AN ECOCULTURAL CONSIDERATION OF SÁMI EARLY CHILDHOOD EDUCATION

Laiti Marikaisa¹,
Määttä Kaarina²

¹Sámi University of Applied Sciences,
Hánnoluohkká 45,
9520 Kautokeino,
Norway
²Faculty of Education,
University of Lapland,
Yliopistonkatu 8,
96101 Rovaniemi,
Finland

Abstract:
The Sámi is the only indigenous people in the EU. The Sámi live in the Arctic region in Finland, Norway Sweden, and Russia. Nature and natural lifestyles, respect for the nature and sustainability make an important part of the Sámi culture. Today’s rapid environmental, economic, and political developments pose a threat to the continuity of traditional values. Early childhood education (ECE) has a strong supportive role in the maintenance, transmitting, and strengthening of the Sámi cultures and languages. This research describes the implementation of Sámi ECE by the narratives of Sámi early childhood educators. Special focus is on the pedagogy educators use to strengthen children’s connectedness to nature, respecting nature and living in nature. The theoretical foundation is the eco-cultural theory. The Sámi Parliament has composed a core curriculum and a guide for the daily practices of the Sámi ECE. The research participants (N=23) represent various educational professions. The data comprised personal interviews. The data was analysed with qualitative content analysis. The significance of the nature appeared at many levels of ECE. The research provided grounds for early education which is culturally sustainable as it leans on the cultural tradition and the strong relationship with the nature.

Keywords: indigenous people, Sámi people, early childhood education, ecocultural theory

¹Correspondence: email marikaisal@samas.no

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1. Introduction

This study examines the implementation of Sámi early childhood education from the point of view of ecocultural theory. We describe how the actions of early childhood educators connect to the Indigenous Sámi culture, its inherent focus on and respect for nature, and how these actions help adjust the traditions to the local culture of the physical surroundings. Children construct their understanding of themselves and their environment on the basis of impetuses gathered from home and early childhood education. This premise is especially important to acknowledge considering the culturally relevant development and revitalisation of the endangered Sámi culture.

The Sámi are an Indigenous people who live in Finland, Norway, Sweden, and Russia. In Finland, there are approximately 10,500 Sámi, most of whom inhabit the Finnish part of the Sámi homeland, Sápmi, in the North of the country. This area is culturally and linguistically autonomous, with three Sámi languages being spoken: Inari Sámi, Skolt Sámi, and Northern Sámi. All of these are considered endangered. The Sámi culture is diverse, but its languages and customs are under constant threat of assimilation to the Finnish majority culture around it (Balto 1997, 35; Ministry of Education and Culture 2012; see also Keskitalo, Määttä & Uusiautti 2013). At the heart of the Sámi way of life is a deep connection with nature (Balto 2008, 57; Helander 2000; Jannok Nutti & Kuoljok 2014; Markkula & Helander-Renvall 2014). The strong assimilation to the majority culture is a consequence of the long history of colonisation of the Sámi (see Keskitalo, Lehtola & Paksuniemi 2014; Kuokkanen 2007). As a result, it is increasingly important — albeit challenging — to ensure that the Sámi cultural heritage is transferred to the next generation. Sámi early childhood education can support and strengthen the conservation, transmission, and revitalisation of the traditional knowledge of the Sámi. After all, it plays a major role in protecting the future of the Indigenous Sámi by following the principles of culturally relevant education. The objective of culturally relevant education is to ensure that the prerequisites of welfare are transferred from generation to generation (Laine 2016).

Originally based on social constructivism and ecological theory (Gallimore, Weisner, Kaufman & Bernheimer 1989; Nsamenang 2015; Tudge 2008), ecocultural theory emerged in the 1980s in the United States (Gallimore, Goldberg & Weisner 1993). It was born out of the criticism directed at the prevailing psychological tradition to observe children’s development in isolation, separated from their environment. Current theories recognise that children learn and develop in interaction with the surrounding culture (Weisner 1989; 2002). Ecocultural theory views the actions of an individual as an effort to organise their activities meaningfully, which is to say, in a way that fits their ecology (Weisner, Matheson, Coots & Bernheimer 2005). As a result, culture becomes an extensive framework that guides an individual’s activities, affecting the typicality of those activities as well the meanings, beliefs, and values the activities are based on. These meanings, beliefs, and values an individual has learned from and shared with others over the course of their lifetime (Grace & Bowes 2011, 15).
According to ecocultural theory, the effects of an individual’s ecological and cultural environment become visible in their daily occupations, which is why daily activities are so meaningful to children’s learning and development. Ecocultural conditions create differences in the daily life by guiding the practices and reasons for organising daily activities in a specific way in a particular environment (Gallimore & Lopez 2002).

In Finland, all early childhood education is organised according to the guidelines set by the Act on Early Childhood Education and Care (540/2018) and the National core curriculum for early childhood education and care (ECEC) (National Board of Education 2018). The guidelines state that children whose mother tongue is a Sámi language are entitled to receive early childhood education in that language. Children who speak a Sámi language as their mother tongue, as well as children whose home language is a Sámi language, are entitled to early childhood education in their own Sámi language anywhere in Finland. In addition to this linguistic support, all Sámi children need holistic early childhood education that is based on their culture (Keskitalo, Määttä & Uusiautti 2013; Ministry of Education and Culture 2021).

Sámi culture has its own pedagogical, interactional, and purpose norms. These are described in more detail in two documents published by the Sámi Parliament, “Saamelainen varhaiskasvatussuunnitelma” [Act on Sámi Early Childhood Education] (Sámi Parliament 2009) and “Arjen käytäntöjen opas” [A Guide to Daily Practices] (Sámi Parliament 2013). These documents present the goals and values of Sámi early childhood education and the guidelines on contents and practices that can be considered when planning and implementing local early childhood education. Central values for the Sámi tradition concentrate on nature, relatives, family, livelihoods, and handicrafts, along with preserving the Sámi languages. The early childhood education of the Indigenous people who speak a minority language needs to constantly and consciously focus on supporting and strengthening the linguistic and cultural aspects of the educational practices (Keskitalo & Määttä 2011; Ministry of Education and Culture 2012; Sámi Parliament 2009).

2. Ecocultural theory and early childhood education

Ecocultural theory was originally developed to provide a framework for studying the families of children with special needs. However, Tonyan (2015, 2017) has employed the framework for the examination of early childhood education, focusing specifically on its implementation and the daily activities undertaken by private childminders. These activities include pedagogical practices, routines, and rituals (see Grace & Bowes 2011; Köngäs 2018; Kyrönlampi-Kylmänen & Määttä 2012). The activities undertaken during early childhood education, and the possibilities for the individual to take part in those activities, are defined by cultural values and beliefs as well as economic and social factors (Nsamenang 2015). Äärelä (2016) introduces a hierarchy of early childhood education activities according to function. Activities such as essential daily tasks and basic care-taking situations that facilitate everyday routines fulfil a primary function: this includes
dining, tidying up, and napping. Other activities, such as structured games and playing, storytelling, free playing, and theme work, can be considered to fulfil a secondary function (Àärelä 2016).

From an ecocultural perspective, early childhood educators create a local function and activity environment that does not automatically follow from any prescribed laws, norms, plans, or cultural factors (Bernheimer, Gallimore & Weisner 1990, 222–223; Weisner, Gallimore & Jordan 1988). The educators are already equipped with cultural ideas on how the routines should be formulated and implemented, but these ideas are flexible and can be modified to fit the available resources and conditions. However, the implementation of daily activities is also subject to restrictions and modifications based on external expectations. Anything may change unexpectedly, such as the environment, children’s needs, economic situations, the people around the children, and the expectations of the results. In these situations, the ecology of the daily activities needs to be reorganised and the activities adjusted to meet the goals.

According to ecocultural theory, cultural continuity is essentially constructed from the activities undertaken by the adults with the children and the routines of the adults in the operational environment. The content and form of daily routines depends on the early childhood educators’ interpretations of what they regard as culturally appropriate and meaningful aims and goals. The adults who work with the children define how and why the children’s daily routines are the way they are, but they might base the implementation of early childhood education on different values. They might value, for example, making a living, enjoying the company of the children, taking care of the children’s wellbeing, preparing them for school, developing the children’s identity, preserving their own culture and language, or promoting sustainable development (Laiti 2018). Ecocultural theory offers a framework and method for discussing the core daily practices in terms of their cultural and ecological meanings with the early childhood educators. By employing this framework, it is possible to study the adjustments in the implementation of early childhood education on both local and cultural levels simultaneously.

In this study, we examine the role of everyday routines in transferring and transmitting the Sámi culture. We investigate the flexibility of the activities and their adaptation to the available resources, such as the local premises, places, and time frames. The study also describes the role and importance of cultural ecology for children’s psychosocial learning, growth, and development. The day-to-day implementation of Sámi early childhood education is defined as a social, constantly shaping activity that is based on two ecocultural operational models: Sámi and Finnish. The Sámi early childhood educators are defined as experiencing, narrating, and meaning-creating agents, who actively adapt the daily routines in order to preserve their own Sámi culture. By doing so, they adopt important roles in which they influence culturally relevant education and strengthen the Indigenous culture.
3. Research methodology

In this study, we describe the daily activities of Sámi early childhood education and their connection to the Sámi culture through the lens of ecocultural theory. At the core of the Sámi culture is nature: the interactive balance between humans and nature, familiarity with nature, recognising its meaning, and having respect for it. This study investigates how Sámi early childhood educators describe the practices they use when teaching children about nature and respect for nature.

The following research question has been set for the study:

“How do Sámi early childhood educators describe the way they transfer the meaning, importance, and respect of nature to their pupils?”

The research informants offer a representative take on the employees in Sámi early childhood education. At the moment of conducting the research, Finland employed forty-four (44) Sámi early childhood educators (Lehtola 2015). They were all invited to participate in our interview. In the end, interviews were conducted with 23 early childhood educators, who came from all over Finland, from Helsinki to Utsjoki. Their work environments involved both municipalities and cities. They represented all Sámi language groups and worked in versatile early childhood education positions, including teachers, nursery workers, and private childminders.

The interviews were conducted as free-form individual interviews in which the implementation of Sámi early childhood education was discussed (Laiti 2018). The informants shared their thoughts on, experiences with, and conceptions of their daily work as Sámi with the Sámi culture and education. The interviews were conducted in the spring and autumn of 2016. The themes of the interviews concerned the daily routines of Sámi early childhood education. The educators were encouraged to share the goals they set concerning Sámi early childhood education, the principles and starting points that guide their work, and the elements that they consider when planning, implementing, and evaluating early childhood education.

The material was subjected to a qualitative content analysis that focused on topics related to the research question. The routines of early childhood education are typically framed as brief episodes or depictions of actions that the educators found natural to describe. The descriptions of daily routines were based on specific themes instead of following a plotline (Hsiehh & Shannon 2005).

The analysis consisted of three phases (Graneheim & Lundman 2004). In the reduction phase, the material was simplified, and irrelevant information was removed. In the second phase, the material was clustered, or grouped into subcategories according to topical or thematic similarities. In the third phase, the subcategories were reorganised and transposed to content-based thematic categories (Mayring 2004) that represented the central outcomes of the study. We prioritised presenting the material in a concise and succinct form, focusing primarily on retention of essential information (Graneheim & Lundman 2004).
Lastly, a note should be made about the researchers’ positions considering this study. The first author lives in a Sámi family and speaks Northern Sámi. She has a long working history in various roles in both Sámi and majority culture early childhood education. James Banks (2006, 180) dubs such position “the external-insider”. The term refers to a researcher who has grown up in another culture, but through the reflection of her own experiences and values can understand the community she studies and supports its objectives. The second author has studied and developed Sámi pedagogical tools (see authors Keskitalo & Määttä 2011; Keskitalo, Määttä, & Uusiautti 2011, 2012a, 2012b, 2013; Keskitalo, Uusiautti & Määttä 2012).

4. Results

4.1 Nature through the eyes of Sámi culture

According to the early childhood educators who participated in this study, the special features of Sámi culture are commonly introduced through the use of nature and natural elements in their education activities. The educators explained that nature remains at the core of Sámi early childhood education regardless of whether they lived in villages, municipalities, or cities. This corresponds to the results of previous studies (e.g. Balto 1997; Jannok Nutti & Joks 2018; Joks 2007; Joks, Østmo & Law 2020; Laiti 2018), which have found that the relationship with nature is at the centre of the Sámi culture. The participants considered it important to speak to the children about the relationship between culture and nature. The connection with nature was experienced as a deeply important theme that plays a comprehensive role in early childhood education.

“[Being Sámi] is actually a template for life itself… for existing… — so… that is what it really is… — the connection to nature… and the seasons and, like, the natural cycle of the environment. Honestly, it is such a deep thing.” (Interview 22)

According to the early childhood educators, all types of surroundings “can be seen through Sámi culture,” (Interview 6) and the environment can be modified to express the Sámi conception of nature by, for example, adopting a shape, such as a circle, as the offset for the decoration.

“…roundness… that in Sámi culture the objects have been round exactly for the seasonal migration with the reindeer… the bottom of the lavvu [traditional Sámi temporary dwelling] is round… the sun is round… the earth is round… and I have wanted our department, too, to have only round tables.” (Interview 22)

The early childhood educators considered nature meaningful also on a personal level. They clarified their personal connection to nature and the process of growing into that connection. Their own childhood experiences were adopted as the basis and beginning of their early childhood education work. They wanted to share their personal experience of Sámi culture with the next generations.
“---... I am Sámi through my relationship with nature. That is how it shows... that nature is to be respected... and that nature is a place to learn in.” (Interview 15)

Indigenous peoples consider nature an important context for activities, growth, and learning (Lee-Hammond 2017; Rowan 2015, 2017). In this study, the natural environment was considered a natural space to act, learn, interact, and experience. In this respect the results are commensurate with results of previous studies concerning other Indigenous peoples (Alcock & Ritchie 2018; Stephenson 2002). Some of the interviewees found it difficult to implement the activities that would abide by the Sámi nature conception with the spatial resources they had, but also, these educators explained that they wished they could “go lavvuing” or “go fishing” or “go to the forest.”

4.2 Nature as a place of action
The highest value and basis of the practical implementation of the activities was considered nature, and especially forest. Natural surroundings, understood as the yard, nearby forests, parks, and beaches, were listed as desired environments for activities. The educators explained that they would go out into the forest as often as possible and regardless of the weather. The seasons dictate the expanse of the area they would use. They want to teach the children how to move in the forest, and in natural areas in general.

“And... well, now, a bit further along spring, obviously, the meaning and importance of being outdoors starts to show...” (Interview 3)

Central to their implementation of early childhood education is that there is nearby place where to go and to experience them as “one’s own place”. In the next excerpt, one of the educators describes the activities in the forest as natural and versatile. The forest is visited often; it is a meaningful location. Being outdoors is more than a part of the day’s planning, it is a part of the culture.

“We went berry-picking again today. Tomorrow we will bake blueberry muffins... we have been, already, I guess... last week... two, three times, and... we go to the forest to pick berries or, like, just to take a walk in the forest. Children sit around on the hummocks... and... eat the berries they find... We go look for where could there be a fox’s den... and what could be a bear’s lair and... (laughs) and all these kinds of things... so... children really do love to wander around in nature.” (Interview 18). Nature provides the physical framework and content to Sámi early childhood education. One of the early childhood educators (Interview 21) summarises educators’ thoughts on the relationship of the forest, language, and culture succinctly: “Language and culture are in the forest.”

4.2 The cycle of nature and seasons as educational contents
The early childhood educators aspire to develop the children’s relationship to nature as a part of their daily activities. It is considered important to focus on nature actively, as one of the interviewees said, “following nature throughout the year is an important thing.”
The educators teach their pupils about nature by showing them the area and attracting the children’s attention to natural phenomena. This usually takes the form of talking with the children about such natural phenomena (e.g., seasonal variation). Familiarity with plants and animals is part of developing the children’s relationship to nature.

The early childhood educators explained how the themes of Sámi early childhood education conform to the cycle of nature around them. When explaining the seasons, for example, the educators mention the foliage in autumn, the migration of birds in spring, and the frost in winter. In the north, a significant aspect of the seasonal cycle was the end of the polar night at the emergence of the sun, which the educators mentioned as an example of a mid-winter theme.

“[Themes] come to us pretty much from the culture and the seasonal activities or… phenomena, so we have covered the northern lights and the rising of the sun, or, like, the re-emergence of the sun --.” (Interview 2)

By following the movements of the sun, the educators want to develop the children’s understanding of time and the signs of nature.

“Then we follow the sun with the children… meaning that we have a specific spot where we go and sit on a rock… and watch… so then, when the sun has sunk below a certain group of trees, it is 11 o’clock and it is time for us to eat.” (Interview 18)

Observing and interpreting the signs of nature are important skills in the Sámi lifestyle (Aikio 2010). By instructing the children to engage with those signs, the educators want to strengthen the children’s self-sustainability in nature and to guide them to understand the ways in which nature can assist them.

In many teaching groups, they used boards that visualise the seasons and the weather conditions common during those seasons. The educators described the meaning and use of these boards in the following way:

“--- We have, there, the cycle of seasons, with eight seasons, and we discuss that every day. We discuss the sphere, where we are going and what the signs are of the present season. Now, recently, we talked about, now that we have just had winter, about when we will start shifting to spring-winter. What are the signs of this shift?” (Interview 1)

In Sámi culture, the traditional lifestyle that is founded on seasonal changes is called seasonal migration (Sámi Parliament 2009, 2013). Reindeer work, obtaining and processing different materials and resources, berry-picking, and fishing follow a specific annual cycle. The educators specifically highlighted the connection of Sámi early childhood educational activities to the annual cycle of reindeer work. In spring, for example, the themes of education include the birth of the calves and earmarking them. Another theme is the timing of the grouse-hunting period in winter.
“We do arts and crafts. Now lately we have done, for instance... the trapping of the grouse... we will do the bear now over the spring, when the bear wakes up, and then later, we will cover the calf, the reindeer calf. It is usually some animal or a culturally relevant activity, so for that week we then plan one arts and crafts work that is connected to that topic, and then we do it.” (Interview 2)

4.3 Nature adjusted to local resources
The educators aim to enhance the children’s relationship to nature in versatile ways. The aim is to do activities that are connected to each season. The way in which those activities are structured depends on the local area. The early childhood educators named the familiarisation and handling of traditional food items as one authentic form of acting and experiencing. For example, preparing dried meat is scheduled in spring, and fishing is practised in many ways:

“Then sometimes we have prepared dried meat... Well, by doing it by ourselves of course, who might have a special interest in fishing... so then this day-care has done that as well. So, we have been there. In autumn we fished with a net... in winter we went ice-fishing... then we took the snowmobile to go... on ice-fishing trips. The ice-fishing trip was a part of this house... yes, they have done that for quite a long time already. I do not know if they go every year... almost, for sure. So, this is how you see the difference, that... the environment is used a lot.” (Interview 17)

It was not possible by far for all educators interviewed to perform diverse activities in nature, the forest, or on the mountains. In such cases, fishing, driving a snowmobile, wandering around in nature or living in the lavvu were presented and experienced in different ways. The early childhood educators explained some of the alternative ways to evoke Sámi environments and ways to act in them. In these cases, nature and natural activities can be created through, for example, imagination, as in the following:

“Yeah well, we just had the skiing vacation. Some of the people actually visited the North and the mountains. We talked about that and... then we had the PE... so we had imaginary physical exercises... that we travelled to the hills, we did not have any equipment there... packed the bags, thought about what we would need there. These who had been there... so we asked, ‘Well tell us now... what did you need to take with you?’ Some of them were taking chainsaws... so there... yes everyone was quite excited about it and off we went... and we had only binoculars with us, used our hands as binoculars and looked through them for what there was to see... and how to walk around the hills... So, they were, they did throw themselves into it really well... they started leading the activity, that... not much was needed from me... Then when I realised that, all right, ‘Well now... so... now we have driven around on the snow scooters enough, so we spotted reindeers and watched them through the binoculars.” (Interview 7)
Flexibility is needed to manifest the educators’ own cultural basis. Sámi early childhood education takes place in environments that do not provide for the things that the educators hold culturally central. The educators showed diverse resourcefulness in trying to combine their expression of their culture with the local facilities, places, and annual cycle. In the spirit of cultural relevance, they adjusted their activities to their current time and place, changed plans, adjusted the schedules, and transformed the operational environment so that they promoted the Sámi culture and language even in new locations.

Nature and the environment can also be approached through bringing those elements inside the day-care facilities. Some groups were building a lavvu and spaces resembling fireplaces, and they brought natural materials to construct those with. Together, the group would create the sound world that reflected the culture.

### 4.4 Choosing natural materials that foster the culture

The early childhood educators explained how in Sámi early childhood education, they use authentic materials and resources whenever possible. The educators favoured natural materials, recycled materials, and traditional, cultural materials. The interview data includes examples of play-lavvus constructed with twigs and troll dolls made of potatoes. Materials were gathered by hand from the forest, or from the neighbourhood whenever possible. Sometimes the children were also offered a chance to participate in processing and handling reindeer skin.

From the traditional Sámi materials, the early childhood educators include sisna (reindeer skin treated with the bark of the birch, willow, aspen or alder tree), reindeer hair, bone, roots, horns, baize (verka, a type of woollen fabric), and decorative ribbons and beads. In one of the groups, they combined the knowledge of the materials and training of the child’s sense of aesthetics in the following way:

“We have those theme weeks when we deal with handiwork in more detail. For example, now we have this going on, that we have worked with leather… the children got to feel and smell the material and then we have done those… of course it is difficult to knit or sew such leather. We then cut a small leather bag like that, which we glued on cardboard, and then that we decorated it with baize and beads.” (Interview 1)

When doing arts and crafts, the educators consider it especially important for their pupils to become acquainted with sisna leather, which is an essential part of the Sámi culture. In the situational context described above, the activity was adapted so that the child had the opportunity to experience the qualities of the material as well as to experiment with the cultural practice of decorating.

### 5. Conclusions

In this study we have observed the ethical considerations of studying Indigenous peoples in general and the Sámi people in particular. In addition to a consideration of general
ethical principles, Sámi research also requires special sensitivity when addressing cultural questions, as well as a genuine interest from the researcher for the participants (Keskitalo, Määttä, & Uusiautti 2012). We adhere to the ethical principle that a researcher who studies a Sámi community must be knowledgeable in and have respect for the history of the Sámi, as well as their traditions, culture, and languages. The first author of this study speaks Sámi, lives in a Sámi family, and is familiar with the Sámi way of living. She has worked in and managed a day-care that had both Sámi and majority culture groups. As a result of her work history, she has also become familiar with the practices and daily routines of Sámi early childhood education. The interest to study the special features of Sámi early childhood education was sparked by her personal experiences in day-care work.

Collecting research data requires confidentiality between the researcher and the participant. In addition, researching a small, professional community requires special sensitivity. We attempted to elicit responses on a deeper level than mere superficial statements on the basis of what the participant expected the researcher to want to hear. In this light, another important consideration involves the inherent power imbalance between the researcher and the participant when creating and analysing the material. Confidentiality was a focus point for the entire duration of the research process.

The ethics of Indigenous research also includes the principle of reciprocity. The knowledge produced in the study must benefit the Sámi community in different ways after the research has been concluded (Keskitalo, Määttä, & Uusiautti 2012; Laiti 2018). It is of primary importance to use the knowledge gained from this study in the training of early childhood education teachers, as well as in courses for educating Sámi early childhood education workers. The interviews formed a rich and diverse set of data in which the early childhood education employees spoke openly about the elements that they considered meaningful in their daily activities. The analysis also gave space for the versatile conceptions and experiences mentioned in the material, and the transparency and credibility of the study are protected through substantial citations from the interviews (Rubin & Rubin 2005).

6. Discussion

The results of the study show how early childhood educators act as administrators and agents of the Sámi culture. They occupy a decisive position in the pursuit to teach the future generations to adopt the values, world view, and practices of the Sámi culture. Significant factors of early childhood education in the protection of the culture’s vibrancy were flexibility and integrated activities that are adjusted to the local circumstances. The teachers and childminders of Sámi early childhood education modified their activities and were flexible in their use of space and time in a way that allowed them to teach nature-related knowledge and respect in a culturally relevant manner (Laine 2016).

Along with culturally relevant education, the educators also practised cultural sensitivity (Keskitalo, Määttä, & Uusiautti 2011; Saus 2006) and embraced the responsibility of introducing the children to their home culture (Byrdi 2016). In this way,
the principles of ecocultural theory reinforce the practice of Sámi early childhood education: the daily activities are implemented in flexible ways and the Sámi culture and language are adjusted to the local environment, location, time, rhythm of nature, and Sámi life as it follows the annual cycle. The children learn to move in the neighbourhood, observe the natural events that take place there, and use the materials that the surrounding nature provides. In addition, such activities also introduce elements from Sámi culture to the local surroundings, such as fireplaces and *lavvus*. Elements from Sámi culture are adjusted to the context of early childhood education, and the educational activities are embedded in the schedule set by nature (Laiti 2018).

The Sámi culture is founded on traditional values that express a respect for nature, and the activities constructed on the basis of these values are implemented in Sámi early childhood education. Nature is at the core of Sámi culture: it is where the culture was born. Nature is considered to provide the framework for a good life, and facilitating a good life is a central value of culturally relevant development.

**Conflict of Interest Statement**
The authors declare no conflicts of interest.

**About the Author(s)**

**Marikaisa Laiti** (PhD; M. Ed, B. Ed./early childhood education teacher) is an independent post-doc researcher. She is also a leader of a research project and researcher at Sami university of applied sciences, in Kautokeino, Norway. Her latest research interest is on Sami pedagogy in Sami early education centers.

**Kaarina Määttä** (PhD) is a Professor of Educational Psychology (emerita), Faculty of Education, University of Lapland. Her research interests include study processes and caring teacherhood, tutoring and student guidance, love and human relationships as well as positive psychology and human resources.

**References**

Aikio A, 2010. Olmmošhan gal birge. Áššit mat ovddidit birgema [People will manage. Matters that promote management]. Kárásjohka: ČálliidLágádus.

Alcock S, Ritchie J, 2018. Early childhood education in the outdoors in Aotearoa New Zealand. Journal of Outdoor and Environmental Education, 21(1), 77–88.

Balto A, 1997. Sámi mánáidbajásgeassin nuppástuvvá [The education of Sámi children is transforming]. Oslo: ad Notam Gyldendal.

Balto A, 2008. Sámi oahpaheddjit sirdet árbevirolaš kultuvrra boahttevaš buolvvaide. Dekoloniserema aksüvndadutkamúš Ruota beale Sámis. [Sámi teachers transmit the traditional culture to the next generations. Action research of the decolonization in the Sámi land]. Diedut 4. Kautokeino: Sámi allaskuvla.
Banks J, 2015. Cultural diversity and education: Foundations, curriculum, and teaching. New York: Routledge.

Bernheimer L, Gallimore R, Weisner T, 1990. Ecocultural theory as a context for the individual family service plan. Journal of Early Intervention, 14(3), 219-233. doi: 10.1177/10538159001400304.

Boine E, Saus M, 2012. Saamelaisten isien kasvustustregioita. [Parenting strategies of Sámi fathers] In A. Lauriala (Ed.) Koulu ja pohjoisen pojat. [School and the Boys of the North]. Rovaniemi: University of Lapland, pp 69–85.

Byrd C, 2016. Does culturally relevant teaching work? An examination from student perspectives. Sage Open, 6 (3), 1-10. doi: 10.1177/2158244016660744

Gallimore R, Goldberg C, Weisner T, 1993. Social construction and subjective reality of activity settings: implications for community psychology. American Journal of Community Psychology, 21(4), 537-559. doi: 10.1007/BF00942159

Gallimore R, Lopez E, 2002. Everyday routines, human agency and ecocultural context: construction and maintaining individual habits. The Occupational Therapy Journal of Research, 22 (1), 70-77. doi: 10.1177/15394492020220S109

Gallimore R, Weisner T, Kaufman S, Bernheimer LP, 1989. The social construction of ecocultural niches: Family accommodation of developmentally delayed children. American Journal on Mental Retardation 94 (3), 216-230.

Grace R, Bowes J, 2011. Using an ecocultural approach to explore young children’s experiences of prior-to-school care settings. Early Child Development and Care, 181(1), 13-25. doi: 10.1080/03004430903205010

Graneheim U, Lundman B, 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse education today, 24 (2), 105-112, doi: 10.1016/j.nedt.2003.10.001

Helander E, 2000. Saamelainen maailmankuva ja luontosuhde. [The Sámi worldview and relationship to nature.] In I. Seurujärvi-Kari (Ed.) Beaivvi mánát. Saamelaisten juuret ja nykyaika. [The roots of the Sámi and the contemporary world]. Helsinki: SKS, pp 171-182.

Hsieh HF, Shannon SE, 2005. Three approaches to qualitative content analysis. Qualitative health research, 15(9), 1277-1288. doi: 10.1177/1049732305276687.

Jannok NY, Kuoljok K. 2014. En eldstad, flera berättelser: Unga skapar relationer till tidigare generationers samiska platser. [One fireplace, many stories: The young creating connections to the Sámi locations of the previous generations]. Jokkmokk: Ájtte, svenskt fjäll- och samemuseum.

Jannok NY, Joks S, 2018. En barnehages praktiske engasjement skaper stedets karakter. [A kindergarten’s practical commitment creates the character of the place] In A. Myrstad, T. Sverdrup & M. B. Helgesen (Eds.). Barn skapar sted - Sted skapar barn. [Children create the place – place creates the children]. Bergen, NO: Fagbokforlaget, pp 189-201.
Laiti Marikaisa, Määttä Kaarina
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Joks S, 2007. Boazodoalu máhtut äiggis äigái. Etniid doaibma árbevirolaš oahpaheamis boazodoalus/Reindeer herding knowledge through the ages. The mothers’ role in the transmission of traditional knowledge within reindeer herding. Diedut nr 3/2007. The Nordic Sámi Institute/The Sámi University of Applied Sciences.

Joks S, Østmo L, Law J, 2020. Verbing meahcci: Living Sámi lands. The Sociological Review 68(2):305-321. doi:10.1177/0038026120905473

Keskitalo P, Lehtola VP, Paksuniemi M, 2014. Saamelaisen kansanopetuksen ja koulunkäynnin historia Suomessa. [A history of Sámi education and schooling in Finland] Turku: Siirtolaisuusinstituutti.

Keskitalo P, Määttä K, 2011. The basics of Sámi Pedagogy. Rovaniemi: Lapland University Press.

Keskitalo P, Määttä K, Uusiautti S, 2011. Toward the practical framework of Sámi education. Journal of Education, Society and Behavioural Science, 1 (2) 84-106.

Keskitalo P, Määttä K, Uusiautti S, 2012a. Sámi education in Finland. Early Child Development and Care, 182(3-4), 329-343. doi:10.1080/03004430.2011.646723

Keskitalo P, Määttä K, Uusiautti S, 2012b. Ethical perspectives on Sámi school research. International Journal of Education, 4(4). 4(4), 267-283. doi: /10.5296/ije.v4i4.2908

Keskitalo P, Määttä K, Uusiautti S, 2013. Sámi education. Frankfurt am Main: Peter Lang.

Kyrönlampi-Kylmänen T, Määttä K, 2012. What do the children really think about a daycare centre—the 5–7-year-old Finnish children speak out. Early Child Development and Care, 182(5), 505-520. doi: 10.1080/03004430.2011.557861

Köngäs M, 2018. "Eihän lapsil ees oo hermoja". Etnografinen tutkimus lasten tunnealystä päiväkotiarjessa. [The children don’t even have nerves. An ethnographic study on children’s emotional intelligence in daily routines at the daycare.] Acta Universitatis Lapponiensis 368. Rovaniemi: Lapland University Press.

Kuokkanen R, 2007. Saamelaiset ja kolonialismin vaikutukset nykypäivänä. [The Sámi and the effects of colonialism in the present world] In J. Kuortti & M. Lehtonen & O. Löytty (Eds.) Kolonialismin jäljet: keskustat, periferiat ja Suomi. [The stain of the Colonialism: centres, peripheries, and Finland] Helsinki: Gaudeamus, pp 142-155.

Lee-Hammond L, 2017. Belonging in nature: Spirituality, indigenous cultures and biophilia. In The SAGE Handbook of Outdoor Play and Learning. Thousand Oaks, CA: SAGE, pp 319-332.
Lehtola R, 2015. Saamelainen kulttuurisensitiivinen täydennyskoulutushanke saamenkielisessä varhaiskasvatuksessa toimiville työntekijöille/varhaiskasvattajille. [Culturally sensitive Sámi additional training project for employees and educators of Sámi early childhood education]. Giellagas-institute of the University of Oulu, the education centre of the Sámi Homeland and the pedagogical faculty of the University of Oulu. Inari: Samediggi.

Mayring P, 2004. Qualitative content analysis. In Uwe Flick & Ernst von Kardoff & Ines Steinke (Eds.) A Companion to Qualitative Research. London: SAGE, pp 159-176.

Markkula I, Helander-Renvall E, 2014. Ekologisen perinnetiedon käsikirja [Handbook of ecological traditional knowledge]. Announcements of the Arctic Centre 59. Rovaniemi: Arctic Centre.

Nsamenang AB, 2015. Ecocultural theories of development. International Encyclopedia of the Social & Behavioral Sciences, 6, 838-844.

National Board of Education 2018. National core curriculum for ECEC. Regulations and Guidelines 2018:3a. Helsinki: National Board of Education.

Ministry of Education and Culture 2012. Toimenpideohjelma saamenkielen elvyttämiseksi [An actionable program for the revitalisation of the Sámi language]. Helsinki: Ministry of Education and Culture.

Ministry of Education and Culture 2021. Saamen kielten ja saamenkielisen opetuksen kehittämisyöryhmän raportti [Development group report on Sámi languages and education in Sámi languages] 25. Helsinki: Ministry of Education and Culture.

Rowan MC, 2017. Relating with land/engaging with elders: Accessing indigenous knowledges in early childhood education through outdoor encounters. In T. Waller, E. Ärlemalm-Hagsér, E.B. H. Sandseter, L. Lee-Hammond, K.S. Lekies & S. Wyver (Eds). The SAGE Handbook of Outdoor Play and Learning. Thousand Oaks, CA: SAGE, pp 395-412.

Rowan MC, 2015. Thinking with land, water, ice and snow: A proposal for Inuit Nunangat pedagogy in the Canadian Arctic. In V. Pacini-Ketchabaw & A.Taylor (Eds.) Unsettling the colonialist places and spaces of early childhood education. New York: Routledge, pp 198-218.

Rubin H, Rubin IS, 2011. Qualitative Interviewing: The Art of Hearing Data. Los Angeles: SAGE.

Sámi Parliament 2009. Saamelainen varhaiskasvatussuunnitelma [Act on Sami Early Childhood Education]. Inari: Samediggi.

Sámi Parliament 2013. Saamelaisen varhaiskasvatuksen arjen käytäntöjen opas [A Guide to the Daily Practices]. Inari: Samediggi.

Saus M, 2006. Cultural competence and children in the North. In E.-L. Kronqvist & P. Hyvönen (Eds.) Insights and Outlouids: Chilhood Research in the North. Acta Universitatis Ouluensis, E 107. Oulu: University of Oulu, pp 43-60.

Stephenson A, 2002. Opening up the outdoors: Exploring the relationship between the indoor and outdoor environments of a centre. European Early Childhood Education Research Journal 10(1), 29–38. doi:10.1080/13502930285208821
Tonyan HA, 2015. Everyday routines: A window into the cultural organization of family childcare. Journal of Early Childhood Research, 13(3), 311–327. doi: 10.1177/1476718X14523748

Tudge J, 2008. The Everyday Lives of Young Children. New York: Cambridge.

Weisner TS, 1989. Cultural and universal aspects of social support for children: Evidence from the Abaluyia of Kenya. In D. Belle (Ed.) Children’s Social Networks and Social Supports New York: Wiley & Sons, pp 70-90.

Weisner TS, 2002. Ecocultural understanding of children’s cultural pathways. Human Development 45(4), 275-281. doi: 10.1159/000064989

Weisner TS, Matheson C, Coots J, Bernheimer LP, 2005. Sustainability of daily routines as a family outcome. In E. Ashley & M.I. Martini (Eds.) Learning in Cultural Context: Family, Peers, and School. New York, NY: Springer, pp 41-73.

Äärelä R, 2016. “Dat ii leat dušše dat giella”– ”Se ei ole vain se kieli” Tapaustutkimus saamenkielisestä kielipesästä saamelaisessa varhaiskasvatuksessa. [“It is not just the language” A case study of a Sámi language nest in Sámi early childhood education]. Acta Universitatis Lapponiensis 335. Rovaniemi: Lapland University Press.
