CHUKESE AND MARSHALLESE PARENT PERSPECTIVES OF EARLY CHILDHOOD DEVELOPMENT

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI‘I AT MĀNOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF EDUCATION

IN

EDUCATIONAL PSYCHOLOGY

March 2018

By

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Keywords: Micronesia, Parents, Developmental Screening, Early Childhood Development, Early Childhood Milestones, Cultural Practices
Abstract

Recently there has been a significant increase in the number of COFA citizens emigrating to the US. Reasons for emigration include seeking employment and education opportunities, and improved healthcare. To advocate for early childhood health and well-being while optimizing cultural sensitivity, it is important to understand parenting perspectives of COFA citizens.

Twenty adults (13 women, 7 men) from Chuuk and the Marshall Islands participated in five focus groups to discuss how parents care for and raise children between birth and five years old. Strategies emphasized by participants were maintaining nutrition, using local medicines, and observing children’s growth. Implications include how healthcare providers who work with Chuukese and Marshallese parents can link conversations about development with nutrition, and that these findings can help inform healthcare providers about local medicine practices. Additionally, educators can use these findings to further their understanding of the cultures and family backgrounds of Chuukese and Marshallese students.
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Introduction

Within the last decade, there has been a large increase in the number of citizens of countries from the Pacific with Compacts of Free Association (COFA) with the United States (US) emigrating to Hawai‘i and to other areas of the US (Heine, 2002; Hezel, 2013; United States Census Bureau, 2012). Currently, there is limited information available regarding parent and caretaker knowledge and conceptions of early childhood development and milestones from this part of the world. Cultures not yet well researched come from the jurisdictions of the Northern Mariana Islands, the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and the Republic of Palau. As a rapidly increasing number of citizens from these areas are coming to the United States, it is important to understand their practices concerning childrearing, as well as parent and caretaker understanding regarding early childhood development as it relates to their culture.

The American Academy of Pediatrics (AAP) (2017) estimates that one in four children are at risk for a developmental delay. Early identification of developmental delays is vital to the health and well-being of young children and their families, especially as children may benefit from intervention programs at younger ages (Hassink, 2015). A number of developmental screening tools have been recommended by the AAP (2017) as they assess several areas of early childhood development (U.S. Department of Health and Human Services, 2014). Parents and primary caregivers have a critical role in understanding their children’s development and advocating for their medical care. Child health professionals and parents share a common goal of seeking the best health and developmental outcomes for children; parents’ observations, concerns and experiences are essential in understanding children and their families. Due to the risk of early childhood developmental delays and disorders, it is critical that physicians and
parents understand the importance of developmental screening and early identification of possible delays within specific cultural contexts.

Parenting behaviors and practices are influenced by many factors, both contextual and cognitive (Reese & Gallimore, 2000). Economic resources, the safety of their children, their sense of community and interactions between household members are contextual aspects that affect parenting behaviors. Cognitive factors include how parents view their roles in terms of their children’s development, knowledge of developmental stages and milestones, cultural knowledge shared between parents of the same ethnic group, and knowledge regarding what children need to be successful in school. For example, Kolobe’s (2004) investigation of 62 Mexican-American mothers of infants between 9 and 12 months found that most mothers expressed that they emphasized nurturing behaviors more than developmental expectations, but they also believed that “above average” cognitive function was important. McEnvoy et al. (2005) examined parenting concepts among a sample of culturally diverse parents that represented 27 countries and identified universal themes regarding parenting philosophies (respect for elders and commitment to family) and practices (the importance of discipline, and reliance on medical professionals for their children’s health). However, there are many different kinds of parenting strategies, all of which are relevant to families’ cultures and environments (Small, 1998).

This study examined what parents and caretakers from the islands of Micronesia perceived and understood about early childhood development, as well as what they considered to be signs that a child was reaching an appropriate level of development. Understanding their perspectives is essential in order to advocate for early childhood health and well-being while making sure to retain cultural sensitivity, especially in order to promote the benefits of
developmental screening. In considering Chuukese and Marshallese participant responses regarding their parenting methods and their cultures, I posited suggestions regarding how to use this information to effectively advocate for regular developmental screenings in early childhood while considering cultural differences and practices.

**Literature Review**

**Developmental Screening in the United States**

According to the AAP, one in four children is at risk for a developmental delay (2017). Additionally, approximately 11%-20% of two-to-five-year-old children in the United States have a behavioral or emotional disorder (Weitzman & Wegner, 2015), and an estimated 25% to 40% of children with one mental health or behavioral diagnosis will have one or more additional diagnoses by age 16 (Costelo, Mustillo, Erkanli, Keeler, & Angold, 2003). Disorders that are often recognized the earliest include attention-deficit/hyperactivity disorder (ADHD) and anxiety disorders, most commonly seen during preschool and the early school-age years (Weitzman & Wegner, 2015).

Early identification of developmental delays and disorders is crucial to the well-being and health of children and their families, especially as physical, cognitive, linguistic, and social-emotional development rapidly takes place in children ages birth to five (U.S. Department of Health and Human Services, 2014). Children with developmental and behavioral challenges can often be identified early using formal standardized screening tools. Early identification of these challenges is important because children may benefit most from intervention at younger ages while their brains and bodies are developing the fastest (Hassink, 2015). Once a formal diagnosis has been given, children often have access to resources through early intervention or educational agencies and can begin intervention and therapy programs. In order to identify areas
that may require further evaluation, pediatric medical organizations such as the AAP recommend that children ages birth to five undergo early and frequent screenings in order to promote healthy growth and development. When developmental issues are identified early, further delays and secondary disabilities may be prevented (Johnson-Staub, 2012).

The AAP recommends that pediatricians screen children at ages 9, 18, and 30 months (or whenever there is a concern) at every health visit using formal screening tools (Hassink, 2015). Additionally, because standard developmental screening tools may not necessarily indicate signs of autism spectrum disorder (ASD), routine ASD-specific screenings should be completed at 18 and 24 months as well.

A number of organizations have introduced a coordinated effort called Birth to Five: Watch Me Thrive! (U.S Department of Health and Human Services, 2014). The purpose of this effort is “to encourage developmental and behavioral screening and support for children, families, and the providers who care for them” (U.S Department of Health and Human Services, 2014, p. 1). The program has four main goals: (a) to celebrate each child’s milestones and raise awareness of child development, (b) to promote screenings to ensure that children are healthy, (c) early identification of possible delays and concerns, and (d) to strengthen developmental supports.

It is important to note that children do not reach developmental milestones such as crawling, first steps and first words at the same time, but instead they develop along a continuum (Johnson-Staub, 2012). However, when milestones are not achieved within the expected time frame, there could be cause for concerns related to developmental disorders, health problems and other factors that may negatively impact a child’s development. High-risk factors that may result in a delay of achieving these developmental milestones include the effects of homelessness
(Haskett, Armstrong & Tisdale, 2015), subnormal growth, illness, neurodevelopmental issues associated with low birth weight (Xu & Filler, 2005), and the effects of maltreatment and neglect (Stahmer, Sutton, Fox & Leslie, 2008).

**Screening Tools Used in the United States**

According to the United States Department of Health and Human Services (2014), there are some considerations for physicians and families to be aware of regarding developmental screenings. First, screenings are designed to be completed in approximately 30 minutes or less. Second, the full range of development, skills, and capacity of children is unable to be fully assessed by screenings, as the main purpose of screenings is to identify possible delays and deficits through looking at a few key behaviors. Screenings are not useful for understanding children’s full ranges of abilities in all of the developmental domains. A third consideration is that screenings are unable to conclusively or definitively identify the type or extent of a disability, as they can only show the potential existence of a developmental delay. Finally, a fourth consideration is that more formal and comprehensive evaluations must occur after screenings to verify issues identified during the screening process (U.S Department of Health and Human Services, 2014).

Moodie et al. (2014) conducted an extensive review of commonly used screening tools in the United States. The tools that were reviewed had to meet a specific set of criteria:

- The tool must be designed only for the purpose of screening and be appropriate for children ages birth to five
- The tool must cover several developmental domains, including physical, cognitive, linguistic and social-emotional
• The tool must be available to be used by early childhood physicians, and
• Information must be available regarding the screening tool’s administration process, training, reliability and validity.

Complete summary tables with general information about many of the screening tools used in the US, in-depth profiles of each tool, evidence of reliability and validity for each tool, information on norming samples, as well as the additional criterion added by the partners of Birth to Five in their screening tool assessment may be found in the 2014 compendium Birth to Five: Watch Me Thrive! A Compendium of Screening Measures for Young Children (U.S. Department of Health and Human Services, 2014).

It is important to note that several of the tools on the complete summary list are not yet available in a variety of languages. The organizations implementing the Birth to Five: Watch Me Thrive! effort recognized that screening tools should be appropriate for each child regarding age, culture and language spoken; however, this can be challenging due to the lack of developmental screening tools tested with diverse populations (Peña & Halle, 2011). Evidence of reliability and validity were found in each of the tools evaluated by the Birth to Five: Watch Me Thrive! partners when assessing English language users; however, developers did not examine if the screening tools were reliable or valid in other languages. As a note, developers of the ASQ-3 reported at the time this compendium was published that translations of the screening tool in an unspecified number of different languages were being developed but had not yet provided information regarding when all of them will be available for use, and no information was provided regarding how evidence for reliability and validity with diverse populations was intended to be sought (U.S. Department of Health and Human Services, 2014).
Diverse Parent Perspectives and Knowledge of Early Childhood Development

In order to promote the benefits of regular early childhood checkups and developmental screenings, it is necessary to understand parent conceptions and perspectives of early childhood development. Caring about and meeting the needs of the parents increases their abilities to nurture and support their children, which is why the Zero To Three Policy Center (2016) conducted a survey of parents of young children. It included questions about early childhood brain development and how long-term development is influenced by early experiences, among other research questions. The researchers wanted to investigate several aspects of parents’ knowledge of child development, including what parents of young children understood about brain development, how children’s long-term development is influenced by early experiences, and what resources they used for help with parenting. Their goal was to use the findings to make certain that their programs appropriately and effectively provided resources to parents that were engaging and relatable, and to emphasize the importance of parents’ voices in the parenting of young children. The researchers organized discussion groups that consisted of single and married mothers and fathers in Caucasian, African-American, and Hispanic families who knew and trusted each other, and therefore felt safe in sharing their experiences. Following the discussion groups, a total of 2,200 Hispanic, African-American and low-income parents were surveyed using a 50-question instrument (Zero To Three, 2016).

After analyzing the data, the researchers noted that across all demographics, parents expressed similar conflicting emotions regarding how experiences during the first five years of life had a lasting effect on children, as shown in Figure 1 below (Zero To Three, 2016). Half of all parents believed that at six months of age the quality of care begins to have a long-term impact on children’s development, however, research shows that this impact actually begins at
Interestingly, 58% of fathers and 41% of mothers expressed wishing that they had understood more about brain development when their children were younger.


Additionally, there appeared to be an expectation gap when considering children’s capabilities (Zero To Three, 2016). For example, when asked at what age children are able to control their emotions (such as not having a tantrum when frustrated), 24% of all parents answered one year or younger, 18% answered two years, and 58% answered three years or older, when the approximate age this particular skill is acquired is three and a half to four years.

Parents surveyed in this study noted that they relied on information regarding early childhood development and parenting strategies from many sources, including family, friends, physicians, teachers, religious leaders and a variety of digital media sources, but also expressed a sense of being overwhelmed and somewhat confused by so much disparate information (Zero To Three, 2016). This demonstrates the need for providing parents and caretakers resources with reliable information, including those among diverse cultural groups. As Kolobe (2004) stated, “examining how culture and childrearing practices are related to optimal or non-optimal child development in minority families is an essential first step toward investigating whether these
practices may be enhanced through interventions…and may lead to positive developmental outcomes” (p. 441). Enhancement through non-threatening parent education, basic developmental assessments (e.g., vision, hearing), and follow-up processes based on results of basic developmental assessments may assist parents in seeking strategies to ensure optimal development of their young children. However, it is also important to note that while cross-cultural researchers can provide information regarding how groups differ, they may fail to detect within-group differences that may exist within a specific population (Kolobe, 2004).

Several studies have examined what parents from different immigrant groups consider as evidence of early childhood development as well as what childrearing practices are used. One such study is Kolobe’s (2004) investigation of 62 Mexican-American mothers of infants between 9 and 12 months, which found that most mothers indicated that they emphasized higher nurturing behaviors (degree of caring for the child) more than developmental expectations (what the child should be able to do by a certain age). Mexican-American mothers who believed that ensuring nurturing experiences for their children was essential also agreed that “above-average” cognitive functioning in children was important. This is consistent with research findings that suggest that parents from some diverse cultures strongly emphasize family and social relationships and may focus more on a child’s social development, while cognitive development seems to be more strongly emphasized in western cultures (Mandell, Novak & Zubritsky, 2005).

Additionally, Keels (2009) examined influences in European, Hispanic (specific Hispanic cultures not identified) and African-American families that affect behaviors in parenting as well as parenting beliefs and behaviors that are determined by culture. Keels found that 54.8% of participating Hispanic English-speaking mothers and 33.9% of Hispanic Spanish-speaking mothers believed that talking and reading to young children was important for cognitive
development. Analysis of the findings confirmed that parenting beliefs and behaviors were significantly associated with early cognitive development in young children, for example, mothers’ lexical knowledge and supportive parenting were directly associated with children’s 24-month Bayley Mental Development Index (MDI) scores. Additionally, the intraethnic group differences found were based on the level of acculturation of Hispanic-American families.

As Small (1998) stated, there are many types of parenting practices, and those practices are relevant to the culture and environment of the family. For example, Small discussed how San parents in Botswana worked with their babies to sit, stand and walk as soon as possible because physical ability was highly important in the San lifestyle. A parenting goal of the Gusii people in East Africa was to raise a submissive and obedient child that would be a productive worker on the family homestead. Gusii parents rarely showed affection (kissing, hugging) or talked with their babies because they did not view it as a valuable use of their time, which would likely be surprising to many people in Western cultures. In contrast, Small highlighted how Japanese mothers were less concerned about raising independent children and more focused on viewing the children as extensions of themselves and of being socially connected with others in society. This belief was also reflected in a study conducted by Bornstein and Cote (2001) that examined the relationship between Japanese mothers and infants. Results indicated that there were positive relations between several parenting behavior domains including nurturing, language, social and physical domains. Small (1998) pointed out that the Japanese goal of integration over individualization coincides with the cultural collectivism values. A parental goal in American culture is to raise children who are independent and self-reliant, and children are typically expected to learn rather than work. “The point is that culture, or the people that make up cultures, have various unstated, often unconscious goals for their kids” (p. xix). These
goals are linked to societal values and are often passed down from one generation to another. However, parenting goals are malleable; when a society changes, parenting goals change along with it.

One group of cultures that appears to be not as thoroughly researched regarding parental perspectives of early childhood development and child rearing practices is that of the Micronesian islands. As the number of immigrants from the COFA States coming to the US is rapidly increasing (United States Census Bureau, 2012), it is important to understand the practices and assumptions regarding childrearing from the parents of this region, as well as parent and caretaker knowledge and beliefs regarding early childhood development as it relates to their cultures. This information may assist physicians, educators and community organizations in advocating for early childhood health and well-being while optimizing cultural sensitivity.

I will now briefly discuss the historical and geographical context of the COFA nations in the geographic region of Micronesia, reasons for immigration to the United States, what is known about child-rearing practices in these cultures, and questions that arise about their perspectives and knowledge of early childhood development.

**Micronesian Immigrant Families**

Located above the equator between the Hawaiian Islands and the Philippines, Micronesia is an immense archipelago that consists of over 2,000 islands and coral atolls that span an area greater than that of the continental United States. There are five separate political systems within the islands and more than 12 different languages are spoken (Sadao, 2000; Ratliffé, 2010). An estimated 200,000 people inhabit more than 200 of the islands (Ratliffé, 2010).
The islands and atolls of Micronesia have been colonized by Spain, Germany, Japan and the US. At the end of World War II, Japan surrendered the islands to the US, making it the third time that colonial rule transitioned from one country to another as a result of war (Hezel, 2013). Additionally, throughout the 1940s and 1950s, 67 atomic and nuclear bombs were tested by the United States on and near the Republic of the Marshall Islands (RMI). As a result, hundreds of people were exposed to radioactive material and ancestral lands were destroyed (Hezel, 2013; Ratliffe, 2010).

In 1978, the United States granted self-rule to the islands, and they were then split into several political entities. The Northern Mariana Islands remained a commonwealth of the US, and the rest were divided into the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI) and the Republic of Palau. In 1986, the FSM and the RMI were recognized as independent nations by the United Nations, followed by Palau in 1992 (Hezel, 2013).

Although they are independent, the three island nations have a relationship with the US through Compacts of Free Association, which allow the US certain defense and military rights. The US is also responsible for providing financial assistance to each of the island nations. Additionally, the Compacts allow travel from the three Freely Associated States (FAS) to the US and the ability to work and attend school with few restrictions. Upon the signing of the Compacts, FAS residents were allowed to work and live in any US territory or state (Heine, 2002). However, ever since the island nations were recognized as independent, their economies have struggled, resulting in large numbers of islanders emigrating to the US seeking jobs they are unable to find in their own nations (Hezel, 2013).
In the 2010 US census, among people who reported only one Native Hawaiian and other Pacific Islander group, people from the islands of Micronesia composed 27 percent (United States Census Bureau, 2012). Specifically, between 2000 and 2010, the islanders from Chuuk, one of the four states in the FSM, had the largest rate of increased population in the US. The Chuukese population in the US in 2010 was more than six times larger than reported in 2000, increasing from less than 700 in 2000 to more than 4,000 in 2010. The Marshallese alone-or-in-any-combination population was reported to be approximately 7,000; however, that number more than tripled by 2010 with an increase to 22,000 people, and this growth was expected to continue (United States Census Bureau, 2012).

Many of the immigrants from the islands are coming to the US to pursue educational and job opportunities, as well as improved health care (Heine, 2002; Hezel, 2013). A number of the islands are still in the beginning stages of economic development and are developing improved educational and healthcare systems. Fisheries, taro and breadfruit and copra cultivation, small-scale tourism and light manufacturing make up the economic base, and job opportunities are limited (Heine, 2002; Hezel, 2013). Unemployment rates have increased, especially in the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI), and the rising costs of living have not been supplemented by increases in annual income (Heine, 2002). As a result, many people who move to the US do so due to economic necessity.

Current research emphasizes that Micronesia consists of many collectivist cultures (Heine, 2002; Hezel, 2013; Ratcliffe, 2010, Sadao, 1997; Sadao, 2000). Sadao (2000) explained that people in Micronesian cultures consider group cooperation, consensus, and “face saving” as highly important. They tend to avoid conflict and confrontation, and instead work to establish trusting relationships and the legacy of the family name (Sadao, 1997; Hezel, 2013). This can
especially be observed in how extended family and community members have important roles in
network for support and may seek out advice from available Western medicinal facilities but also
investigate traditional medicine options” (p.25). The popular mantra “It takes a village to raise a
child” appears to appropriately describe the Micronesian attitude toward child rearing. Family
relationships are close among both nuclear and extended family members, and often adults are
just as responsible for their children as they are for their siblings’ children (Ratliffe, 2010). One
example in Ratliffe’s study involved a woman who was raising six children from two of her
brothers in addition to raising her own biological child. Her role resulted in her having to move
to Hawai’i to look after her brothers’ children as they attended school while their parents were
earning a living in their home islands. While she received a certain amount of financial support
from her brothers, she also relied on assistance from the Hawai’i State government for housing,
food, and medical needs.

Non-English speaking children of COFA families are considered “vulnerable” due to
experiencing “‘risk factors’ related to healthy social, emotional, cognitive, and/or physical
development” (Collaborative Leaders Network [CLN], 2012, p. 23). Many families who come
to the US from the Marshall Islands remain affected by the health issues resulting from the
nuclear testing that include cancer, kidney failure and high infant mortality. As Sadao (2000)
pointed out, little research has been conducted investigating attitudes and perspectives of
Micronesian families of children with disabilities. In order to effectively promote the benefits of
developmental screening and early childhood well-being, it is necessary to understand
Micronesian parent and caretaker knowledge and perspectives of early childhood development.
Theoretical Framework and Research Questions

This study examined what parents and caretakers from the islands of Micronesia perceived about early childhood development (specifically ages birth to five-years-old) and how they knew whether or not a child was developing appropriately. The theoretical framework I applied was Vygotsky’s (1978) sociocultural theory, which suggests that social interactions influence the way people construct knowledge, as well as how they interpret the world and personal experiences (Jaramillo, 1996). His theory also proposes that learning is a social process and that the origin of human knowledge is in society and culture. According to Vygotsky, social interaction plays a fundamental role in the development of cognition. He believed that all people learn through interacting with others and integrating new knowledge into existing mental structures. As Pontecorvo (1993) stated, “Social interaction is an essential variable of development-and-learning, because individual functioning is preceded and accompanied by an interindividual functioning” (p. 190). For example, children participate in many cultural practices everyday, such as family mealtime, classroom instruction and school activities, household chores and conversational patterns. Engaging in these practices increases their understanding of the rules and behaviors that are expected of them during those activities (Miller, 2016).

A second aspect of Vygotsky’s theory is the zone of proximal development (ZPD), which is the gap between what a person can do alone and what that person can do with assistance. A mentor or collaborative group members can build on the learner’s existing knowledge to expand that knowledge slightly beyond their current level of understanding. When the learners are familiar with the persons assisting and they share a common goal in completing a task, they also share an understanding of the problem (Miller, 2016). Collaborative learning, modeling, and
scaffolding are strategies for supporting the development of knowledge and skills of learners, as well as facilitating intentional learning.

As family and community relationships are highly valued in Micronesian cultures (Hezel, 2002; Hezel, 2013; Ratliffe, 2010), I believed information about early childhood development might have been received from other family and community members, and that social interactions between family members furthered parents’ knowledge regarding how to raise and care for their children. Several questions related to Vygotsky’s (1978) sociocultural theory were addressed in this study, including:

• How do parents and caretakers of young children from the islands of Micronesia describe and characterize early childhood (birth to five-years-old) development, and what are some of the phases of development that are familiar to them?

• With which community members do Micronesian parents and caretakers discuss methods of caring for infants and young children? Is new knowledge regarding how to care for young children built upon existing knowledge?

• What strategies do parents and caretakers use when they have concerns about their child’s development and health?

• What strategies do parents use to promote children’s health and wellness?

Method

Participants

Participants in this study were men and women living in Hawai‘i who relocated to the United States from the islands of Chuuk State in the FSM and the Marshall Islands. A total of 20 people volunteered to participate in this study, 13 women and 7 men. Participants ranged in age from 31 to 69 years, with a mean age of 52 years. Four of the female participants did not have
biological children of their own; however, they had assisted other family members in raising their children. The other 16 participants had biological children, and 10 of those participants were also grandparents. All of the participants were recruited through an immigrant and migrant resource center on O‘ahu, Red Beach Resource Center (pseudonym) that served families from the islands of Micronesia. I contacted a gatekeeper of the organization and asked him if there were any clients who would be interested in participating in a focus group. He contacted individuals he believed would be interested in participating. Inclusion criteria to participate in the study included:

a) Being an adult age 18 or older
b) Self-identifying as from the islands of Micronesia
c) The ability to speak English
d) Having experience raising a child age birth to five-years-old by either being a parent or by having helped raise a child within their family or community.

**Instruments**

I developed 13 interview questions for focus groups based on the research questions and created a discussion guide based on the focus group design outlined by Hennink (2014) (see Appendix). The interview questions were designed to gather information from the participants concerning their thoughts and feelings regarding their experiences raising children between the ages of birth to five-years old and addressed each of the study’s research questions. I chose to conduct focus groups because I believed that more information would come from group discussions and interactions rather than individual interviews. Additionally, I thought that if participants already knew each other or were recruited from the same organization, they might feel more comfortable in sharing their experiences and perspectives. All 13 questions were
addressed in each of the focus groups. The interview questions were reviewed by my thesis committee and by the executive director of a local children’s advocacy organization, who has several years of experience working with different groups in Hawai‘i in advocating for the health, well-being and education of all children in the Hawaiian Islands.

Procedure

After recruiting participants, I formed four focus groups. Two of the focus groups took place at Red Beach Resource Center. The other two groups took place at convenient locations for the participants, one at a local restaurant, and the other at a health center. After I transcribed and coded the interview data, I formed a fifth focus group with six participants from the islands of Chuuk in order to check the accuracy of my findings. Three of those participants had been in an earlier focus group, but three new people joined us as well. In addition, I met with one of the Marshallese participants individually to check my findings with her. Before the focus groups began, I read through each section of the consent form and asked if participants had any questions in order to ensure they understood that their participation was voluntary and that I sought their permission to audio record the interview. All of the participants signed the consent form and granted me permission to audio record the sessions. After the focus groups concluded, participants were given children’s books for their participation in the study. I also provided refreshments for each of the focus groups. Table 2 shows the number of participants, island region and the length of each focus group.

Prior to each session, I asked a representative from Red Beach Resource Center to attend the focus groups to serve as a cultural broker. I felt that having a cultural broker would increase the level of trust and comfort felt by the participants, especially as I come from outside the group. My advisor, Dr. Katherine Ratliffe, attended the first four focus groups to serve as an
Table 2
Focus Group Participant Numbers, Island Region and Length of Interview

<table>
<thead>
<tr>
<th>Focus Group Number</th>
<th>Location</th>
<th>Total Number of Participants</th>
<th>Number of Male Participants</th>
<th>Number of Female Participants</th>
<th>Island Region</th>
<th>Length of Interview (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red Beach Resource Center</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>Chuuk</td>
<td>90</td>
</tr>
<tr>
<td>2</td>
<td>Local Restaurant</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>Chuuk</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>Red Beach Resource Center</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>Marshall Islands</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>Local Health Center</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>Chuuk</td>
<td>85</td>
</tr>
<tr>
<td>5</td>
<td>Red Beach Resource Center</td>
<td>6 (3 from first group, 3 new)</td>
<td>2</td>
<td>4</td>
<td>Chuuk</td>
<td>70</td>
</tr>
</tbody>
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additional cultural broker, as she had 28 years of experience working with people from the islands of Micronesia. She had been to the Marshall Islands four times, spending a total of two months there, and she had been to Chuuk between 10 and 12 times, spending a total of about six months of time. During those trips, she taught special education teachers to work with children with severe disabilities, attended and presented at local conferences, and participated on the advisory board of a grant-funded project developing mathematics curricula using local ethnic practices across the region such as canoe building, weaving and navigating.

In the first two focus groups, a male representative from the Chuuk Islands was present, and in the third focus group, a female from the Marshall Islands was present. The fourth focus group did not include a cultural broker from the Chuuk community because both women were introduced to Dr. Ratliffé and me through a friend of Dr. Ratliffé’s and felt comfortable speaking with us alone. The Chuukese and Marshallese representatives reviewed the discussion questions
prior to the focus group and assisted in interpreting the meaning and language of the participants. Each focus group was audio-recorded.

**Data Analysis**

After each focus group was complete, I transcribed the audio recording of the meeting. I used the three phases of grounded theory method coding as outlined by Strauss and Corbin (1990) to identify themes and generate a theory about the data. I read each transcript several times and coded participant responses. Using open coding, I identified new themes and formed preliminary categories that elaborated on parent perspectives and conceptions about early childhood development. For example, although I did not include questions about the importance of family roles in my discussion questions, all of the participants discussed how everyone has a role in caring for babies and children, so I identified this as a theme. Next, I used axial coding to develop a coding paradigm to illustrate the relationship between the main open coding categories and how they related to the categories that surrounded the main themes. For example, themes related to cultural aspects, such as the role of the midwife during delivery, best fit as a subtheme under the larger theme of culture. I then used selective coding to generate a theory based on the relationship between the themes and subthemes. I also reviewed field notes and grouped them with participant responses.

After the transcriptions were analyzed, I presented the themes I identified to the cultural brokers individually in order to review them through these participants’ lenses (Creswell & Poth, 2018), which resulted in mutual validation. The conversations also allowed the cultural brokers to further elaborate on their personal experiences and perspectives. I sought peer feedback from a fellow graduate student in order to gain an understanding of the perspectives of others outside
this area of research. The student reviewed the results and discussion section and emailed feedback to me regarding the clarity of my writing and my explanations of the themes I found.

**Role of the Researcher**

I collected, analyzed and interpreted the data as the primary researcher in this study. I am a graduate student at the University of Hawai‘i at Mānoa, but as I moved from Washington State about one and a half years ago, I am new to Hawai‘i. I am a white female and I grew up in Washington State in a middle-class family. I have several years of experience working with young children in home and preschool settings; however, I am not a parent. I took several psychology classes in my undergraduate program that provided an overview of early childhood development, and as I enjoy working with preschool aged children, early childhood development is of interest to me. I first began learning about some of the different Micronesian islands, their cultures, and histories through reading the research of Dr. Ratliffe. I also read some of Francis Hezel’s work and research on the region. As I learned more about how thousands of people from the Micronesian islands are relocating to Hawai‘i and the continental US and their reasons for doing so, I wanted to know more about their perceptions of early childhood development and how they care for children from ages birth to five years.

**Potential biases** As I read about the cultural trauma experienced by the people of the Micronesian islands through colonization and the effects of nuclear bomb testing by the US, I found myself shocked and saddened regarding the way that I believe people from these island regions were unjustly treated during and after those events. Additionally, I believe that Micronesian islanders who come to the US are often discriminated against, and as I want their voices to be heard, this may have influenced how I perceived what they shared with me and influenced me to have a positive bias. I am also a group outsider, which could have influenced
the participants to question the level of my trustworthiness. I wanted participants to feel comfortable sharing their perceptions and experiences with me, so I asked three representatives from Red Beach Resource Center to be present during most focus groups to serve as cultural brokers. The purpose of the cultural brokers was not only to increase the level of trust felt by the participants, but also to assist in interpreting language and meaning for those who shared their stories and perceptions during the focus groups. Although my biases may have influenced the way I interpreted the data, I believe I made every effort to ensure my objectivity by discussing the themes I found with seven of the participants (five from Chuuk and one from the Marshall Islands) as well as with Dr. Ratliffe. In order to make sure the discussion questions were not leading, my thesis committee and the representatives of Red Beach Resource Center reviewed the open-ended questions prior to the focus groups.

Results

Two main themes and five subthemes emerged from the data analysis. The detailed responses from the participants provided a foundation for explaining how the Chuukese and Marshallese islanders I spoke with perceived early childhood development.

The Importance of Family and Community in Raising Young Children

One area discussed at length by participants in all of the focus groups was that many people in the family and in the community had a role in caring for a newborn baby. Ansina (pseudonym), a woman from the Chuuk islands, explained that when a mother had a baby, many people came to visit her and wanted to hold the baby. There was much excitement within the community when a baby was born and everyone wanted to share in the joy of the new mother. Ansina said:
Everybody contribute to the caring for the baby. They come to the place and they like to hold the baby and pass them on. Like, oh let me help! Let me help! Let me hold the baby! They really happy they have newborn baby.

Runica, a woman from the Marshall Islands, discussed how new mothers had an abundance of support and aid from family and community members:

There’s always like a support group somewhere. And right after the baby, there’s always that big attention the mom and the baby gets from all these people – family members, healers…so everybody’s pitching in to give that support to the baby and the mom. Even in here, in the States, support each other, reach out to each other for that support. And I think that’s a good thing because you know how we go through like depressed, after having babies and stuff. We feel like we’re always alone, and there’s all these people helping. And we go through all that alone time, loneliness, you have like people in and out with your baby checking your baby, and you have that peace of mind. So it’s a very good emotional support.

Ansina’s husband, Enap, explained how unlike in Western societies which traditionally refer to a child’s parents as being one mother and one father, most Micronesian island cultures considered everyone in the extended family to be a mother and a father, even if they did not have biological children of their own. Enap stated,

We all play the role as father and mother. Only when we come here [US] that we can differentiate the uncle and auntie. Back home, everybody else is mother and father. So I’m saying that because if Apwete doesn’t have children of her own, but she always taking care of the children of the sister or the brother or something like that. So everybody knows that’s what we do. There is no such thing as uncle, auntsies back on the
island, cousins, we’re just like brother and sister. When you say Mom and Dad, this is how to differentiate your real Mom and Dad from the so-called uncle and aunties. With the father, you just say “Papa.” “Papa John” means John, he’s the uncle. But just call him Father John or Papa John. Likewise, the mother, you say “Mom,” your mother, your auntie, “Mama Jane.” And brother and sister are just brother and sister.

Older women who are friends or relatives of the mother stayed with her to assist her after she gave birth. Both Ansina and Enap explained that the women stayed with the mother for about three months to help care for her and the newborn baby. Methods of caring for the baby included singing to them when they were upset, using local massage techniques to help soothe them, and making sure the mother breastfed when the baby was hungry, especially if she slept for long periods of time (breastfeeding will be further discussed in the next theme). They also assisted with making sure the mother was well and happy. Enap translated a statement made by Apwete:

Those people that are in the facility with the mother, is taking care of her, has to make her happy. Because there were times when the mother was mad or was not feeling happy, sad, that also affect the baby. So those are some of the things we as parents, often the mother has to be make sure no one has come to upset the mother. Whatever happens to her affects the baby.

Additionally, the women who come to help the new mother also help her make sure the baby and the home are clean. Andon, Achina, Helya and Eponu (Chuuk) discussed how regularly bathing the baby and keeping a clean home assisted in maintain the health of the baby. Ardon (Chuuk) shared that, “[It is important to] give the baby bathing, like shower, and keep the area and the clothes clean.”
Five participants from the Marshall Islands expressed that there were more people on their home islands available to help take care of the baby than there were in Hawai‘i, largely because they all lived in the same area on their home island. Runica stated,

There’s more people attending, there’s more people helping each other. Culturally, everybody live together. And our culture is…whether there is a small family or a big family, everybody’s gonna live in the same household. And everybody helps each other. So it’s more like a close-knit community. Just as long as you’re called Marshallese, then everybody in that area feed each other, live off of each other, take care of each other, support each other.

The presence of a new mother’s grandmothers, mother and aunties was critically important as the mother raised her children. Older women were highly depended on to provide information about how to care for and raise children, and that information was not usually written down and was instead passed through word-of-mouth. As families tended to live together with three or four generations living in one household, methods of caring for and raising children were passed down from generation to generation. Women learned how previous generations cared for children and were also responsible for noting new information so that they could pass it on to their daughters. Men were aware that certain methods of caring for young children existed, and the five participants from the Marshall Islands expressed that although men usually did not know all of the methods specifically, they encouraged their daughters to learn them from their mother. Runica shared:

In our culture it’s like really important, even like to have a mom there…they even have a word for it, like a saint, where like once your mom is gone, it’s almost like life is worthless. Because everything you get is through your mom…mom is like caregiver,
doctor, everything. And she has all that information, she got it from when she was younger. And, it’s information passed to every mom, it’s like she has to add on information to pass it on to her daughters. And it’s passed onto women and daughters every generation. We learn that stuff from mom and grandmothers and stuff. And all the men are aware of it. Even they push their daughters to learn it.

While the women had the primary role in caring for newborn babies and young children, the primary role of the men was to provide plenty of food for the mother to eat while she was pregnant and during the months that followed the birth of the baby. They were responsible for gathering fish and other food such as taro, breadfruit, papayas, coconut, copra and bananas. Further information regarding nutrition will be discussed in the next theme.

**Methods of Ensuring the Health and Well-being of Young Children**

Participants from both the Chuuk and the Marshall Islands explained that there were several methods though which they made sure young children were healthy and appropriately growing, and that all of the methods were interconnected. These strategies developed into subthemes and included (a) the role of the midwife/local massager during delivery, (b) providing ample sources of nutrition for both the mother and the baby, (c) seeking appropriate medical care, (d) observing how the child is growing, and (e) cultural practices that impact the health of babies and young children.

**Role of the midwife during delivery.** Participants from the Chuuk and Marshall Islands discussed the cultural importance of having a midwife from the family’s clan present when a mother gave birth. Traditionally, midwives were referred to as a type of local healer or local massager; however, participants from both island regions discussed how the term “midwife” seemed to be the most appropriate English word to describe the role of the woman who delivers
the baby. Ekit stated that in the Chuuk Islands, more babies were being born in the hospital than in previous days. People who lived on islands closest to the main hospital had easier access to doctors and more Western medicine; however, people who lived in the outer islands who had to travel longer distances by boat to reach the main hospital relied more on the family’s midwife to deliver the baby. Enap (Chuuk) described the importance of the role of the family’s midwife:

Because, in the old days, it’s family or someone’s clan in Chuuk, they have, we don’t call them midwife. Local massagers who are expert in delivering babies. But, like I said, in the old days, because midwife is a new concept associated with modern day…each family has their own baby deliverer. Because we don’t trust, you know, that’s another thing, her clan (points to another participant) I don’t trust their deliverer to come deliver my daughter. Usually we look around for that person within our clan, can you come and deliver our daughter? Because we know she do it from the heart. So she will do it right. If worse come to worse, she know what to do.

During the fifth focus group in which I checked the accuracy of my findings with the first group of Chuukese participants, Enap confirmed the importance of the role of the midwife during delivery and added that while it is preferred that the midwife be a relative, in an emergency situation, someone outside the family with knowledge of child delivery can deliver the baby.

Runica, Lae and Betra (Marshall Islands) explained how each family’s midwife had her own herbs and medicines that she used for different situations relating to the birth of the baby, such as turning the baby and preparing for the baby to exit the birth canal. Runica stated:

When women give birth, we rely mainly on our midwives. So midwives learn their techniques from their older ancestors. They bring their own medicine, mainly from trees
and leaves, and what we have. And when the baby is breech...when it’s upside down, midwife have ways of, um, medication, their own traditional way of fixing it without any of the materials we use nowadays, you know, no medication or nothing. It’s more like chanting and herbal leaves.

After the baby is born, the midwife stays with the mother for two weeks to a month until she is well enough to move around the house and do more things independently. She also checks on the baby during that time to make sure the baby is healthy. Runica described that Marshallese midwives provide baths for the mothers after they give birth, and the purpose of the bath is to ensure the health of the mother and the health of the newborn. Just as herbal leaves are used and chanting occurs during the birthing process to make sure the baby is delivered safely, leaves and chanting are also utilized in the baths. Runica (Marshall Islands) shared,

So here we would call it, you know how we have the postpartum and stuff like that, ours is more meditation medication sort of thing and bath. So it’s kind of like combined Japanese style, they have that really hot bath...Marshallese they do the same thing. If it’s a girl, it’s different. If it’s a boy, it’s different ‘cause they think that with a baby girl you have more fluid, so they give you a longer one [bath]. And it’s a big process. One that requires a lot of herbal, um, traditional midwives to do chanting, to massage.

Participants from both island regions explained that those who came to Hawai‘i usually continued to rely on midwives to deliver their babies; however, they also took their newborns to the doctor and used a combination of cultural local medicine traditions and Western medicine. Further information regarding local medicine practices will be discussed later.

**Nutrition**  A second method of ensuring the health and well-being of young children that was discussed by all of the participants is good nutrition. Two main aspects of nutrition were
emphasized, breastfeeding and providing ample amounts of nutritious food for the mother and young child. Parents from the Chuuk Islands discussed breastfeeding longer than parents from the Marshall Islands, but both groups highlighted its importance.

When the participants were asked what they saw when a baby was born and as the baby grew, parents noted that one of the first things they saw a baby do was breastfeed. When babies were born, mothers were immediately encouraged to breastfeed, as breast milk was considered to be an infant’s first and best source of nutrition. Parents emphasized that giving newborns breast milk ensured that the babies would be healthy. Ekit explained, “In Chuuk, basically the first food for the baby is the breast milk from the mother. So, we encourage the mother to give the baby milk from the breast.”

Additionally, Enap explained that two new mothers could breastfeed each other’s babies, so breastfeeding a baby was not limited to the biological mother only. He stated, “It doesn’t have to be the mother only. Other mother can also do the breastfeeding.” Ansina highlighted that regular breast feedings were important to a baby’s health.

Because when she [the mother] miss [a breastfeeding time], it’s not good to miss, like, time to breastfeed, because if she miss it, then the baby might get sick. Because she [the baby] miss her food. She’s [the baby] gonna have a diarrhea or something like that. That’s why it’s really important for the mother to breastfeed the baby. Like after thirty minutes, or yeah, she just have to maintain that so that the baby won’t miss any milk.

Ansina, Enap and Ekit explained that if the baby was having difficulty breastfeeding, the first thing they did was to have a relative of the mother attempt to breastfeed the baby. If there was still difficulty in breastfeeding the baby, baby was given “coconut juice,” which participants explained helped the baby swallow. Ekit stated, “If they [the baby] experience difficulty getting
milk from the mother, coconut juice is the supplement.” After babies could swallow the “coconut juice,” they were able to breastfeed more easily.

Another reason why breastfeeding is emphasized in Chuukese and Marshallese cultures is because of the bonding that takes place between the mother and the baby. During the focus groups to discuss the accuracy of the identified themes, Enap and Runica explained that they noticed a difference between babies who were breastfed and babies who were mainly given formula. They observed that children who were breastfed were more obedient to their parents and their identity was highly associated with their relationship with their family and community. In contrast, they observed that children who were not breastfed tended to lack the bond with their mother more often than children who were breastfed, and that they tended to be more “naughty” and considered themselves more independent from their families.

The second aspect of nutrition highlighted by all of the participants in both groups was the importance of making sure that enough food is provided for the mother and newborn baby. Participants maintained that nutrition was especially important as the mother breastfed for the health of both the mother and of the baby. As briefly mentioned earlier, one of the most important roles for a new father was to go fishing and bring back plenty of fish for the mother because the nutrients she absorbed were passed to the baby. Enap stated,

The child will also take the food as well through the mother. So as father of children just born, it is our job to make sure she has plenty food… because we said that [is] associated with the children to be healthy. The more the mother is healthy, better it is for the baby. That’s one thing we normally do. The more food absorbed by the mom, the more food goes through the baby. And this grows the baby. That’s our sense of thinking.
According to participants from both the Chuuk and Marshall Islands, fish was one of the main sources of nutrients for new mothers and their babies. However, other commonly used food sources were fresh papaya, coconut, copra, homegrown vegetables, taro and bananas. When babies began the transition from breast milk to solid food, one of the first foods they ate was mashed banana. Runica explained that traditionally, baby food was made from homegrown fruits and vegetables:

The baby food, we get it from our own fruits…we take the banana and make it into baby food…everything’s all fresh food. And then we give them fish, so these are our healthy way of making our babies grow healthy, right? Give them fresh fish from where there’s fishing.

Additionally, Ansina shared:

They [parents] give them banana…they cook very soft. The first thing they give them to eat. And they give them coconut too, to drink, and eat. Ripe papaya, and very soft food, like pumpkin with rice…and put some more coconut milk to make it tasty. And, I know especially fish is one that’s good for them.

All of the participants expressed that healthy food was necessary for children as they grew. However, Enap discussed that when he was younger, his grandmother told him that when previous generations had babies, the babies were healthier because they ate more homegrown food than some children do in the present day. Instead of consuming homegrown fruits, vegetables and fish, many people today buy canned meats, rice and imported foods that do not contain the nutritional value of homegrown fruits and vegetables. Enap elaborated on how nutritional values had changed for some people in the islands:
They eat refrigerated food, imported from the US. They like turkey tails, all this stuff here. But now days, it varies, because mother, I hate to say it, but there were mothers [who] smoke marijuana. They drinks, they do things they not supposed to be doing. That also associated with the fact that many newborn will grow pretty slow. They don’t eat the right food anymore. Unlike in the old days. I just like to bring up because I think what we are right now in Chuuk or any Micronesian place is different from the old days. Because if you look at the older men, they’re very, very large frame.

Several of the participants discussed how usual food sources that were available in their home islands were easier to access on the home islands than in Hawai‘i, and traditional ways of making baby food was time consuming. Runica explained:

We have certain food for babies for certain age. Like really soft food and ways of cooking it. I know it requires a lot because we don’t have [in Hawai‘i what we have] back home, like ingredients we need to use. Everything is limited.

Tana and Inina, two women from Chuuk, also emphasized that making the baby food from homegrown bananas, breadfruit and taro took longer than making rice or serving canned meat. Even though Tana and Inina worked with other Chuukese families in Hawai‘i to discuss the benefits of feeding their children more fruits and vegetables, they stated that they saw an increasing number of parents choosing to prepare food for the children that was less time consuming to make.

Nowadays, now that they introduce rice, so seems like it’s so easy for them than the banana and the breadfruit. That’s another thing that we try…to tell them not to use rice instead of banana, and we have a hard time, you know. But they know that it’s so hard,
like she [Inina] said, so rice is easy. They just scoop that rice [out] and put on the stove.

(Tana, Chuuk)

Although several participants shared that there were some families that tended to buy more imported foods, all of the participants in both focus groups agreed that having healthy babies is associated with providing them proper nutrition. For example, Runica stated,

We [the Marshallese participants] notice that the kids that eat fresh fruits from home, [they] aren’t any sick [when they] eat the food from the land, versus kids that are eating imported foods. So we try to give them only that kind of food and not imported ones.

When I met with Runica to discuss with her the themes I identified from the focus group with the Marshallese participants, she added that the nuclear bomb testing has impacted nutrition in the Marshall Islands. She explained that the food supply is limited in the majority of the islands, and people worry about growing and eating food from the land and gathering fish from the ocean because they fear it is contaminated. However, most people still eat fish, fruit and vegetables from the islands because that is the main food supply. “The whole place is affected by that,” Runica stated. “It’s very emotional when we talk about that part [the bomb testing] and after.” According to Runica, another reason why people from the Marshall Islands move to the US is to have better quality food, as well as to seek medical treatment related to illnesses from food and water contamination.

Even getting containers of fruits in the ship, by the time it gets there [the Marshall Islands] it’s rotten. You see them expired on the shelves or in the refrigerator and people buy them. They have no other fruit sources. I went back and I was like ‘Look at these watermelons! Who would buy these in the mainland? These are expired! Why are they
here?’ They said, ‘Are you gonna throw that away, or are you gonna give it to somebody whose gonna die [someone who was sick and needed nutrients from the food]?’

Runica continued, “I think that’s the biggest reason why our population back home has gotten even smaller,” On her most recent visit back to the Marshall Islands, she explained that homes and entire villages that she remembers being filled with people are now empty because many people are moving to the US. “It’s almost like deserted, some parts.”

**Seeking appropriate medical care.** All 20 participants discussed the importance of local medicine practices for the health of young children. Both Chuukese and Marshallese groups shared about traditional medicine practices that were practiced in their islands for many generations.

In both cultures, there was a designated traditional healer for each clan, or extended family. Runica explained that in the Marshallese language, the word for medicine is *uno*, and the person who prepares and administers the medicine is called *ri-uno*. The Chuukese and Marshallese participants in this study referred in English to the traditional healer both as a local healer and a local massager. The local healer/massager was responsible for mastering all of the traditional medicine knowledge and practices that had been passed down through the family’s many generations of healers.

We have our own person in the community that does it. So we go out to them…to people that have been blessed or given the authority to do that. So it’s not something that you just take and you learn, it has to be passed down. You need to be blessed or given permission…otherwise it doesn’t work. So it is passed down by generation, but it has to be passed down by a person to another person that she’s giving that authority to. (Runica, Marshall Islands)
Enap (Chuuk) explained that each family had its own healer because they may have different ways of making and applying medicine. “Each family has its own style and has its own medication... just how to implement it, how to apply it, may be different.” Participants in both groups expressed that there were many different kinds of local herbal medicine and ways of applying it to patients in their cultures for both adults and for children.

Local medicine was used to both prevent and treat illness. In addition to proper nutrition, children were regularly given medicine, such as different herbal leaves, to prevent illness and ensure they would grow and be healthy. When a baby became sick, the family sought help from their local healer. Lae, Betra and Runica discussed how massage was a significant part of the healing process, and healers used Marshallese coconut oil when they massaged babies who were ill. Runica explained,

If our babies get sick then we take them to the healers. If they have a fever, [the healer] use our Marshallese coconut oil and then we soak them in that. Use coconut oil over the whole body, massage the baby. And after [the healer] put that in, it dries into the body and then they [the baby] start sweating, and then it continues for awhile until all that heat inside is all gone.

Ansina described how Chuukese local healers also used coconut oil and leaves to treat illness in children:

There are certain leaves they’re using to massage the baby with. Use coconut oil, and leaves. Put two leaves together, and then they start to massage the baby with. Cannot massage without the leaves. So if the baby like has a fever...then they’re using that leaves to massage. And some ladies, they start using the noni leaves, because noni leaves
is really good. I like noni leaves…you can put noni leaves on the baby and the fever is
gone. And I really believe that. I tried. It works.

Runica shared a personal story about a time the school her daughter attended called to
ask her to pick her daughter up from school because she was running a fever. Runica brought
her daughter home from school for the day and administered local medicine to her to reduce her
fever. She stated,

I used what I have that’s available to me that I got from back home and I used it to help
her fever come down. I took her home and I did what I thought was better than taking her
to the hospital.

When she brought her daughter to back to school, Runica said a school administrator
told her that they would not allow her daughter to come back until she had a doctor’s note saying
that the fever was gone, and that the administrator thought Runica did not take her child’s health
seriously because she had not taken her daughter to see a doctor. “But because I didn’t get the
clearance from the doctor, the school was saying that I don’t care, I just took my baby home,”
she said. Runica went on to say,

When I brought my daughter back to school, I had to fight for her. I said, why are you
blocking her from coming back to school? It’s not right! It’s her right to go to school. I
said you cannot do that to my child, and you cannot do that to me. But I had to know the
language. But what if I didn’t know any of that stuff or know how to speak the language?
So I know those kind of things, parents go through that. And how does a parent that
doesn’t speak English explain that? And why is it a requirement? I think it’s just a lack
of communication and a language barrier between the cultures. There’s so many
examples of that we see day in and day out.”
As Runica believes in the effectiveness of local medicine, she explained that she thought she was doing what was best for her daughter by keeping her at home and using local medicine to reduce the fever.

Runica and Betra also discussed the usefulness of noni leaves and how local healers used them to relieve toothaches in young children. To relieve pain from teething for babies, local healers combined a noni leaf with another type of leaf and put them in the babies’ mouths.

For a child with a toothache, they go into the noni, and there’s one little piece in there that numbs toothache…and then they put it into the baby’s [gums], and it’s supposed to numb it. So with another leaf [for teething], they put it together [with the noni leaf]. So they put them together, they just kind of like pound it, and then put it into the hole, and at the same time, the pain is gone. (Runica)

Another way that local medicine was used that was described by all five participants from the Marshall Islands and the two Chuukese women in the fourth focus group was to help children walk. When mothers saw that the child had been crawling for several weeks and was starting to pull up on their feet, they knew the child was going to begin walking. All of the participants agreed that this happened shortly before the child turned one. As the child’s first birthday approached, the local healer applied a certain type of local medicine to the child three times for three consecutive days before the first birthday to ensure that the baby walked when he or she turned one.

So for the baby walking part, they put their feet inside that tub, and then they I guess massage it and then they chant. They have their own sing, kind of like Indian’s chant for peace, and then we have ours for making a baby walk. They do it three times and the baby starts walking. And then we see the results right away. So this is a practice that’s
been there ever since we can remember. It came from our ancestors…and it’s part of our
culture. Part of our history. (Runica)

All five Marshallese participants agreed that if that process was followed before the
child’s first birthday, the child would walk by the first birthday. They had never seen or heard of
a child who had received that herbal medication not be able to walk by the first birthday.

We’ve never seen one that doesn’t…it if that does happen, if there’s a baby that doesn’t
walk, it’s because the family didn’t do it. Either they didn’t know, or they don’t believe
in that stuff, or they just didn’t get the stuff that they need to do it. (Runica)

If a family did not apply the medication to their child before the child turned one and the
child did not walk when it was supposed to, medication to help the child walk could still be
applied, but the participants shared that the process and herbs were different in that case. Runica
stated, “So there are other ways after that, but it’s not the same as the other one…it’s a different
medicine, different herbal, different process.”

Tana and Inina also explained a local medicine practice that was used by Chuukese
Islanders on the islands they grew up on. Just before the child’s first birthday, when parents
knew the child would soon walk, those who had convenient access to a beach would go to the
shore and select several hermit crabs to place in a row in the sand. When the hermit crabs started
running, they would pick up the crab that was the fastest and scrape out the meat inside of the
shell. The meat was then mixed with copra and the “skin” of one of the strongest trees in the
Chuukese Islands. After mixing the ingredient together, they would place the mixture out in the
sun for a period of time. The mixture was then applied to the child’s legs three times per day
until the mixture became too old to use.
And that is the reason why they use those things. The one [hermit crab] goes first is fast, it’s gonna make the baby go fast. And the tree is they gonna be strong, feel stronger inside. (Tana)

Some families who lived in the mountains and had a more difficult time accessing a beach used other strong plants or leaves instead of using the meat of a hermit crab in the medicinal mixture.

But some of the ladies on the mountain, they cannot go down there [the beach]…and when they want something like when they wanna get the best for the sun [for the mixture], they go look for the longest crawling leaves or grass in a row, so they pull up tallest one, the one that’s growing fast on the ground. (Inina)

Chuukese participants shared that another way local medicine was used for babies in their culture was to help the baby be well liked when they grew older. After babies were born, the local healer applied a certain type of local medicine on the babies to ensure that they would not only be healthy, but likeable as well.

When you were born, they put some local medicine on you to be healthy. And to be likeable when you grow up to the older age. When you reach young man and young woman, even if you’re ugly, look frightful, people just tend to like you. Why? Because when you were little, they give you some local medicine. They put on your head and they say, “Oh John Doe, when you grow up, people will like you,” something like this. Just like ice cream, people will really like you. (Enap)

All 20 participants discussed that because the local medicine practices were incredibly vital to the health and well-being of young children, Chuukese and Marshallese mothers who lived in Hawai‘i, and even Marshallese mothers who lived in Springdale, Arkansas, traveled
back to their home islands to get the local medicine they needed if it could not be made where
they lived.

A lot of our families, especially the ones on the mainland because they don’t have any
leaves, you know how the seasons and stuff like that, so they fly here after they have the
baby to get the help here [Hawaiʻi] or to go back home. So you’ll see a lot of pregnant
women or newborn babies and their mom coming to go home to get that herbal
medication. (Runica)

The participants also explained that most Chuukese and Marshallese parents who lived in
Hawaiʻi utilized a combination of traditional and Western medicine practices. For example, they
explained that parents usually took their children to the doctor for regular checkups and
vaccinations, but there was also strong belief in traditional medicine practices and in the
importance of continuing to pass them from generation to generation. Enap (Chuuk) explained
that if they thought their child was sick, parents who lived in Hawaiʻi would first take their child
to a Western doctor. If the doctor was unable to identify why the child was sick or told them that
nothing was wrong, the parents would then know that their child was sick because of another
reason, such as an argument in the family. The parents would then take their child to a local
magician, the person participants stated who could identify why the baby was sick. If, for
example, there was a disagreement among family members, the family would come together to
make peace in order to make the child well again.

Runica stated that she valued being able to have access to both cultural and Western
methods of seeking needed medical care for her children.

So we’re kind of fortunate because we have the American way, we get the Marshallese
way, some of us has the Japanese way, so we have all these cultures and all these things.
Oh, I’ll try this, the Japanese kind. And one time, when my daughter was really sick, I’m gonna use this medication the Marshallese way. And next time, oh I’m gonna take her to the hospital, give her medicine. I have choices since [I have] all this information.

When asked how regularly children living in Hawai‘i saw a dentist, Andon (Chuuk) noted that he and other Chuukese parents in his community made dentist appointments for their children for cleanings as well as anytime the children had a toothache, and that dental check-ups were a part of maintaining their children’s health. Regarding whether or not parents take their children back to the dentist when the dentist asks them to come back for follow-up visits, Andon stated,

Yep. But sometimes time and transportation is a problem. You know, here [Hawai‘i] and over there [Chuuk] is different. ‘Cause sometimes, the dentist goes to the community and make a service over there [Chuuk]. But here [Hawai‘i] we come to the dental. But there, the doctor go to the community.”

Tana explained that on her island in Chuuk, most parents chose to vaccinate their children if vaccines were available. Community health workers went out to the communities, even to communities far up in the mountains, to provide the vaccinations rather than the families taking a trip to a clinic or hospital for their children to receive them. Typically, families utilized vaccines in conjunction with local medicine practices. Tana was one of the community health workers that gave vaccines to children whose parents wanted them to receive them. She also helped keep a record of which children had received particular vaccines.

But when they get sick, we can treat by our own local medicine. We do have vaccines now, because they sent us vaccine. If there’s only one [person] we miss, then we can go back. Because we just wanna make sure that everybody got their vaccine.
Observations regarding children’s development. Four participants – Enik (Chuuk), Runica, Betra and Lae (Marshall Islands) noted specific behaviors that parents observed when children reached certain ages before they turned one. For example, Enik, who worked in the Department of Health in Hawai‘i, stated,

From my experience as a father, the stages of development. From birth to two months, they usually see the baby always crying. In the middle of the night, the baby cry. Then until three months, the baby start to turn, like from laying on his back, he starting to (made turning motion) the side, and then maybe from four to six months they start crawling on their stomach. Then from six to seven month, they crawl and sit up. And nine to eleven months, they start to stand and start to, one step, two steps. That the way I observed it.

Additionally, Runica discussed an observation she had after a baby started crawling:

[At] six months and after they start crawling, and we look out for things like what they’re, you know, like motor skills, what they’re able to get ahold of, eat from the ground, what they, you know, ‘cause that age they still don’t know food, and so they just pick up anything.

Runica also added that before children turn one-year-old, they show signs that they are preparing to walk, such as pulling themselves up to stand. Parents help children prepare to walk by holding their hands as they take a few steps, holding them from the back to practice standing, and by helping them use baby walkers.

Tara and Inina (Chuuk) stated that they observed that the baby began to have stronger muscles by the time they were three months old. Both Tara and Inina also noted how they remembered that their children began to start babbling when they were about five or six months
old. Other observations they had included that children began to roll over at six months, they began to sit up by themselves when they were seven months old and that they crawled when they were seven or eight months old, although Tara shared that her son had begun to crawling when he was three months old: “Yeah, on his third months he was crawling on his knees. My oldest one.” Tara and Inina also stated that they observed that children began to walk by the time they were one year old.

The primary method that all of the participants said they used to tell if a child was growing as they were supposed to was by observing whether or not the child was getting bigger. Parents said they observed the size and felt the weight of the baby to determine if the baby was growing properly.

We don’t have like the scale. Like they have like here in the modern hospital here. We use imagination. Just look that the baby has been growing. Yeah, so its just that the imagination when we observation and we observe the baby. The baby usually grow. Only when you take the baby to the hospital then we weigh them. And feel the weight and look at the size. (Enap, Chuuk)

Additionally, Runica explained, “For infants…we look for sizes of the arms, wrists, hands, eyes, pupils. Just appearance.”

Ansina noted that she observed that some babies grow big quicker or slower than other babies, especially babies who are born premature and that they “have a different way of growing,” but she did not understand why babies who were not premature seemed to develop at a slower rate.

When five women have the same baby, the same month, and they wonder why how come theirs is kind of slow in growing, developing. I understand that some women’s, they
have a premature baby. That’s the one we understand that they can grow very slow. Because…they’re premature. The mother had them on like on the seven months, but the other kinds, I don’t know why they grow slow. I don’t know why develop slowly.

When asked what they do if they had a concern about a baby’s growth rate, all of the participants said the solution was to feed them more and give them local medicine. As discussed above, participants highly associated nutrition with health. Ansina added, “Some parents, they were happy when their babies kind of, fat. Because they say they’re healthy. Our Chuukese, they thought that being fat is healthy because they eat enough. Same with baby.”

**Cultural practices that impact the health of babies and young children.** In addition to the above methods, Chuukese participants described other ways related to their culture that helped ensure the health and well-being of babies and young children. One such aspect they discussed was the importance of harmony within the family. Unresolved disagreements between family members could result in the baby becoming sick, or possibly even dying. Enap translated a statement by Apwete:

> But Apwete was saying…quarrel in the family, disagreement, fighting among man and wife, father-in-law, mother-in-law, relatives, so we have to peacefully settle differences because there may be times the baby is very, very sick, so we among ourselves, whose mad at who? Because if we know that, we have to apologize. Because we don’t do that, there are times that the baby may die. And that belief is very strong.

Additionally, participants explained that other situations could result in the baby becoming sick and dying, such as infidelity by one or both parents. Ansina stated,
If the man mess around with somebody else, and the baby will get sick. If not the man, the woman. But, I heard only some people know how to bring the local medicine for that. To cure the baby.

It was also important that the mother and father did not have any sexual interaction with each other for several months after the baby is born. On the home island, after the mother gave birth, the father slept in the community meetinghouse for three to four months. During this time, he could come inside the house and see his wife and children and bring them food. However, he could not sleep inside the house until after the first three to four months of the newborn’s life. Enap explained, “No more sexual interaction. The main thing is not to sleep with the wife. Temptation may be there. So he has to remove himself to the meetinghouse.”

Inina and Tana shared that on their islands, husbands and wives had to sleep separately starting when the mother was seven months pregnant.

And they have a reason why they don’t want us to sleep with our husband. It’s because they know that they think that when we gonna sleep, they think the baby’s…you know, the head, it’s almost down there. So they…just think that if we have sex with the husband, it’s gonna hit the head. (Tara)

“It could damage the baby,” Inina added. The father slept in the community hall for about a year after the baby was born, and one of the reasons for that, according to Tara and Inina, was so that babies were not born too close together in age.

When babies are first born, five Chuukese parents explained that they keep them at home for several months. One of the reasons was because they believed that adverse weather, such as rain, was harmful to the baby’s health. Another reason was that mothers were concerned about taking their babies in public because many people asked to hold them, and the mothers
worried that might result in the injury of their child. Mothers usually only trusted people within their own community to touch and hold their baby. Babies were also kept at home to protect them from possible elements in public that may have harmed them.

We don’t really expose the baby outside, in public, we don’t really expose the baby out at night time. Why? Because some believe in bad ghosts roaming around. So, we have to be very careful because custom and tradition also play a big role in the rearing of children. Don’t expose them. Don’t take them out. (Enap)

As children in the Chuukese islands grow older and begin to explore and play away from the family’s home, parents make sure that they come home at night to make sure they are physically safe, but also because parents prefer their children to remain out of other families’ homes and to eat only food that they gave them in order to make sure that they are healthy. Enap explained,

I think what’s also associate with children’s development, we want them not to abuse themselves. You know, like sometimes, the young children…they just leave home and go roaming around. We want them to make sure that they come home so they will eat what they are supposed to be eating. And we don’t want them to go eat around in somebody else’s house, because black magic, we also believe in. There may be elements within the community that don’t like my little ones because they are afraid my little ones might be somebody big down the road. These are some of the stuff that we warn our kids, because…their growth may be interrupted. So we want them to eat healthy food, and the healthy food has to come from the family itself.

Young children were also taught to respect others, especially elderly people, within the community because they depended on each other. Parents emphasized to their children if they
treat others with kindness and respect, they can avoid conflicts in the future. “Culturally respect is pretty strong on the island. And to be show respect and politeness to others.” (Enap) Ansina added, “Parents are the ones who set a good example for the kids at home.”

All of the participants agreed that parents who raised their children away from their home islands believed that it was important to pass on their culture, knowledge and traditions to them. Enap expressed that members of older generations were concerned that their local medicine practices and cultural stories were fading away. However, as they raised their children away from their islands, their belief in their cultural values remained strong. Enap stated,

What we are saying here is if we still believe in some of our local value, and this local value associate with the growth the children too…we have to be very, very careful as parents to make sure the newborn and you as a parent [know] those noble beliefs that exist back on the island. You…respect it. It doesn’t mean that because you’re in Hawai‘i, you will act like Hawaiians or Americans. No. Don’t go that way.

Discussion

Connections to the Theoretical Framework

All 20 participants discussed how new mothers receive knowledge regarding how to care for and raise their children from their mothers, grandmothers and other older women (aunties) in the community, which is consistent with Vygotsky’s (1978) sociocultural theory. Through social interaction, mothers constructed new knowledge about how to care for their babies. Mothers solidified their knowledge and understanding of caring for infants and young children through interacting with older women in the community and absorbing knowledge and skills from them, Pontecorvo (1993) and Miller (2016) discussed this kind of interaction and sharing of knowledge as an important factor in learning.
Two ways in which the zone of proximal development was seen were in (a) how older generations of Chuukese and Marshallese islanders help young mothers construct new knowledge about how to care for and raise children, and (b) how local healers/massagers also helped construct new knowledge as they built on existing local medical information passed down by previous generations. Interacting with others in the community assisted new mothers and local healers in developing a strong belief and deeper understanding of the importance of cultural traditions through local medicine practices that were directly related to the health and well-being of young children. As Miller (2016) discussed, intentional learning occurs when modeling and scaffolding strategies are used to help support an individual’s development and learning. When Chuukese and Marshallese older women showed new mothers how to care for their newborns by modeling, they supported the mothers to support the health of the babies. Learners depended on those with more experience. This is especially important in Chuukese and Marshallese cultures because their cultural practices are passed down to new generations through word-of-mouth rather than in written instructions.

The social context of learning, another aspect of Vygotksy’s sociocultural theory (John-Steiner & Mahn, 1996) was also seen in how families care for and raise their children. According to Vygotksy’s (1978) theory, “learning and development take place in socially and culturally shaped contexts” (John-Steiner & Mahn, 1996). Both Chuukese and Marshallese cultures highly valued every family member’s role in caring for new mothers and infants, as well as each of the methods for ensuring the health and well-being of young children. There appeared to be a sense of social solidarity among the participants of each focus group when they discussed the importance of these different methods of ensuring the health and well-being of their young children, as well as their strong belief the effectiveness of these methods. As Runica stated when
she discussed a Marshallese local medicine practice to help children learn to walk, “This is a practice that’s been there ever since we can remember. It came from our ancestors…and it’s part of our culture. Part of our history.” These practices were deeply embedded in the social context in Chuukese and Marshallese cultures, and influenced new mothers’ learning in how to care for their infants and young children.

**Implications**

There are several implications from these findings that can be used by healthcare providers and educators who work with families from Chuuk and the RMI. These implications include Chuukese and Marshallese parent views of health and early childhood development, how the connections between multiple generations are highly emphasized, and the importance of trust among the extended family members.

**Parenting goals.** Chuukese and Marshallese parenting practices are aligned with societal goals, which Small (1998) suggested is true of many cultures. For example, Chuukese and Marshallese children are taught to respect and care for others in the community, especially those who are elderly. Treating others with kindness is associated with avoiding conflicts with them later. As Hezel (2013) discussed, because conflicts can significantly damage small communities, remaining on good terms with family and community members is essential to Micronesian cultures. Chuukese participants specifically discussed the importance of maintaining strong family and community relationships, especially because they believed that discord between family members could cause babies to become sick, and in some cases even die.

**Perspectives of nutrition and health.** Perhaps one of the most interesting findings was that all 20 participants emphasized the importance of nutrition. They strongly believed that it was important to make sure the mother has plenty of nutrients while she is breastfeeding. To
them, health is directly associated with nutrition, and they believe that a big baby is a healthy baby. Parents focused on the importance of nutrition, even if they did not identify any specific stages of development. If parents have concerns about their children’s health, they consult their grandmothers and mothers for advice, and feed the babies more nutritious food.

Even though other food options are available for babies to eat, such as “coconut juice,” parents believe that the best source of nutrition for infants is breast milk. The AAP, which is one of the leading Western authorities in children’s health, recommends breastfeeding exclusively for the child’s first six months, and then incorporating solid foods in conjunction with breast feeding for at least one year. Breastfeeding is associated with improved infant health outcomes, such as a lower risk of Sudden Infant Death Syndrome (SIDS), allergic diseases, obesity and diabetes (AAP, 2012). The AAP also recommends that mothers who are breastfeeding should be well nourished, and ideal food sources include fish (which contains the necessary omega-3 fatty acid) as well vegetables and fruits, which Chuukese and Marshallese parents also stated were important for mothers to consume.

It is important to note that breastfeeding is strongly emphasized within Chuukese and Marshallese communities both in their island regions and in the US. For example, Tana and Inina, two participants from Chuuk who work at a comprehensive health family service center, explained how they went out into communities with people from Chuuk islands to help educate them on the benefits of breastfeeding their children. For example, Tana shared, “When we go out in the community to educate parents, we don’t educate [about] baby food [from the store]. We educate [about] bananas and breadfruit.” Tana also explained that she had heard some mothers say that they chose not to breastfeed because they had been eating food that was not as nutritious as homegrown fruits and vegetables, so their breast milk would not be as good for the
baby as formula or baby food they could buy in grocery stores. “They always think
that…because they don’t eat good, they say [they should not give the baby] breast milk,” Tara
said. “We keep encouraging them that is not true.” Tana shared that she explained to the
mothers she worked with that there are still nutrition benefits in breastfeeding their infants, even
if they have not been consistently eating nutritious food. All of the participants in this study
emphasized the importance of breastfeeding and believed it was the best source of nutrition for
infants.

These findings are consistent with those of Scott, Shreve, Ayers and McElfish (2016)
who examined breastfeeding perceptions, beliefs and experiences of 31 Marshallese mothers
living in the US. Participants reported that they believed breast milk was the healthiest and most
nutritious option for infants because formula could not provide as many vitamins as breast milk
and it was also not as “fresh.” However, participants also discussed several barriers they
experienced in breastfeeding in the US, such as breastfeeding in public. Mothers explained that
while breastfeeding in public was acceptable in the Marshall Islands, it was unacceptable in the
US. Several mothers shared that they had experienced verbal shaming (being told to “cover up”)
and nonverbal shaming (facial expressions of non-Marshallese in public). Scott et al. (2016)
concluded that although Marshallese mothers in this study believed that breastfeeding was the
healthiest choice for their babies, the barriers they faced influenced their perceptions and beliefs
about continuing to do so.

Additionally, mothers’ concerns regarding the quality of their breast milk is seen in other
cultures as well, such as American Samoa (Hawley et al., 2015). Hawley et al. (2015)
interviewed 46 American Samoa mothers about their beliefs, knowledge and attitudes about
breastfeeding. Most mothers reported that their initial intention was to exclusively breastfeed
their babies because they believed breast milk to be the infant’s best source of nutrition. However, their concerns about (a) the possibility of not producing enough milk, (b) how their diets with high fat content from fried foods would affect their breast milk, (c) their concern about the pain associated with breastfeeding, and (d) the convenience of using formula resulted in their choice to use formula instead of exclusively breastfeeding as the originally intended. Tana discussed how even when she heard mothers in Marshallese communities state similar concerns, she explained to them that there is still nutritional value in breastfeeding and that it is healthier for babies than formula.

**Perspectives of early childhood development and health.** The participants in this study viewed early childhood development differently than do people coming from Western perspectives. For example, development is not seen in terms of milestones. Child health is viewed concretely; it is something they can specifically see and observe. Chuukese and Marshallese parents do not measure growth by age such as months of age, or by weighing them to check the infant weight percentile. Instead, parents use their own observations of their children’s physical development and nutritional needs to determine whether or not the baby is healthy and developing like they are supposed to.

Additionally, there seems to be a conception of health that goes beyond people’s knowledge and understanding, such as specifically how ghosts and other certain “entities” (as Enap discussed), can affect children’s health. There is also a strong belief in how the feelings, emotions and actions of others can result in a child suddenly becoming sick. For example, there is a strong belief within both cultures that one or both parents being unfaithful to each other can cause children to become ill. Health seems to be viewed in both a concrete manner as well as an aspect of a spiritual condition. Kim, Kim-Godwin, and Koenig (2016) found a similar
perspective in their study that examined Korean-American family spirituality and its influences on health. Participants in that study reported that they believed their spiritual well-being was highly important for their physical and mental health. Furthermore, participants discussed that as their extended families were separated after immigration, they felt they benefited from the support they received from other Korean people in the US who shared their spiritual views. As mentioned earlier, there seemed to be a sense of solidarity among Chuukese and Marshallese participants when they discussed their methods of ensuring the health and well-being of young children, including their perspectives on keeping their young children safe from harmful “entities” outside their communities. Even though not all of the participants in each group were related, they supported each other when they discussed their similar cultural beliefs.

**Extended family and raising children.** Participants extensively discussed how everyone in the community had a role in raising children, even those who did not have biological children of their own. As Ratliffe (2010) also found in her study with participants from the FSM, RMI and Republic of Palau, parents shared the responsibility for caring for all of the children within their family. However, these roles were clearly defined regarding what mothers and fathers were responsible for. For example, consistent with the research of Hezel (2013), mothers have the primary role of caring for young children, while father are responsible for providing the mother with nutritious food to ensure her health and the health of the baby.

Connection between generations seems to be important in Chuukese and Marshallese extended families, especially as all of these cultural practices happen within the family. Members of older generations in the family are highly respected and are seen as leaders and the main source of guidance for the family. As mentioned earlier, women have the primary role in raising children, and grandmothers and aunties are highly depended on to provide their daughters
and granddaughters with the knowledge they need to take care of their children. Runica’s explanation of how “life is worthless” after a woman’s mother passes away illustrates the feelings of loss that are experienced when her mother is no longer there to pass on that knowledge; it leaves a gap between generations.

Trust is also important among extended family members. Everything happens within the family, and so it essential that everyone is able to trust each other. This is consistent with Peterson (2009), who discussed how the people of the Micronesian Islands devote themselves to their relationships with other family members. Enap explained that one of the reasons why babies are kept at home for the first few months of their lives is because mothers want to keep them safe. If they take their newborns out in public and people outside of their family ask to hold the baby, mothers worry that their baby could be injured or become sick. They typically only trust people within their extended family to touch and hold their baby. Other examples of this include how families have their own midwife and local healer. They trust only people from within their family to deliver their babies and provide them with local medicines.

**Local medicine.** The emphasis on the use of local medicine with children was also an interesting finding. Even though most of the participants had lived in Hawai‘i for several years, all of them believed in the power of local medicine and local healers/massagers. In both Chuukese and Marshallese cultures, there were specific situations and periods in the child’s life in which particular types of local medicine were applied to children to help them remain healthy and grow normally. Local medicine also played an important role during and after childbirth. Again, even though some parents did not note specific stages of development, they knew exactly when local medicine should be applied and the required process for each situation, such as when a baby had a fever or when a child was preparing to walk. Local medicine remained so valued
by both cultures that people who lived far away from their home islands traveled there to get it, and if someone could not afford to travel, others in the community donated necessary funds to cover their expenses. While both Chuukese and Marshallese participants stated that parents who lived in Hawai‘i took their young children to Western physicians, they relied on local medicine practices at the same time. They noted that older generations preferred local healers/massagers and used local medicine almost exclusively while younger generations use a combination of local and western medicines, indicating that second and third generation Chuukese and Marshallese islanders became more acculturated to the US in this way than did first generation islanders. This is consistent with other research that has examined the effects of generational status in immigrants groups, such as Vang’s (2013) study of Hmong in the US. Vang surveyed a total of 195 first, second and third generation Hmong living in the US and found that later generations tended to identify more with US culture than Hmong culture and considered themselves as “Hmong American,” while older generations identified themselves as only “Hmong” and remained strongly attached to their native culture and practices.

**Differences between Chuukese and Marshallese cultures.** In the present study, participant responses regarding how parents care for and raise their young children appeared to be similar. Participants from both cultures emphasized all of the above themes and subthemes, however, as discussed earlier, there were different methods of making and applying local medicine within each extended family. While Chuukese and Marshallese participants appeared to have similar perspectives of how to care for and raise children between the ages of birth and five year old, it is important to understand that they are two separate, distinct cultures with different languages and practices (Hezel, 2013; Ratliff, 2010; Sadao, 2000).
Recommendations

One group of community service providers who can use this information is healthcare professionals. By understanding how Chuukese and Marshallese parents view early childhood development, primary care providers, pediatricians and nurses can better serve families from those island regions. For example, doctors can link conversations about development with nutrition. Rather than approaching development through the perspective of identifying specific milestones, development can be looked at through the lenses of nutrition, weight and health. One example of this would be for doctors to praise the mothers for how they care for their babies and then discuss developmental milestones they should notice as their babies get older. The conversation between a healthcare provider and a mother of a six-month old baby might start by saying something such as, “Oh, your baby is so big and healthy! She is growing so well. As she continues to grow, you will start to see her prefer to be around the aunties and uncles she is most familiar with, hear her begin to make talking sounds with her mouth, and she will start to sit all by herself!” Praising the mother for making sure her baby is big and healthy may help make her feel validated for her ability to care for her baby, and could create an opportunity to talk with her about what she should expect to see her baby do next. At that point, the healthcare provider could also suggest that if the mother does not observe her baby doing those things, she should make an appointment to see the healthcare provider again since he or she also wants the baby to grow big and healthy.

Another way this information can be used is that it can begin to inform pediatricians, nurses and other health providers about Marshallese and Chuukese local medicine practices. Participants in this study explained that some parents use local medicine in conjunction with Western medicine. It is important to note that as the local medicines described by participants in
this study were mainly combinations of a variety of herbs and leaves mixed with coconut oil, the local medicine is fairly innocuous and is unlikely to hurt the children.

During my discussion with Runica to confirm the themes I believed I found from the focus group with the Marshallese participants, Runica shared that if Marshallese parents do not take their babies to a hospital, it does not mean that they do not care about their babies’ health; it means that they believe they are doing what’s best for their baby by taking him or her to a local healer and caring for him or her at home. “They get the medical treatment they need culturally in their own way,” Runica said. “And sometimes we feel it’s better than the Western way. They don’t see what’s happening at home.” Runica’s question in her story, “why is it a requirement?” demonstrates a need for taking time explain to parents why certain rules are in place. For example, some parents may not understand why schools request that they keep their children home for 24 hours after a fever goes away.

Additionally, healthcare providers can use these findings to further their understanding of Chuukese and Marshallese cultures and local medicine practices, and help them see the importance of these practices for Chuukese and Marshallese people. By understanding, respecting and accepting whole-heartedly that these local medicine practices take place, healthcare providers can continue to better serve people from these island regions. Local medicine and Western medicine do not have to conflict. If, for example, a parent refuses medicine prescribed by a doctor for their child who has an infection, the doctor can navigate this situation by giving a reason why the child need the antibiotic in addition to local medicine. The doctor may state, “The local medicine you are using will benefit your child, however, I am worried that your child’s infection could get worse, and I think this antibiotic is needed to help treat the infection while the local medicine can help him feel better.”
One other way that healthcare providers can use these findings is increase their knowledge of the importance of trust within Chuukese and Marshallese families. As Hezel (2013) discussed, people in the islands of Micronesia connect new people they meet to others they already know in the community. Even if a family is in a clinic for a quick visit, clinic staff can try to connect somehow with the family. For example, asking where the family has sought medical treatment before and who helped them might lead to discovering that the healthcare provider and the family know some of the same people, and having that connection can help build trust.

Educators and service agencies that work with Chuukese and Marshallese families can also use the findings in this study as they may provide further knowledge of parenting practices and of the cultures in those island regions. For example, teachers could use the parent responses and perspectives to understand the background and upbringing of Marshallese and Chuukese students in their classrooms. Hawai‘i state programs that offer developmental screenings in the community can also use these findings to inform how they as service providers communicate with Chuukese and Marshallese families, and to be aware of Chuukese and Marshallese methods of ensuring the health of young children.

Similarly to healthcare providers, teachers who work with families from Chuuk and the RMI can also attempt to establish a connection between themselves and the families by identifying someone they both know. For example, a teacher working with a family new to the school could ask the family if they know other Chuukese or Marshallese families that they (the teacher) have worked with before. The teacher might say, “Do you know Ansina and Enap? I had their grandson in my classroom last year.” Or, a teacher could ask the family if their child or children have attended another school nearby and check to see if they both know some of the
same teachers or school staff. These connections can help establish trust between the teacher and the family.

As discussed by Chuukese and Marshallese participants in this study, mothers and aunties, and fathers and uncles are not differentiated from one another, although children in both cultures know who their biological parents are. Grandparents also have important roles in raising their grandchildren. In understanding that extended family members are all involved in caring for and raising young children in Chuukese and Marshallese cultures, teachers and school administrators can invite extended family members to school events, parent-teacher conferences, and to volunteer in the classroom. Including the whole family in these areas can also help build trust between the families and the school, and ensure that everyone in the family feels included and welcome to be a part of their child’s education.

Additionally, in considering the experience Runica shared when her daughter had a fever at school, school administrators and teachers can use this story to understand the importance of sharing and explaining to families why certain school rules exist. For instance, some parents may not know that children should be kept at home for 24 hours after a fever has gone away because they may be contagious and spread illness to others within that 24-hour timeframe. Making time to explain these rules to Chuukese and Marshallese parents while taking their cultural background and context into consideration can help them feel understood and cared for by school administration and teachers.

**Limitations**

One of the limitations of this study was the language barrier that existed between some of the participants and myself. Two of the Chuukese women in the first focus group, as well as two Marshallese women and one Marshallese man in the second focus group, were still learning
English and were only able to communicate to me through the cultural broker. Those five participants may have wanted to share more, but perhaps felt limited in how they could communicate their thoughts and experiences. This resulted in a larger number of responses from those who felt more confident and comfortable in their English-speaking abilities.

A second limitation was that during the first focus group, there were several distractions that made it difficult to concentrate on some of the participants’ responses. One of the participants brought his grandson, who was seven-years old, to the focus group. As he played in the room and moved several of the empty chairs around, it was difficult at certain points to hear what the participants were saying. Other distractions included the fact the individuals who were not part of the focus group came in and out of the room as they were dropping off or picking things up, and the air conditioner was quite loud. Next time, a quieter location for the focus groups will be sought.

A third limitation is that while five to six participants is an appropriate number to have in a focus group, a study examining parent perspectives on early childhood development should perhaps include more than a total of 20 participants. As I aimed to understand how parents from the islands of Micronesia viewed early childhood development and how they care for young children, speaking with a larger number of parents from both cultures may have provided a wider range of perspectives and experiences. For example, more information may have come forward regarding parent observations of children as they grow, and other cultural practices related to how Chuukese and Marshallese parents ensure the health and well-being of their babies and young children.

A fourth limitation was that there were more Chuukese than Marshallese participants. One of the reasons for this was that the Chuukese cultural broker in the first focus group
connected me with other Chuukese parents that he knew on another part of O‘ahu, and one of Dr. Ratliffe’s colleagues connected me with two women who were also from Chuuk. Next time, a more equal number of participants from both island regions will be sought.

Information from this small group may not be generalizable to the whole of Chuukese and Marshallese cultures, although it may be helpful for health care providers to begin to understand some of the practices and beliefs in this population. In addition, the information gathered may not be applicable to people who have been in the US for longer than one generation, and who may not be acculturated more to Western medical practices.

As both men and women were present in four of the focus groups, the women may have felt limited in the extent to which they could discuss certain subjects, such as childbirth and breastfeeding. All of the Chuukese and Marshallese participants shared that no one had ever asked them questions related to how they raise and care for their young children, so interest in the topic may have prompted the men to also want to participate. Most of the women still shared their thoughts in the focus groups by either directly speaking to me or through the cultural broker, but it may have been beneficial to include only women, since mothers have the primary role in raising children in most Micronesian cultures.

**Future Research**

This study looked at how Chuukese and Marshallese participants perceived early childhood development, and is a first step in aiming to understand Chuukese and Marshallese parent perspectives of early childhood development and methods of ensuring the health and well-being of young children. Further studies are needed to examine these themes more closely in order to gain additional knowledge of Chuukese and Marshallese cultures and practices. For example, Marshallese participants expressed that the local medicine that is applied to children
shortly before their first birthday helps them gain the ability to walk. A future study could examine people’s perceptions of the practice in different generations. Another future study could specifically examine Chuukese and Marshallese perceptions of local medicine and healing in young children, particularly related to the body, and how the oil and the leave work together to heal.

A future study could also focus specifically on how local medicines help the baby grow and develop. Aspects that could be examined include at what stages in a child’s life local medicines are applied to help them grow and develop, when and during what situations are local medicines applied to a child to help prevent them from becoming ill, and when/how local medicines are administered to children as they become older. Future directions for study could also include focusing on similarities and differences between how children grow and develop on their native islands and how they are raised in the US, cultural practices that impact children’s health and development, and how perspectives of Western medicine and early childhood development change over the first few generations of parents from Micronesian cultures as they raise their children in the US.
References


Keels, M. (2009). Ethnic group differences in early head start parents’ parenting beliefs and


Petersen, G. (2009). *Traditional Micronesian societies adaptation, integration,*
and political organization. Honolulu: University of Hawai'i Press.


Appendix

Focus Group Questions

1. How do you explain how a child develops between the ages birth and five-years old?
   a. What do you look at to see if a child is developing like other children?
   b. What skills do children develop first? Next? (etc.) (give cues for language, motor development, thinking)
   c. What are some of the steps in the process of development from your perspective?
2. Where do you get basic information about how children develop?
3. What do you do if you are worried about your child’s development and health?
4. How do you make sure your children are healthy?
   a. How often do your children see a doctor or a dentist?
5. What things do you do to prevent illness in your children?
6. What do you believe are important things to do in order to encourage continued development in young children?
   a. Do these things help prepare young children for school or to earn a living through fishing or farming?
7. What places or organizations do you know of in Hawaii that can help support you as you raise young children here?
8. Is there anything else you would like to share before we end our discussion?
9. Thank you for talking with us today!