 open-ended questions adopted from a study by Lewis (2011) that successfully explored the meaning of healthy aging among Alaska Native elders. The questions were:

- 1) At what age do you think that a person becomes an elder in your community?
- 2) How do you know if someone is regarded as an elder or not?
- 3) Is there anything that happens to mark this transition?
- 4) Do you think things have changed for elders these days, as opposed to say, 20 years ago?
If so, in what ways? (Probe different comments by participant.)
- 5) What do you think successful aging means?
- 6) Why do some Elders age well and some do not?
- 7) What are the signs of an elder who is aging well? For example, can you think of someone in this community who is aging really well? (Allow a response, and then follow up with: How can you tell they are aging well, as opposed to someone who is not?)
- 8) What are some of the signs, or symptoms, of poor aging? Or unhealthy aging?
- 9) Can poor aging be prevented?
 - a. If yes, what can people do to prevent poor aging?
 - b. What does a person need to do to age well? (Is doing the same as being?)
- 10) Do you think there are differences in how people age when living in our community versus outside of our community? How so? Why do you think/these differences (s) exist? (If applicable).

- 11) What role do you think your community plays in whether or not someone grows older positively and healthily?
- 12) How does getting older affect you as a person? Give example(s). Probing questions:
 - a. How does aging impact your body? Bodily impact
 - b. How does aging impact your spiritual well-being? Spiritual impact
 - c. How does aging impact your emotions? Emotional impact
 - d. How does aging impact your thoughts? Cognitive impact
- 13) Do you think elders in your community are aging successfully?
- 14) How does someone in your community learn about aging successfully? Are there ways that people share this knowledge?
- 15) Is there anything about aging or being elder that you want to tell me, that I haven't asked about yet?

Procedures

The focus group had four phases. The first phase was to recruit the elders. I visited five daycare stations in five villages in Jingfong Township because most of the eligible elders whom I had access to interview often come to the daycare center. I also used snowball sampling by asking participants to recruit other participants for the study and ensure the participants met the inclusion criteria. Thus, I recruited two participants from each village for a total of 10 participants. During the first two weeks of the study, I helped them complete the consent forms.

The second phase was to provide an orientation to the study. The participants and I determined the day, time, and location of the focus group interview. They were asked to identify potential solutions to any problems identified that related to the logistics of this study, for instance, transportation to the focus group. Then, I organized transportation for every participant to come to the focus group discussion and addressed other logistical issues.

The third phase was to conduct the focus group. At the beginning of focus group, I invited one of the Paiwan elders to give a prayer ceremony and greeting. Prior to initiating the discussion, I ensured that I introduced myself and disclosed any relevant information, maintained confidentiality, expressed gratitude to the participants, and conveyed my genuine interest in their contributions to the study.

Then the participants were asked the 15 questions outlined above. The Mandarin version of the focus group interview questions was provided to the participants (See appendix 4). A

Paiwan language interpreter helped translate between Paiwan language and Mandarin as needed. The group met for 130 minutes, with a 10-minute break after the meeting was operating for an hour. At the end of the focus group, we had an open space for the participants to share their thoughts about the questions.

The fourth phase was transcribing and analyzing the focus group discussion. After transcribing the focus group interviews, I analyzed the data to see if any of the responses were unclear and looked for details that I wanted to learn more about. In this phase, the transcripts were proofread by the interpreter. Also, a tribal elder who was guiding me in doing research served as a consultant. Then I identified themes and subthemes in the data.

Data Analysis

In data analysis, I used a general inductive approach to analyze the interview transcripts and developing codes and themes and subthemes (Thomas, 2006). These were put into Excel software to create a codebook. Connections between categories and themes in the codebook were used to further my understanding of the participants' views of health in the Paiwan community and their conceptualizations of healthy aging. Once the codebook was completed, I reread and coded the transcripts. Then, I counted how many elders spoke to each theme and identified quotes from the transcripts that illustrated the themes.

Overall Rigors

To ensure the findings met the rigor of qualitative research, I checked the themes learned from the interview transcripts with the participants and the community members who were willing to meet with me, including the instructor of the Paiwan language and the mamazangiljan (chiefs) in the community. Furthermore, I kept a journal of evolving thinking to reflect on the experience of working with the elders, workers in the daycare centers, and the community members. I used my journal to support my observations during the entire process of this study.

Positionality

I recognized that my background completely influences the story I am sharing and how I analyzed my data. I am from the Indigenous Paiwan tribe with whom I conducted this study. I was born and raised in mamazangiljan (the chief family) in the community that has been the center of all my people. I have taken part in caring for people, not only offering spiritual guidance but also sharing the duty of caring for people who need care and cannot live by themselves. This is the main lesson of being a member of chief family system. I was employed at

the daycare station in my community for several years, hired because of my public health education background, and I have served as a resource for long-term care in the community. However, Tervalon (1998) tells us that cultural humility incorporates a lifelong commitment to self-evaluation and self-critique. So, I am an insider because I am from the community, and I must be loyal to my community. I also have studied public health. Thus, I always ask myself “how could I help my community in my way?” and “how can my efforts assist their needs?” However, because I am part of the mamazangiljan, I may be perceived as having more power than some others in the community. To counter this, I realized that I needed to help by listening and then helping others too hear the voices of the elders of my Paiwan community.

Results

Participants

A total of ten participants were enrolled as members of the focus group, with two participants from each of 5 villages. Of the ten, seven were male and three were female. Three participants were between the ages of 55 and 59 years, three were 60-69 years old, two were 70-79 years old, and two were aged 80 or older. Four had experiences of participating in the daycare stations, including one who attended regularly and three who had been there several times. The other six focus group members were not going to the daycare stations. One of them was a chief from a tribe and some of others were also holding positions within their tribes, for examples, as advisors of the chiefs and committee members for traditional rituals. Two members had pensions after their retirements.

Themes

From the discussion, three main themes were identified: (1) factors that promote successful aging; (2) how to define an elder; and (3) opinions on daycare stations. Although none of the questions asked specifically about the daycare stations, the focus group took place in a daycare station, and the conversation gravitated toward expressing opinions about daycare stations in general. A number of subthemes were identified under each theme, as shown in Figure 3.1.

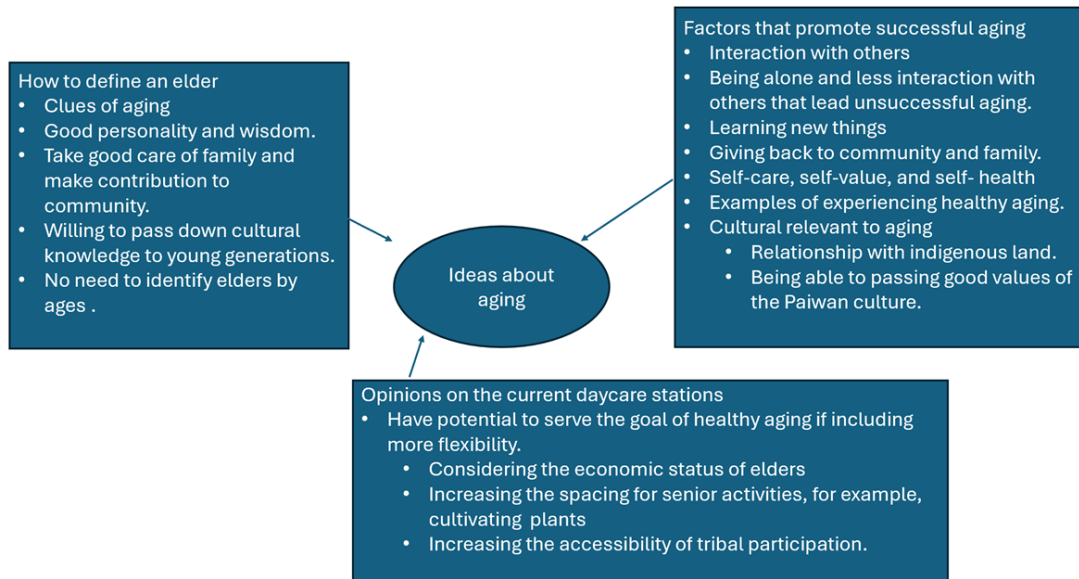


Figure 3.1: Themes for Ideas about Aging

Theme 1: Factors That Promote Successful Aging

Nine out of ten participants provided ideas about successful aging. Seven discussed how successful aging evolved continually through interaction with others. For example, an elder said “they can go to our neighbors’ houses to chat and walk around.” Others noted how the daycare stations were helpful in providing activities they could help elders maintain their health through connection with other people, with an elder saying, “they have opportunities of sing, dance, and make friends, and they could participate in other activities at daycare stations, and these seemed to reduce their fatigue.” A 55-60-year-old elder said:

The government builds this cultural and health station, and the elderly are coming here. I see the elderly coming here to take classes. I am very happy. It is not like before, when they were all lighting fires in their fields alone. There is no one to chat with. When we feel young, we will forget that we are already old people, and we will be like children. We will be very comfortable and will not feel any pain.

Relatedly, four out of ten participants linked social isolation and lack of interpersonal interaction with unsuccessful aging. One 80-year-old elder said, “The whole society is aging. If you are alone at home, you will age very unhealthy. It would be better if you could go out more and have more contact with others.”

Four elders implied that continuing to learn new things could lead to successful aging. During the focus group discussions, some participants mentioned their plans to engage in a second career after retirement, while others indicated they had arrangements in place for their later years. The focal point of the discussion revolved around the notion that if seniors have increased opportunities for learning in their later years, it not only enhances their physical and mental well-being, thereby prolonging the value of life, but also provided them with the chance to fulfill a cultural legacy. An elder aged 80+ years said: “we are old, but we still need to participate in more activities.” A 70-80-year-old elder said " If we don't think about anything or participate in anything when we get old, we will get old soon.” An elder aged 55-60 years said:

Look, the most successful example is _____ [indicating another elder in the focus group]. He knew very early what he would be busy with after retirement, so he was ready for his second career. Like me, I was sick at that time, but I thought ‘yes, what can I do and what can I give back to the community?’ Fortunately, now is the cultural revitalization and prosperity. I think the language part is relatively easy. I want to get the most advanced mother tongue certificate and then learn some skills. The elders learn things and continue to perpetuate the culture.

Relatedly, five elders spoke specifically about the importance of giving back to the family or community. They believed healthy elders made good contribution to the community and provided support to their families. This encompassed the transmission of cultural knowledge possessed by individuals to the next generation, preserving it for their benefit, and making contributions to cultural heritage, all of which contribute to the health of late-life experiences. An elder aged 70-80 years said:

At this age, I want everyone to be able to interact with each other, to lead, and to improve our community. There are elders in every tribe. If every tribe has an elder like _____, they can pass on good practices to the next generation, which can improve the community. A healthy old man may have done some contribution to his family, living environment, and economy.

Another elder said that failure to pass down wisdom to younger generations during old age symbolized unhealthy aging.

Two participants thought self-care, self-value, and self- health management were keys for successful aging. For example, they said it was important to take good care of yourself and have

interests that make you happy and positive. Being self-directed and deriving motivation from learning leads individuals to find joy, which not only promotes mental and physical well-being but also fosters a desire to share happiness with others, contributing to overall health. An elder aged 70-80 years said:

Healthy aging is to find your own interests. If you say you love work, then go to work. If you like going to church, if you like singing, then go sing. For example, the principles you hear in church should be related to those of your relatives and friends. Friends shared that when you see someone you want to help, go, and help them. This is also very helpful to your body and mind, and it is also helpful to others. This way you can keep a happy mood every day and avoid aging early, so to maintain such a youthful mood, we must keep a happy mood, so that our health will be maintained for a long time.

On the other hand, an 80-year-old elder observed that cognitive decline is associated with unsuccessful aging, saying "So, when we get old, our bodies will age, but our minds are just like those of children. It means very healthy. But if our bodies also age, our minds will also age This is unhealthy aging."

In the discussion, six out of ten elders talked about how participating in cultural traditions were related to aging with success. Three elders gave ideas about cultivating Indigenous land can achieve healthy aging. For instance, when discussing how elders can maintain productivity, assist in their daily lives, and engage with others, these discussions were intertwined with the Indigenous land. A participant mentioned the weight of words, suggesting that the land carries our responsibilities, and even as we age, we can still rely on the land to provide strength. One 80-year-old elder said, "For us Paiwan people, land is our life, and we will never leave the land. When we are in the world, life grows from the land." A 70-80-year-old elder said: "I have to rely on the land to make money through farming." Another said, "No matter how old we are, we will still rely on the land. When the elderly are sick, they still go to the fields; The land is our mission...It is the same for us. Let the land be your best brother." Another 70-80-year-old elder talked about an older woman in the village, saying:

She is very old and has difficulty moving, but she has the same attitude towards life. She grows vegetables next to her house. Because she is active, her body will not age. This was the idea of the old woman. She would distribute the harvested crops to her relatives and friends. The old woman knew that she worked so hard and felt very good and happy.

Three participants highlighted the significance of transmitting positive values inherent in Paiwan culture, such as ancestor worship and respect for elders, tribal leaders, and chiefs. These perspectives were echoed by four other participants, emphasizing the potential for imparting these values to younger generations. Such cultural factors are believed to contribute to experiencing healthy aging among Paiwan individuals. An elder age 70-80 years said:

We, the Paiwan people, are a people who like to help each other. People always must find what they like to do. Following your own interests will help your life. If you don't keep doing it, you will not be happy. It won't help your health. _____ is also an elder who valued the whole tribe and family and continues the inheritance, so the annual harvest festival must be held. Every time, we must recall how our family came to this place [history and story], so that we can teach children and our family will grow stronger. The times have passed too much, and we have become very old so we should continue to pass on the culture and teach the culture so that we, the Paiwan people, can become stronger.

An 80-year-old elder referred to two other elders that exemplified healthy aging, saying:

_____ and _____, people whom I think have aged healthy, they are also old people. They also use their expertise in singing and learn from older people, and they all want to spread the word. They are busy. There are things that can never be finished. _____ is 65 years old and has her own expertise and wants to pass it on, so such examples can easily be publicized in the tribe. If we do this, we will leave our reputation, and we will want to live, learn, and teach until we are old.

Theme 2: How to Define an Elder

The participants reminded that group that the Taiwan government officially deems Indigenous Peoples age 55 and older as elders, and they can have access to governmental assistance. This topic led to heated discussion about the disparities between biological indicators of aging and social and societal experiences of aging. For example, five out ten participants said there was no need to define elders through age but to use other criteria.

Two provided physical definitions. A 50-60-year-old elder said "there is no need to use age as a definition, but rather the limitation of movement, the amount of wisdom, and tribe. Those who affirm him are called elders." One 60-70-year-old participant provided an example, and everyone agreed, "What are the symptoms that an old person has? Suddenly [he] wakes up

early morning or has genital problems that kind of the physiological response is slower, which means you feel older, so you need to take good care of it."

Seven said an elder shared wisdom, and three participants added that effective elders should have good character as well. For example, A 60-70-year-old participant said:

You don't need to use age to define whether you are an elder. I think an elder will take care of his family and think about the community. It doesn't have to be very old. Now (under government rules) we must recognize elders based on age. But in the village, if we talk about elders, we will talk about their character."

Another 60-70-year-old participant said:

As long as he has good character and serves the community, it can be said. 'It's the elders. He has this kind of idea and ability to lead the family, the community, and has good character and can lead everyone.' Only in this way can he be considered an elder. Although he is 70-80-years old, without this ability, he cannot be called an elder. Even if he is older but has no ideas and is not a good person, it is not in line with your performance as an elder. When we get old, we will forget and have no ideas. Although the 80-year-old elder may be able to pass on the inheritance from her childhood to the present, we must study, and we will learn a lot; Although some elders are 80 years old, they have a bad mentality, but some people have a good mentality when they are 80 years old. You can learn anything and learn what good elders look like. This is my answer.

Another 70-80-year-old participant said, "Those who respect others and are very humble are very important people. The so-called elders do not mean that they are elders when they are older. We need to see that he works seriously and does well in the community." Another 60-70-year-old participant said:

I think an elder will take care of her family and think about the community. It doesn't have to be very old. If she has good character and serves the community, it can be said. 'It's the elders.' She has this kind of idea and ability to lead the family, the community, and has good character and can lead everyone.

Theme 3: Opinions about the Daycare Stations

Six out of ten elders shared their opinions about the current daycare stations in which some were participating, and some were not. The three participants that attended said it enhanced their health. A 60-70-year-old participant said:

In the past, the elderly would stay alone and warm themselves by the fire. After arriving in daycare stations, they would do some things together. Being able to move their minds and move their bodies is the key to successful aging. Having hope and expectations is the key to successful aging.

Five participants implied that daycare stations have potential to support the health of elders in the communities, however it should have some conditions to achieve the goals. One 60-70-year-old participant said:

Now we have been promoting daycare stations. You see, the old people in the stations had received early Japanese education [during the Japanese occupation of Taiwan]. Now they have traveled outside or have received relatively higher education. I think they will continue to go to daycare stations in the future. It is very difficult, otherwise this place is a very good place for the elderly.

Three participants that were not attending the daycare stations said that they could not attend because it conflicted with their work. One elder made a case for government stipends for elders so that they could attend rather than work. For example, one 50-60-year-old participant said:

First, providing stipends or covering the insurance for all the participants in daycare stations. With the economy concerns, if the elders have stable economy that can support themselves or their families, they probably will consider joining the daycare station.

Another 50-60-year-old agreed, saying

Can the central government prepare a budget so that they can at least have some financial support for their daily lives before they are willing to participate? This is a very real problem now. The central government has not compiled a budget to use as pocket money. Give them (living allowance) and ask them to go to the cultural and health station instead of going to work. What will they do with their daily lives? Even if I give them \$200 New Taiwan Dollars a day, I believe more people will come. I think if it were me, I don't have a job and don't have any money, so I have no intention of going to the cultural health center. If the central government can prepare a budget to make their lives worry-free, the cultural and health stations will be successful.

Another 70-80-year-old elder agree and added, "They can also provide [private] insurance for everyone."

Several agreed with the idea that the daycare stations could use some of the land to grow vegetables and traditional plants. Then the elders could have more activities to work and share the harvest to other elders who could not enroll the daycare stations. One 50-60-year-old participant said:

No matter how old we are, we will still rely on the land. When the elderly are sick, they still go to the fields. The land is our mission, but something has changed now. It is the same for us. Let the land be your best brother. The station should again have a large vegetable garden, perfect for the crops they could make, but could have jointly managed agricultural land.

Focus group participants also advocated that the tribes should be able to organize activities at the daycare station. One 60-70-year-old said:

I also prefer tribes to do this health promotion work. Why do I say this? If the public sector can establish tribal organizations and give them a task, it will be very feasible. After all, there are no long-term public sector plans. It was decided directly by the tribe that we should let the tribe do this work. The young people in each tribe are very capable and can take on this task. We should return to our original leader organization. In the past, the leader would have taken care of widows and widowers.

Discussion

The findings from this study demonstrate that, for Paiwan elders, healthy aging is related more to staying engaged and interacting with others, while social isolation was linked to unsuccessful aging. Healthy elders should continue to learn new things, to give back to the family and community, and pass wisdom to the next generation. If elders maintain productivity in their later years, such as continuing to assist with daily family affairs, this is a symbol of healthy aging. This result was echoed to the report from older Aboriginal and Torres Strait Islander Australians that found that sharing wisdom and making contribution to communities were keys to successful aging (Delbaere et al., 2019). These findings also are like those of Lewis et al. (2011), who found that community engagement was an essential part of becoming a respected elder. Additionally, these findings are like those of Quigley et.al (2022) in their scoping review, who found aging well was fostered by the strength of a person maintaining connections to their own identity, their family, friends, the community, to their culture, and traditional lands.

In Taiwan, individuals aged 55 and above are legally defined as seniors. Due to the shorter life expectancy of Indigenous populations compared to non-Indigenous groups, Indigenous individuals are eligible for senior-related benefits, such as elderly allowances and discounts on public services, upon reaching the age of 55 (國內指標-原住民簡易生命表平均餘命, n.d.). However, focus group findings suggest that Paiwan elders felt that age is not a good determinant of whether an individual is considered an elder. Rather, being an elder meant being of good “character,” and this is determined by the individual's overall performance and the community's evaluation of them. Within the Paiwan community, the term "elder" seems to imply esteemed seniors and wise figures worthy of respect and may also represent role models that the Paiwan people aspire to emulate. This agrees with Dawes et al. (2022) who found there is a general understanding among Māori that the title of kaumātua is not self-proclaimed, but is determined by the contributions the person makes to culture, environment, and whānau (family).

Although not the intent of the focus group, participants provided opinions about the tribal daycare stations. The members of focus groups attending the stations liked them because they helped them interact and learn new things. Those that didn't attend noted that they could not be due to having to farm or work for wages. They advocated for the government to provide stipends to older adults so they could be able to decrease time at work and spend more time in the daycare stations. According to the Labor Insurance Bureau of the Ministry of Labor in Taiwan, Indigenous Peoples aged 55 and above who have household registration in the country and meet certain conditions are eligible to receive "Indigenous benefits" under the National Pension Act. This includes a stipend of NT\$4,049 per month (about US\$125) until the month before reaching the age of 65. However, excluded from this payment are 1) current military personnel, civil servants, and employees of public or private or have retirement pensions from these jobs; 2) individuals currently receiving disability allowances or veterans' living allowances or fully subsidized and accommodated by the government; and 3) those earning more than NT\$500,000 a year or having personal land and housing assets over NT\$5,000,000. Despite this, according to a survey conducted by (許俊才 et al., 2018b) of Indigenous elders in Taiwan, 60% still reported that their income was insufficient to meet their needs.

Several elders brought up the desire that the day care stations recognize the cultural context of land use and its role in healthy aging. They suggested that if daycare stations had access to more land for cultivating vegetables and traditional plants, elders could engage in more

activities related to farming and share the harvest with other elders who may not be enrolled in daycare stations. This result corresponded to a study that examined the ways that place influenced experiences of ageing for older Māori (Butcher & Breheny, 2016) and how their connection to the land offered a sense of solace and security and fostered independence in their later years. Instead of merely striving for self-sufficiency to avoid reliance on others, older Māori viewed aging as an opportunity for autonomy and the freedom to live in harmony with Māori values, exemplified by the concept of whakawhanaungatanga. This also was found by McKinley (2022), who interviewed American Indians in the U.S. and found being elders wanted to be in nature and work together as families in activities like planting and harvesting.

Another point mentioned in the focus group was the belief that the establishment and operation of the daycare stations should involve the participation of traditional tribal organizations. A few members expressed difficulties integrating tribal leadership into the daycare stations, and most members of the focus group, including the participating tribal chief, felt the daycare stations could play an important role in helping the tribal chiefs fulfill their responsibilities to care for the elders within their tribes. This finding is similar to that of Wettasinghe et al. (2020), who found that culturally sensitive care emphasizes family, community, cultural identity and empowerment as core principles, and with (Oosman et al., n.d.) who recommended integrating a high level of community engagement and augmenting intergenerational approaches in promoting health among Indigenous populations and communities.

Taken together, these findings show that the Paiwan community, perhaps due to its communal nature, benefits from social interaction and cohesion among its members, and this positively impacts healthy aging, individual well-being, and community development. Therefore, when discussing health impacts at the individual level, it is pertinent to consider interpersonal and community-level interactions. This finding is similar to that of Wright-St Clair et al. (2017) who compared Māori and non-Māori of advanced age in New Zealand. The authors found that, for Māori, healthy aging encompassed leisure and household activities, spiritual engagement, interpersonal interactions, and communication. In contrast, healthy aging was defined by non-Māori as good self-care, sleep routines, singing, leisure alongside work, and learning.

Limitations

Limitations in the study may have included issues translating questions from English to Mandarin and then to Paiwan language, potentially leading to responses deviating from the expected direction. Additionally, more men than women participated, and members of the focus group included individuals with positions in the tribe. Time constraints may have imposed limitations on focus group discussions to fit all the questions into the discussion. Finally, although efforts were made to listen well, demonstrate humility, and allow the participants to direct the discussion, elders may have felt that they needed to participate and respond in certain ways given my role in the community. However, the group had a lively discussion and provided valuable information about healthy aging in their communities.

Conclusions

This study represents the first attempt in Taiwan to construct research on the meaning of healthy aging among Paiwan elders. The findings indicate that factors influencing healthy aging include high levels of social interaction, being of good character, contributing to the family, community, and culture, and maintaining a strong connection to land. Furthermore, discussions on healthy aging also highlight how the definition of elders' roles within Paiwan communities shapes the ideal of aging well.

While this study has made some breakthrough discoveries in the field of health among Indigenous elders in Taiwan, further research is needed. It is imperative to attract scholars and experts from various fields to focus on issues concerning Indigenous elders. Throughout the course of this study, Indigenous elders ceased to be mere subjects of research; rather, they became the focal point, guiding the study towards a more Indigenous-centric approach. Consequently, there is a need for more interpretations rooted in traditional cultural significance and participation from diverse perspectives. Future research should consider issues of representativeness among research subjects, such as gender proportions, and to avoid overlooking minority voices when incorporating opinion leaders. Finally, there is an encouragement to utilize Indigenous languages in research.

Chapter 4: What are the reasons that Paiwan elders use or do not use the cultural daycare stations?

Introduction

With the consideration of the lack of social welfare programs, medical resources, and healthcare providers in the remote locations in which Taiwan's Indigenous Peoples live, the Council of Indigenous Peoples promoted the establishment of tribal-based daycare stations funded by the Long-term Care Fund since September 2016. The number of daycare stations has increased from 121 to 433 within Indigenous communities in Taiwan since 2018 (推展原住民族長期照顧文化健康站查核報告, 2019).

The Indigenous daycare stations provide medical assistance and activities. For medical assistance, the stations check participants' blood pressure, check blood sugar for elders with blood sugar problems, and make referrals to health providers as needed. The workers at the stations make calls to check the elders if they do not attend as expected. For activities, the station offers lunch during weekdays, health education, networking events, gardening, cultural activities, art education, and room for sharing belief of religion like singing songs from church.

In 2021, the Council of Indigenous Peoples published an evaluation report examining the tribal-based daycare stations in Taiwan (原住民族委員會全球資訊網, 2021). This report summarized common problems of implementing and operating daycare stations, such as a lack of evaluation of cultural activities. Although Indigenous elders can engage in some cultural practices in the daycare stations, it is unknown if these and other activities offered at the stations are truly what the elders enjoy. Also, this report did not provide sufficient information about recommendations and suggestions for improvement. It provided few tips or practical examples to demonstrate the best practices of culturally grounded interventions.

In addition, data for this report were not gathered from daycare participants and non-participants. For example, the authors did not interview Paiwan elders who were participating in the daycare stations or measure the attitudes of the workers in the daycare stations. Instead, they reviewed the worker's annual reports, they checked the educational syllabus of each daycare stations, and they considered the checklists from the worker's supervisors. The report was conducted by medical experts and administrative workers of this project, so it used academic and formal terms and concepts that were not understandable to the local communities. The entire report contained only governmental opinions, but not the voices of community members. Thus,

more research needs to be conducted to ascertain the credibility of this report in terms of the efficacy of the long-term care policy that has been employed in Indigenous communities (Gagnon et al., 2018).

Taiwanese current health-related policies are paying attention to the growing numbers of Indigenous elders, the number of daycare stations in a village, and the participation rates in the daycare stations. These rates can represent the achievements of the health policy. Still missing are studies exploring how the Indigenous elders who join daycare stations and use their services feel about the services or if their health and if their lives are improved by participating. Also not known is why Indigenous elders are not participating in the daycare stations. In a study comparing well-being among Indigenous Peoples and non-Indigenous People, Love et al. (2017) found that it is important to recognize the differences between the Indigenous and non-Indigenous worldviews. Thus, if all programs and policies must be implemented following the national vision, this will make it harder to implement programs that appeal to Indigenous elders.

More community-based programming and interventions are integrating culture as the framework into their design to ensure cultural appropriateness, such as land-based and Indigenous language-oriented interventions (Redvers, 2020). Studies in various Indigenous communities globally have incorporated Indigenous culture and language into their interventions and evaluation designs (Ahmed et al., 2021; Burgess et al., 2005). Studies of Whakawhiti Kōrero, a method for the Development of a Cultural Assessment Tool among Māori in Aotearoa (New Zealand), have shown how an Indigenous cultural lens can be brought into an assessment to evaluate Indigenous programs (DiLorenzo et al., 2015; Elder & Kersten, 2015).

However, many interventions and evaluations still lack consideration of culture, although authors encourage that culture should be valued in program evaluation studies (Venugopal et al., 2021). There is a need for research to evaluate interventions in Taiwan. The best way to do this is to by listening to Indigenous elders (Browne et al., 2009). However, this has not been done in Taiwan. Thus, the purpose of this study was to identify the reasons from participating in, or not participating in, Taiwan's tribal daycare stations established among a large number of Paiwan older adults.

Methods

Study Design

I administered a needs assessment survey with Paiwan elders in Jingfong Township to learn why some Paiwan elders do not want to participate in the current daycare stations and explore the factors that influence the participation of others.

Human Subjects-IRB

I secured approval for this research from the University of Hawai'i at Mānoa IRB. Appendix 7 includes the English and Mandarin versions of the approved consent form for this study.

Community Partners

Before I started the study, I met with the village chiefs to provide an orientation to my dissertation. I shared the purpose and expected findings of the study, the predictable consequence, the desire to present results to them and the community, and compensation for participation in this study. They approved the study.

The tribal-based daycare stations are under the Department of Indigenous Peoples Social Welfare of the Taitung County Government (臺東縣政府原住民族行政處-原住民社會福利, n.d.). I reached out to the director of this department and discussed my project, and the director and her team approved my research investigation in the tribes.

Sample

The sample included the Indigenous elders in the Jinfong Township, including those living in Sinsin, Chensin, Cialan, Binmao, and Riciou villages. Jinfong Township has a population of 3,659. About 1,004 of the residents are 55 years or older, accounting for 28% of the total population of the Township (台東縣金峰鄉公所 - Home, n.d.). The official age group for older adults among non-Indigenous Peoples is 65 years and older, whereas for Indigenous Peoples, it is defined as 55 years and older. This is the age group eligible to receive services from the tribal daycare stations.

For the needs assessment, eligible participants: 1) self-identified as an Indigenous Paiwan person, 2) were 55 years old or older, and 3) lived in a village in Jingfong Township. Current daycare station participants, former daycare station participants, and elders who did not consider joining the daycare stations were included.

To recruit daycare station participants, I met with the elders at the daycare stations and asked them to participate in this research study. For those who consented, I collected data from those attending the stations by walking the group through the survey and having individuals mark their answers on the questionnaire. For the former participants, I asked the daycare station workers for the list of people who have attended the daycare stations in the past, and I visited them with the introduction of this study. For those who consented, I collected data from them at their houses. I recruited those that have never participated by talking to the village officer to obtain information about the people who are at age above 55 years old and then visited those people to invite them to participate in the study.

The estimated target population of 55 years and older is about 1,004 people in Jingfong Township, and power analysis suggested that recruiting 214 participants would adequately power the survey. I obtained this number by using the precalculated set of sample sizes based on a margin of error of 5% in a chosen CI of 90% (Salazar et al., 2015).

Measures

I developed the survey based on the services of the daycare stations and common complaints heard from villagers who do not participate. It was first developed in English and then translated to Mandarin. It included 60 items altogether. Demographic items included age, living arrangements, village, current work status (working for wages), work location, retirement status, the last job prior to retiring, age of retirement, other work they engaged in (e.g., farming, caring for grandchildren), religion, and chronic disease status.

The respondents were then asked about the frequency of participation in daycare stations. People who were enrolled in daycare stations were guided to Section 1, which asked them to agree or disagree with various reasons for attending the daycare stations (from 1=strongly disagree to 4=strongly agree). Reasons included, for example, they have the time, they find the daycare offers an opportunity to pass down their culture, and they like that the workers check their health status. After this, they were asked four open-ended questions: When did you start attending the daycare station? What activities do you enjoy most at the daycare station? What activities don't you enjoy? and What activities or services should be changed or added?

Older adults who never attended or who participated in the past but dropped out were guided to Section 2, which asked them to rate their level of agreement with various reasons for not currently participating at the daycare stations (from 1=strongly disagree to 4=strongly agree).

Reasons included, for example, physically unable to attend, no time to attend, still working, and daycare station services are not relevant. Then they were asked an open-ended question: What can be changed or added to the daycare station that would make it attractive for you to attend?

All respondents were asked to complete Section 3, which asked about health concerns. These items were adapted from a similar tool by DiLorenzo et al. (2015) and included, for example: 1) Sometimes I don't take my medication like my doctor wants me to and 2) If I need care, my family provides it. Response options are based on a four-point Likert scale, from 1=strongly disagree to 4=strongly. The English version is in Appendix 1, and the Mandarin version is in Appendix 2.

The survey was pretested with two participants who met the recruitment criteria, one who was a current participant at a daycare station, and the other who was not (Draugalis et al., 2008). The pretest found that the survey tool made sense to respondents, took about 20 minutes to complete a one-on-one survey interview, and yielded good information. The pretest respondents also provided suggestions to improve the Mandarin translation and make survey questions more concise. Additionally, I asked two participants to be among the first to take the revised survey in case they could suggest other improvements to the clarify the questions or wording.

Procedures

To respect the communities, the consenting process occurred as part of an orientation to the chief. I introduced the procedures and purpose of this study, provided recruitment fliers (Appendix 11 for the English version and Appendix 12 for the Mandarin version), and answered questions before the study officially started. The recruitment flier and consent forms were provided in Mandarin, and discussion was invited. Some of the chiefs who were age 55 or older participated in this part. I recruited a translator who was on hand to translate the written Mandarin into oral Paiwan language to gain more accurate response from the elders.

Then I visited the daycare stations. Consent forms were given to the people who were willing to participate in the study. After recruiting participants, meetings with the participants were scheduled. At the meeting, I introduced this study again to the participants. I asked if they preferred to do the survey themselves, in a group, and with or without the Mandarin-Paiwan translator.

Last, I recruited non-participants identified by the daycare station workers or with the help of the chiefs. During the one-on-one interviews, I first asked the participants if they were

willing to complete a questionnaire and requested that they signed an informed consent form. They had the option to fill it out themselves; if they were unable to do so, I assisted them in completing the questionnaire. I also inquired whether they preferred to conduct the survey in Mandarin or in the Paiwan language.

For all groups, I allowed participants to ask questions about any items they did not understand. On average, each participant took 10 to 15 minutes to complete the questionnaire. Upon completion of the questionnaire, I provided the participants with their compensation.

Data Analysis

To ensure confidentiality, each completed survey was assigned an ID number. Answers from completed surveys were entered into Excel software and then exported to SPSS for data management and analysis. Participant characteristics were described for the entire sample and then compared between those who participated in the daycare station and those who did not. Responses to the items rated on the 4-point scale (strongly disagree to strongly agree) were collapsed into two categories – one with those agreeing or strongly agreeing to the statement, and the other with those disagreeing or strongly disagreeing with the statement. The results are presented as frequencies and tested for differences using the chi-square test. For open-ended data, the quantity of responses was counted, and I used EXCEL software to manage and analyze the results. From the responses of participants, if a certain answer was similar, it was grouped. Themes were used to group similar or same answers from the raw data.

Results

Characteristics of the Sample

Overall, 211 elders completed the survey; 77 elders attended the daycare stations, and 134 elders did not participate in the daycare stations. Of the 211 elders, 59 were from Chialan village (23 elders went to the stations, and 36 elders did not go to the station); 37 were from Lichiu village (18 elders went to the station, and 19 elders did not go to the station); 30 were from Chensin village (8 elders went to the station, and 22 elders did not go to the station); 40 were from Sinsin village (11 elders went to stations, and 29 elders did not go to the station); and 45 were from Binmao village (17 elders went to the station, and 28 elders did not go to the station).

Demographic characteristics of the full sample are shown in Table 4.1. The total sample included more females (68%) than males (32%). About 43% of the sample was under age 66

years, while 36% was 66 to 75 years, and 21% was above 75 years old. The elders in the sample mostly lived with other family members, and people living alone comprised only 7% of the whole sample. Only 14% of the sample was retired with a pension, while about 61% reported they were working for wages. Additionally, 83% of elders were working in non-paying areas, including farming (53%), caregiving (19%), and volunteering (12%). Most elders (88%) reported following a specific religion, and about 83% reported having one or more chronic conditions.

Table 4.1. Demographic Characteristics of the Sample

Variable	All elders in the sample (n=211) N (%)	Elders who attended the station (n=77) N (%)	Elders who did not attend the station (n=134) N (%)	Chi-square test
Gender				
Male	67 (32.0)	16 (21.0)	51 (38.0)	$X^2=5.96,$ $P=0.015$
Female	144 (68.0)	61 (79.0)	83 (62.0)	
Age Group				
<66	90 (42.7)	23 (29.0)	67 (50.0)	$X^2=17.67,$ $P=0.001$
66-75	76 (36.0)	26 (34.0)	50 (37.0)	
>75	45 (21.3)	28 (37.0)	17 (13.0)	
Living arrangements				
• Alone	25 (7.0)	16 (16.7)	9 (6.7)	$X^2=11.9,$ $P=0.001$
• With others	186 (92.5)	61 (83.3)	125 (93.3)	
Working for wages				
• No	129(61.3)	69 (89.6)	60 (44.8)	$X^2=41.37,$ $P=0.000$
• Yes	82(38.7)	8 (10.4)	74 (55.2)	
Other work				
• Caring for family/grandkids	41 (19.4) 112 (53.1)	20 (29.4) 35 (51.5)	21 (19.1) 77 (70.0)	$X^2=3.32, P=0.069$ $X^2=2.83, P=0.061$
• Farming	25 (11.8)	13 (19.1)	12 (10.9)	
• Volunteering	175(82.9)	74(96.1)	101(75.4)	$X^2=14.85,$ $P=0.001$
• Any other work				
Retired with pension				
• No	182 (86.3)	73 (94.8)	109 (81.3)	$X^2=7.475,$ $P=0.006$
• Yes	29 (13.7)	4 (5.2)	25 (18.7)	

Religion				
• No	26 (12.3)	5 (6.4)	21 (13.6)	X ² =3.812, P=0.051
• Yes	185 (87.7)	72 (93.6)	113 (86.4)	
Chronic disease				
• No	36(17.1)	11 (14.3)	25(18.7)	X ² =0.661, P=0.416
• Yes	175 (82.9)	66 (85.7)	109 (81.3)	

Also shown in Table 4.1 are the demographic differences between elders who attended and the elders who did not attend the daycare stations. The results show that the elders who participated in the daycare stations were more likely to be female (X²=5.96, P=0.0146), in the older age groups (X²=17.67, P=.0001<0.05), living alone (X²=11.9, P=.0007<0.05), not working for wages (X²=41.37, P=0.000), and not farming

Reasons Elders Attend the Daycare Station and Suggestions for Improvement

Table 4.2 shows the level of agreement with the reasons that elders attended the daycare station. Interestingly, 96%-99% of those attending the daycare stations agreed with every reason except “my family wants me to attend.” For example, they agreed that the daycare stations were convenient, they had the time to attend, they could meet friends there, and they enjoyed the activities. They agreed that the daycare stations facilitated discussion of community affairs and supported cultural practices and their transmission to the younger generation. They also felt that the workers understood their needs, helped monitor their health, and helped them find needed information.

Table 4.2. Level of Agreement with Reasons for Attending the Daycare Station (N=77)

	Agree or strongly agree. N (%)
Geographically convenient	76 (99)
Available time	76 (99)
Workers understand my need	76 (99)
Workers make sure I take my medications as directed	76 (99)
The worker tests my blood sugar	76 (99)
Workers help me find the information I need	76 (99)
Pass my Paiwan legacy to young people	76 (99)
Free time	75 (97)
Discuss community affairs	75 (97)

Share my traditional knowledge with others	75 (97)
See friends and relatives	74 (96)
Enjoy the general activities	74 (96)
Physically able to attend	74 (96)
We can share our religion	73 (95)
My family wants me to attend	56 (73)

Responses to the open-ended questions answered by elders who attended the daycare stations are shown in Table 4.3 About a half (52.2%) of the sample mentioned that they enjoyed most the cultural activities, while 33.7% enjoyed most the exercise, and 14% most liked the outdoor activities. For activities they liked least, about 62% of the elders did not identify anything. However, 13% said they did not have an interest in drawing, and about 12% did not like the indoor activities. Less than 10% did not like the handicraft, exercise, and singing activities. When asked about activities to add, about 44% did not mention anything. However, about 22% wanted more outdoor activities, and about 16% wanted more cultural classes.

Table 4.3. Activities Liked, Not Liked, or Needed at the Daycare Stations

Themes	Subthemes	N (%)
Activities enjoyed the most	Exercise	31 (33.7)
	Outdoor activities, like visiting other stations or dance competitions	13 (14.1)
	Cultural activities, like learning traditional history, songs, practice, food therapy, language. Handcraft	48 (52.2)
Activities not liked	None	48 (62.3)
	Drawing	10 (13.0)
	Activities you do alone	9 (11.7)
	Handcraft	3 (3.9)
	Exercise	6 (7.8)
	Singing	1 (1.3)
Activities that should be added	Outdoor activities	17 (22.1)
	Entertainment	5 (6.5)
	Massage	4 (5.2)
	Culture class	12 (15.6)
	Community activities	5 (6.5)
	None	34 (44.2)

Reasons Elders Do Not Attend the Daycare Station and Suggestions for Improvement

Table 4.4 shows the level of agreement with reasons elders do not attend the daycare stations. In response to personal reasons, about 22% of the sample agreed that they did not consider themselves as an older person, 80% agreed they were too busy with their work or caring for grandchildren, and 76% agreed that they could meet their friends without coming to the stations.

Two questions were asked about the workers at the daycare stations, with 64% agreeing that the workers did not understand their needs, and 29% feeling that the workers did not incorporate Paiwan culture in the activities. Four questions were asked about the activities at the daycare stations. About 67% were clear about which activities were offered at the stations; however, 52% agreed that they did not like the activities provided, 51% agreed that the activities do not reflect Paiwan spirituality, and 93% agreed that they preferred to discuss community affairs outside the daycare stations. In response to the three items related to health services provided by the stations, 89% already knew how to find health-related information outside of the station so did not need help, 63% agreed that they did not need reminders for medications, and 65% did not need the workers to check their blood pressure and blood sugar.

Table 4.4 Level of Agreement with Reasons Elders Might Not Attend the Daycare Station (N=134)

	Agree or strongly agree N (%)
Prefer discuss community affairs outside the stations	124 (92.5)
I know how to find health related information	119 (88.8)
Busy with work, caring for grandchildren	107 (79.9)
No need to attend for friends	102 (76.1)
No need me blood pressure or blood sugar checked	87 (64.9)
No need reminders to take medication	85 (63.4)
Workers do not understand my needs	85 (63.4)
Don't like the activities at the daycare station.	70 (52.2)
Activities do not reflect Paiwan spirituality	68 (50.7)
Don't have available time	47 (35.1)
Unclear what is offered	44 (32.8)
Workers do not understand or incorporate Paiwan culture.	39 (29.1)
Don't consider myself to be an older person/*-	30 (22.4)

Physically not able to attend	27 (20.1)
My family doesn't want me to go	21 (15.7)
Not convenient or too far	15 (11.2)

Fifty-six elders not attending the daycare stations responded to the open-ended questions, which were grouped in four categories (Table 4.5). About 39.3% related to the way activities were designed, saying for example that the activity should consider different ages among elders, be more connected to communities, and teach how to use a cellphone or computer. About 28.6% mentioned personal reasons, for example, they were still working for wages, farming, or caring for grandchildren or that they had no need to go to the daycare station. About 26.8% wanted daycare stations to add more cultural classes, for example, learning culture from the very old elders, learning hunting skills, and practicing Paiwan language. About 5.4% mentioned that the daycare stations could not accommodate people who were lying on beds and did not provide physical and/or occupational therapy or respite services for caregivers.

Table 4.5. Open-ended Answers about Why Elders Do Not Attend

Themes	Number commenting	Sample comments
Activity designed	22 (39.3)	<ul style="list-style-type: none"> • Outdoor activities, everyone can be a teacher • More related to the tribe • Should be designed for different ages • Class design should be connected to the community • Considered shy people are related to health • Don't enjoy the teachers and the materials for class • Learning with the young generation should design classes That can invite younger female elders teach how to use 3C
Personal reasons	16 (28.6)	<ul style="list-style-type: none"> • Social interaction is weak • Fewer young elders in the stations • Don't want to be there every day, but for outdoor activities • Hope to go with grandchildren, financial issue • Financial issues are important for elders
Add cultural classes	15 (26.8)	<ul style="list-style-type: none"> • The cultural class that for the next generation • Learning the Paiwan language more • Elders passing on traditional wisdom

		<ul style="list-style-type: none"> Elders and children learn together
Long-term care - related	3 (5.4)	<ul style="list-style-type: none"> Bathing assistance Need to investigate are health-related needs of elders Want my husband to participate so that I can do some errands for myself. PT/ OT therapy
Responses	N=56	

Differences in Health Concerns Between Elders Who Do and Do Not Attend the Daycare Stations

Table 4.6 shows the health-related concerns of the elders who attended and the elders who were not attending the daycare stations. Although the majority of respondents were able to manage their healthcare by themselves, elders who attended the daycare stations were more likely to see a doctor whenever they needed to and more likely to reach out to the daycare stations for help. However, elders who did not attend the daycare stations were more likely to get prescription medicine easily.

Table 4.6. The Frequency of Disagree or Agree to Health-Relates Questions with Chi-Square Test

Questions	Total sample (N=211) N (%)	Elders who attend (N=77) N (%)	Elders who did not attend (N=134) N (%)	Chi-square test
I have a doctor I can see whenever I need to. <ul style="list-style-type: none"> Disagree/strongly disagree Agree/strongly agree 	19 (9.0) 192 (91.0)	1 (1.3) 76 (98.7)	18 (13.4) 116 (86.6)	$X^2=8.87$, P=0.003
I know how to take good care of myself. <ul style="list-style-type: none"> Disagree/strongly disagree Agree/strongly agree 	8 (3.8) 203 (96.2)	3 (3.9) 74 (96.1)	5 (3.7) 129 (96.3)	$X^2=0.003$, P=0.9563
I maintain a healthy diet lifestyle. <ul style="list-style-type: none"> Disagree/strongly disagree Agree/strongly agree 	16 (7.6) 194 (92.4)	3 (3.9) 73 (96.1)	13 (9.7) 121 (90.3)	$X^2=0.377$, P=0.539
If I need care, my family provides it.				

<ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	13 (6.2) 198 (93.8)	7 (9.1) 70 (90.9)	6 (4.5) 128 (95.5)	$X^2=1.799$, P= 0.1798
If I need to see a doctor, I reach out to daycare stations for help. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	122 (57.8) 89 (42.2)	10 (13.0) 67 (87.0)	112 (83.6) 22 (16.4)	$X^2=99.924$, P < 0.01
I can go by myself to see a doctor. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	47 (22.3) 164 (77.7)	11 (14.3) 66 (85.7)	36 (26.9) 98 (73.1)	$X^2=4.469$, P=0.0345
If I need to take prescription medicine, I can easily get the medicine. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	18 (8.5) 193 (91.5)	16 (20.8) 61 (79.2)	2 (1.5) 132 (98.5)	$X^2=23.311$ P< 0.01
When I'm prescribed medicine, I always take it as directed. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	5 (2.4) 206 (97.6)	3 (3.9) 74 (96.1)	29 (1.5) 132 (98.5)	$X^2=1.221$, P= 0.2692
Sometimes I don't take my medication like my doctor wants me to. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	90 (42.7) 121 (57.3)	34 (44.2) 43 (54.8)	56 (41.8) 78 (58.2)	$X^2=0.111$, P=0.7390
To me, as long as I can walk and leave the house, I'm in good health. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	1 (0.5) 210 (99.5)	0 (0) 77 (100)	1 (0.7) 133 (99.3)	$X^2=0.578$, P=0.4471
11. If I feel sick, I will go to see a doctor right away. <ul style="list-style-type: none"> • Disagree/strongly disagree • Agree/strongly agree 	13 (6.2) 89 (93.8)	2 (2.6) 75 (97.4)	11 (8.2) 124 (91.8)	$X^2=2.663$, P=0.1027

Discussion

Quantitative data tends to be more compelling in conveying information to policymakers. Consequently, it often possesses greater potential to advance agendas related to social justice, a sentiment shared by researchers engaged in Indigenous health (Jaworsky, 2019; Prussing, 2018). This study represents the inaugural quantitative investigation conducted on the implementation of daycare stations in the Paiwan tribal regions. It aids in quantifying the perspectives and opinions of the elderly regarding the utilization of cultural health stations, shedding light on the

effectiveness of this policy implementation within the Paiwan tribal area. It also gathered opinions of both daycare station participants and non-participants in Jingfong township. A total of 211 elderly individuals participated, with about a third of them attending the daycare stations and two-thirds not attending.

Those who attended appeared happy with the activities and services provided by the daycare stations, although they would like more cultural activities, such as more classes on culture and Paiwan language taught by Paiwan elders, more opportunities to pass down cultural knowledge during class time, and activities connected to tribal affairs. They also wanted more outdoor activities. These findings are similar to those of McKinley (2022), who interviewed American Indians in the U.S. and found that elders wanted to be in nature, to stay active in the natural world, and to stay active through culture. Lack of integration of tribal affairs into the course design also was mentioned, and this finding is similar to that of Gomes et al. (2014), who stressed the importance of engaging Indigenous elders in community affairs, and with Oosman et al. (2021), who recommended integrating a high level of community engagement and augmenting intergenerational approaches in promoting health among Indigenous populations and communities.

Elders who attended daycare stations were more likely to be older, female, and free during the day. Those not attending were more likely to be younger, male, and busy with work and caring for grandchildren. In Taiwan, in addition to the health benefits and community-based long-term care services provided by the government, there are also economic safeguards for the elderly. For instance, aside from the old-age benefits and pensions provided by social insurance programs such as military, public, educational, and labor insurance, there are provisions for Indigenous seniors aged 55 and above (65 for non-Indigenous seniors). Each receives approximately USD 130 per month until death. For low-income seniors who are not receiving government-sponsored housing, additional living allowances are provided based on their family's economic status. There are also funeral assistance funds, aid for injuries and illnesses, emergency living assistance, and disaster relief (Bureau of Labor Insurance, 2024).

However, the findings suggest that this amount is inadequate for many Paiwan elders. This agrees with findings of Huang Yuan-Xie and Zhuang Li-Xin (2014), who conducted research in the central region of Taiwan and found that economic stability was a key factor influencing elderly participation in cultural health stations (黃源協、莊俐昕, 2014). This was

also found by Rahman et al. (2021) who gathered data from elders in Bangladesh and found that financial insufficiency reduced service use.

Large percentages of the sample said they did not require reminders for medication, could independently measure blood pressure and glucose, and knew how to seek health-related information. Despite this self-sufficiency, the surveyed elders participating in the stations expressed high satisfaction with the provided services, affirming the government's continued efforts in this domain. Notably, Indigenous-specific health services, as highlighted in the Aboriginal and Torres Strait Islander Health Performance Framework - Summary report, play a crucial role, emphasizing the positive impact on trust in services and cultural safety at the local level (Nolan-Isles et al., 2021). As translators of policies and local knowledge, workers of the daycare stations complete the tasks assigned by the government through transforming policy requirements (李秉純 et al., 2023).

Limitation and strength

A potential limitation in the data collection process may have occurred due to issues related to translating between English, Mandarin, and the Paiwan language, leading to potential misinterpretation and unclear responses. However, the researcher engaged translation professionals for the translation of questionnaires, and the researcher was a member of the Paiwan ethnic group, personally conducting interviews using the native language to ensure clarity in participant understanding.

Conclusion

The most significant feature and applicable aspect of this study is its comprehensive evaluation of the implementation of current culture daycare stations on a township-wide scale. To ensure the project's effectiveness, it is crucial to engage in further discussions about future participants and their needs. Moreover, the government should seriously consider and address the feedback from elderly participants regarding the operation of cultural daycare stations and make necessary adjustments.

Chapter 5: Summary

Since the issue of aging has gained attention, an increasing number of studies have focused on comparing aging differences across racial/ethnic groups. While this study focused on the health issues of elders from Indigenous communities, particularly in Taiwan, it also underscores that, even for research targeted at specific minority groups, the importance of aging issues requires multidimensional discussions grounded in perspectives of health equity, historical justice, and respect for ethnic diversity. Particularly when viewed from an Indigenous standpoint, we can better understand that the health of elders is entangled with the health of their cultures and communities.

To further knowledge about Indigenous elders and, more specifically, Paiwan elders, this dissertation explored three research questions. To answer the first question, “How do Indigenous Peoples define elderhood?”, I conducted a systematic review of studies to explore the definition of an elder in Indigenous communities and how this related to health. To answer the second questions, “From the perspective of Paiwan elders, what constitutes healthy aging?”, I conducted a focus group with Paiwan elders on their perspectives and thoughts regarding health and healthy aging. For the third question, “What were the reasons that Paiwan elders use or do not use the cultural daycare stations?”, I conducted a quantitative survey of older adults who are and who are not participating in daycare stations to explore the reasons for their choices.

Overall Findings

There are two major findings from these three studies. First, the literature review and the qualitative study found that the idea of healthy aging and elderhood were intertwined. Elderhood is not defined by age. Rather it is based in an elder’s character and commitment to the culture, community, and next generation. Within this definition of elderhood, healthy aging means to become an elder. This means to become of person of good character who continues to contribute to the community, serves as a role model, and helps provide a vision for the future based on tradition. In the community, if the significance of elders can be continuously deepened, various intervention models can be directly developed from traditional culture, whether in promoting elder health or in the current service design of the tribal daycare stations. As recommended by others, it is hoped that more elder-led initiatives can be seen in these health stations, utilizing the organization's resources to develop a variety of services that not only care for the elders but also

promote the autonomous development of the Indigenous communities (Hadjipavlou et al., 2018; Young, 2015).

Second, the qualitative study and the survey revealed differences in the older adults that attended and did not attend the daycare stations. Those more likely to attend were older women who did not also have to farm or work for wages. However, the majority of Paiwan older adults appeared to appreciate the daycare stations because they provided activities and health checks. Still, respondents felt that daycare station activities could be improved by better reflecting Paiwan culture, expanding opportunities to learn the Paiwan language and preserve culture, incorporating land-based activities, and better involving the traditional tribal governance structure.

Recommendations for Policy and Practice

The core value of this study lies in providing data that will help the Paiwan people advocate for improved services. Current services rely on Western health frameworks. Findings from my research provide a cultural perspective that could help in designing and implementing policies and services. Specifically, within Indigenous communities, elders hold significant roles that go beyond individual experiences, influencing the entire community. By recognizing the role of Indigenous elderhood within the community, services and policies can better support Indigenous healthy aging.

These findings should provide insights for the long-term operation of tribal daycare stations, such as considering how to increase spaces related to community cultural participation to make them more community-oriented rather than just government agencies. Additionally, the economic conditions of elderly individuals in their later years should be considered regarding their participation in activities. Understanding that elders do not participate in the daycare stations because the pension for older adults is low and they need to continue to farm or work for wages means that the pension system must be examined.

Further, elders in tribes have high expectations for the development of tribal health stations, but this requires more involvement of tribal cultural thinking and the participation of the entire community system in the design. Daycare stations should not be stand-alone organizations, but should be integrated into the traditional and cultural value system. For example, as discovered in Study 2, there is a conflict between elders' deep connection to the land and the standardized spaces of the daycare stations. Similar to many studies that highlight the importance

of land-based designs for aged care programs (Danto et al., 2022; Hansen, 2018; Walsh et al., 2020; Young, 2015), my dissertation showed that the importance of land and farming should be honored by and reflected in the daycare station. This approach underscores the significance of Indigenous land, which is intricately connected to the well-being of individuals both within and outside the community (Walsh et al., 2022).

Recommendations for Research

There are three recommendations for future research. First, in Taiwan, Indigenous peoples are often viewed as a collective research subject, yet this study focuses solely on older adults from the Paiwan tribes. While this may seem somewhat limited, future researchers are encouraged to explore other Indigenous groups and different age groups within them. This approach may provide a more complete and meaningful understanding of their needs across the diverse Indigenous groups in Taiwan. Additionally, comparative studies between different tribes and age groups can shed light on unique cultural practices and health outcomes, contributing to a more comprehensive body of knowledge.

Second, due to the scarcity of health data in Taiwan's Indigenous communities, I advocate for future research to not only prioritize qualitative studies but also establish quantitative databases to support empirical research (Datta, 2018). For instance, in the questionnaire survey of this dissertation, I have learned that detailed efforts in questionnaire design can enhance the usability of the original database, such as by including income brackets and welfare subsidy status for older respondents. Expanding quantitative data collection will allow for robust statistical analyses and trend identification, which are essential for developing targeted health interventions and policies. This dual approach of qualitative and quantitative research will help address the multifaceted nature of health issues in Indigenous populations.

Third, future research should involve tribal leaders and elders in its design and in the interpretation of findings. Their insights are invaluable for ensuring that the research is culturally relevant and respectful. I anticipate that future research will build upon the methods and findings of this dissertation to conduct action research and evaluate elder care programs. By engaging community leaders and elders, researchers can co-create interventions that are more likely to be accepted and effective. This participatory approach can also empower Indigenous communities, fostering a sense of ownership and agency in the research process and its outcomes. Furthermore, ongoing collaboration with these key stakeholders can facilitate the continuous improvement and

adaptation of care programs, ensuring they remain responsive to the evolving needs of the community.

Conclusion

In conclusion, this study provided valuable insights into the health and well-being of Paiwan elders within the context of Taiwan's Indigenous communities. By focusing on the specific needs and cultural significance of elderhood among Indigenous Paiwan communities, this dissertation highlighted important areas for policy development and community-based interventions. However, the study is not without limitations, including the narrow focus on a single Indigenous group of Taiwan and the existing limitations of each study design. Future research should aim incorporate qualitative and quantitative data to enhance the validation and comprehensiveness of findings for evidence-based strategy and tailored policy. Additionally, involving tribal leaders and elders in the research process will ensure cultural relevance and practical applicability. Ultimately, this study underscores the critical role of culturally informed care in promoting the health and sustainability of Indigenous communities, paving the way for further exploration and action in this vital field.

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Appendices – Consent Forms, Recruitment Fliers, and Measurement Tools

Appendix 1: Paiwan Elders Needs Assessment Survey (English)

Purpose: *The purpose of this survey is to learn your thoughts about the daycare station in your village. If you attend or not, I'm interested in your opinion about its services. First, I will record your name, gender, age, village, and so forth, and then ask questions about your thoughts. I will explain more if you have any further questions. Thank you for your time.*

Demographics

- 1) Gender: Male? Female?
- 2) Age: 55-60 yr 61-65 yr 66-70yr 71-75 yr 76-80 yr 80 yr above
- 3) Village: _____
- 4) Do you live alone or with others? I live alone I live with other people
- 5) If you live with others, check all that apply: Spouse Adult children
Grandchildren Siblings Friends Other (specify)

- 6) Do you work for wages? Yes/No Where _____
- 7) Are you retired? Yes/No
From where? _____ What year? _____
- 8) What Other work do you do? Focus on work _____ Farming Care for grandchildren
 Church work Volunteer Other _____
(specify) _____
- 9) Religion: Catholic Christian Buddhist Seventh-day Adventist _____
Other(specify) _____
- 10) Chronic diseases: Diabetes High blood pressure Arthritis _____ Stroke _____
Cancer Dialysis Other (specify) _____

Participation of daycare station

1. Have ever been to the daycare stations (Yes/ No) _____ (if no, skip to Section 2)
2. If yes, currently, how often do you go to the daycare station?
 Almost every day when it's open
 Several times a week

___ Several times a month

___ Just for a specific activity (specify) _____

___ I used to go, but I don't go anymore (if yes, then skip to Section 2)

Section 1 – For current daycare station users - **Why do you attend regularly?**

Please indicate your level of agreement/disagreement to the following statements.

Questions	1 = strongly disagree 2 = disagree 3 = agree 4 = strongly agree			
1. The daycare station is geographically convenient for me.	1	2	3	4
2. I like going from 8am to noon when the daycare station is open.	1	2	3	4
3. I have free time.	1	2	3	4
4. I am physically able to attend the daycare station.	1	2	3	4
5. I think the workers understand my needs.	1	2	3	4
6. The workers make sure I take my medications as directed.	1	2	3	4
7. The workers test my blood sugar.	1	2	3	4
8. The workers help me find information and resources I need.	1	2	3	4
9. I can see my friends and relatives.	1	2	3	4
10. My family wants me to attend.	1	2	3	4
11. I go daycare stations because we can share our religion.	1	2	3	4
12. I go daycare stations because We can discuss community affairs.	1	2	3	4
13. I go daycare stations because I can share my traditional knowledge with others.	1	2	3	4
14. I go daycare stations because I am able to pass my Paiwan legacy to younger generations.	1	2	3	4
15. I go daycare stations because I enjoy the activities.	1	2	3	4
16. When did you attend start attending the daycare station?				
17. What activities do you enjoy most at the daycare station?				
18. What activities don't you enjoy?				
19. What activities or services should be changed or added?				

--

Now go the Section 3

Section 2. Why don't you attend regularly?

Please indicate your level of agreement/disagreement to the following statements.

Questions	1 = strongly disagree 2 = disagree 3 = agree 4 = strongly agree			
1. Geographic distance is too far or inconvenient.	1	2	3	4
2. I am busy from 8am to noon when the daycare station is open.	1	2	3	4
3. I am too busy with work, grandchildren, or something else.	1	2	3	4
4. I have personal physical problems, like hard time walking or using the toilet.	1	2	3	4
5. I don't need to go to the daycare station to see my friends.	1	2	3	4
6. I don't consider I am older person.	1	2	3	4
7. My family does not want me to attend.	1	2	3	4
8. I am unclear about what is offered at the daycare station.	1	2	3	4
9. The workers do not understand my needs.	1	2	3	4
10. The workers do not understand or incorporate Paiwan culture.	1	2	3	4
11. The activities do not reflect Paiwan spirituality.	1	2	3	4
12. I do not need reminders to take my medication.	1	2	3	4
13. I do not need my blood pressure or blood sugar checked.	1	2	3	4
14. I have access to people outside the daycare station that can help me find information and resources.	1	2	3	4
15. I prefer to discuss community affairs outside the daycare station, for example with my family or with the chief directly.	1	2	3	4
16. I don't like the activities at the daycare station.	1	2	3	4
17. What can be changed or added to the daycare station that would make it attractive for you to attend?				

Section 3. Health Concerns

Questions	1 = strongly disagree 2 = disagree 3 = agree 4 = strongly agree			
1. I have a doctor I can see whenever I need to see one.	1	2	3	4
2. I know how to take good care of myself.	1	2	3	4
3. I maintain a healthy diet lifestyle.	1	2	3	4
4. If I need care, my family provides it.	1	2	3	4
5. If I need to see a doctor, I reach out to daycare stations for help.	1	2	3	4
6. I can go by myself to see a doctor.	1	2	3	4
7. If I need to take prescription medicine, I can easily get the medicine.	1	2	3	4
8. When I'm prescribed medicine, I always take it as directed.	1	2	3	4
9. Sometimes I don't take my medication like my doctor wants me to.	1	2	3	4
10. To me, as long as I can walk and leave the house, I'm in good health	1	2	3	4
11. If I do not feel sick, I don't need to see the doctor. (If I feel sick, I will go to see a doctor right away.)	1	2	3	4

Thank you for your time! Have a great day!

Appendix 2: Paiwan Elders Needs Assessment Survey (Mandarin)

排灣長者健康需求評估表

研究目的：本問卷的目的是要調查您是否參與部落文化健康站的經驗中學習。若您沒有參與，研究者本人也希望獲得您未參與的考量理由；若您有參與部落文化健康站的活動，研究者也很歡迎您盡量可以從本身與活動之中的互動感受而填答。首先，本分研究也會收集有關您個人的資訊，例如：姓名、性別、年齡、所居住的村莊等，接續就會進行到有關文化健康站的參與狀況。若對於題目有任何問題，請不吝與研究者詢問。誠摯地感謝您的協助填答問卷，祝福平安健康! Masalu!

基本資料 (若符合答案，請在答案前打勾 v)

- (1) 編號：_____ (2) 性別：__男 / __女
- (3) 年齡：__ 55-60 歲 __ 61-65 歲 __ 66-70 歲 __ 71-75 歲 __ 76-80 歲 __ 80 歲以上
- (4) 所居住的村莊：
- (5) 同住家人：__ 獨居 __ 與其他人同住，__ 配偶 __ 成人子女 __ 孫子女 __ 兄弟姊妹
__ 朋友 __ 其他：
- (6) 您現在是有支領薪水：__ 否 / __ 是，職業：__ 軍公教 __ 商 __ 工 __ 農林漁牧 __ 服務業 __ 家庭主婦
- (7) 退休狀態：__ 是 / __ 否；在民國_____年，從_____退休。
- (8) 是否從事其他工作：__ 農物 __ 照顧孫子女 __ 教會工作 __ 志工服務 __ 其他：
- (9) 信仰：__ 天主教 __ 基督長老教會 __ 基督復靈安息日會 __ 佛教徒 __ 其他：

(10) 是否有慢性疾病： ___否 / ___是 (___高血壓 ___關節炎 ___糖尿病 ___中風 ___癌症
 史 ___洗腎 ___其他： _____)

部落文化健康站參與程度

1. 是否曾經參加過文健站的活動？ ___是 / ___否

2. 最近多久去一次文健站

___ 幾乎每次開站都會去 (請接續填答第一部分並跳過第二部分，接著完成第三部分。)

___ 一個禮拜去不到三次，甚至幾個月才去不到五次 (請跳過第一部分填答並接續回答第
 二部分，接著完成第三 部分。)

___ 沒有去過 (請跳過第一部分填答並接續回答第二部分，接著完成第三 部分。)

___ 只有特定的活動才會接觸，請說明是甚麼活動_____ (請跳過第一部分填答並接
 續回答第二部分，接著完成第三 部分)

第一部分：甚麼原因讓我參加文化健康站

*請針對每一題圈選出最能反映您內心回答的數字

題目	1 = 非常不同意 2 = 不同意 3 = 同意 4 = 非常同意			
	1	2	3	4
1. 文健站的設站點對我來說很方便到達。	1	2	3	4
2. 文健站開站的時間是很適合參加的時間。	1	2	3	4
3. 我有充裕的時間可以參加文健站的活動。	1	2	3	4
4. 我的行動方便，不影響我去文健站參加活動。	1	2	3	4

5. 我認為文健站的照服員非常了解我的需求 (身心靈)	1	2	3	4
6. 文健站的照服員會協助我遵照醫師指示服藥或換藥。	1	2	3	4
7. 文健站的照服員會協助我量測血糖及血壓。	1	2	3	4
8. 文健站的照服員會協助我尋找我需要的資訊。	1	2	3	4
9. 我去文健站是因為去找親人及好友交流。	1	2	3	4
10 我去文健站是因為.家裡人要我參加文健站。	1	2	3	4
11. 我去文健站是因為我們可以分享信仰活動。	1	2	3	4
12. 我去文健站是因為我們可以談論部落事務。	1	2	3	4
13. 我去文健站是因為我們可以分享排灣族的傳統知識及文化。	1	2	3	4
14. 我去文健站是因為我們可以將傳統知識傳承給下一代。	1	2	3	4
15. 我去文健站是因為這裡有更多我可以學習的長輩。				
16. 總體而言，我去文健站是因為我很享受這裡的活動。	1	2	3	4
17. 甚麼時間點 (民國____年) 開始參加文化健康站?				
18. 我最喜歡哪些活動？請列出。				
19. 我最不喜歡或最不擅長的活動是甚麼？請列出。				
20. 哪些活動可以增加？哪些活動可以怎麼調整會更吸引人。				

第二部分：甚麼原因讓我沒有參加文化健康站

*請針對每一題圈選出最能反映您內心回答的數字

題目	1 = 非常不同意 2 = 不同意 3 = 同意 4 = 非常同意			
1. 文健站的設站點對我來說很方便到達。	1	2	3	4
2. 文健站開戰的時間是不適合我參加。	1	2	3	4
3. 因為我正在忙自己的工作（正職、照顧孫子女、志工等）	1	2	3	4
4. 我的行動不方便，導致我不方便文健站參加活動。	1	2	3	4
5. 我不去文健站是因為我不需要在文健站與親友交流。	1	2	3	4
6. 我不去文健站是因為我認為自己很老。	1	2	3	4
7. 我不去文健站是因為我的家人不希望我去。	1	2	3	4
8. 我不去文健站是因為我不清楚他們有哪些活動。	1	2	3	4
9. 我不去文健站是因為我不需求照服員給我協助。	1	2	3	4
10. 我不去文健站是因為我看不出來活動有融合文化的考量而設計。	1	2	3	4

11. 我不去文健站是因為太少能夠讓我自由發揮專長的活動。	1	2	3	4
12. 我不去文健站是因為我不需要被照服員提醒服藥時間。	1	2	3	4
13. 我不去文健站是因為我不需要照服員幫忙量測血糖及血壓。	1	2	3	4
14. 自己有尋求醫療協助及知識的管道，所以不用去文健站找幫忙。	1	2	3	4
15. 我傾向在部落裡面談論部落的事物，而不是文健站。	1	2	3	4
16. 總體而言，我沒有去文健站是因為我沒有很喜歡那裡的活動。	1	2	3	4
17. 可以做哪些調整，或是增設哪些活動跟設施，可以增加參加意願？				

第三部分:自我健康管理相關

*請針對每一題圈選出最能反映您內心回答的數字

題目	1 = 非常不同意 2 = 不同意 3 = 同意
----	--------------------------------

	4 = 非常同意			
1. 當我需要就醫時，我自己有固定去看的醫生。	1	2	3	4
2. 我知道如何照顧好自己。	1	2	3	4
3. 我會維持健康良好的飲食型態。	1	2	3	4
4. 若我需要照顧，家人會是主要照顧者。	1	2	3	4
5. 若我需要就醫，我會去文健站尋找協助或幫忙。	1	2	3	4
6. 我可以自行去找醫生看病。	1	2	3	4
7. 對我來說能自行向醫療單位領取處方用藥是很簡單的事。	1	2	3	4
8. 當醫生告知我需要定期服用慢性病用藥時，我會遵守。	1	2	3	4
9. 有的時候我並不會按照醫生的指示正常服藥。	1	2	3	4
10. 對我來說，能在自己的家裡附近走動，就是表示還很健康。	1	2	3	4
11. 我不舒服的時候，我會立即去看病。	1	2	3	4

感謝您的寶貴時間! Masalu!

Appendix 3: Paiwan Elders Focus Group Questions (English)

- 1) At what age do you think that a person becomes an elder in your community?
- 2) How do you know if someone is regarded as an elder or not?
- 3) Is there anything that happens to mark this transition?
- 4) Do you think things have changed for elders these days, as opposed to say, 20 years ago?
If so, in what ways? (Probe different comments by participant.)
- 5) What do you think successful aging means?
- 6) Why do some Elders age well and some do not?
- 7) What are the signs of an elder who is aging well? For example, can you think of someone in this community who is aging really well? (Allow a response, and then follow up with: How can you tell they are aging well, as opposed to someone who is not?)
- 8) What are some of the signs, or symptoms, of poor aging? Or unhealthy aging?
- 9) Can poor aging be prevented?
 - a. If yes, what can people do to prevent poor aging?
 - b. What does a person need to do to age well? (Is doing the same as being?)
- 10) Do you think there are differences in how people age when living in our community versus outside of our community? How so? Why do you think/these differences (s) exist? (If applicable).
- 11) What role do you think your community plays in whether or not someone grows older in a positive and healthy way?
- 12) How does getting the older affect you as a person? Give example(s). Probing questions:
 - a. How does aging impact your body? Bodily impact
 - b. How does aging impact your spiritual well-being? Spiritual impact
 - c. How does aging impact your emotions? Emotional impact
 - d. How does aging impact your thoughts? Cognitive impact
- 13) Do you think elders in your community are aging successfully?
- 14) How does someone in your community learn about aging successfully? Are there ways that people share this knowledge?
- 15) Is there anything about aging or being elder that you want to tell me, that I haven't asked about yet?

Appendix 4: Paiwan Elders Focus Group Questions (Mandarin)

探索排灣族長者之健康與健康老化之意義

歡迎您參與本研究的焦點團體訪談，採訪的過程唯有本研究主持人以及受訪者進行 1.5 至 2 小時的焦點團體訪問，訪問 15 題開放式題。並在取得受訪者同意後進行錄音以及錄影，為製作訪問逐字稿使用。Masalu! 謝謝您!

以下為 15 提討論題目:

- 1) 您認為幾歲才能被定義為長者?
- 2) 你如何定義一個人是否被視為長者?
- 3) 呈上題，有什麼明顯的事件或是轉變的時點?
- 4) 您認為這 20 年間，對長者來說有甚麼特別的變化?
- 5) 你認為成功老化的定義為?
- 6) 為什麼有些長者能夠健康的老化，而有些卻沒有?
- 7) 健康老化的徵兆是甚麼? 您可以舉個例子，在我們社區之中有哪些人是成功老化的案例?
他們成功老化的經驗是甚麼呢?
- 8) 有甚麼症狀或是事件能夠說明沒有成功的老化?
- 9) 您認為可以成功預防不健康的老化嗎?
 - a. 若您的回答為是，哪些事情是可以預防部健康老化?
 - b. 一個人需要做什麼才能成功老化?
- 10) 您認為居住在社區內與居住在社區之外衰老是否存在差異? 有哪些差異呢?
- 11) 您認為社區能夠發揮甚麼角色協助一個人成功老化?
- 12) 變老對於一個人來說，有甚麼影響? 請提供例子。
 - a. 老化對您的身體影響為?
 - b. 老化對您的精神層面的影響為?
 - c. 老化對您的情緒(感情面)影響為?
 - d. 老化對您的認知或是思考事情方面有甚麼影響?
- 13) 您認為我們社區的長者正在成功老化嗎?
- 14) 在您社區中是否有長者有經驗到成功老化? 社區中的人有沒有辦法分享或得到這

知識?

- 15) 還有沒有任何有關於衰老或變老的事要分享呢?

Appendix 5: Inform-Consent Form to qualitative research Study 2 (English)



University of Hawai'i Consent to Participate in a Research Project

Yu-Chi, Huang, Principal Investigator

Project title: Exploring Paiwan Elder View of Health, Aging, and Service Preference

Djavadjavai! My name is Yu- Chi, Huang 黃喻祺 (Kalesekes Kaciljaan) and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the Public Health Studies. As part of the requirements for earning my graduate degree, I am doing a research project.

What am I being asked to do?

If you participate in this project, I will meet with you to gather data for my need assessment survey at a location and time convenient for you. I will ask you if you prefer to do the survey yourself or with a translator.

Taking part in this study is your choice.

Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you. Your choice to participate or not participate will not affect you.

Why is this study being done?

The purpose of my project is to identify the reasons that Paiwan elders participate and do not participate in the current program established by the Taiwan government. I am asking you to participate because you are qualified to participate in this study.

What will happen if I decide to take part in this study?

The interview will consist of 15 open-ended questions. It will take 1.5 hours to 2 hours. The interview questions will include questions like, “ What do you think successful aging means” and “Why do some Elders age well and some do not? ”

Only you and I will be present during the interview. With your permission, I will audio-record the interview so that I can later transcribe the interview and analyze the responses. You will be one of about 10 people I will interview for this study. With your permission, I will also video-record the interview so that I can analyze your movements during the interview.

What are the risks and benefits of taking part in this study?

I believe there is little risk to you for participating in this research project. You may become stressed or uncomfortable answering any of the interview questions or discussing topics with me during the interview. If you do become stressed or uncomfortable, you can skip the question or take a break. You can also stop the interview or you can withdraw from the project altogether. There will be no direct benefit to you for participating in this interview. I expect these data will help develop a lens to guide culturally appropriate health and eldercare policy and programs for the Indigenous Paiwan community.



University of Hawai'i
Consent to Participate in a Research Project

Yu-Chi, Huang, Principal Investigator

Project title: Exploring Paiwan Elder View of Health, Aging, and Service Preference

Privacy and Confidentiality:

I will keep all study data secure in a locked filing cabinet in a locked office/encrypted on a password protected computer. Only my University of Hawai'i advisor and I will have access to the information. Also the University of Hawai'i Human Studies Program has the right to review research records for this study.

After I write a copy of the interviews, I will erase or destroy the audio-recordings. When I report the results of my research project, I will not use your name. I will not use any other personal identifying information that can identify you. I will use pseudonyms (fake names) and report my findings in a way that protects your privacy and confidentiality to the extent allowed by law.

Compensation:

You will receive a NT\$300 shopping voucher for PX Mart (全聯福利中心) for your time and effort in participating in this research project.

Future Research Studies:

Even after removing identifiers, the data from this study will not be used or distributed for future research studies.

Questions:

If you have any questions about this study, please call or email me at [phone 0986401777 & email: huangyc@hawaii.edu]. You may also contact my advisor, Dr. Kathryn Braun, at [email: kbraun@hawaii.edu]. You may contact the UH Human Studies Program at +1 808.956.5007 or uhirb@hawaii.edu to discuss problems, concerns, and questions; obtain information; or offer

input with an informed individual who is unaffiliated with the specific research protocol. Please visit <http://go.hawaii.edu/jRd> for more information on your rights as a research participant.

If you agree to participate in this project, please sign and date this signature page and return it to: huangyc@hawaii.edu

Keep a copy of the informed consent for your records and reference.



University of Hawai'i

Consent to Participate in a Research Project

Yu-Chi, Huang, Principal Investigator

Project title: Exploring Paiwan Elder View of Health, Aging, and Service Preference

Signature(s) for Consent:

I give permission to join the research project entitled, "*The meaning of Health of elders in Paiwan Community.*"

Please initial next to either "Yes" or "No" to the following:

_____ Yes _____ No I consent to be audio-recorded for the interview portion of this research.

_____ Yes _____ No I consent to being video-recorded for the interview portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

Maljimalji Masalu! 謝謝! Mahalo!

Appendix 6: Inform-Consent Form to qualitative research Study 2 (Mandarin)



研究參與知情同意書

研究計畫名稱或主題： 探究排灣族人對健康定義之研究

研究計畫執行機構： 夏威夷大學 University of Hawai'i

研究主持人： 黃喻祺 **職稱：** 博士生

共同/協同主持人： Kathryn Braun **職稱：** 教授

研究計畫聯絡人： 黃喻祺 E-mail: huangyc@hawaii.edu 電話: 0986401777

研究經費補助/贊助單位： University of Hawai'i

研究目的： 藉由本研究探尋排灣族人對於健康的定義，以利往後健康政策及應用以及健康介入活動設計之用。

為何邀請您參與？ 本研究將採訪十位居住在台東縣金峰鄉之 55 歲以上之排灣族人已收集族人之意見作為研究材料分析，因您符合本研究的基本條件，所以邀請您加入本研究。

研究活動

- (一) 時間及地點：將依受訪者就為便利之活動場所而定。
- (二) 參與方式：採訪的過程唯有本研究主持人以及受訪者進行 1.5 至 2 小時的焦點團體訪問，訪問 15 題開放式題。並在取得受訪者同意後進行錄音以及錄影，為製作訪問逐字稿使用。

可能承受的風險及因應措施

若受訪者因參與過程產生可能會有的壓力或是題及隱私，影響受訪者情緒起伏而造成心理不適，可以及時向採訪者反應。

研究補償

受訪者將會因為參與完整的受訪程序而獲得 300 元台幣價值之全聯福利中心禮卷。

研究資料之保存期限及運用規劃

1. 您所提供的個人資料，我們將輸入電腦且編碼，妥善保存在設有密碼的硬碟或電腦裡，且於研究結束一年內刪除銷毀，並只使用在本研究。
2. 未來研究成果呈現時，您的真實姓名及個人資料將不會出現在報告上；若您有興趣瞭解研究結果，完成研究後，可提供您摘要報告。

暫停及退出研究之權益

過程中，若您感到不舒服，想要暫停或退出研究，我們會完全尊重您的意願。即便研究結束，有任何問題，都歡迎聯絡我們。

參與權益第三方諮詢管道

本研究由美國夏威夷大學委託校內人類研究倫理審查委員會已倫理審查通過，若想諮詢參與研究的權益或提出申訴，請聯絡該委員會，電話：808.956.5007 或 Email: uhirb@hawaii.edu

雙方簽名欄位

研究參與者：

錄音及錄影：同意-錄音錄影 不同意-錄音錄影

成果回饋：研究完成請提供報告，寄至 _huangyc@hawaii.edu

不用了，謝謝

簽名：_____ 日期： 年 月 日

研究團隊簽署欄：

本同意書一式兩份，將由雙方各自留存，以利日後聯繫

計畫主持人/共同主持人/研究人員簽名：_____ 日期： 年 月 日



University of Hawai'i

Consent to Participate in a Research Project

Appendix 7: Inform-Consent Form to quantitative research Study 3 (English)



University of Hawai'i Consent to Participate in a Research Project

Yu-Chi, Huang, Principal Investigator

Project title: Exploring Paiwan Elder View of Health, Aging, and Service Preference

Djavadjavai! My name is Yu- Chi, Huang 黃喻祺 (Kalesekes Kaciljaan) and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the Public Health Studies. As part of the requirements for earning my graduate degree, I am doing a research project.

What am I being asked to do?

If you participate in this project, I will meet with you to gather data for my need assessment survey at a location and time convenient for you. I will ask you if you prefer to do the survey yourself or with a translator.

Taking part in this study is your choice.

Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you. Your choice to participate or not participate will not affect you.

Why is this study being done?

The purpose of my project is to identify the reasons that Paiwan elders participate and do not participate in the current program established by the Taiwan government. I am asking you to participate because you are qualified to participate in this study.

What will happen if I decide to take part in this study?

The survey consists of 60 questions. The first part collects information about yourself (demographic questions). The second part asks about your participation in the daycare stations. The third part asks about health behaviors.

What are the risks and benefits of taking part in this study?

I believe there is little risk to you for participating in this research project. You may become stressed or uncomfortable answering any of the survey questions or discussing topics with me during the time. If you do become stressed or uncomfortable, you can skip the question or take a break. You can also stop the process, or you can withdraw from the project altogether. There will be no direct benefit to you for participating in this interview. I expect these data will help develop a lens to guide culturally appropriate health and eldercare policy and programs for the Indigenous Paiwan community.

If you agree to participate in this project, please sign and date this signature page and return it to:
huangyc@hawaii.edu

Keep a copy of the informed consent for your records and reference.

Appendix 8: Inform-Consent Form to quantitative research Study 3 (Mandarin)



研究參與知情同意書

<p>研究計畫名稱或主題： 探討排灣族長者對於健康及健康老化的意義以及長者照顧服務偏好</p>
<p>研究計畫執行機構： 夏威夷大學 University of Hawai'i</p>
<p>研究主持人： 黃喻祺 職稱： 博士生</p>
<p>共同/協同主持人： Kathryn Braun 職稱： 教授</p>
<p>研究計畫聯絡人： 黃喻祺 E-mail: huangyc@hawaii.edu 電話: 0986401777</p>
<p>研究經費補助/贊助單位： University of Hawai'i</p>
<p>研究目的： 藉由本研究探尋排灣長者對於健康及健康老化的定義以及長者對於長者照顧需求服務的偏好研究，以利往後健康政策應用。</p>
<p>為何邀請您參與？ 本研究將採訪十位居住在台東縣金峰鄉之 55 歲以上之排灣族人已收集族人之意見作為研究材料分析，因您符合本研究的基本條件，所以邀請您加入本研究。</p>
<p>研究活動</p> <p>(一) 時間及地點：將依受訪者就為便利之活動場所而定。</p> <p>(二) 參與方式：參與研究者可以依照個人的狀況選擇 (1)自行填答問卷 (2)需要由計畫主持人在旁協助填答，並可以要求排灣族母語翻譯。填答問卷時間約 20 至 30 分鐘，總共 60 題，其中包含人口學資料填答、文化健康站參與的狀況，以及對於個人健康及使用醫療資源的態度。</p>
<p>可能承受的風險及因應措施</p>

若受訪者因參與過程產生可能會有的壓力或是題及隱私，影響受訪者情緒起伏而造成心理不適，可以及時向採訪者反應。

研究補償

受訪者將會因為參與完整的受訪程序而獲得 50 元台幣價值之全聯福利中心禮卷。

研究資料之保存期限及運用規劃

1. 您所提供的個人資料，我們將輸入電腦且編碼，妥善保存在設有密碼的硬碟或電腦裡，且於研究結束一年內刪除銷毀，並只使用在本研究。
2. 未來研究成果呈現時，您的真實姓名及個人資料將不會出現在報告上；若您有興趣瞭解研究結果，完成研究後，可提供您摘要報告。

暫停及退出研究之權益

過程中，若您感到不舒服，想要暫停或退出研究，我們會完全尊重您的意願。即便研究結束，有任何問題，都歡迎聯絡我們。

參與權益第三方諮詢管道

本研究由美國夏威夷大學委託校內人類研究倫理審查委員會已倫理審查通過，若想諮詢參與研究的權益或提出申訴，請聯絡該委員會，電話：808.956.5007 或 Email: uhirb@hawaii.edu

雙方簽名欄位

研究參與者：

成果回饋：研究完成請提供報告，寄至 _____

不用了，謝謝

簽名：_____ 日期： 年 月 日

研究團隊簽署欄：

本同意書一式兩份，將由雙方各自留存，以利日後聯繫

計畫主持人/共同主持人/研究人員簽名：_____日期： 年 月 日



University of Hawai'i
Consent to Participate in a Research Project

Appendix 9: Paiwan Elders Focus Group Recruitment Flier (English)

The University of Hawai`i is conducting a study:

What is Health and Healthy Aging for Indigenous Paiwan Elders?

Are you interested in participating in this study and your age above 55 years old? If the answer is **YES...**

Yu- Chi, Huang would like to invite you to participate in a research study.

The purpose: This qualitative study will answer the following research question “how do Paiwan elders see health and healthy aging?” The goal of this study is to develop a Paiwan cultural lens related to health that can inform eldercare policies for the Indigenous Paiwan people.

- This research includes Indigenous Paiwan elders in the Jinfong Township, including those living in Sinsin, Chensin, Cialan, Binmao, and Riciou villages.
- This research will include 10 Indigenous Paiwan elders (2 from each village from Jinfong Township) for a focus group interview and a drawing project.
- Each of selected participant will receive A NT\$ 300 shopping voucher for PX Mart.
- A summary of the results to this research performed during the research will be available to study participants.
- Please feel free to ask questions before you decide to participate in this research.

**To learn more about the study,
please call Yu-Chi, Huang, at 0986401777**

Appendix 10: Paiwan Elders Focus Group Recruitment Flier (Mandarin)

探索排灣族長者之健康與健康老化之意義

若您對於本研究有參與意願且年齡超過 55 歲以上之金峰鄉排灣族長輩，

請不吝與研究人員_黃喻祺聯繫!

研究目的: 本研究將與排灣族長者進行焦點小組訪談，了解長者對排灣健康和健康老齡化的觀點。除了訪談，本研究也會與長者一同繪製族人對健康和健康老齡化的概念，以確保收集健康及健康老化更全面的意義。本研究結果將有助於開發具有排灣族文化主體之的視角，為提供排灣族社區和長者照顧政策和計劃上的建議。

- 本研究邀請金峰鄉來自新興村、正興村、嘉蘭村、賓茂村以及壠坵村 55 歲以上排灣族族人參加焦點團體訪談，以及繪畫發生實作。
- 本研究預計每村招募兩位 55 歲以上排灣族長輩，總共 10 位長輩。
- 各入選之研究參與者將在研究完成後收到 300 元全聯超市禮券。
- 各入選之研究參與者將在研究完成後收到本研究結果之摘要。
- 若對本研究有不清楚之處，請與我聯絡! Masalu! 謝謝!

研究人員聯絡方式

黃喻祺 Kalesekes Kaciljaan 小姐

電話: 0986401777

信箱: huangyc@hawaii.edu

Appendix 11: Paiwan Elders Survey Recruitment Flier (English)

The University of Hawai`i is conducting a study:

What are the reasons that Paiwan elders use or do not use the cultural daycare stations?

Are you interested in participating in this study and you are Paiwan people who age above 55 years old? If the answer is YES...

Yu- Chi, Huang would like to invite you to participate in a research study.

The purpose: This survey study will use a needs assessment type survey to collect data. The expected findings of this research will identify a gap between the care preferences of these Paiwan elders and the current services provided by the daycare centers, especially in revealing the opinions of elders who do not engage in the current daycare stations.

- This research includes Indigenous Paiwan elders in the Jinfong Township, including those living in Sinsin, Chensin, Cialan, Binmao, and Riciou villages.
- This research invites elders who attend the daycare stations or those that do not.
- Each of selected participant will receive a NT\$ 50 shopping voucher for PX Mart.
- A summary of the results to this research performed during the research will be available to study participants.
- Please feel free to ask questions before you decide to participate in this research.

**To learn more about the study,
please call Yu-Chi, Huang, at 0986401777**

Appendix 12: Paiwan Elders Survey Recruitment Flier (Mandarin)

探析影響排灣族長者參與部落文化健康站之調查

若您對於本研究有參與意願且年齡超過 55 歲以上之金峰鄉排灣族長輩，

請不吝與研究人員_黃喻祺聯繫!

研究目的: 本研究將使用需求評估調查問卷調查影響排灣族長輩使用文化健康站之原因，並提供排灣長者表達的照顧偏好服務與當前計劃之間的差距，以新排灣族人觀點之下如何增進文化照顧服務。

- 本研究邀請金峰鄉來自新興村、正興村、嘉蘭村、賓茂村以及壠坵村 55 歲以上排灣族長輩參與。
- 本研究邀請有參加、或曾經參加、或沒有參加之 55 歲以上長輩參與。
- 各入選之研究參與者將在研究完成後收到元全聯超市禮券。
- 各入選之研究參與者將在研究完成後收到本研究結果之摘要。
- 若對本研究有不清楚之處，請與我聯絡! **Masalu!** 謝謝!

研究人員聯絡方式

黃喻祺 **Kalesekes Kaciljaan** 小姐

電話: **0986401777**

信箱: **huangyc@hawaii.edu**