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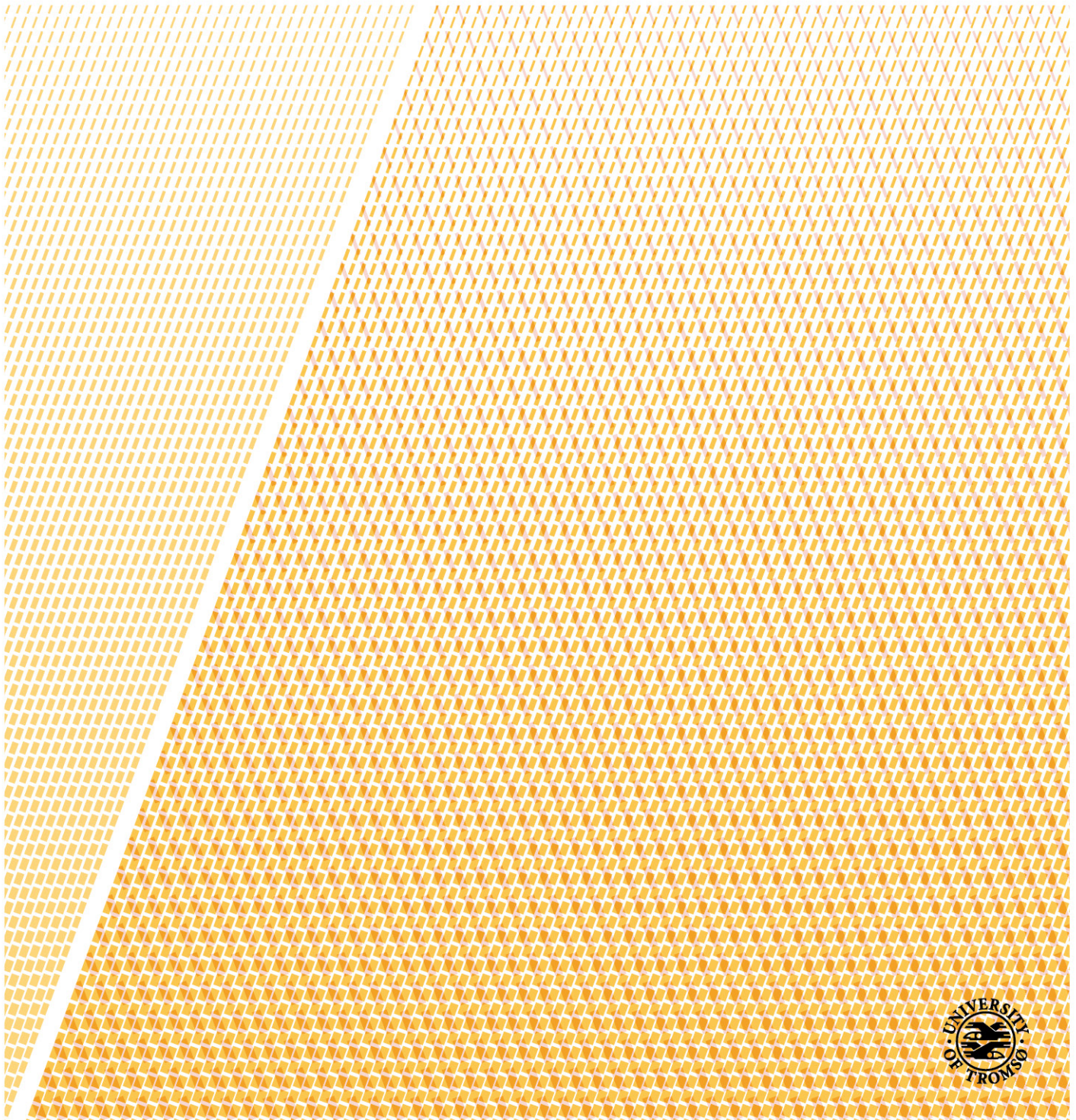
Faculty of health

“I sound”

– yoik as embodied health knowledge

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A dissertation for the degree of Doctor Philosophiae – March 2023



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Háliidan váimmulaččat giihtit buohkaid guđet iešguđetlagan leat dahkan vejolažžan dan barggu. Fuolakeahtta makkár rollas, visot leat leamaš dárbbaslaččat. Earenoamážit háliidan giihtit sin guđet eai goassege heitan juoigamis, ja sin guđet fas juoigagohte jus heite. Háliidan máiddai giihtit sin guđet dollet dat mávssolaš árbevieru ja addet dat viidaseabbo, ja dovddastit sin guđet gávdnet dan ođđasis sin siste ja dan ealáskahttet.

List of papers

Study 1

Hämäläinen, S., Musial, F., Graff, O., Olsen, T. A., & Salamonsen, A. (2017). Yoik experiences and possible positive health outcomes: an explorative pilot study. *International Journal of Circumpolar Health*, 76(1). <https://doi.org/10.1080/22423982.2016.1271590>

Study 2

Hämäläinen, S., Musial, F., Salamonsen, A., Graff, O. & Olsen, T. A. (2018). Sami yoik, Sami history, Sami health: a narrative review. *International Journal of Circumpolar Health*, 77:1. <https://doi.org/10.1080/22423982.2018.1454784>

Study 3

Hämäläinen, S., Musial, F., Graff, O., Schirmer, H., Salamonsen, A. & Mehus, G. (2020). The art of yoik in care: Sami caregivers' experiences in dementia care in Northern Norway. *Nordic Journal of Arts, Culture and Health*. <https://doi.org/10.18261/issn.2535-7913-2020-01-03>

Study 4

Hämäläinen, S., Salamonsen, A., Mehus, G., Schirmer, H., Graff, O. & Musial, F. (2021). Yoik in Sami elderly and dementia care – a potential for culturally sensitive music therapy? *Nordic Journal of Music Therapy*. <https://doi.org/10.1080/08098131.2020.1849364>

Čoahkkáigeassu sámegillii

Boares čállosat juoigama ja sámi kultuvrra birra govvidedje juoigama oassin buot eallima beliin sápmelaččas, leaš dál beaivválaš eallima doaimmain dahje vuoŋŋalaš ja erenoamáš meanuin ja daguin. Juoigan govviduvvui dárbbaslažžan dearvvašvuhtii, čálgui ja lihkkui. Oanehaččat dadjon oažžot lohkat ahte luohiti govviduvvui leame eallindárbun. Odne celket máŋga juoigi ahte luohitis lea seamma mearkkašumi sidjiide. Sáhtta dadjat ahte lea divraseamos mii dus lea. Lihkká lea juoigama čanastat dearvvašvuhtii unnán dutkojuvvon. Dát dutkkus lea fenomenologalaš-hermeneutistalaš čiekŋudeapmi fáttas. Dutkkus vuodđuduvvo njealji artihkkala vuodđul namuhuvvon das ovdalaš nugo Study 1-4, ja leat gávdnamis ollislaččat mildosiin. Dutkosat leat dahkon guoskevaš girjjálašvuoda duogážiin ja guokte diehtovuodu mat leat čohkkejuvvon kvalitatiiivvalaš dutkosságastallamiid ja jearahallamiid bokte. Dán dutkosis guorahalan viidasit ja čohkken muhtin daid teorehtalaš beliid mat namuhuvvojit artihkkaliin – musihkalašvuoda, iešmuddejumi ja persovnnalašvuoda salutogenehtalaš dearvvašvuoda perspektiivvaš.

Mu lahkoneapmi dutkanjearaldahkii **Maid sáhttit mii ipmirdit dearvvašvuodamáhtus mii lea julggaštuvvon ja fátmastuvvon luohitis/juoigamis?** lea máŋggafágalaš. Anan bihtáža Áillohačča diktemis dáiddalaš stuoridanlásen, ja salutogena guovddáš teoriijan. Dutkanjearaldat iešalddis muitala dohkkeheami dasa ahte dan máhtu maid lea vejolaš ovdanbuktit ja digaštallat dán dutkosis, lea ráddjejuvvon ja belohakkii. Lassin dasa čujuha sátni «mii» dutkanjearaldagas dan kultuvrralaš gaska mii lea dan akademalašmáhtu ja eamiálbmotmáhtu gaskkas, man siskkobealde dát dutkkus lea.

Salutogenehtalaš perspektiiva fuomášuhtta eavttuid dearvvašvuhtii. Koloniseren ja assimileren guhkilmas loavkideapmin eamiálbmogiin, sin eallinguovlluin ja kultuvrralaš ovdanbuktimiin lea leamaš, ja lea, ollislaččat vahátlaš ja lea addán gorutlaš váikkuhusaid sin eavttuide dearvvašvuhtii ja čálgui miehta máilmmi. Dán dutkosis ákkastalan dohkkehit árvvu ollislaš ja gorutlaš dearvvašvuodamáhtus mii lea juoiganárbevierus ja -geavahas. Guovtti dutkanságastallama vuodđodieđuiquin, Áillohačča divttaid «čuojan [I sound]», ja «mun nai čuojan [and I resound]» ja doarjjalaš dutkangirjjálašvuodain vuodđun, ákkastalan ahte gorutlaš ja vuđolaš musihkkamáhttu olbmos lea sihke riegádeamis, ja buot olbmo gulahallamis. Mun dulkon juoigama dovddaheapmin praktihkalaš ja gorutlaš dohkkeheapmin olbmo iešmuddengelbbolašvuodas ja persovnnalašvuodas vuđolaš musihkalašvuodas. Mun dulkon juoigama dego gorutlaš, praktihkalaš máhttun olbmo dearvvašvuoda ja leat-

máilmmis musihkkalaš luonddu harrái. Juoigan dego gorutlaš, praktihkalaš máhttu máilmmálaš musihkalašvuoda birra ávžžuha min eallit eallima musihkalaš gaskavuodain sihke iežaideameguin ja earáiguin, leaš dál dat earát olbmot dahje eará go olmmošlaš eallit. Dakkár musihkalašvuodta eallimis sáhtta boktit dovduidečuohcci gelddolašvuoda, čájehit maid atnit árvvus ja sajáiduhittit iežas alldestis. Dearvvašvuodapotensiála juoigama musihkalaš leat-máilmmis mearkkaša maidái ahte dus álohii lea reaidu sadjogasas mainna gieđahalat dovdduid ja iešmuddema. Dát bealit sáhttet belohakkii čilget manne juoigan lea ceavzán čuohtenarjagiid heahpatvuoda.

Dohkkeheapmi juoigama salutogenehtalašvuoda potenciálas sáhtta leat dearvvašvuodaovdánahttin dekoloniseremii muhtin eavttuide gustovaččat dearvvašvuodamáhttui. Juoigan nugo eamiboaris báikkálaš praktihkalaš ja gorutlaš dearvvašvuodamáhttu gullá máilmmiviidosas eamiálbmotmáhttui dearvvašvuodaekologijja birra gaskkal olbmo ja birrasa.

Abstract

The earliest descriptions of yoik and Sami culture depict it as something the Sami would integrate into all their living: in daily life, mundane activities as well as spiritual, ritual, and ceremonial practices. Yoik was seen as something necessary for health, well-being, happiness, and success. In short, yoik was an existential necessity. Today, many yoikers articulate yoik's significance for them in similar ways. It is said to be the most precious thing you can have. However, the connections between yoik and health have only been modestly addressed in research. This thesis is a phenomenological-hermeneutic in-depth study of this topic based on four papers listed below and found in *Appendices*. They are studies on relevant background literature and two sets of data collected with qualitative research conversations and interviews. In this thesis, I elaborate further and summarize some of the theoretical aspects mentioned in the papers—aspects of musicality, self-regulation, and personhood connected to health from a salutogenic perspective.

The overall research question – **What can we understand about some of the health knowledge embodied in yoik?** – is approached from multiple disciplinary perspectives with a piece of Nils-Aslak Valkeapää's poetry as an artistic looking-glass, and salutogenesis as the central theory. The research question expresses my acknowledgement of the limited and partial character of the knowledge that is possible to generate and discuss in this thesis.

Furthermore, the word “we” refers to the cultural interface between academic and indigenous ways of knowing that this thesis moves within.

The salutogenic perspective focuses on prerequisites to health. Colonization and assimilation as long-term violations of Indigenous people, their living areas, and their cultural expressions has had, and has, a detrimental embodied impact on the prerequisites of their health and well-being worldwide. In this thesis, I argue for acknowledging the value of embodied health knowledge in the tradition and practice of yoik. Based on two data sets of research conversations, Valkeapää’s poems “I sound”, “and I resound”, and supporting research literature, I argue for an innate, fundamental musicality in humans and human interactions. I interpret yoik as an expression of embodied Indigenous acknowledgement of this fundamental musicality, of the importance of resonating attunement, relationality, and multiartistic, musicking self-expression for human self-regulation competence and personhood. I interpret yoik as embodied knowledge of the musical character of human health and being-in-the-world. Yoik as embodied knowledge of a fundamental musicality in the world as a whole encourages living your life in a musical, relational resonance with your self as well others, whether the others are humans or non humans. This kind of musicking may release emotional charge, presence your loved subjects, and anchor you in your self. The health potential in a yoiking, musical being-in-a-world also includes the practicality of always having a means for emotion management and self-regulation readily available. This might partially explain why yoik has survived a centuries long shaming.

Acknowledging yoik’s salutogenic potential could be a health promoting measure towards decolonizing some of the criteria for valid health knowledge. Yoik as local, ancient embodied Indigenous health knowledge belongs to the global Indigenous embodied knowledge of the health ecology between humans and their environments.

Sammendrag på norsk

De tidligste beskrivelser av joik og samisk kultur fremstilte joik som noe samer integrerte i all sitt liv, i dagliglivets praktiske aktiviteter som i åndelige rituelle og seremonielle praksiser. Joik ble sett som nødvendig for helse, velvære, lykke, og hell. Kort sagt, joik ble sett på som en eksistensiell nødvendighet. I dag artikulerer mange joikere joikens betydning for seg selv på lignende måter. Den sies å være det mest verdifulle du kan ha. Likevel er joikens sammenhenger med helse blitt utforsket bare i beskjeden grad. Denne

avhandlingen er en fenomenologisk-hermeneutisk dybdestudie av denne tematikken. Den er basert på fire artikler listet ovenfor som Study 1-4, og som finnes i sin helhet i *Appendices*. De er studier på relevant bakgrunns litteratur og to datasett samlet gjennom kvalitative forskningssamtaler og intervjuer. I denne avhandlingen undersøker jeg videre og oppsummerer noen av de teoretiske aspektene nevnt i artiklene—aspekter av musikalitet, selvregulering, og personlighet i salutogent helseperspektiv.

Min tilnærming til forskningsspørsmålet **Hva kan vi forstå av helsekunnskap manifestert og legemliggjort i joik?** er flerfaglig. Jeg bruker et lite stykke av Nils-Aslak Valkeapääs diktning som et kunstnerisk forstørrelsesglass, og salutogenese som sentral teori. Forskningsspørsmålet i seg selv uttrykker min anerkjennelse av at kunnskapen som er mulig å generere og diskutere i denne avhandlingen er begrenset og delvis. I tillegg henviser ordet “vi” i forskningsspørsmålet til det kulturelle mellomrommet mellom akademisk- og urfolks kunnskap denne avhandlingen beveger seg innenfor.

Salutogent perspektiv fokuserer på forutsetninger for helse. Kolonisering og assimilering som en langvarig krenkelse av urfolk, deres leveområder og kulturelle uttrykk har hatt, og har, skadelig helhetlig og kroppsliggjort virkning på forutsetninger for deres helse og velvære verden over. I denne avhandlingen argumenterer jeg for anerkjennelsen av verdien av den helhetlige kroppsliggjorte helsekunnskapen i joiketradisjon og -praksis. Basert på to datasett av forskningssamtaler, Valkeapääs dikt “čuojan [I sound]”, “ja munnai čuojan [and I resound]” og støttende forskningslitteratur, argumenterer jeg for en medfødt, kroppslig og grunnleggende musikalitet i mennesket, og i menneskelige interaksjoner. Jeg tolker joik som et uttrykk for en praktisk og kroppsliggjort anerkjennelse av denne grunnleggende musikaliteten for menneskets selvreguleringskompetanse og personlighet. Jeg tolker joik som kroppsliggjort, praktisk kunnskap om den musikalske karakteren av menneskets helse og vøren-i-verden. Joik som kroppsliggjort, praktisk kunnskap om musikalitet også i verden i sin helhet oppfordrer oss til å leve livet i en musikalsk, relasjonell resonans med oss selv og andre, om disse “andre” så er mennesker eller andre enn menneskelige vesener. Denne typen musikalisering av tilværelsen kan forløse emosjonell spenning, tilstedegjøre det vi har kjær, og forankre oss i oss selv. Helsepotensialet i joikens musikalske vøren-i-verden innebærer også det praktiske aspektet at man alltid har verktøyet for emosjonshåndtering og selvregulering med seg og tilgjengelig. Disse tingene kan kanskje delvis forklare hvorfor joik har overlevd århundreder av skammeliggjøring.

Anerkjennelsen av joikens salutogene potensial kunne være et helsefremmende steg mot dekolonisering av noen av kriteriene for gjeldende helsekunnskap. Joik som urgammel lokal praktisk og kroppsliggjort urfolks helsekunnskap tilhører blant den globale urfolkskunnskapen om helseøkologien mellom mennesket og miljø.

Preface

“It is less a matter of what we choose than what chooses us” (Justice, 2016, loc. 566).

I choose to quote the Indigenous scholar Daniel Heath Justice as a starting statement for this initial presentation of myself, before the actual thesis. The reason for choosing this quote is the manner in which I came to study what I now consider the obvious connections between *yoik* and health. I return to the beginning of my study of this topic in greater detail in this thesis. My quoting of Justice is not as “the entitled one”, but rather as one who did something while asking “Can this be done?” and “Is it ok if I do this?” As I have lived my life outside the Sami cultural space, I wish that in one way or another the research I did would be of service to Sami people.

It is natural to ask “who is this person?” and “what is her connection to Sami culture?” when a new researcher and a new research topic such as *yoik and health* is presented. So, I grew up at the outskirts of an average size town in Middle-Finland. My parents grew up in that town as well. Their parents were small-scale farmers and crofters from Middle-Finland and South-East Karelia now on the Russian side of the border. So apparently, there is nothing special about me or my family, and no obvious connections to Sami culture in my family-, cultural-, or geographical roots. Therefore, I acknowledge that the connections between our backgrounds, lifeworlds, and the choices we make are not always obvious and straightforward.

Introduction

[The Sami] should always yoik and rune day and night, at all times and every hour because it brings luck and happiness. [...] They cannot live long, keep their good luck, nutrition, health, and healing without the yoik and rune.

- *Quote: the missionarian Isaac Olsen at the beginning of 18th century*

(Wersland, 2006, p. 20).

Yoik, the traditional vocal art of the Sami, has had many functions throughout its history, and still has throughout Sami communities. Yoik has been studied extensively within several disciplines, but its connection to health and well-being has been directly addressed only to a modest extent.

The title of this thesis borrows the initial words from Nils-Aslak Valkeapää's poem nr. 560 in his main work *Beaivi, áhčážan* in its English translation (Valkeapää, 1988, 1997). These words capsule what I regard as fundamental to yoik and its embodied health knowledge. My regard is based on conversations with the participants in the published studies listed above; some of the participants' spontaneous expressions of how a yoik comes about; how some yoikers in yoik studies describe the creative yoik process; as well as my own understanding and preconceptions about the basic elements of music and our embodiments of them.

Aim, objectives, and research questions

The overall aim of this dissertation is to **explore in depth the possible connections between the traditional Sami vocal art of yoik and health as well as possible health benefits connected to the practice of it.**

In this dissertation I want to consider my aim from an overall level as well as discuss the findings in the papers within possible and meaningful theoretical frames from several disciplinary perspectives. I focus on a less studied and understudied aspect of yoik: its possible health connections and yoik as embodied health knowledge. This thesis is a compilation of and further theorizing on studies on the topic presented in four papers listed above and presented later (see the *Appendices*). This thesis' study is an exploration at the intersection of musicology, health-, and social sciences, striving to operate at what Martin Nakata calls a *cultural interface* of knowledge systems (Nakata, 2002).

The overall aim and objective of this dissertation is expressed in the following research question:

What can we understand about some of the health knowledge embodied in yoik?

In this research question, the word “What” is an acknowledgement of the partial nature of the knowledge that is possible to generate and discuss in this thesis, whereas “we” refers to the academic community of health sciences. I am elaborating this main question with the following subquestions:

- How do yoikers describe what happens when they yoik something?
- How are yoik experiences described by yoikers and non-yoikers?
- What kind of theoretical frames can these questions be understood within?

This research question with subquestions is approached from theoretical aspects of i) what is important for health ii) how can music or musicality contribute to health, iii) which aspects of music does yoik philosophy and praxis embody, and iv) how is this praxis and philosophy connected to health. With “philosophy” I mean the way of thinking and relating, embodied in and guiding the practice of yoik, in this case.

I have chosen these aims, objectives, and research question with subquestions in order to discuss possible aspects of yoik not yet discussed in the background literature or our papers. The choice of journals for publishing our research teams’ studies on yoik and health connections reflects my cross-disciplinary approach. The journals represent different fields of research: circumpolar health studies, arts, culture and health studies, and music therapy studies.

1. Theoretical perspectives

In this thesis I study the phenomenon of yoik related to the factors contributing to health promotion, that is, a salutogenic understanding of health (Antonovsky, 1987). I try to comprehend yoik's meanings as expressed in research conversations by the involved participants. I discuss those expressions as I understand them, connected to Western scholarly health knowledge. Thus, I aim to discuss concepts that come from different lifeworlds. I acknowledge that one of my initial preconceptions is that such discussion is possible. I also acknowledge that I do have other preconceptions as well, those I am both aware and unaware of. This thesis' theoretical approach expresses my preconception of inherent musicality in humans, and the significance of music and musicality for our overall health.

In terms of the Western scientific theoretical approach, my perspective in this thesis is phenomenological-hermeneutic (Merleau-Ponty, 2012; Gadamer, 2004; Wifstad, 2018). However, yoik is an expression of people belonging to a certain Indigenous culture traditionally integrating multiple artistic expressions in their daily life and lifeworld as part of their practical knowledge systems (Gaski, 2011). I see it as natural to reflect this somehow in this thesis. I aim to do so by applying a particular piece of the Sami multi-artist Nils-Aslak Valkeapää's poetry that I consider a precise expression of the connections between yoik and health, which functions not only as a title, but also as an overall theoretical and artistic frame (Valkeapää, 1988, 1997). I am aware that this choice may take me beyond the paradigm of *normal health science* (Kuhn, 2012; Wifstad, 2018), as Valkeapää is not considered an academic or scientific theorist. However, there are aspects of human experience that might be best expressed and comprehended through arts (Gadamer, 2004) – for example yoik. Through my choice of applying Valkeapää's poetry, I might be moving towards *Indigenous paradigm* (Kuokkanen, 2000). Indigenous paradigm honors Indigenous people's own knowledge systems, sources of knowledge and ways of practicing knowledge (Kuokkanen, 2000). Valkeapää's sources of knowledge included observations and perceptions of nature and society, Sami traditions, other people, himself, as well as his own feelings evoked by all of these. He practiced his knowledge in multiartistic expressions, such as yoik, in a way that addresses something universally human. I justify this statement by referring to the Nordic Council literature prize with which he was honored in 1991 (Gaski, 2008).

In this thesis I aim to deepen the academic knowledge and widen the horizon of understanding yoik and health connections through new hermeneutic circles (Gadamer, 2004).

In order to build up a rationale for both my perspective as well as my discussion on yoik and health, I present what I consider as necessary historical, musicological, as well as basic aspects in human biopsychological functioning, in my view embodied in yoik and the people touched by it. By doing so, I wish to contribute new insights to the body of knowledge in health science.

1.1 About the Sami and yoik: some historical and current features

Initially, I want to clarify some concepts mentioned in the *Introduction*. For instance, in this thesis, what do I mean by “Sami community” and “Sami communities”?

The Sami are the Indigenous people living in Fennoscandia, an area divided between Norway, Sweden, Finland, and Russia. To date, the Sami are defined as consisting of ten subgroups, the definition criteria being linguistic and cultural features, as well as geographical areas of origin. The ten subgroups are South Sami, Ume, Pite, Lule, North, Inari, Skolt, Kildin, Ter, and Akkala Sami (Kailo & Helander-Renvall, 1998; Lantto, 2010; Seurujärvi-Kari & Virtanen, 2020). The geographical area understood as Sami land today is large and varied regarding both climatic and geographical conditions (Kent, 2014), see Figure 1 below. Variations occur in linguistic and cultural features, and so also in yoik traditions.

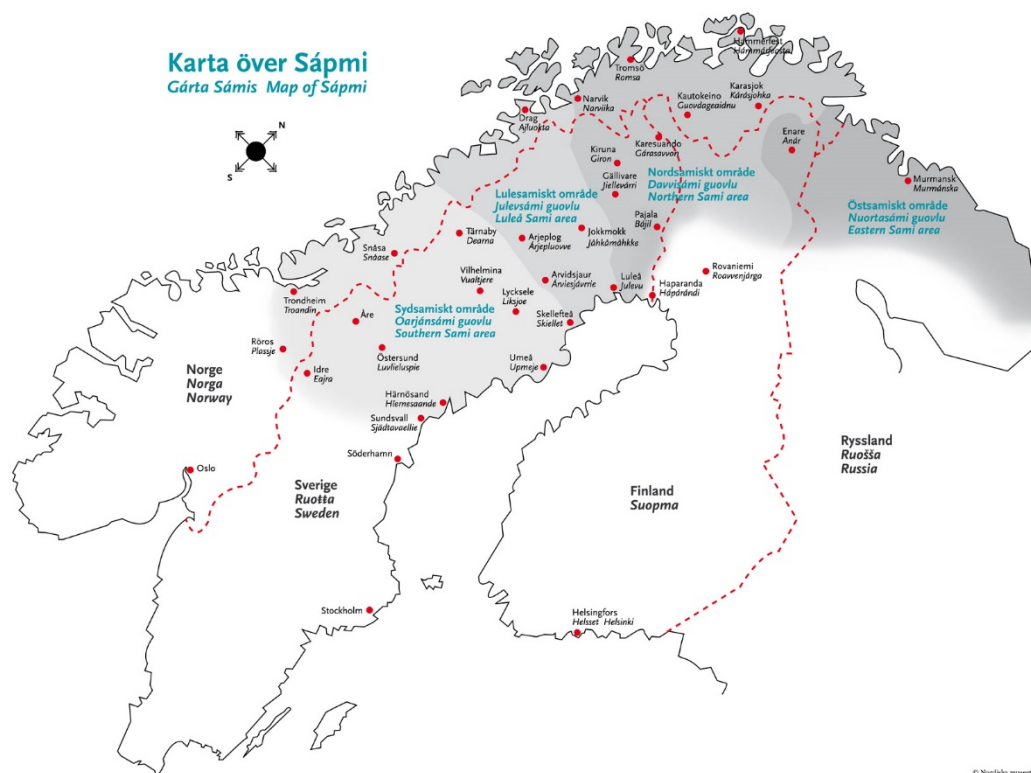


Figure 1. Map of Sami land today. With permission from Nordiska museet. I use this same map with subsequent modifications.

Other subdivisions occur as well based on, for example, land and livelihoods (Cramér, 2012; Kent, 2014; Pedersen & Nyseth, 2015). The Coastal or Sea Sami are commonly understood as those Sami living in the coastal areas of Finnmark and Northern Troms counties, traditionally pursuing mixed livelihoods that combine small scale agriculture, fishing as well as other industries such as handicraft (Pedersen & Høgmo, 2012). Reindeer herders, on the other hand, could pursue their livelihood in both mountains and forests, and derived their names therefrom (Myrvoll et al., 2015). I also want to mention the historical professional group called “parish Lapps (socken lappar)” in Sweden (Svanberg, 1986, 1999)¹, a legal arrangement which lasted up until 19th century. This group lived and originated significantly further south of today’s Sami land, thus evidencing an original Sami presence in an area much larger than that covered by the map above and generally known today (Nordin, 2018; Svanberg, 1986).

¹ The latter was a definition of Sami craftsmen with a particular societal position due to their work. They worked on tasks like slaughtering and castrating horses, and providing farmers with handicraft (Svanberg, 1999).

Recent decades' structural changes in society as a whole have also caused changes in Sami traditional livelihoods and living areas. A contemporary group that developed during and due to these developments is the so-called City-Sami, people with Sami origins living in urban areas (Broderstad & Sørli, 2012; Broderstad & Broderstad, 2014; Dankertsen & Åhren, 2018; Pedersen & Nyseth, 2015).

Why "Sami communities" and not "Sami community"? The Sami as people consist of many linguistic, cultural, and geographically originated groups, with both similarities as well as differences. On some occasions it is correct to use *Sami community* while on others *Sami communities* is more appropriate. I apply the term *Sami community* when the Sami people as a whole are in focus. This is the case, for example, when discussing assimilation and colonization. The same goes for the term *Sami culture*. Here, it is not meant as a definite term and could equally well be applied in its plural form. However, for simplicity's sake I generally use its singular form.

In the studies presented in the papers this thesis is based on, the term "Sami" refers to self-identification as Sami. In those studies, the participants and others were not asked about their ethnicity or cultural belonging. They self-defined themselves as either Sami or something else.

The term "yoik" applied in this thesis is a non-Sami term chosen for its simplicity as a compromise between the linguistic variants of the names of traditional Sami vocal practices applied in other than Sami languages. Yoik as a multidimensional phenomenon exceeds disciplinary boundaries, and approaches to yoik have been, and may be, from different disciplinary perspectives. Yoik has been studied as part of religious life, music, literature, and folklore. I do not attempt to give an exhaustive description of yoik as a phenomenon in this thesis, as various studies of yoik within different academic disciplines have already been written by contemporary scholars. In this thesis I focus instead on some aspects of yoik and health as it is a highly under researched topic. The elements I present below outline yoik's geographical distribution, diversity of features and applications, connections to other Indigenous peoples' musical practices, and some moments in yoik's historical and contemporary position. This information, in my view, constitutes a necessary back-drop to understanding the yoik and health connections presented and discussed in this thesis.

According to Sami Professor of Literature Harald Gaski (1999), and ethnomusicologist Professor Ola Graff (2004), it is reasonable to presume that yoik has been practiced in some form in the total area inhabited by the Sami (Gaski, 1999; Graff, 2004). Historical, archeological, and linguistic studies indicate an original Sami presence in the whole of Finland, including the archipelago along the coast, as well as the Eastern areas now belonging to Russia (Heikkilä, 2014; Kent, 2014; Piha, 2019; Seurujärvi-Kari & Virtanen, 2020). Figure 2 below is my suggestion of a modification of the map in Figure 1. With notes as musical symbols, I indicate a loose reflection of possible original Sami musical presence in the Fennoscandian area in addition to contemporary Sami land.



Figure 2. Possible musical map of original Sami land.

Although the original Sami inhabited area is larger than what is defined as Sami land today (Kent, 2014; Nordin, 2018; Piha, 2019; Svanberg, 1999), the currently defined area is still large, containing geographical and climatic, as well as cultural and linguistic, variations.

Yoik traditions also vary in tonalities, form, and lyrics. There are yoiks rich with lyrics and yoiks with occasional lyrics, yoiks with regular rhythmic and yoiks with free rhythmic. Some yoiks appear like songs for an outsider, but are still called yoiks (Jones-Bamman, 1993). Yoik has been applied to storytelling and lengthy epic poems. Examples include Olaus Sirma's *Moarsi fávrrot* and Anders Fellner's *Beaivvi bárdni* (Gaski, 1996; Hilder, 2015; Schefferus, 1674).

Yoik differs from singing, although the distinction may be subtle and difficult to describe. One of the important distinctions is its referential symbolic functioning, connecting yoik usually to a subject (Graff, 2004). Very often, yoik's subject is another person whom the yoiker wants to describe by yoiking that person so vividly that the presence of that person can be felt by the listeners (Hilder, 2015). Hilder refers to the way yoikers describe what goes on when they yoik something by naming this "presencing" the yoik's subject, bringing it alive here and now (Somby, 1995; Hilder, 2015, p. 6). According to Gaski (1996), "In reality, the yoik is not *about* a person, it actually *is* the person – " (Gaski, 1996, p. 13). In addition to another person, yoik's subject could be many other things as well, such as landscapes or animals (Jones-Bamman, 1993), since "a Sami yoiks anything that belongs to human life" (my translation) (Buljo, 1998, p. 140). The Swedish title of film director Maj-Lis Skaltje's book of yoik, *Minsta lilla liv har sin joik* (*Tiniest life has its yoik*, my translation) also indicates this (Skaltje, 2014). Hence, the vocal ideal of yoik stresses expressiveness and the accuracy of expression with regard to the yoik's subject. The yoikers may thus use their entire vocal potential in order to serve the purpose of presencing the yoik's subject (Daling, 2014).

Yoiking another person is called "personal yoik". Personal yoik is like a person's musical name. It can be given to a child by family members already in infancy. This kind of yoik is called *dovdna*, and it is attuned to that particular child. It is more child-like and simple than that of an adult, and it may evolve as the child matures. Personal yoik is often an expression of the yoiker's love and affiliation towards their subject. Personal yoik also functions as an acknowledgement of the subject person's belonging to a Sami society (Gaski, 1996). Graff as well as Turi point out, however, that personal yoik can also be used to express negative feelings towards a person (Graff, 2004, 2016; Turi, 2012).

To the best of my knowledge, in other Fennoscandian music traditions we do not find an equivalent to the Sami personal yoik. Studies on Indigenous musics in Siberia, however, offer some similarities to it. Nikolsky and colleagues report of the characteristics and

importance of “personal music” in traditional music styles of this area (Nikolsky et al., 2020, p. 1). Personal music resembles yoik in aspects like personal melody, which includes the *timbre*.² This belongs intimately to a person anchoring the person to their self, thus maintaining the person’s integrity (Nikolsky et al., 2020). In Siberian music cultures, personal music is even considered necessary for survival and mental sanity (Nikolsky et al., 2020). Furthermore, just as personal yoik may be given to a child already in its infancy, in Siberian Indigenous cultures a child also receives its own personal music early in a childlike simpler form than that for an adult. The child-yoik, *dovdna*, as well as the Siberian personal music, may accompany the child, growing and developing together with it (Hilder, 2015; Graff, 2004; Nikolsky et al., 2020). Furthermore, thematical and functional similarities between the Indigenous peoples’ traditional vocal practices in the Circumpolar area can be found (Cruikshank, 2006; Hauser, 1992; Hoefnagels & Diamond, 2012; Nattiez, 1983; Sjöström, 1991; TED, 2012). These practices include drumdances, singing and dancing, as well as throat singing practices, in an Inuit context also called “throat games”. The researchers describe how traditional Inuit and other North American Natives’ vocal practices include descriptions of daily life activities, people, and animals. They may also be part of storytelling (Cruikshank, 2006; TED, 2012) as well as rituals connected to hunting (Nattiez, 1983). Possible functions include enhancing both individual as well as collective identities, connection to ancestors, natural environments and land, as well as presencing the animals to be hunted (Cruikshank, 2006; Hauser, 1992; Hoefnagels & Diamond, 2012; Nattiez, 1983; Sjöström, 1991). Diamond (2019) refers to Sami, Inuit as well as other similar Indigenous practices as “mimetic Indigenous genres” practicing “mimetic vocalizations” (Diamond, 2019, pp. 255, 256). Common to these practices is what she, with reference to Janis B. Nuckolls, calls “sonic alignment” (Diamond, 2019, pp. 255, 256), that is, imitating experiential phenomena with sound by modeling the resonant and rhythmic properties of those phenomena, creating “idiophonic sound” (Diamond, 2019, pp. 255, 256). Beyond the Circumpolar area, in Papua-New Guinea, the Yupno people have a tradition of giving each person in their society their own personal melody. They call this “the sound of a person” (Amman et al., 2013, p. 63). Each member of this community knows up to 1000 such melodies (Amman et al., 2013).

² The special character and properties of a sound that distinguishes it from other sounds (Merriam-Webster, n. d.). Explained in more detail under heading *Sound* further below.

Yoik's history is old, with origins presumably in prehistoric times (Arnberg et al., 1969). Early reports of yoik in texts written by Christian missionaries and priests describe yoik as inseparably weaved into peoples' lives (Graff, 2004; Wersland, 2006; Schefferus, 1674). Sami children learned to yoik before they learned to speak, and yoik in some form would accompany the entire Sami life, both sacred and mundane (Graff, 2004). Yoik was applied to the rituals the *noaidi*³ conducted in order to heal persons and communities as well as to pre- as well as post-hunting rituals, reindeer herding practices, storytelling, and as lullabies (Graff, 2004; Wersland, 2006; Schefferus, 1674; Turi, 2012). The mentioned *Moarsi fávrrot* poem was published in the famous scholarly book about the Sami, *Laponia*, written by the Swedish scholar Schefferus (Schefferus, 1674). The book includes detailed descriptions of the Sami and their life, dictated to Schefferus by Olaus Sirma. Sirma was one of few Sami at the time who had the opportunity to gain higher education, becoming a priest. Schefferus himself never visited Sami land (Nordin & Ojala, 2019). *Moarsi fávrrot* is a lengthy yoik poem describing a young Sami man's courting of his beloved. This Sami poem was the main inspiration for the development of European romantic poetry of that time (Gaski, 1996).

Yoik's history includes yoik as prohibited music (Graff, 2004, 2016; Hilder, 2015; Jones-Bamman, 1993; Wersland, 2006). The first known legislation affecting yoik was settled by the Danish-Norwegian king Christian IV in 1609 (Graff, 2004; Wersland, 2006). The official reason for this was to end the pre-Christian religious practices considered by the Danish-Norwegian authorities, and clergy in general, as sorcery, that is, the Devil's service (Edström, 1978; Graff, 2004; Wersland, 2006). Sorcery, and yoik as a part of it, was to be penalized with death. The quote at the beginning of this thesis is originally written by the missionary Isaac Olsen in the book *About the delusion and superstition of the Lapps* (my translation of *Om Lapparnas vildfarelser og overtro*) (Graff, 2004; Wersland, 2006). The book is written at the beginning of the 18th century when Christian missionaries' attempts to convert the Sami were enhanced. By that time, yoik had been interpreted as part of sorcery for more than 100 years. This was the same time period during which yoik was inspiring contemporary European poetry.

³ A North-Sami word for a pre-Christian spiritual and medical specialist, e.g. shaman (Gaski, 1996; Turi, 2012; Wersland, 2006).

The missionaries' attempts were intensified throughout the 18th century with systematic collection of the *noaidi* ceremonial drums, as well as the destruction of the sites of sacrifice (Rydving, 2007). During this same period, the time of so-called "Enlightenment" emerged, exotizing and romanticizing Indigenous people as "noble savages" (Evjen et al., 2021; Evjen & Beck, 2015; Hilder, 2015; Hjulman, 2017; Kent, 2014). Yoik as an Indigenous expression was, on one hand, demonized; on the other, it was admired as something exotic (Hilder, 2015). In the course of 19th century, Norwegian authorities implemented the policies of "Norwegianization" in Norway (Eriksen & Niemi, 1981; Evjen et al., 2021; Evjen & Beck, 2015; Minde, 2003). Similar measures in other Sami inhabited countries were implemented (Evjen et al., 2021; Evjen & Beck, 2015; Lehtola, 2015). The aim of these policies was to unify the people by assimilating them into the majority culture. In Norway, this was seen as particularly important in the Northern areas bordering Russia (Eriksen & Niemi, 1981; Evjen et al., 2021; Minde, 2003). The idea of national unity, with the national romantic cultivation of the farmer ("bondeidyll" as described by Hansen 2011, p. 24) despised the Sami as primitive and lower developed (Eriksen & Niemi, 1981; Evjen et al., 2021; Evjen & Beck, 2015). This was supported by the emergence of social-Darwinism, which became a mainstream idea in 19th and the first half of 20th centuries. According to this idea, human cultures and societies went through evolutionary stages similar to groups of animals and plants (Hjulman, 2017; Lehtola, 2017; Wekker, 2016). In that sense, urbanized European populations or even the white urban European male was at the top of evolution (Evjen, 1997; Hansen, 2011; Wekker, 2016). Indigenous people and their cultures were generally considered primitive, thus at a lower developmental stage than white people with European origins (Evjen et al., 2021; Hansen, 2011; Ingierd & Fossheim, 2016; Lehtola, 2017; Smith, 2012). The noble task of man was to develop, otherwise he was condemned to perish (Eriksen & Niemi, 1981; Lehtola, 2017). Research supported these beliefs, and research measures to prove the truth of this ideology were, for example, skull measurements, grave robberies, and documentation of the physiological defects of lower standing people measured against the noble standard of a white European (Evjen, 1997; Evjen et al., 2021; Lehtola, 2017; Smith, 2012; Wekker, 2016).

For the different yoik practices, these policies and measures had severe effects. The centuries long pressure in different forms from outside caused many yoik traditions to become extinct or taboo, that is, something not spoken about and seemingly nonexistent (Graff, 2016; Grenersen, 2002; Hilder, 2015; Jones-Bamman, 1993; Mikkelsen, 2017).

Today, yoik is acknowledged as a musical genre in the Norwegian public soundscape. During recent years, yoik has appeared as a part of prime-time entertainment in the Norwegian official public media. Yoik is studied and taught in courses and workshops in schools, universities, and not least, Sami music festivals (Hilder, 2015). Furthermore, yoik is fused with all kinds of contemporary music styles (Diamond, 2011; Edström, 2003; Hilder, 2015; Hoefnagels & Diamond, 2012). Sami musicians from Mari Boine to Marja Mortensson, who combine yoik with their own musical expressions in various ways, are highly respected celebrities performing on national as well as international scenes (Evjen et al., 2021). This situation is the result of a long development that Nils-Aslak Valkeapää is particularly acknowledged to have initiated. He refused to believe that yoik is evil or that yoik should be conserved strictly within its traditional forms and appearances. Valkeapää was the first one to publish recordings of yoik accompanied with different instruments and combined with different musical styles (Gaski, 2011; Hilder, 2015).

1.2 Valkeapää and my position between knowledge systems

Multitartist Nils-Aslak Valkeapää's work encompasses yoik, paintings, sculpting, poetry, as well as photography, to mention a few. In this thesis I use a poem-pair, poems nr. 560 and 561, from *Beaivi, áhčážan (The sun, my father)* (Valkeapää, 1988, 1997, 2018) as a foundation for my theorizing about yoik and its health connections as well as yoik as embodied health knowledge. *Beaivi, áhčážan* is his main work for which he received the Nordic Council's price in literature in 1991 (Gaski, 2008). I chose these two poems because they capsule his many modes of self-expression to the extent that the Finnish translation of the first line of poem nr. 560 was applied as the title of a recent scholarly description of his life and work (Valtonen & Valkeapää, 2017). In my understanding, this poem-pair capsules some of the many descriptions I have heard of yoik, which I will discuss later in this thesis. For the reader I want to mention that the layout below is as close to the one in the referred publications as possible. Visual impression of the poems' texts was for Valkeapää an important part of them (Gaski, 2011).

Poems nr. 560 and 561 in *Beaivi, áhčážan (The sun, my father)* (Valkeapää, 1997, 2018) can be found below:

560. čuojan

mun čuojan, munnai

čuojan

ja viiddis lea ilbmahat

humadeame

healaideame

Eallima Eatnu

561. ja mun čuojan

go dat čuojaha mu, mus

mu váimmu dovdduin, mu váimmus

beivvii'an jođus

šuvva

ollašuvva

In English:

560. I sound

resound, me too

sounding

and the world is wide

speaking

confidentially

The River of Life

561. and I resound

when it plays within, inside me

with my heart's feelings, in my heart

on the journey of my days

it sings

is accomplished

I interpret these poems as expressing what he explained in plain words in a portrait film *Solen, min far - Nils-Aslak Valkeapää (The Sun, my father – Nils-Aslak Valkeapää)* broadcasted on Norwegian public broadcasting NRK:

I don't distinguish whether it be music or literature or a picture... For me it all is about one thing... I just use different techniques to express it... sometimes words suit best, sometimes yoik, and sometimes pictures... Sometimes when I write, I hear a *luohti*⁴ in my heart... (my translation), (Andersen & Askerøi, 1991, 5:00-5:54 minutes in the film).

My interpretation of Valkeapää, and my desire to theorize on yoik's health connections through a piece of his poetry, is to be understood as an expression of a sincere, heartfelt awareness of things that fit together and make sense together for me. I am aware that I am unauthorized to talk about Sami culture, having grown up and lived far away from it. My perspective is one of a visitor with a musicologic academic background. Knowing this, I have wanted to honor and be true to those who shared their time and thoughts with me about their yoik experiences, as I have understood them. However, no matter how much I and my fellow scholars want to practice research based on democratic research principles, indigenous lifeworlds, social justice, and ideas of decolonization, in academia we have to connect our findings to acknowledged academic theories in order to legitimate and even enable our knowledge production (Denzin et al., 2008). Quite often this is equal to a theory that comes from somewhere else, from a "bigger" world, while Indigenous knowledge is local, connected to local circumstances and traditions (Chilisa, 2017; Davison & Díaz Andrade, 2018; Eriksen

⁴*Luohti* is a North-Sami noun for "a yoik".

et al., 2019; Hoefnagels & Diamond, 2012; Justice, 2016; Nakata, 2002). Nevertheless, I attempt to see yoik on an overall level as an expression, reflection, and embodiment of a profound health related musical function in humans, through the two poems as a looking-glass.

In conversations with participants in papers 1, 3 and 4 included in this thesis, academic theorizing has not been the topic most at focus. However, some of the participants later found interest in discussing my idea of theorizing on and through Valkeapää's poems, having agreed with this idea.

In addition to anchoring this thesis in the mentioned expression of Indigenous and yoik knowledge, I want to make pragmatic choices of acknowledged academic theories which I perceive as harmonizing with Valkeapää's poems. Evidently, these choices also reflect my preconceptions about humans' profound musicality and its significance for health. Even so, I wish to accommodate the claims of academic and scientific validity, as well as honor traditional Indigenous knowledge, as suggested, among others, by Mikaelsson in a conference paper about ethics in research involving Indigenous peoples (Drugge, 2016). Nevertheless, I am aware that my knowledge and understanding of both Indigenous knowledge as well as yoik are and will always be limited, as I was not brought up in an Indigenous culture. Yet I hope my way of theorizing adds to and makes sense as possible knowledge in *cultural interfaces* of Western scientific and Indigenous knowledge systems, as emphasized by Nakata (Nakata, 2002, 2007). At the very least I hope that my theorizing is perceived as striving for *understanding with humility* as warranted by Daniel Heath Justice (Justice, 2016). I also hope it might contribute to *open up space for dialogue* about the purposefulness of how we listen (Diamond, 2019) to the musicality in our different knowledge systems.

According to researchers belonging to Indigenous people, academic and scientific knowledge production and knowledge producing institutions rely on a history based on colonial policies and practices (Coleman, 2012; Cilisa, 2017; Denzin, et al., 2008; Kovach, 2009; Mihesuah & Wilson, 2004; Nakata, 2002, 2007; Smith, 2012; Wekker, 2016). This can be observed today in the hegemonies of language and thereby knowledge (Chilisa, 2017; Coleman, 2012; Davison & Díaz Andrade, 2018; Denzin et al., 2008; Smith, 2012). Language should not be considered as a mere mode of communication of certain thought content. It also communicates ways of seeing and relating to the world and reality, and thereby ways of thinking (Coleman, 2012; Davison & Díaz Andrade, 2018; Denzin et al., 2008; Smith, 2012).

Diamond asks, with a musical term as a metaphor, whether English could be seen as *the tonality⁵ of our time* (Diamond, 2019). Like tonality, it defines the tones and combinations of tones that fit into it. Thus, a former colonial power maintains its hegemony through the dominant language of global knowledge production, setting the premises and tonality, defining what kind of knowledge is produced in ways considered appropriate and relevant for knowledge. Yet, we can hope that the cultural interfaces between English and other languages might open up space for new concepts, or new tonalities, for knowledge systems and knowledge production.

The praxis and culture of yoik contain a system of knowledge (Somby, 1995). It contains ideas of circular time, expressed in certain yoik forms with “no beginning, no end” (Kailo & Helander-Renvall, 1998, p. 1; Somby, 1995). Graff (2018) questions, with solid scholarly argumentation, the consistency of this statement in his paper in Norwegian from 2018: “*Joik er som en sirkel!*” *Realitet eller ideology?* (“*Yoik is like a circle!*” *Reality or ideology?* - my translation of the title) (Graff, 2018). I do not join the conversation concerning whether the statement regarding yoik’s circularity is true, and from which or whose point of view this is expressed. Nevertheless, I mention it here to exemplify that among the many yoik forms with varying musical structures, some yoik styles are referred to by certain Sami yoikers and scholars as circular, unlike songs, which are perceived as linear in form. Despite that, yoik is referred to as having its own system of knowledge. Yoik is also said to communicate its contents on multiple levels and with multiple meanings (Gaski, 1999, 2011).

Yoik is an iconic expression of an Indigenous people, the Sami. Research on Indigenous people up until World War II was based on, and contributed to, social-Darwinistic worldviews (Evjen, 1997; Evjen et al., 2021; Hansen, 2011; Pedersen & Høgmø, 2012). Research methods such as skull measurements, grave robberies, as well as eugenics have caused a general skepticism towards research in some Sami people (Evjen, 1997; Evjen et al., 2021; Grenersen, 2002). The questions that comprise the theoretical foundation of this thesis are thus both academic and ethical. What kind of (and whose) values, knowledge, and worldviews does this research reflect? What kind of power relations does this research support and contribute to through knowledge production? With my choice to apply Valkeapää’s poems as a theorizing

⁵ *Tonality* is used in Western musicology as an overall term to describe a set of pitches perceived as belonging together in a system called *scale*. Tonality determines which pitches are appropriate or harmonious to use within its scope. Tonalities are culture specific, yet the Western so-called functional-harmonious tonality has become dominant in the global music industry (Hyer, 2001).

lens in this thesis, I aim to balance the fundamental asymmetry between the academic knowledge production originating in colonial history and values and the topic of this dissertation, which is a traditional Indigenous art of expression.

1.3 Arts, music, well-being and health related to yoik

The World Health Organization (WHO) reports on the connections between arts and health, encouraging the overall implementation of creative or art activities in peoples' lives (Fancourt & Finn, 2019). According to this report from 2019,

Arts activities can be considered as complex or multimodal interventions in that they combine multiple different components that are all known to be health promoting. Arts activities can involve aesthetic engagement, involvement of the imagination, sensory activation, evocation of emotion and cognitive stimulation. Depending on its nature, an art activity may also involve social interaction, physical activity, engagement with themes of health and interaction with health-care settings. (Fancourt & Finn, 2019, p. 2)

Overall, arts have multiple functions in different areas of health, in both general and particular conditions, as well as within health promoting and management (Fancourt & Finn, 2019). The arts included in the WHO-report contain visual (such as painting and sculpting), performative (music, dance, and drama), cultural (exhibitions), as well as online (digital arts) modalities.

Yoik is an ancient form of art, and among other things, also music, and music is said to be a universal language (Clarke et al., 2015). Clarke and colleagues as well as other musicologists question the statement of music's universality, but it can be true in the sense that all human cultures engage in some form of music (Norton, 2016; Wade, 2004). Even though we in our modern contemporary culture have, in a certain sense, outsourced music to technical devices, it has been a central part of our daily lives in immemorial times (Killin, 2018; Norton, 2016). According to findings within the discipline of *music archeology*, the oldest known musical instruments are bone flutes found in South-East Germany (Killin, 2018). These flutes are estimated to be 40 000 years of age. When a musical artefact, an instrument, is so old, we can only imagine the age of our ability to make musical sounds with our built-in, portable, and readily available instrument of which our body constitutes.

Music's impact on health and well-being has been the target of studies for decades. Systematic reviews and meta-analyses reveal the benefits of music in various conditions

(Daykin et al., 2018; Hohmann et al., 2017; Sihvonen et al., 2017; Stegemann et al., 2019). Many of the reviews report great heterogeneity in the materials, which hampers high-level evidence (Hohmann et al., 2017). However, single studies of music's efficacy on peoples' moods and behavior support laymen's everyday experiences of the necessity, or at the least, usefulness and joy of music in our daily lives (Norton, 2016; Reagon et al., 2016). Studies on music's impact on health and well-being is a complicated issue due to the heterogeneity of the meanings of the concept "music", as well as the variety of ways the concept is applied in the different studies reporting results (Fancourt, 2016; Fancourt et al., 2013; Kamioka et al., 2014). In fact, differences in musical experience may be considerable between electroacoustic, live, and unplugged live mediating. Furthermore, the impact may be a very different art concerning whether a piece of music is sung or played with an instrument, and again, whether the same piece, sung or played with an instrument, is mediated as a recording or as a live event (Fancourt, 2016; Fancourt et al., 2013). Moreover, the impact may again be very different when considering whether music is experienced actively through, for example, singing, playing, or dancing, or passively through listening (Fancourt et al., 2013; Norton, 2016).

As we can see, the concept of "music" may be applied in varied ways in research literature such that it may be challenging to find comparable studies. Even if it is possible to standardize the external parameters for research on music's impact, it will hardly be possible to standardize the internal ones. An individual's musical preferences are crucial internal parameters. What might work therapeutically for one person might be detrimental for another (Bunt & Stige, 2014; Diamond, 2019; Norton, 2016).

Nonetheless, the number of studies reporting positive health effects due to different kinds of applications of music is growing. Several studies are referred to in our published papers, found in the *Appendices* to this thesis. Here, I want to mention some recent reviews of Sihvonen and colleagues (2017) and Särkämö (2017) on the effect that music therapy and music-based activities have on neurodegenerative diseases (Sihvonen et al., 2017; Särkämö, 2017), as well as music's potential effect on promoting empathy and cultural understanding as discussed by Clarke, DeNora and Vuoskoski (Clarke et al., 2015). It can even potentially function as a *cultural immunogen* (Ruud, 2013). This concept of *cultural immunogen* is coined by Even Ruud, a renowned Norwegian professor emeritus in music therapy. He explains the meaning of this concept as "handling cultural artefacts or artistic expression

within the context of health-related behavior” (Ruud, 2013, p. 2). Hence, everyday musical activities, also called *musicking* (Small, 1998), may act as a health promoting behavioral immunogen, in contrast to health endangering behavior like excessive smoking and drinking (Ruud, 2013). The general impression of studies on music therapy and music-based activities is that music functions as emotion and mood regulation, reducing anxiety and depression in both mental distortions as well as emotional challenges connected to more somatic diagnoses (Norton, 2016; Reagon et al., 2016). Särkämö, as well as Sihvonen and colleagues, emphasize the effect of music to stroke patients, with impairments in motoric, language, and cognitive functions, as well as mood and quality of life (Sihvonen et al., 2017; Särkämö, 2017). Norton (2016) refers to a large number of studies with results in line with both Särkämö and Sihvonen and colleagues (Norton, 2016; Sihvonen et al., 2017; Särkämö, 2017). The studies in question report improvements in persons with dementia when preferred or familiar music is applied. The improvements can be observed in motoric and cognitive functioning, reminiscence as well as moods and behavior (Norton, 2016; Sihvonen et al., 2017; Särkämö, 2017). Särkämö and Norton also emphasize the positive impact of leisure time singing on persons with dementia, and its effect on relieving caregiver stress. These studies confirm other studies in the field (Evans et al., 2019; Gerdner, 1997, 2000; McDermott et al., 2014; Swall et al., 2020). These studies particularly stress the aspect of the *person-centered approach*, which is enhanced when applying familiar, patient-preferred or personalized music in dementia care. The person-centered approach in these studies includes aspects of connectedness and communication, emotional meaningfulness and expression, as well as identity and recognition. The study by Evans and colleagues stresses the importance of personalized music in reminiscence work (Evans et al., 2019). That study also notifies the importance of research designs that include qualitative methodologies when studying the impact of interventions in persons with dementia (Evans et al., 2019). This is due to qualitative methodologies’ possibilities to catch important fine-tuned details that may contain important information out of reach for surveys and questionnaires (Evans et al., 2019). The effect of familiar music and singing in dementia care has, in Norway, resulted in a nation-wide implementation commitment of Music Based Environmental Treatment in Norway (Nasjonalt kompetansesenter for kultur, helse & omsorg, 2019).

Even though the mechanisms of action might vary, music as a nonpharmacologic supplement to other treatments and interventions has proven so well functioning that the Norwegian Directorate of Health recommends it for mental health challenges as well as

dementia patients in clinical and institutional contexts (Helsedirektoratet, 2016; Nasjonalt kompetansesenter for kultur, helse & omsorg, 2019). Furthermore, music also functions for everyday mood regulating purposes in both professional as well as unprofessional healthcare settings.

Considered against the background of music's many possible health benefits, it is reasonable to ask whether yoik and other Indigenous music would have similar benefits. In 2015 and 2016, my search with search terms "yoik/joik/jojk and/AND health" gave zero results in the PubMed, Web of Science, Science Direct and JSTOR databases. Likewise, a search on "Sami/Sámi/Saami singing and/AND health" and "indigenous singing and/AND health" provided results related to traditional healing practices where singing was embedded in rituals and ceremonies (Bad Hand, 2002; Bassett, 2012; Crawford O'Brien, 2008; Gioia, 2006). A similar search in 2018 only discovered our own published papers. This is not quite a correct picture of the conducted research, however; Ingrid Hanssen had published her important papers on the emphasis of understanding the significance of cultural symbols in intercultural dementia care. She exemplified her argument with yoik, doing groundbreaking pioneering work on this field thereby (Hanssen, 2011, 2013). In the international scholarly literature, there might be and has also been other scholars addressing the issues connected to Indigenous singing and health. Hence, why publications such as those of Klisala Harrison did not show up in the search results is unclear to me (Harrison, 2009).

Nevertheless, I argue that music-and-health research in the context of Indigenous singing traditions is understudied. Search on "indigenous singing and health" still results, in 2023, in a rather modest selection of papers and other scholarly resources. Often the issue is featured and discussed as "cultural" with occasional prefixes like "cross-", "multi-" or "inter-". In my opinion, it is insufficient to discuss Indigenous musical issues related to health only from a cultural point of view. Worldwide, Indigenous peoples and cultures—their music included—have experienced colonization and assimilation. These are not "cultural" features but violations that have their health effects (Andersson et al., 2016; Clarke & Yellow Bird, 2020; Eriksen et al., 2018; Friborg et al., 2020; Hansen, 2015; Kirmayer et al., 2014; Kirkengen, 2010; Yehuda & Lehrner, 2018; Össbo, 2021). Violations have also been done in the name of research as explained earlier (Eriksen & Niemi, 1981; Evjen et al., 2021; Evjen & Beck, 2015). In Study 4, my cowriters and I discuss this, and I return to this issue later in this thesis under heading *Cultural or Indigenous?* in the *Discussion* section.

1.4 Yoik and relevant basic musicological elements

Yoik as a musical genre has its distinct soundscape, as do many other Indigenous as well as Western musical styles. Common to all audible musical styles and cultures is, however, the basic element of sound. The obvious musical element embodied in us is related to sound in the form of beats which form rhythms. Our heart beats in a certain rhythm and at a particular pace, which is related to the rhythm of our respiration. These are measurable entities that are used in collecting health information concerning our bodies. These measurable entities are also applied to instruct physical activities and exercise for maintaining or improving bodily health. More obvious and subtle is our embodiment of mere sound, and so is its significance to our health. As yoik is a vocal art, I focus on the aspect of sound in our musical embodiments in this thesis. Hence, some basic sound-related information is capsulized below.

1.4.1 *Sound*

“Sounds convey vast amounts of information — information that situates bodies in space, in relationship to others, and in relationship to power” (Wilbourne & Cusick, 2021, p. 2).

Sound can be considered as one of the least sensible elements of audible music, yoik included. The occurrence of sound is explained by the compression of molecules in the air caused by sound waves (Levitin, 2011; Sundberg, 1991). If the sound waves are regular, the sound is perceived to have a pitch, a certain height, and is named a *tone*. The sound wave pattern oscillates in cycles in different frequencies. These wave frequencies are measured in cycles per second, expressed as hertz (Hz) (Sundberg, 1991; Stach, 1998). The smaller the number of waves per second, the slower the frequency, and the lower the pitch or height of the tone (Bunt & Stige, 2014; Sundberg, 1991). The human range of perceiving sound is limited to 20-20000 Hz in young adults (Stach, 1998). Beyond these frequencies there are then along-resounding tones in abundance, continuing beyond our perceptual limitations. This along-resounding tone specter gives the characteristic qualities to the sound called *timbre*, which allows us to distinguish and identify instruments or voices from each other, like yoik or singing from guitar, as well as different persons producing the sound whether it is sung or yoiked (Bunt & Stige, 2014; Merriam-Webster, n.d.-b; Sundberg, 1991).

Timbre is also connected to sound properties per se, whether the sounds were pitched or not. Timbre is moreover considered as the most important factor for distinguishing different sounds and their sources from each other (Nikolsky et al., 2020). As examples of so-called

pitchless sounds could be different kinds of razzling, roaring, breaking, hitting, and scratching sounds. Also, the blowing of wind could be perceived as a pitchless sound. Even humidity freezing, whether on the ground or in the air, or mere water in some form, can make a perceivable sound. These are all sounds giving information about what is going on in our environment. This kind of information may confirm our safety or need for alertness, and may secure our survival. Just imagine the sound of your own entrance door. At certain times and with certain character, it will confirm that your fellow humans are returning as expected. In out-of-routine times or with a different character, this sound may be a warning.

Nikolsky and colleagues characterize musical cultures as either pitch-based or timbre-based. In short, pitch-based cultures enhance the accuracy of the pitched tones, generally exemplified with the Western musical cultures (Nikolsky et al., 2020). Timbre-based cultures, however, enhance the accuracy of timbre, thus including a wider range of sounds in their musical expression, as both sounds with and sounds without pitch are included. Nikolsky and colleagues consider timbre-based music cultures as primary ones (Nikolsky et al., 2020). They defend this view with the fact that an infant first learns to distinguish sounds from each other due to the timbre of those sounds (Nikolsky et al., 2020). Furthermore, many of the Indigenous music cultures are primarily timbre-based, allowing, cherishing, and cultivating all kinds of sounds prior to those with the perfect pitch. Distinguishing sounds from each other is, after all, crucial for survival (Nikolsky et al., 2020). The work of Nikolsky and colleagues resonates with several aspects of this thesis.

1.4.2 *Perceptions of musicalities.*

Although musicality is a universal human trait, the definitions of music and musicality are to a great extent culturally associated (Blacking, 1973; Wade, 2004). According to ethnomusicologist Bonnie C. Wade, in First Nation cultures there is no separate word for music, as music is not perceived as a separable part of life (Wade, 2004). In timbre-based Indigenous music traditions, the musical sound ideal and sound applications are different from Western, pitch-based ones. With reference to traditional yoik practices as well as Nikolsky and colleagues, in Indigenous music cultures the perceptions of music and musicality may also include musical perceptions of pitchless sounds (Nikolsky et al., 2020). This difference in timbre- and pitch-based music cultures might explain why the 18th and 19th century European travelers and scholars like Acerbi and Fétis, referring to yoik, considered the Sami

as a people totally without musicality (Hilder, 2015; Wersland, 2006). Fétis even stated that the Sami were the only people in the world who could not sing (Wersland, 2006).

Wade states that all known groups of people engage in some form of music understood as organizing sound differently from speech or speaking (Wade, 2004). She refers to ethnomusicologist John Blacking who in the 1970s defined music as *humanly organized sound* (Blacking, 1973; Wade, 2004). Yet another ethnomusicologist, Christopher Small, introduced the concept of *musicking* into the musicological vocabulary (Small, 1998). According to Small, music should be understood dynamically as a verb instead of statically as a noun. Small included in the concept of *musicking* every act that contributes to any form of music taking place (Small, 1998).

In short, in Western musical thinking it is a 20th century idea that pitchless or timbre-based nonpercussive sounds can also be musical, or that silence in itself can contain music (Cage, 1966; Losseff & Doctor, 2016; Robinson & Metzger, 2011). Composer John Cage became a household name in the 1960s and 1970s as he explored the boundaries between music, nonmusic, and silence in Western academic and art music contexts (Cage, 1966; Losseff & Doctor, 2016; Robinson & Metzger, 2011). Cage conducted concert hall performances consisting only of mere silence (Berliner Philharmoniker, 2020) or sounds produced by naturally occurring plant materials, such as branches and leaves, that are rubbed together with the following sound amplified (Vanderbilt Percussion Group, 2020). He stated that the boundaries between music, nonmusic, and silence are connected to our perceptual habits (Losseff & Doctor, 2016).

I have presented these names from Western musicology in order to display what I conceive of as some aspects connected to the concepts of music, musicality, and sound. Acerbi and Fétis defined the Sami and their vocal traditional art as totally unmusical (Hilder, 2015; Wersland, 2006), and a century or two later a Western fine art music composer Cage stated that our perceptual habits determine what we understand as music. In the following I want to bring in yet another scholar as well as some explorations related to his work. I consider them as relevant for what I see as possible understandings of yoik and Valkeapää's poetic lines.

Doctor Hans Jenny provided evidence of sound's ability to shape matter with his developments of and experiments with an oscillator, an apparatus that could illustrate how

sounds form matter (Jenny, 2001). Jenny's explorations reveal a possibility that the sensible world may consist of manifestations of countless musical sounds (Jenny, 2001). Thus, sensible, material world may embody a form of inaudible music. Some of Jenny's explorations are published also as films accessible on the internet, see, for example, <https://vimeo.com/377556399> (Moon, 2020) and <https://www.youtube.com/watch?v=Pmsfuj1Rk9c> (Kulig, n. d.). In the latter film, the experiments start at 2:12 minutes. Unfortunately, the quality of the films is a bit compromised due to their age. Jenny named his explorations *cymatics*, a study of wave matters referring to sound waves oscillating in regular frequencies that we perceive as pitched sounds (Jenny, 2001).

The idea of the sensible world originating from and formed by sound is a central idea in classical Indian music tradition originating thousands of years ago (Losseff & Doctor, 2016). Within this ancient tradition, music and sound are thought to be present in the universe both as an audible sound, *ahata nada*, as well as an inaudible sound *anahata nada*. The latter is considered a creative force that permeates all sensible phenomena. Our sensible reality, including audible sounds and music, are seen as manifestations of this inaudible sound (Losseff & Doctor, 2016). This minds me of Skaltje's book title *Tiniest life has its yoik* (Skaltje, 2014). Yoik, like sound, is possibly present in every phenomenon.

Beyond the visualizations of the effect of sound on matter, sound's property as impacting physical bodies is acknowledged among scholars. According to musicologist J. Martin Daughtry, "sound coerces bodies into involuntary vibration and co-opts them into participation through resonance", causing physical and psychological ramifications (Daughtry, 2015, p. 165).

Resonance as a possible noun for both resonating as well as resounding "[...] is a common phenomenon, which is observed both in nature and in numerous devices and structures. It occurs in literally all types of vibrations. To mention just a few examples, acoustic, mechanical, or electromagnetic resonance can be distinguished [...]" (Awrejcewicz, 2017). According to the Swedish professor of music acoustics, Johan Sundberg, "All systems that possess both mass and compliance, and in which there is reflection serve as a resonator" (Sundberg, 1991, s. 32). Simplified, "mass" in a certain way equals to weight and "compliance" to the property of striving to original volume if compressed (Sundberg, 1991). Hence, resonance occurs everywhere in our surroundings in countless reflecting surfaces

(Sundberg, 1991). One concrete and perspicuous example illustrating resonance is the experiment with two similar tuning forks: You hit one and put it close to the other. The other will start sounding in same tune “by itself” because it resonates, that is, vibrates in the same frequency as the one which was hit. Lindvang and music therapist colleagues (2018) describe resonance as follows:

From a musical perspective, we see two major areas of resonance: one of acoustics and physiology, where energy, frequency and vibration come together in observable forms, and one that is a psychological and phenomenological area of lived experiences where forms of emotions come together and are shared, shaped, and transformed in the music. The first area consists of observable, even measurable, physical vibrations; the second is of a metaphorical nature, often referring back to the first. (Lindvang et al., 2018, p. 7)

Lindvang with colleagues also refer to Jenny’s work and cymatics when they describe different modes of resonances (Lindvang et al., 2018). Further, they refer to empathy researchers Zaki and Ochsner’s *neural resonance* (2012), which “includes deeper and more subtle processes observed in motor intentions, sensory experiences and visceral states” (Lindvang et al., 2018, p. 8; Zaki & Ochsner, 2012). In music therapy, Lindvang and colleagues refer to resonance as “resounding with the different emotions in a musical interaction” in three different ways as sympathetic resonance, voice resonance, and affective resonance (Lindvang, 2018, p. 8). All these modes relate to yoik whether applied therapeutically or not. I will return to this aspect in *Discussion*.

In a *Comprehensive guide to music therapy*, resonance is classified as a deep level music therapy intervention in an example table of music therapy for pain management (Jacobsen et al., 2019, p. 33). It describes something happening on a very deep level in a therapeutic setting. Hence, the coercive effect of resonance (Daughtry, 2015) has deep therapeutic possibilities. Moreover, Norton (2016) refers to scientific discoveries about the workings of mirror neuron systems, which enable performers and their audiences to share “a neurological resonance” (Norton, 2016, p. 35).

Sound vibrations do not only impact our eardrums. They vibrate and reverberate in our entire bodies, in tissues, cell membranes, and fluids, depending on the amplitude as well as other properties of the sound, as well as the masses, compliances, and reflective properties of

our bodily resonators. This is particularly so with music we produce ourselves, either by playing an instrument, singing (Norton, 2016) or, of course, yoiking. If we followed the entire bodily event of singing or yoiking with only one single tune, we would discover how totally even this one act of active musicking engages the body. We would become aware of our breathing, as voice is carried by it. We would notice sensations in the tissues of our throats, mouths, lips and ears. Moreover, depending on various factors, we might notice vibrations in our teeth, the cavities in our skulls and even in various tissues and membranes in our entire bodies. We might also become aware of tensions in our bodies. When we sing, or in a broader sense *vocalize* as is the done in practicing different yoik styles, our body membranes, tissues and fluids vibrate even stronger with the sound we transmit than they do when we just listen—depending, of course, on the amplitude and other properties of the respective sounds. According to Daughtry (2015), this resonating is involuntary (Daughtry, 2015). In that sense we can say that our entire psychobiological bodies are resonators, with an immense amount of resonating mediators.

Musicality lives also in our verbal expressions. We talk naturally about resonating, resounding, attuning, being in tune, being in the same wavelength, and tuning into, as well as use similar expressions, without further explanations of what we mean by these concepts. *Attunement* may be considered as a derivate of *tuning*, like a synonym of *tuning into*. When something is *in tune* with something else, those elements are *tuned into* each other, or simply *attuned*. The concept of *attunement* is obvious in the contexts of music and music-related therapies (Jacobsen et al., 2019; Swaney, 2018). Moreover, according to psychotherapists Stern and McCluskey, attunement as a sort of musicality is necessary in all professions based on human interaction, like those within healthcare (McCluskey, 2018; Stern, 2004). In dance therapy, attunement is described as aspects of *self-attunement*, *other-attunement*, and *attunement to a group*. It is also described as an experience of the present moment, being alive, free of expectations, and with the unity of movement. Self-attunement, in particular, is described as an experience of embodiment and unity of mind and body (Jerak et al., 2018). I will return to these concepts and their connection to yoik in the *Discussion* section.

1.4.3 *Summary of Yoik and relevant basic musicological elements*

Music in different forms may benefit our health and well-being. The concept of music, however, can have different contents and meanings for different people. Musicality, on the other hand, is something we share across our different culturally conditioned perceptions of

music. Musicality is also present in inaudible forms in our environments as well as our verbal expressions. We often apply musical terms like resonating, resounding, attuning and the like in matters regarding empathizing or agreeing with someone or something. In healthcare related professions like music therapy, interpersonal emotional musicality expressed by the term *attuning*, or *tuning into*, is a necessary skill. Our bodies are multiple resonators with countless tissues, surfaces, and fluids mediating vibrations of all kinds of sounds. These aspects represent a universal embodied musicality which applies to yoik as well as other musical styles.

Hence, musicality is embodied in us, and our musical embodiments and body-ness are related to our health and well-being. Below, I will present the concepts embodiment, health and well-being, and link them to the topic of this thesis.

1.5 Embodiment, health, and yoik

In this section I explore theoretical concepts and phenomena connected to some basics within our health. In this exploration I move from the general to the specific, starting with the concept of *embodiment* in order to acknowledge that embodiment is a prerequisite for me to write these words, not to mention merely think them. I then move to *salutogenesis*, which is a set of thoughts, constructing a theory of health. Thereafter, I focus on specific concepts within this theory connected to some bodily functions such as homeostasis, some basics in psychobiology, and self-regulation. Finally, I focus on the origins of self-regulation and the way it is part of the foundation of our personhood. This part of the exploration takes us to the beginning of our lives, and back to embodiments and yoik. I do this round-trip in order to prepare the ground for my discussion of yoik and health later in this thesis.

Embodiment is a frequently used but not as frequently clarified concept. The meanings of the concept, or the contexts where the concept in different modifications is applied, may vary. I am clarifying some of the basic meanings of embodiment relevant for this thesis in the following lines. They are meant as background information for my application of the concept, but in the thesis, I do not discuss theories on embodiment as such. These basic meanings are relevant because yoik, whether performed or listened, takes place in bodies as an event of sensing, responding, and evoked feelings. The bodies, then, are further involved in forming practices and cultures, as I explain later with reference to neuroscientist Professor Antonio Damasio (Damasio, 2018).

The French philosopher Maurice Merleau-Ponty is considered the founder of the concept of embodiment. According to Merleau-Ponty, embodiment or body-ness is a prerequisite for and a consequence of our being alive, and thus, a prerequisite to any of our experiences perceived as bodily or as something else. Being alive equals certain bodily functions in order—heartbeat, respiration, as well as metabolism, that is, the intake of nutrients and excretion of wastes (Merleau-Ponty, 2012). If basic bodily functions are not in order, we are dead. Thus, all the other functions like thinking—how ever advanced—perceiving, sensing, feeling and so forth, are due to our embodiment (Merleau-Ponty, 2012).⁶ Therefore, whatever our experiences are, they are inevitably always bodily as well. This also applies to the yoik experiences discussed in this thesis. According to Thomas J. Csordas, the body can be seen both as representation and as a way of being in the world (Csordas, 1994). Csordas writes about body as something having history as well as culture, and as being the existential ground of both culture and self (Csordas, 1994). Hence, in line with Merleau-Ponty, considering embodiment, that is, being a body as the base of all our functions, experiences, and being-in-the-world, embodiment constitutes a ground for human activities, such as forming cultures (Csordas, 1994).

Because of the embodied character of our entire existence, our knowledge also cannot be anything but embodied. That said, the concept *embodied knowledge* often describes automatized, more or less conscious functions and abilities in humans (Tanaka, 2011). “Embodied” may be understood as “bodily” where the body is the knower before the mind, although mind is not necessarily excluded either (Tanaka, 2011). “Embodied” might thus equal being “unaware”, like bodily experienced and bodily achieved knowledge. This is often something you “just know”, such as non-verbal, practical knowledge. Embodied knowledge is knowledge we take for granted. It is knowledge so evident that we might not even be able to explain why we know something is as we know it to be. Everyday practicalities including environmental adaptation is one example of this kind of embodied knowledge, which is reproduced in everyday behavior and speech (Cruikshank, 2006). It is often passed down through generations as ways of being and behaving. For instance, in Northern Scandinavia people know how to clothe themselves in winter. They know how snow behaves in different

⁶ Here, I present some theoretical concepts about embodiment. Some people argue that we also have thoughts and feelings after we have passed over. I am not saying anything about the truthfulness of this argument nor similar ones as that would be a discussion beyond the scope of this thesis. For the same reason I am not saying that human experience is limited to Merleau-Ponty’s reasoning.

temperatures, and dress up accordingly, automatically making the approximately correct choices.

A further example of the use of *embodiment* is linked to bringing a phenomenon to life. Hilder (2015) uses this when he characterizes the Sami musical performance that embodies traditional knowledge through performance. Hilder (2015) quotes Diana Taylor as he refers to a dichotomy between yoik archives versus yoik repertoire (Hilder, 2015, pp. 171-172). Archives are apparently sustainable static representations of the archived materials, while repertoire embodies the realities of the traditions that happen in living context. The latter cannot be archived. Hilder also refers to an acknowledged yoiker Biret Risten Sara and her explanation that some of the archived materials sound lifeless. This is due to the recording event not being an integrated part of daily life, but an artificial situation. The recorded yoiks she refers to are not directed to someone or something present, but to a tape recorder or an archive, so the entire relational aspect of yoik is made up, or not present (Hilder, 2015). In this sense, can embodiment be like “bringing to life/being”, “bringing to existence”, “bringing to physicality”, or simply “expressing”? Hilder (2015) quotes Somby explaining that yoik is “bringing to life” and “bringing to being” the subject of yoik (Hilder, 2015, pp. 5, 6.). I will return to these aspects in the *Discussion* section.

While I return to the concept of embodiment as related to both yoik as well as health and well-being in *Discussion* section, in the following I present some central concepts related to the embodied character of our existence. I start with *health*, as it is the topic of this thesis to investigate this as connected to yoik. Moreover, health determines to such an extent how we live our lives.

1.5.1 *Health from a salutogenic perspective*

Health is such a multifaceted concept that it is necessary to clarify my perspective on it in this thesis. According to the World Health Organization (WHO), health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 2022). The WHO also defines “the enjoyment of the highest attainable standard of health” as belonging to fundamental human rights (World Health Organization, 2022). However, very often in informal conversations with people, the first general association with the word “health” is, in a certain sense, medical. It is as if health is about fixing a material problem in the body, which is seen as a material-mechanic entity.

What do we mean when we talk about health? Is health about mere biochemical material mechanics?

Aaron Antonovsky (1923 – 1994), an Israeli sociologist, is known for his theory of salutogenesis (Mittelmark et al., 2017). Salutogenesis complements the more traditional medical perspective of “pathogenesis”. Pathogenesis approaches health from the question of the reasons for as well as factors causing disease. Salutogenesis seeks to comprehend what the factors contributing to health are. According to Antonovsky, health and disease are not to be seen as static states. Instead, Antonovsky sees health and disease as ease and dis-ease at the opposite ends of, or directions on, a scale. This scale is a continuum we constantly move in towards either direction, trying to balance between them (Antonovsky, 1987). Factors contributing to our health are then those that move us towards the direction of ease. Antonovsky compiled such factors into three necessary experiential components: the experiences of comprehensibility, meaningfulness, and manageability. These constitute the overall main health promoting factor, which is a *sense of coherence* (Antonovsky, 1987). These concepts can be clarified, for example, in the following way.

Among the factors causing dis-ease are the so-called “stressors” in our lives. The concepts of stress and stressors refer to both those we experience consciously as well as that which happen to our bodies without our awareness involved (Antonovsky, 1987; Mittelmark et al., 2017). Stress in and of itself is not detrimental to our health. It is a necessary biopsychological mechanism needed to ensure our safety in situations perceived as threatening to whatever extent (Cardinali, 2018; Thiel & Dretsch, 2011). Stress may sometimes even be sought to achieve some form of entertainment, as in thriller or horror movies or extreme sports.

When the scope of the stressors we encounter are within the range of our accessible resources, the stress is manageable, and we maintain our integrity. We can handle the situation, and we may experience it as meaningful. One example of this kind of meaningful stress could be a childbirth that runs naturally and without complications. The stress and pain during the labor may build up to the limits of manageability but simultaneously be perceived or comprehended as extremely meaningful. Mastering this kind of stress connected to a natural life event might even provide the involved person with an experience of empowerment (Antonovsky, 1987). When we experience the stressors incomprehensible, unmanageable, and meaningless to that extent that we lose our sense of coherence, we may experience being

dis-empowered, and move towards the dis-ease direction of the continuum, thus running the risk of being exposed to an onset of disease of some kind (Antonovsky, 1987). *Empowerment* is thus a central concept within salutogenic theory. In this theoretical context it means feeling control and managing the factors contributing to health and well-being in our lives (Antonovsky, 1987).

According to Antonovsky, we have an innate or a built-in competency necessary to health, that is, *self-regulation*. Self-regulation competency means that the person is in continuous contact with their biopsychological being and its various states in order to feel and perceive what is going on, thereby being able to satisfy their emerging needs. These needs might be hunger, thirst, movement, rest, comfort, warmth, socializing, solitude, self-expression, and so forth. According to Antonovsky, emotion management is a fundamental element in our self-regulation competence (Antonovsky, 1987). This is because every emotion, no matter pleasurable or unpleasurable, represents a load to the organism if contained over extensive time (Antonovsky, 1987). Emotions need to be managed in order for us to maintain a homeostatic state.

1.5.1.1 Homeostasis – imperative in salutogenesis. Damasio considers homeostasis as the very fundamental well-being-seeking mechanism of all life, from the single cell organism to humans (Damasio, 2018). Basically, Damasio argues that a wide range of human activities on whichever level of consciousness, whether individual or collective, is motivated ultimately by the search for homeostasis (Damasio, 2018). In his book *The Strange Order of Things* he depicts how the drive to homeostasis, the *homeostatic imperative*, motivates a wide range of life forms from bacteria to human cultures and communities (Damasio, 2018). It is a matter of achieving the best possible state of homeostasis understood as a sense of well-being. This happens in a constant flow of sensing and responding, an event taking place in the organism's exteriority as well as interiority simultaneously. In the case of advanced organisms such as humans, *feeling* is born as a result of a process of sensing and responding. Whenever we sense something, we simultaneously sense both the stimuli outside ourselves as well as its impact within our bodies, which creates an emotive response in us, a feeling (Damasio, 2018). Feelings are valenced, that is, "they are good or bad, positive or negative, appetitive or aversive, pleasurable or painful, agreeable or disagreeable" (Damasio, 2018, p. 158). "Valence is the inherent quality of the experience" (Damasio, 2018, p. 104). In accordance with the homeostatic imperative, these internal valenced states, then, call for some sort of

regulation, as explained above in the passage about salutogenesis and self-regulation. Interjections, those spontaneous vocal sounds we produce when surprised, scared, delighted, enraged, or disgusted all of a sudden, can also be seen as belonging to our self-regulation system. They contribute to releasing the sudden emotional overload in the situation and could be called a trivial, instinctive form of vocal self-regulation.

1.5.1.2 Self-regulation and psychobiological functions. Self-regulation to maintain homeostasis is bodily manifested in the functions of our autonomic nervous system (Cardinali, 2018). When freezing, we automatically get goose bumps and may start shivering in order to maintain the ideal temperature for the organs to function. When on the contrary the temperature is too warm for us, we sweat in order to avoid overheating. Yet another well-known example of the function of our autonomic nervous system in regulating our bodily functions is the fight-flight-freeze-reaction in stressful situations, and its opposite rest-and-digest or relaxation response. The latter occurs when the stressful situation is over (Cardinali, 2018; Rea, 2014). These kinds of reactions are not only connected to bodily needs and sensations in concrete life events. They can also be generated by mental events such as thoughts and memories, which illustrates the intertwinedness of our psyche and body. These well-known examples illustrate some of the psychobiological functions of our autonomic nervous system and our built-in self-regulation. However, the intertwinedness of our bodies and minds exists also in a less dramatic and perceivable manner throughout our entire existence (Damasio, 2018; Merleau-Ponty, 2012). In the following, I focus on the origins of our ability to self-regulate, and how it is formed and connected to our personhood. I focus on this issue as I perceive it fundamental to understanding some of the depth of health wisdom in yoik culture, which I return to and discuss further in the *Discussion* section.

1.5.1.3 Musical origins of self-regulation and personhood. According to theories of prenatal psychology, attachment, and development, our self-regulation competence begins to develop at the intrauterine—inside the womb—state of our lives through a mother-child interaction (Fedor-Freybergh, 2021; Smaling et al., 2017). In this state, this interaction happens through the amniotic fluid, placenta, and umbilical cord (Van den Bergh, 2021). Hence, the prenatal child is submitted to the functions and events of the maternal psyche and her autonomic nervous system (Lehrner & Yehuda, 2018; Van den Bergh, 2021; Verny, 2021). In short, maternal embodiments become those of the prenatal child, including the embodied consequences of transgenerational experiences (Hoover & Metz, 2021; Jones et al.,

2019; Lehrner & Yehuda, 2018). Furthermore, Norton (2016) refers to scholars Lacan and Rosolato and the concept *sonorous womb*, which enhances the crucial role of the mother's voice in human experience. In an amniotic environment, the mother's voice is the most intense acoustic signal (Norton, 2016).

Post-partum, the interaction continues in new ways, including other caretakers in addition to the mother. In this interaction, the mother's and the other caretakers' ability to attune to the child is crucial (Hart, 2008; Siegel, 2012; Stern, 2002). This kind of attunement between two beings is called *dyadic resonance* by Hart (Hart, 2008) and *mental state resonance* by Siegel (Siegel, 2012). In short, this means that the mother's and other caretakers' emotional connection with the child, that is, their ability to feel the child's needs and respond to them in an adequate manner, is formative for the development of the child's sense of self (Hart, 2008; Siegel, 2012; Smaling et al., 2017; Stern, 2002). The child mirrors itself in the mother's and other caretakers' interaction with, and their relation to, the child's expressions through eye contact, ordinary caretaker-infant interaction and playing in daily care situations (Hart, 2008; Siegel, 2012; Smaling et al., 2017; Stern, 2002). Presuming that the mother and other caretakers respond in adequate manners, the child learns that its needs are something that matter. The child learns the difference of how it feels to be hungry and satisfied, dry and wet, warm and cold, tired and rested. It learns the difference between the feeling of "not enough", "enough" and "too much", be it food or stimulation. Mother's and other caretakers' feelings about and interaction with the child build the child's sense of self or *personhood* through the child's contact with itself and its basic needs. The child learns the difference between balance and well-being—that is, homeostasis—and imbalance/not-well-being in its being. It learns how imbalance feels and how balance and well-being is achieved, which is, in short, self-regulation in its essence. In the case of a young perinatal infant, however, the concept to use is not really *self*-regulation as this is still in formation. More precisely, it is *co*-regulation with the caretakers, as the infant's self-regulation is not yet developed (Siegel, 2012). Nevertheless, at the end, the development of the child's self-regulation competence and personhood can be seen as an embodiment of its mother's and other caretakers' attunement to it (Siegel, 2012). Hence, attunement as an application of interpersonal musicality is essential in the earliest formation of our sense of self.

In living yoik cultures, "ordinary caretaker-infant interaction and playing" may also contain the earlier mentioned *dovdna*, the child's own little personal piece of music,

particularly attuned to that particular child. In the earlier section on music and health, Lindvang with colleagues referred to empathy research and a concept of *neural resonance* (Zaki & Ochsner, 2012) and resonance in music therapy (Lindvang et al., 2018). This kind of resonance may occur at a deep level, “resounding with the different emotions in a musical interaction” in three different ways as sympathetic resonance, voice resonance, and affective resonance (Lindvang et al., 2018, p. 8). *Dovdna*, as I have understood it, is not intended as music- or other therapy but as an expression of affiliation. Interestingly, it contains elements which within music therapy are acknowledged as therapeutically important.

To capsulize, I argue that the origins of our self-regulation and health is profoundly musical in its nature. This musicality is crucial to the foundation of our embodied self, that is, our personhood. Our personhood, our embodied self, is body and mind intertwined, in other words, a psychobiological entity. Health from the salutogen perspective in this thesis is thus not considered to consist of mere material-mechanistic events isolated from our lived experiences but rather as an expression of our embodiments of those experiences. I later discuss the possible connections between salutogenesis related to the poem “I sound” and yoik.

I want to be precise here, that I include within the words “psychological” or “mental” also those aspects sometimes called “spiritual”, as well as the concept of “soul”. Whatever names we give to different perceptions of phenomena taking place in human consciousness, they still take place in human consciousness, and are thus categorizable as psychological. That said, events categorized and characterized as psychological have their biochemical physiological correlates. Hence, psychological events are simultaneously bodily events underlying the functioning of our autonomous nervous system (Breedlove et al., c2007; Choi & Musial, 2011; Damasio, 2018; Kirkengen, 2010; Merleau-Ponty, 2012). This applies to the experience of “I sound” expressed in the earlier presented poems of Valkeapää as well. I return to this in the *Discussion* section of this thesis.

1.5.2 *Summary of Embodiment, health, and yoik*

Embodiment in this thesis is seen as a primary condition for our being-in-the-world, as we sense ourselves and our environments through and in our bodies. Furthermore, embodiment is an ongoing integration of experiences. Hence, embodiment includes automatized knowledge, history, culture, as well as our sense of self as bodily beings. It also

includes bringing something into life, as is the case when (an archived) yoik is performed in a live event.

The salutogenic health perspective in this thesis focuses on factors constituting and maintaining health. Important concepts within salutogenesis are empowerment and sense of coherence consisting of comprehensibility, meaningfulness and manageability. Building blocks for our health, and thus salutogenesis, are homeostasis and self-regulation competence. Homeostasis, that is, a drive for well-being, is common in all life, and according to Damasio, a driving force for cultures as well. Self-regulation is a mechanism to attain homeostasis and is formed at the beginning of life in dyadic resonance, that is, in an attuned interaction between the infant and mother as well as other caretakers. In humans, self-regulation and personhood are closely connected, as the infant internalizes the attunement and contact qualities in their first relationships with the mother as well as additional primary caretakers.

1.6 Consequences of colonization and assimilation on Sami health?

Returning to the overall topic of this thesis, it is near-at-hand to request the possible embodiments resulting from centuries long structural violence towards a particular group of people and their cultural expressions, in this thesis the Sami and yoik. The possible embodiments include the effects of stressful events as well as chronic or long-term stress. The relationship between stressful events or chronic stress and health disruption is generally accepted through the understanding of the allostatic load model (Entringer & Epel, 2020; Karlamangla et al., 2002; McEwen, 2003; McEwen & Stellar, 1993). Studies such as those of Adverse Childhood Experiences (ACE-studies) suggest a correlation between violation and disease (Felitti et al., 1998). Friberg and colleagues suggest a connection between boarding school experiences and disabilities later in life (Friberg et al., 2020). Boarding school experiences are among the childhood adversities many Indigenous children have experienced (Clarke & Yellow Bird, 2020). Hansen points out issues in the adult Sami context with the correlation between ethnic discrimination and health (Hansen, 2015). Eriksen with colleagues conclude that the prevalence of psychological distress is more common in the Sami than non-Sami population of Mid- and Northern Norway (Eriksen et al., 2018). Össbo (2021) examines in the Swedish context the emotional impact of radical life changes for Sami people due to radical environmental changes. These changes take place when Sami traditional living areas are expropriated or confiscated to mining companies, power production, or other purposes that leave no space for Sami traditional livelihoods. Accordingly, Össbo calls for an

intergenerational perspective in studies on Sami issues (Össbo, 2021). This perspective is warranted indeed, as the Sami living spaces have for centuries been targeted for other intentions than Sami industrial interests. Moreover, evidence of the inheritance of effects derived from cultural and historical trauma actualizes the need for this perspective (Yehuda & Lehrner, 2018). Yehuda and Lehrner's study (2018) examines the impact of the Holocaust on the descendants of survivors, showing that historical trauma has an impact on the offspring of those who experienced the events directly. However, Kirmayer and colleagues stress the importance of taking into account the *ongoing structural violence* that Indigenous people constantly experience in addition to the historical collective trauma (Kirmayer et al., 2014). Yellow Bird (2016) stresses the total psychobiological impact of colonization at neural levels on individuals with experiences related to it (Yellow Bird, 2016). Kirkengen calls the effect of violation an "inscription" in the body (Kirkengen, 2010). Clarke and Yellow Bird together acknowledge these mentioned effects as belonging to the summoned impact of cultural, historical, as well as ongoing colonial oppression (Clarke & Yellow Bird, 2020). In their view, this impact is both individual, collective, as well as environmental (Clarke & Yellow Bird, 2020).

The studies referred to above are meant to give an idea that the embodiments of centuries long assimilation and colonization may have left several traces and inscriptions in the bodies of those who experienced stressful events directly, as well as in their descendants. These traces come to expression in public health surveys of Indigenous populations worldwide (Andersson et al., 2016). However, the consequences of assimilation and colonization on indigenous health can only be measured in individuals self-identifying as Indigenous today. In case of Sami, the exact number of Sami people is not given. The restrictions towards ethnic registering of people in general, and of the Sami for any reason other than the Sami Parliament's franchise purposes, has several causes. One of these is the attempt to protect people from the possible misuse of such registers in the manner that was done, for example, during WWII (Pedersen & Nyseth, 2015). The effects of Norwegianization, the forced evacuation at the end phase of WWII, as well as the post-war structural changes, together caused many Sami to entirely change their identity and withhold their cultural origins even from their children. Relocated people rebuilt their lives with new identities in new environments where no one knew their origins. Those who returned to their home areas and places started rebuilding their lives as Norwegians (Bjørklund, 1985; Lundby, 2009; Pedersen & Høgmo, 2012). Some people with such life stories sometimes personify this

history with their personal stories in Norwegian public media (Aslaksen & Lian, 2019; Oskal & Aslaksen, 2018). There are individuals living today who have lived their entire adult lives with hidden original identities (Lundby, 2009; Oskal & Aslaksen, 2018). The examples mentioned are not exhaustive but might exemplify some of the reasons for the challenges of knowing the total health consequences of the assimilation and colonization of the Sami people. Sami persons assimilated into the majority population, carrying health consequences due to that assimilation, will not contribute to Sami health statistics but to that of the majority. The number of those persons representing those health consequences of Sami assimilation will remain unknown.

2. Methodology

According to Leavy (2017), research methodologies are roughly divided into five categories: quantitative, qualitative, mixed, arts-based, and community-based participatory research (CBPR) methods (Leavy, 2017). These methods differ in their character and suitability for investigation, each having their specialties and strengths. Leavy does not particularly mention Indigenous methodology. Due to the topic of this thesis, however, it is mandatory not only to mention Indigenous methodology but also discuss and justify our choice of methods related to it. I present Indigenous methodology to begin with, and discuss our methodic choices related to it on several occasions. However, I concentrate on qualitative methodology for the most part, as I consider it as our actual choice of method. For our studies of yoik and its possible health connections, and yoik in care contexts, we considered qualitative methodology as a suitable option because these issues were highly understudied with very limited literature resources. Furthermore, it was not a given that research was even possible or desirable in the first place, in particular when no one in our initial research group was a Sami or a yoiker. The two data collections were conducted in order to explore and clarify the fundamental questions of desirability of research on yoik and health connections, and who should conduct research with what kinds of methods. The desirability of research also included the aspect of whether the participants considered the issue of yoik and health connections as a research topic at all. Research conversations with the participants on this topic, then, brought to the surface the many yoik experiences.

2.1 Indigenous methodology

Indigenous methodology is an attempt to correct the picture drawn of Indigenous people by researchers originating from Western/"white" European societies, representing Western/originally "white" European cultural epistemologies, values and worldviews (Denzin et al., 2008; Smith, 2012). Indigenous methodology is not a fixed set of measures but can be understood as a set of democratic principles to be implemented to guide a research design and attitudes embedded in it. The common understandings of Indigenous methodology include reciprocity, democracy in the whole research process, participatory or co-research, and collective consent to the research (Kovach, 2009; Smith, 2012). These principles include participant and community involvement in all phases of the course of the research project from defining research topics to methods, participating to data collection, analyzing data, and disseminating the results (Smith, 2012). Furthermore, the results should be returned to and benefit the people and communities concerned. Further important aspects involve the choice

of language as well as concepts used in research. Reciprocity is often understood as the mutual benefit for both the researcher and the researched. Another important aspect of reciprocity is “giving back”. This means giving back to the community in question. A much used way of doing this is arranging a workshop or giving-back seminar with the participants and other community members (Kovach, 2009). Moreover, it is important that the researchers are open with regard to the Indigenous peoples’ and participants’ worldviews and ways of knowing, that is, epistemologies and lifeworlds. Furthermore, in order to level and balance the historically settled power positions, researchers should acknowledge the realities shared by people belonging to a group with collective historical traumatic experiences, as exemplified by those of the Sami, see *Theoretical perspectives/About the Sami and yoik*. Researchers should understand that such experiences may have consequences in general, and for research thematics in particular (Denzin et al., 2008; Drugge, 2016; Eriksen & Niemi, 1981; Evjen, 1997; Evjen & Beck, 2015; Grenersen, 2002; Ingierd & Fossheim, 2016; Kent, 2014; Minde, 2003).

Research and academia have a history of practices based on social-Darwinistic ideology, which categorized people into different levels of value, as described earlier in this dissertation (Nakata, 2002; Smith, 2012; Wekker, 2016). For the Sami, these practices included methods like grave robberies and skull measurements meant to provide scientific proof for their racial inferiority to Scandinavian majorities (Evjen, 1997; Evjen et al., 2021). The proof would then justify the assimilation and colonization of a people who would perish anyway (Minde, 2003). The university as an institution is built on the traditions of Western or “white” European thinking, which developed within cultures that considered themselves as being entitled to colonize the rest of the world (Denzin et al., 2008; Nakata, 2002; Smith, 2012; Wekker, 2016). Colonization is not only a matter of land ownership and management of material and natural resources. Colonialism also includes worldviews and epistemologies. So “white”/Western Europeans considered themselves entitled to define valid knowledge and valid knowledge production as well (Chilisa, 2017; Coleman et al., 2012; Denzin et al., 2008; Nakata, 2002; Smith, 2012; Wekker, 2016). Indigenous research methodologies were developed to counteract this monopolization of “truth”. (Held, 2019; Smith, 2012). Furthermore, Indigenous methodologies have inspired methodologies applied in health sciences’ research to include participant or user involvement as a standard procedure (Oslo universitetssykehus, 2017). Particularly in qualitative research, it may thus be difficult to

distinguish between Indigenous and mere qualitative methods. I return to this topic in *Discussion/Methodological considerations*.

The outline and definition of Indigenous methodology is a discourse in itself. This discourse also involves the questions of whether it is sufficient to focus on mere methodology, or whether academia should move towards an Indigenous paradigm (Held, 2019; Kuokkanen, 2000). “Paradigm” as a concept refers to disciplinary set of agreements that define what Kuhn calls “normal science” (Kuhn, 1996). Paradigm for normal science, then, is rules for acceptable and applicable theoretical and practical frames for trustworthy research, developed over time by research solidifying the selfsame frames (Kuhn, 1996). It is a question worth pondering whether a methodology can be separable from the paradigm it is created within, or from epistemologies and lifeworlds (Held, 2019; Kuokkanen, 2000). Thus, there are several reasons for why I choose to write that we selected qualitative methodology and consider it a more comprehensive and true description of our research than Indigenous methodology. I discuss our choice of methods as well as the questions connected to Indigenous- and qualitative methodology in the *Discussion/Methodological considerations*.

2.2 My scientific position and choice of method

Through the choices of the investigative method and validation criteria, a project is placed in a theoretical scientific framework (Justesen, 2010). In investigating the possible connections between yoik and health, my aim was to understand as much as I could about the phenomenon of yoik through the descriptions of the participants, most of them yoikers. Aware of what Gadamer, the founder of hermeneutics, calls *preconceptions*, I wanted to listen to them empathetically, aiming to tune into their narratives and their lifeworlds, asking them to explain when I was uncertain whether I had understood what was said. This kind of approach is characterized by Gadamer as a “hermeneutic circle” (Gadamer, 2004). I wanted to present the views and experiences of the participants and theorize around them in a way that validates those experiences and views. My approach to the phenomenon of yoik was hermeneutic with regard to participants’ descriptions of their experiences and views.

An important aspect in hermeneutics is the preconceptions all humans have. Our preconceptions are related to our embodiments, and hence, our lifeworlds (Gadamer, 2004). Our embodiments and lifeworlds thus include the influence of the environment of our entire lives, including the early formative years, as explored in *Theoretical perspectives*. In other words, concerning our preconceptions about who we are in what kind of world, it matters

where, when and with whom we grew up; which schools and studies we attended; which professions and works we have pursued; and what kinds of personal life experiences we have had. The researcher's preconceptions are considered part of the research process, at least in qualitative research with a hermeneutical approach. I scrutinize this by discussing what I consider the difference between Indigenous research methodology and collaborative qualitative research, found under *Discussion/Methodological considerations*. I have presented some aspects about myself both at the beginning of this thesis as well as under the heading *Quality in qualitative research*, see the section about confirmability. I chose the former in order to honor a tradition, common to many Indigenous peoples, of presenting yourself—who you are, who were your ancestors, where do you come from.

Creswell and Poth present five different methodological approaches to qualitative studies—narrative, phenomenology, grounded theory, ethnography, and case-studies (Creswell & Poth, 2018). All of these inform and offer a philosophical and interpretive framework for the entire research process. Creswell and Poth's criteria for this selection are the frequency and number of these approaches in qualitative research literature over several years, as well as common features of several approaches that can be extracted into a remaining five (Creswell & Poth, 2018). Our studies have been about the phenomenon of yoik and individuals' experiences of it. We have not attempted to build a new theory, and I have not applied data sources other than interviews in our studies. As a researcher conducting multidisciplinary research, I position myself at the intersection and cultural interfaces of humanist and health sciences. In this thesis, I also position myself between Indigenous knowledge and collaborative research, anchored in qualitative methodology with a phenomenological-hermeneutic perspective (Creswell & Poth, 2018; Denzin et al., 2008).

2.3 Qualitative methodology

Qualitative methods are used to explore, explain and describe phenomena (Leavy, 2017). Qualitative research methods are suitable in complex and in-depth research topics, such as lived experiences of people about certain topics (Denzin & Lincoln, 2000), in this thesis the experiences of yoik. Qualitative research considers knowledge production a subjective and reflexive process, and knowledge produced with qualitative methodology as socially constructed and interpreted (Denzin & Lincoln, 2000; Jootun et al., 2009), regardless of whether the materials studied were texts, artefacts, social or cultural phenomena, or human individuals and their experiences. Qualitative research often produces “thick descriptions” of

the phenomena studied. Therefore, the sample size is kept small in order to keep the amount of data manageable (Brinkmann & Kvale, 2015). Hence, qualitative research does not claim to present generalizable results but suggests contributing to a phenomenon's body of knowledge with aspects not attainable with quantitative methods. Examples of this kind of knowledge are in-depth information of peoples' lived lives, life experiences, and reflections (Baillie, 2015). Moreover, if not generalizable, the results from a qualitative study may be representative with regard to a phenomenon or group of people (Brinkmann & Kvale, 2015).

2.3.1 *Quality in qualitative research*

Rigor is important for any research if it is to be considered trustworthy. The criteria for rigor in quantitative research—validity, reliability, generalizability, and objectivity—are not applicable as such to qualitative research (Baillie, 2015). Because of the nature of the information sought, these concepts in qualitative research are adjusted to credibility, dependability, transferability, and confirmability (Baillie, 2015). Each of these qualities are attained by particular actions that guarantee transparency and thoroughness in the process (Baillie, 2015). I briefly clarify these concepts here related to our studies and return to them in *Discussion*. “Credibility” means, according to Baillie, that the research results make sense. This is attained through actions like member checking, prolonged time in the field, triangulation, peer debriefing, and negative case analysis (Baillie, 2015). Out of these actions, we conducted member checking and peer debriefing. Prolonged time in the field was not attainable due to limitations in the project frames; triangulation is not applicable in phenomenological studies (Baillie, 2015), and in the data materials there were no negative cases to analyze. I comment on this in *Discussion/Methodological considerations*.

“Dependability” means the research has been conducted in a dependable, auditable way. This is attained through transparency of the decision path throughout the research process (Baillie, 2015). In the published papers reporting from the two data sets we have rationalized the decision path as thoroughly as possible within the word count frames of the respective journals.

“Transferability” means the possibility of the findings being transferred to another setting, attained through rich descriptions of the setting and participants (Baillie, 2015). In the papers we do not provide extensive descriptions of the participants and the settings to protect the privacy of the individual participants in small transparent communities. Regarding

connections between health and yoik, the latter understood as Indigenous or culture specific vocal art, it would certainly be interesting to find out whether our findings were transferable to other cultural or Indigenous contexts. By now, some aspects in the international multidisciplinary research literature I refer to in this thesis might indicate some possible similarities between Indigenous music cultures and their possible health connections, such as anchoring oneself to one's natural and social surroundings and, not least, to oneself (Clarke & Yellow Bird, 2020; Hoefnagels & Diamond, 2012; Cruikshank, 2006; Nikolsky, 2020; Sjöström, 1991; Yellow Bird, 2016).

“Confirmability” means confirmation of the researcher's position and influence, attained through reflexivity (Baillie, 2015, p. 37). Reflexivity is particularly important, as it clarifies the researchers' awareness of themselves as research instruments, including aspects in themselves that will influence the process of research. Among these are preconceptions, knowledge of, familiarity with, and relationships to the research field and participants. Furthermore, this awareness includes emotions, body language, and nonverbal communication in data collection situations (Baillie, 2015; Jootun et al. 2009). These aspects are reflected upon in our published papers to the extent possible within the word limits stipulated by the journals. I discuss them in greater detail and depth in *Discussion/Methodological considerations*. In order to clarify some of these aspects I will below provide some background information about myself.

I am a Finnish born female who was in my fifties when I started studying the topic of yoik and health connections. My origins are in an area geographically and culturally far away from what is acknowledged today as a Sami cultural area. I emigrated to Norway in 1986. I feel myself an outsider with regard to Sami, Norwegian, and Finnish contemporary cultures; The Sami, because I neither grew up or have lived within the culture; the Norwegian since I am not originally Norwegian, although I have lived in Norway most of my life; and the Finnish since I am alienated from a lot of the contemporary Finnish way of being due to having lived most of my life abroad. My professional and academic studies and experiences include teaching students both with and without functional challenges from kindergarten to adult education, as well as completing a master's degree in musicology. My greatest interest is peoples' lived lives, their ways of being in the world—that is, embodiments—and the concomitant health impacts. Furthermore, my motivation lies in the reciprocity and meaningfulness of research for those concerned.

2.3.2 *Recruitment and the participants*

The inclusion criteria for participants in both data sets were wide, particularly the first data set reported in Study 1 below. The topic “yoik and health” was underresearched, and as mentioned, the taboo surrounding yoik was heavier by the time I conducted the data collection for that study. Therefore, any person with relevant experience who would be willing to be interviewed would qualify (Creswell & Poth, 2018). I attended different events regarding Sami or yoik issues, and straightforwardly approached people who had spoken publicly of those issues. I presented myself and my errand, asking if they were interested in participating and being interviewed by me. Other forms of participation requests were e-mail and text messages to potentially interested persons in our networks.

The inclusion criteria for the second data collection in Studies 3 and 4 (see below) were more specifically defined to address yoik experiences in care contexts. Also, as the project was funded by Northern Norway Regional Health Authority, the participants needed to have either a professional or private connection to the primary area under this authority. This means they should either live, originate from, work or have worked in this part of the country. My approach to recruiting possible participants was somewhat similar to that of the first data collection, however. Moreover, some of the participants in the first data collection were contacted, and some of them consented to participate in the second as well. Furthermore, in both studies, snowballing—one participant inviting their relevant acquaintances to participate—was an important enrolment measure.

All possible participants received written information beforehand about the research projects, including information about the possibility to withdraw at any time without explanation. In the first data collection, a total of 32 persons were contacted and 26 information letters were sent or handed out (Hämäläinen et al., 2017). In the second data collection, 33 persons were contacted and 17 consented to participate (Hämäläinen et al., 2020). Also, all participants received the consent form together with the project information. The information in the second data collection regarding yoik in care contexts also included the interview guide.

The participants are presented in the two tables below. The tables are as displayed in the referred papers.

Table 1. Participant characteristics, data set 1 (Hämäläinen et al., 2017).

n=13	Women	Men
Gender	6	7

Age	58–77	24–70
Sami	5	6
Non-Sami	1	1
Yoik background	5	3
Grown up with yoik		
Education, not musical		
<7 years	2	
7–9 years	1	
Higher education, 4 years or less	2	3
Higher education, more than 4 years		1
Education, musical		
High school		1
Higher education 4 years or less		1
Higher education Master’s level or more	1	1
Musicians		
Professional	1	3
Amateur		2
Yoiking practice		
Yoikers	5	5
Non-yoikers	1	2

Table 2. Participant characteristics, data set 2 (Hämäläinen et al., 2020)

Participants n=17

Gender:

Men: 1

Women: 16

Age span:

33–50 years: 4

51–70 years: 10

71–88 years: 3

Caregivers’ role in the interview:

Informal*: 6

Formal**: 10

Mixed: 8

Relation to yoik:

Professional yoiker : 4

Unprofessional yoiker: 9

Non yoiker: 2

Experience of yoik in daily life: 9

Do not know yoik from growing up: 4

Education level:

Primary school: 2

High school: 5

Bachelor’s level: 5

Master’s level: 4

PhD level: 1

Recruited by:

By first author in Sami events: 4

From former studies on the topic: 5

Snowballing: 8

* a family member

** in this context, a person working or having worked within healthcare, including as a voluntary, unpaid worker, e. g. a regular visitor

The participants comprised 25 individuals. Five of them participated in both data collections. The age variation was from 24 to 81 years. Ten had not grown up with yoik,

while 15 had varying yoik experiences since childhood. In the first data set the gender distribution was even with six females and seven males, while in the second data set the gender distribution was female dominated. While gender balance was not targeted, in the second data set the gender balance reflects the gender distribution of healthcare-givers in Norway, both formally and informally. The education level of the participants varied from one year at school to PhD level. Four were professional musicians, that is, had a formal music education and made their living mainly from some form of music. With regard to yoikers, the line between “professional” and “nonprofessional” is not meaningful to draw here, as in these studies the yoikers were what could be called semi-professional: high level performers, tradition bearers and creative artists pursuing other livelihoods for income. Our inclusion criteria were, as mentioned, wide and pragmatic—I would have research conversations with those who had relevant experiences willing to share their experiences with me—and we ended up with a group of pro-yoik participants. I further scrutinize the selection of participants in *Discussion/Methodological considerations*.

2.3.3 Interviews

The first data collection occurred from March to June in 2015, and the second from May to July in 2017. The interviews were semi-structured. In the first data collection, I had a set of themes that we should discuss with all the participants, written down on a piece of paper as a memory aid. They were about yoik experiences in general. In the second data collection, the participants received the questions beforehand. In the second data collection, the questions were thematized to cover experiences and thoughts from care situations in addition to the participants own personal yoik experiences. Initially, I set up individual interviews. However, there were situations where the principal participant enrolled another during the interview, or two participants wished to be interviewed together. These were not intentional focus groups, but naturally occurring occasions. That is why they were reported in the papers as individual interviews or interviews in pairs. The interviews were conducted in environments chosen by participants. The interview sites included private homes, work offices, cafes, and outdoor locations, and lasted 1-3 hours. The interviews were audio recorded digitally and transcribed verbatim. The first interview set I transcribed myself, while the other was transcribed by a professional transcriber, except for two interviews which were with two persons each. I transcribed them as well and anonymized the interview transcriptions before analysis. The transcriptions were sent to the respective participants with invitations to comment on them if they so wished. The second data set was also color-coded with a preliminary analysis before

sending. The only comments I received were during later personal encounters, where one participant commented self-critically about her own way of expressing things, and another said it was fun to memorize the interview through re-reading.

2.3.4 *Analysis*

The research team analyzed and discussed the data applying qualitative content analysis and thematic analysis (Vaismoradi et al., 2016). According to Vaismoradi and Snelgrove (2019) this approach belongs to qualitative descriptive design. The process of analyzing qualitative data always includes both description and interpretation. The term “descriptive” is used when the researchers want to maintain a higher level of description (Vaismoradi & Snelgrove, 2019).

There are certain similarities between qualitative content analysis (QCA) and thematic analysis (TA). They share “philosophical backgrounds, immersion in data, attention to both description and interpretation, considering the context and cutting across the data for seeking themes” (Vaismoradi & Snelgrove, 2019, pp. 1-2). The difference between QCA and TA, according to Vaismoradi and Snelgrove (2019), is that TA is more interpretive, including latent meanings, while QCA tends to be more descriptive with manifest meanings. Yet, QCA can be conducted in various ways. Hsieh and Shannon (2005) describe three different approaches: conventional, directed, and summative (Hsieh & Shannon, 2005). Conventional QCA is applied to understudied issues approached with descriptive, phenomenological design and interviews with open-ended questions (Hsieh & Shannon, 2005). Directed QCA uses a more structured approach with existing theory or pre-existing research guiding pre-existing coding categories (Hsieh & Shannon, 2005). Summative QCA quantifies the amount and frequency of certain words or units, thereafter exploring the latent meanings in them in the different contexts of the analyzed text (Hsieh & Shannon, 2005).

In the first data set we conducted what Hsieh and Shannon call conventional QCA (Hsieh & Shannon, 2005; Hämmäläinen et al., 2017). We identified and coded themes in the transcriptions, organizing them in different categories and subcategories. The coding categories were also partly predefined as they were the guiding questions in the interview guide. These categories were, e.g., 1) yoik experiences, with a subcategory 1a) yoik restrictions; 2) yoik versus singing; 3) yoik in fusion with other musical styles; and 4) yoik’s significance. Category 1) yoik experiences included themes like feelings evoked by yoik, descriptions of yoik situations, and descriptions of learning yoik. The subcategory 1a) yoik

restrictions included descriptions of situations where yoiking was not allowed, appropriate or the person would voluntarily restrain from yoiking. Category 2) yoik versus singing contained descriptions of the potential differences between yoik and singing. Category 3) contained participants' opinions about "modern" yoik forms, and in category 4) yoik's significance the participants provided descriptions about yoik's significance to them.

In the second data set the coding categories were basically predefined and thus pre-existing in the interview guide (Hämäläinen et al., 2021). The interview guide contained thematized questions about the participants' thoughts and experiences of yoik in care situations, particularly in institutional settings. The questions were about whether yoik should or could be applied, and if so, by whom? Could healthcare personnel yoik, say, the participant themselves, in case they happened to be in need of institutional care? Could healthcare personnel yoik the participants' relatives in the institution? What should they yoik? Furthermore, the questions were also about a potential systematic larger study on this topic. Is research desirable? How should it be conducted, which data collection methods would be appropriate, who should do the data collection? Would the participants participate in a larger systematic study as well? However, our initial directed QCA also revealed themes and categories not predefined. Furthermore, the contents turned out to be too extensive to be reported in one paper. Hence, we wrote another thematic analysis on the same data set, reporting additional emerging themes in the materials (Hämäläinen et al., 2020).

I will return to discussing data analyzing styles in *Discussion/Methodological considerations* where I justify my argument concerning the categories of analytic approaches in our studies. Here, I have first and foremost described what we did, but in the following I will shortly present the outline of the four studies.

3. Results

3.1 Study 1

Yoik and possible positive health outcomes: an explorative qualitative study

The first paper, with the title *Yoik and possible positive health outcomes: an explorative qualitative study*, reported on a pilot study conducted to investigate the desirability as well as feasibility of research on the topic of yoik and health. The open-ended interviews revolved around the questions related to the following objectives: i) what kind of yoik experiences did the participants have, ii) were they about yoik in particular or about singing, and iii) could these experiences be related to health. Altogether 13 participants were interviewed. Qualitative content analysis of the interviews revealed themes connected to emotion management, as well as feelings of a connection to something beyond oneself, like ancestral and cultural history, nature, society, and so forth. We connected these themes to the salutogenic theory of health and well-being, and its acknowledgment of the necessity of emotion management as part of self-regulation competence.

3.2 Study 2

Sami yoik, Sami health, Sami history: a narrative review

The second paper *Sami yoik, Sami health, Sami history: a narrative review* gave an overview of relevant literature regarding the topic of yoik and health. As this topic is highly understudied, we used evidence from music and health research, relating it to knowledge about the Sami as a people, such as their history and yoik as their cultural expression. Furthermore, we discussed this knowledge in relation to salutogenic theory and our findings from our first published paper, Study 1 above. In Study 2 we discussed the public health profile of the people self-reporting as Sami today concerning the possible health consequences of centuries long assimilation and colonization policies. As a result of these policies, many people possibly suffering from the health consequences of these policies will not be included in Sami health research. Yoik is mentioned in some of the Sami health research literature as an important health promoting agent, among other traditional activities. Thus, this paper concluded that yoik may function as a salutogenic agent on two levels: an individual level, as a tool for emotion regulation and stress relief, and a population level, as a socio-cultural resilience factor.

3.3 Study 3

The art of yoik in care: North-Sami caregivers' experiences in Northern Norway

The third paper, *The art of yoik in care: North-Sami caregivers' experiences in Northern Norway*, is a further study of the data collected and partly reported on in the third study. The objective in this study is to investigate the participants' yoik experiences, both generally and in care contexts. In this study we report some of the emerging themes in the interviews, discussing them in relation to theories of decolonization, embodiment, attunement, as well as person-centered care and personhood. Yoik may function as a sort of “musical sensory garden”, as yoiks describing familiar places in nature evoke vivid memories of those places even in institutional environments. Healthcare personnel have the opportunity to decolonize institutional care on a micro-level in everyday interpersonal encounters. According to some participants, by learning just a few yoik melodies, they could apply them in accordance with the subject person's preferences. When mindfully applied, yoik appears to have the potential to enhance the personhood of the people in care, functioning as an attunement tool inducing good feelings and a culturally safe care environment.

3.4 Study 4

Yoik in Sami elderly and dementia care – a potential for culturally sensitive music therapy?

The fourth paper called *Yoik in Sami elderly and dementia care – a potential for culturally sensitive music therapy?* reported on the second data collection, which aimed to investigate the potential and experiences of yoik, as well as the desirability and feasibility of research on yoik applied in care situations. This project was motivated by the results and some of the reports in the first data collection reported in Study 1 described above.

Altogether, 17 participants were interviewed with a semi-structured interview guide regarding their experiences and opinions about yoik in the care context, as well as possible research on this topic. Seven participants were close relatives and 10 were professional healthcare workers. The participants mainly reported experiences from the care of older adults with or without dementia. Directed qualitative content analysis was applied, and the results revealed experiences of yoik as a potentially powerful agent for evoking the presence, reminiscence, and personhood of the people in care, as well as regulating the moods and behavior of people living with dementia. Despite this, yoik appeared to be applied rather sporadically. Also, the non-Sami healthcare workers' awareness and competence about yoik and its significance to people seemed insufficient. For music therapy, implications of yoik, and in global contexts Indigenous singing, were stressed.

4. Discussion

The overall aim of this dissertation is to **explore possible connections between the traditional Sami vocal art yoik and health in depth, as well as possible health benefits connected to practicing it.** In order to answer the research question *What can we understand about some of the health knowledge embodied in yoik*, I discuss this topic further below. I approach this question through yoik experiences described by yoikers and non-yoikers, connecting these to the different theoretical perspectives presented in the background section. In this discussion I elaborate these theoretical perspectives in accordance with the subquestions i) what is important to health, ii) how can music or musicality contribute to health, iii) which aspects of music does yoik philosophy and praxis embody, and iv) how is this praxis and philosophy connected to health.

Our published studies presented above display yoik on an overall health theory level as an important salutogenic agent in the lives of those Sami who practice it. Yoik appears to be organically connected to the everyday lives of individuals, as well as to relationships between people, and human and other-than-human entities. Importantly, the participants in our studies also display yoik's capacity to evoke and presence the lost and blurred contents of the personhood of individuals in need of care, in particular in persons with dementia.

4.1 Perceptions of health knowledge embodied in yoik 1: yoik, its subject and arts

Some of the evidence regarding musical activities' impact on health and well-being was presented in *Theoretical perspectives/Arts, music, well-being and health related to yoik?* (Daykin et al., 2018; Fancourt et al., 2013; Fancourt, 2016; Hohmann et al., 2017; Kamioka et al., 2014; Norton, 2016; Reagon, 2016; Sivonen et al., 2017; Stegemann et al., 2019; Särkämö et al., 2017). Although yoik has not been part of the research on music-based activities beyond our pilot studies up until the time those studies were conducted, it is near-at-hand to presume that yoik could function in at least a similar manner to that of other music. Yoik is connected to the innermost feelings of people who are familiar with it. Personal yoiks are like their owners' musical names, with a similar intimate connection between the yoik and its subject, as that between a name and its owner. This applies to other subjects of yoiks as well, as the expression "to yoik a river" or "to yoik an animal" or "to yoik a flower" suggests (Hämäläinen et al., 2017, 2018, 2020, 2021). Graff (2004) has chosen to use another expression in his book title, namely *Om kjæresten min vil jeg joike (I will yoik about my beloved)* (Graff, 2004). However, the yoikers I have spoken with both within and outside the

data collections, talked about “yoiking a subject”, instead of yoiking “about”. That common expression displays the close connection between yoik and its subject. Moreover, when teaching yoik or explaining (for example, to a researcher) how a yoik is created, many yoikers stress the importance of *being* what you want to yoik. This is in alignment with what Hilder (2015), in referring to several yoikers, calls *presencing* the yoik’s subject. As mentioned in *Theoretical perspectives/The Sami and yoik*, the Sami scholar Gaski (1996) clearly expresses this in this statement: “In reality, the yoik is not *about* a person, it actually *is* the person – “ (Gaski, 1996, p. 13). I argue that this kind of creation of yoik, that is, presencing the yoik’s subject, calls for attuning to, or resonating, the yoik’s subject. This applies equally in cases where someone or something is not yoiked with a positive aim. Nevertheless, Graff’s book title exemplifies and illustrates flexibility as one of the properties in yoik; one *can* also yoik *about* something. Either way, attunement is crucial.

Skaltje’s booktitle *Tiniest life has its yoik* indicates a possible inherent musical presence in all life (Skaltje, 2014). Valkeapää’s commentary in the documentary program referred to earlier in this thesis suggests a presence, or flow, or just an “it” that calls for creative expression, sometimes as yoik, sometimes as poetry, sometimes as something else (Andersen & Askerøi, 1991). In the referred poems he says:

.....

560. I sound

resound, me too

sounding

and the world is wide

speaking

confidentially

The River of Life

561. and I resound

when it plays within, inside me

with my heart's feelings, in my heart

on the journey of my days

it sings

is accomplished

.....

Although I am considering the two poems together, Valkeapää himself has numbered them as two separate, subsequent poems. However, they are displayed together on one page in the book *Beaivi, áhčážan* (Valkeapää, 1988, 1997). They can be read together as well as independently. Above, “it” in the second poem might refer to “the River of Life” in the first. However, if the second poem is read independently, “it” could also be understood as something unpronounced, a feeling or presence that plays within as long as we live, as in Valkeapää’s words “on the journey of my days”, which the reader is free to perceive according to their preference. Still, that feeling or presence is musical in that “it *sings*”. Valkeapää expresses the presencing “it” with the words “I sound” and “resound”. “It” might also refer to “world” which is both wide and speaks confidentially, suggesting an intimacy in this resounding communication, even with a wide world. It is as if the wide world as well as “the River of Life” plays “with my heart’s feelings” in an intimate communication. In the Finnish translation of the poems, the originally Sami word *healaim* is translated to the word *hellimässä*, which in English would be close to *caressing*, which is intimate indeed (Valkeapää, 1992). This heart connection and intimacy is what many yoikers express about their relation to yoik. My interpretation here is not to be considered as an attempt at scholarly literature or arts analysis in an academic sense. It is my presentation of what these poems speak to me. Hence, it reflects my individual perspective (Damasio, 2018) at the spot where I am situated. It evidently also reflects my preconceptions and views that always will color what I perceive (Gadamer, 2004). Yet, just like art performed by one individual—here poetry by Valkeapää—appeals to others revealing something universally recognizable, so might

another individual's—such as my—interpretation of that piece of art appeal to yet others, revealing yet other recognizable aspects of reality.

With reference to Valkeapää's words of “not distinguishing whether it be music or literature or a picture”, just using “different techniques to express it” (Andersen & Askerøi, 1991), yoik can also be understood and considered as one expression of multiartistic attunement. According to Gaski (2011), this is also in line with Sami tradition and life conditioned by natural environment. It requires skills in multiple arts and crafts, something that Valkeapää deeply respected and honored. In order to survive one simply cannot afford to specialize in just one thing (Gaski, 2011). Moreover, yoik fulfills also the criteria of Ruud's *cultural immunogen*, that is, “handling cultural artefacts or artistic expression within the context of health-related behavior”, as everyday musicking (Ruud, 2013, p. 2). Yoik contains many of the components of Fancourt and Finn's list in the “logic model linking the arts with health” found in their WHO-report based on a systematic review of research in this field (Fancourt & Finn, 2019, p. 3). Some of those mentioned are “aesthetic engagement, involvement of the imagination, sensory activation, evocation of emotion, cognitive stimulation, social interaction and interaction with healthcare settings”. According to Fancourt and Finn, these components generate responses like “enhanced coping, emotional regulation, reduced loneliness and isolation, enhanced social support and improved social behaviors”, resulting in at least health “promotion and management” (Fancourt & Finn, 2019, p. 3). These characteristics apply to yoik, as yoik can be seen as aesthetic engagement as well as cultural immunogen. Expressed in Fancourt and Finn's words, yoik involves “imagination, sensory activation, evocation of emotion, cognitive stimulation and social interaction” generating “enhanced coping, emotional regulation, reduced loneliness and isolation, enhanced social support and improved social behaviors” (Fancourt & Finn, 2019, p. 3; Hämäläinen et al., 2017, 2020, 2021).

4.2 Perceptions of health knowledge embodied in yoik 2: salutogenesis and yoik

According to Antonovsky, self-expression as part of our emotion management abilities belong to our fundamental self-regulation competence (Antonovsky, 1987). As we are constantly sensing and responding to life in ourselves and around us, thus being emotionally evoked (Damasio, 2018), we need to release the valence caused by emotional charge to keep our organism in balance, in other words, homeostasis (Antonovsky, 1987; Damasio, 2018). This *homeostatic imperative*, seeking an optimal state of well-being, is a driving force for all

life (Damasio, 2018). It is basically an imperative for self-regulation. According to Damasio, all living entities are on some level engaged in the constant processes of sensing and responding (Damasio, 2018). We sense simultaneously a stimuli outside us as well as its impact in our bodies, which creates an emotive response (Damasio, 2018). Self-regulation is necessary to de-charge the valences in our emotive responses generated in the course of sensing, perceiving, and responding. This evidently applies to experiences connected to yoik and other forms of art as well. As long as we are part of the flow of the “River of Life”, and as long as “it plays us”, we are engaged in sensing, emotive responding, and feelings. In Valkeapää’s words we “sound” and “resound”. We sense what happens inside us due to our sensing of the world outside us. The “River of Life” is simultaneously inside us as well as outside, in this event of sensory flow we are exposed to, because as long as we live, we are part of our environments, which then “play” inside us. I argue this demonstrates how arts can express different or complementary aspects of reality to those that science does (Gadamer, 2004).

Homeostasis and self-regulation are fundamental to Antonovsky’s salutogenic theory (Antonovsky, 1987). Antonovsky precedes Damasio in stressing the importance of managing feelings and emotions in order to maintain homeostasis. Managing emotions and feelings is thus a cornerstone in our self-regulation competence, keeping us on the ease-side of the salutogenic continuum (Antonovsky, 1987). As we argue in Study 1, yoik is applied and functions for the purpose of emotion management, and thus the self-regulation and maintenance of homeostasis and health (Hämäläinen et al., 2017).

Among the factors contributing to health, Antonovsky mentions comprehensibility, meaningfulness, and manageability (Antonovsky, 1987). These three components contribute to the sense of coherence (Antonovsky, 1987). According to the descriptions of the participants in our studies, as well as the poems of Valkeapää applied in this thesis, I interpret yoik as contributing to the sense of coherence for several reasons, such as the following:

- The participants report that yoik gives them a feeling of belonging to something greater beyond themselves, whether nature, universal force, ancestral history, community, or Sami culture (Hämäläinen et al., 2017). Gaski mentions this as well (Gaski, 1996). Belonging to something beyond yourself may contribute to a sense of comprehensibility and meaning, and thus a sense of coherence (Antonovsky, 1987).

- Valkeapää connects himself to something beyond himself when he “sounds” and “resounds” in his creative process. That something is, in his two poems, referred to in this thesis as both the “wide world” as well as “the River of Life”. The participants mention, “nature, universal force”, for which I see the expression of the “River of Life” as a metaphor. Some participants in Study 1 also mention elements like “flow” and “stream” connected to their yoik experiences (Hämäläinen et al., 2017). These can directly be seen as connected to the metaphor of the “River of Life”, as a constant flow and stream are characteristic for natural undammed rivers. Hence, this aspect may as well contribute to the sense of coherence.
- In Study 1, we interpreted the participants descriptions of their yoik experiences as related to emotion management. This is, according to Antonovsky, a basic salutogenic ability, as it constitutes the fundament of self-regulation competence (Antonovsky, 1987). In Study 4, a participant enhanced this in plain words by talking about the necessity of yoik in everyday life, “in order to get along with it all” (Hämäläinen et al., 2021). Both these aspects are related to manageability and thus a sense of coherence.

This actualizes yet another aspect of yoik that fits into the theory of salutogenesis, that of *empowerment*, see also *Theoretical perspectives/Health in salutogenic perspective*. Personal yoik enhances the subject person’s sense of self. Some yoikers reported in Studies 3 and 4 that they sometimes used their personal yoiks in order to lift up themselves (Hämäläinen et al., 2020, 2021). I consider this a self-empowering act. Whatever empowers us, moves us towards the ease-direction on the salutogenic continuum (Antonovsky, 1987). Thus, I argue that yoik is in line of salutogenic theory in this aspect as well.

In few lines, Valkeapää capsulizes fundamental salutogenic health knowledge in a poetic outfit, knowledge which resonates with the knowledge of the theorists Antonovsky, Damasio, Merleau-Ponty, Csordas, and others referred to in this thesis and acknowledged in Western academia. In my interpretation, Valkeapää’s poems capsulize the relational character of the foundation of our health. We are conceived in a relational event, and we develop in a relational life in our first, intrauterine relationship (Fedor-Freibergh, 2021; Hoover & Metz, 2021; Jones et al., 2019; Lehrner & Yehuda, 2018; Norton, 2016; Smaling et al., 2017; Stern, 2002; Van der Bergh, 2021; Verny, 2021). Up to the moment of birth, in amniotic fluid, we are literally flowing and bathing in the “River of Life”, see *Theoretical perspectives/Musical*

origins of self-regulation and personhood. During the intrauterine time, this “River of Life” contains our mother’s embodiments and her psychobiological life, with her sensing, responding, and valenced feelings (Csordas, 1994; Damasio, 2018; Merleau-Ponty, 2012). Through the placenta and umbilical cord, the mother’s psychobiological life, her “River of Life”, washes through us in our bloodstream. Thus, we are submitted to whatever is there, as in the womb we cannot be isolated beings (Fedor-Freybergh, 2021; Hoover & Metz, 2021; Jones et al., 2019; Lehrner & Yehuda, 2018; Norton, 2016; Smaling et al., 2017; Stern, 2002; Van der Bergh, 2021; Verny, 2021). Within prenatal psychology, this is considered as early interpersonal interaction and interaction between the infant and their environment. Hence, the mother with her psychobiological life is the infant’s first relationship and first environment (Fedor-Freybergh, 2021; Hoover & Metz, 2021; Jones et al., 2019; Lehrner & Yehuda, 2018; Smaling et al., 2017; Stern, 2002; Van der Bergh, 2021; Verny, 2021). This includes the feelings and sensations the mother might have while yoiking or listening to yoik. As the human body consists of countless resonating membranes and liquids as well as a resonating nervous system (Zaki & Ochsner, 2012), an intrauterine child of a yoiking mother will inevitably bathe in yoik resonances. Hence, this first environment is a sonoric umbilical chamber dominated by the mother’s voice, which resounds round and through us as our primary sonoric experience (Norton, 2016).

The sensory flow of the “River of Life” of the infant drastically changes after birth (Hart, 2008), as the infant transfers from a liquid, closed environment to an airy open one. The sensory flow which up until birth has been buffered by and filtrated through the mother’s body now meets the infant directly. The emotive response generates emotions and feelings of different kinds, with their different valences (Damasio, 2018). The caretaker’s ability to attune to the child is fundamental in this early perinatal interactive co-regulation process (Hart, 2008; Siegel, 2012). In *dyadic-, mental state-, and neural resonances* (Hart, 2008; Siegel, 2012; Zaki & Ochsner, 2012), depending on the caretakers’ attunement and co-regulating capacities, the infant’s sense of self and personhood is formed, see *Theoretical perspectives/Musical origins of self-regulation and personhood* (Hart, 2008; Siegel, 2012; Smaling et al., 2016; Stern, 2002; Zaki & Ochsner, 2012). We learn the essence of our self-regulation in this first relationship as well as post-partum with other primary caretakers in dyadic-, mental state-, and neural resonances, and in mutual attunement (Hart, 2008; Siegel, 2012; Smaling et al., 2017; Stern, 2002; Zaki & Ochsner, 2012). When Life “plays us” and

within us, we “sound” and “resound”, widely and intimately, the wide world, the tiniest life, and ourselves.

In a living yoik culture and in accordance with yoik philosophy, an infant or a child gets their own child-yoik, *dovdna*, a little melody line attuned to the particular child, see *Theoretical perspectives/About the Sami and yoik* (Hilder, 2015; Graff, 2004). This personal child-yoik may grow and change together with the child as the child changes, growing into an adult’s personal yoik. Moreover, a personal yoik can, of course, be given to a person at any time. Regardless of when they had received their personal yoik, the participants in our studies reported feelings of really being seen and acknowledged as they really are when they were yoiked. Also, Sami adolescents report personal yoik as being one of the important resilience factors in their lives (Nystad et al., 2014). In that sense, personal yoik seems to function like a mirror reflecting the subject’s personhood and their evolution from infant, accompanied by their personal *dovdna*, to adult with their personal yoik. The foundation of our personhood, our sense of self, is formed in an attuned relationship, in our first relationship(s) through our mother’s and after birth also other caretakers’ attunement with us, in that silent, wordless *feeling* of being tuned together (Stern, 2002), in neural-, dyadic-, and mental state resonance (Hart, 2008; Siegel, 2012; Smaling et al., 2016; Stern, 2002; Zaki & Ochsner, 2012). Within yoik culture, the attunement in first relationship may indeed be audible as well, when a mother expresses her feelings towards her child with this child-like little tune attuned to that particular child. Furthermore, a person learns in their infancy that musicking one’s daily life is natural and matter-of-course. A similar practice is also described in Siberian Indigenous musics (Nikolsky, 2020).

With regard to musicality in interpersonal relationships, Stern considers resonance as a fundamental basis for any or all intersubjectivity (Stern, 2004). Resonance and attunement are related concepts as explained earlier in this thesis in *Theoretical perspectives/Perceptions of musicalities*. Both are linked to two instruments or objects swinging in the same wavelength (Levitin, 2011). “Objects” may also refer to neurons or neural systems, both intra- as well as interpersonally (Hart, 2008; Zaki & Ochsner, 2012). Hart refers also to an interpersonal *field of resonance* between the infant and their caregivers, where the infant’s self-regulation capacities as well as sense of self, develop in resonance with those of their caregivers (Hart, 2008). In a certain sense this dyadic attunement or dyadic resonance appears like a circular “dance” between the infant and the caretaker, with features associated to musical concepts of

attunement from dance therapy mentioned in *Theoretical perspectives/Perceptions of musicalities* (Jerak et al., 2018): The yoiking caretaker attunes to themselves and their feelings towards the infant and their character in a simultaneous *self-attunement* and *other-attunement*. As yoikers often include characteristic features from their own families' yoiks in the new ones they create, they simultaneously express a form of *attunement to a group*. The infant mirrors themselves in their caretaker's multiple attunements, co-attuning with the caretaker, the caretaker's attunement of the infant themselves, and the larger social entity or group they both belong to. Attunement in these different ways is described in dance therapy as the experience of present moment free from expectations, and with the unity of movement (Jerak et al., 2018). Self-attunement is particularly described as an experience of the embodiment and unity of mind and body (Jerak et al., 2018). These wordings are somewhat similar to those yoikers in Studies 1, 3 and 4 applied when describing their yoik experiences in our studies: feelings of presence, freedom, unity, and so forth (Hämäläinen et al., 2017, 2020, 2021). Also, Valkeapää appears to attune to himself, his life, and his environment when he "sounds" and "resounds". In my interpretation, he might display a similar devotion when sounding and resounding himself with his environment here in his poems, as all humans do in their very first one.

The quality of attunement in our first relationship is formative to our sense of self as well as our self-regulation competence (Hart, 2008; Siegel, 2012; Smaling et al., 2016; Stern, 2002) and thereby fundamental to our health (Antonovsky, 1987). The concepts attunement, tuning in, resounding, and resonating, original musical concepts I have presented in this thesis' *Theoretical perspectives/Perceptions of musicalities* (Jacobsen et al., 2019; Jerak et al., 2018; Lindvang et al., 2018; Swaney, 2018), are closely related. They are also challenging in a certain sense. They are defined lexically (Merriam-Webster, n.d.-a), explained scientifically (Awrejcewicz, 2017; Mühlhoff, 2015; Sundberg, 1991), and implemented in everyday language in a self-evident manner, mostly without any definitions or explanations of what is meant by the concepts. Hence, these concepts also have other definitions besides the musical ones, and Mühlhoff, for example, refers to these concepts as originating from physics (Mühlhoff, 2015). Still, these concepts belong to basic musical vocabulary and refer to alignment in the same wavelength (Levitin, 2011). Hence, I argue for an innate, embodied musicality on a fundamental level within humans, as well as in human interactions. I justify my argument with the fact that attunement, understood as musicality, is even formative to the development of our self-regulation ability and consequently, health. Therefore, I suggest that

the foundation of our self-regulation, health, and well-being lies basically in a musical, attuned presence in our first interpersonal and environmental relationship.

Within yoik culture, anything one attunes to can be yoiked. Hence, all relations whether between humans, or humans and other-than-human entities, can be seen as inherently musical. A similar musical and relational presence is reported in many other Indigenous musical cultures as well (Amman et al., 2013; Cruikshank, 2006; Diamond, 2019; Hauser, 1992; Hoefnagles & Diamond, 2012; Nattiez, 1983; Sjöström, 1991). Therefore, I interpret yoik as embodied Indigenous knowledge of the importance of resonating attunement, relationality, and multiartistic, musicking self-expression for our self-regulation ability and personhood. I also interpret yoik as embodied knowledge of the musical character of our health and being in the world. The health potential in a yoiking, musical being-in-a-world includes also the practicality of always having a means for emotion management and self-regulation readily available. The vocal ideal within yoik of enhancing expressiveness before pitch accuracy (Nikolsky, 2020) allows for a whole range of emotions and feelings to be expressed. Furthermore, as yoikers presence subjects like their loved ones with their yoiks, yoiking re-anchors the yoiker in their close relationships, and comforts when the close person is not physically there. The same applies to familiar places as well as other everyday phenomena. In other words, yoik anchors the person to themselves, and their social, human as well as their other-than-human environments. This is concretized particularly in the reports from yoik in dementia care in Studies 3 and 4 (Hämäläinen et al., 2020, 2021). In other circumpolar Indigenous music traditions presented earlier in this thesis, Nikolsky even reports Siberian personal music as necessary for survival because of its function in anchoring the person to themselves (Nikolsky, 2020).

This part of the discussion answers the research question, “What can we understand about some of the health knowledge embodied in yoik?” as understood through the theoretical aspects of music that yoik philosophy and praxis embody and the way I see this praxis and philosophy connected to health. This may explain to some extent why yoik has survived the centuries long assimilation pressure. How can you refuse or deny something that is an essential part of your existence? And how could you ever submit to the idea that an essential part of your existence is nothing but evil? How could you submit that something you do out of parental love, such as giving your child a *dovdna* - a little child-like yoik to become attuned to that particular child - could be the devil’s work?

In the following I elaborate further on the concepts music and musicality related to yoik, and on the significance of musicality for health.

4.3 Musicality and healthcare

In the *Theoretical perspectives/Perceptions of musicalities* section I presented some principles of music and musicality. Music as concept may have very different meanings in different cultures at different times as we saw from a quote of the Italian traveler Acerbi who considered the Sami as having no musical art in their culture, see *Theoretical perspectives/Perceptions of musicalities*. Yet musicality is so universal for humans that, according to Christopher Small, whom some musicologists attribute being one of the most significant music thinkers of the 20th century (Walser, 2016), in order to cover the range of human musical activities, the concept of music should be a verb instead of a noun (Small, 1998). Other 20th century musicological scholars also suggested that music can be perceived as potentially present everywhere (Cage, 1966). The development and works of cymatics by Hans Jenny confirm that music may indeed be perceived as present everywhere in the sensible world in implicit, inaudible forms (Jenny, 2001). Jenny's work proved empirically one of the oldest known music philosophies, the classical Indian music philosophy. According to this philosophy, the sensible world is manifestations of an inaudible sound which acts as a creative force in the universe (Losseff & Doctor, 2016). It is thus a human trait and possibility to organize sounds, whether audible or inaudible, into music. Humans do this in their awareness, in accordance with their perceptual habits (Losseff & Doctor, 2016). Hence, I perceive Blacking's definition of music as *humanly organized sound* (Blacking, 1976) as an accurate one. A human trait to organize sounds into music means that is something we humans do, whatever the concept *music* means to us. Moreover, according to *music archaeological* findings, humans certainly have done so for tens of thousands of years (Killin, 2018; Norton, 2016). Norton (2016) even argues that humans evolved as voice driven beings, as voice's role in human experience is intimately involved with survival.

Referring to expressions "I sound", "I resound", *Tiniest life has its yoik* and "when you yoik something you *presence* what you yoik", I interpret yoik culture and philosophy as embodying knowledge of both these aspects of inherent musicality and musical properties in our universe—the one within ourselves, and the one in our environments. When I sound and resound or resonate, I connect myself through my embodied musicality with the embodied musicality or musical properties of another entity, be it a human, an animal, a plant, a

landscape, or something else, when “it sings” audibly or inaudibly. I interpret this connection as the “River of Life” “playing” me and in me (Valkeapää, 1988, 1997). Connecting with another entity through sensing evokes feelings (Damasio, 2018). Whether audibly or silently, connecting *musically* with another entity certainly evokes feelings, as Valkeapää expresses “with my hearts feelings, in my heart” (Valkeapää, 1988, 1997). Yet, my statements and arguments result from my interpretations of yoik, music, and musicality. They are not to be understood as something I claim to be “true” in an objective, scientific sense. According to John Cage, “truth”, after all, is strongly connected to our perceptual habits (Losseff & Doctor, 2016; Robinson & Metzger, 2011). In my perception, then, yoik as a musical being-in-the-world, relating in a musical manner to oneself as well as phenomena perceived as other than oneself, is an expression of an embodied understanding of the profound needs of our bodiliness and its requirements for health and well-being. The profound needs of our bodiliness and its requirements for health and well-being include the acknowledgement of ourselves as psychobiological beings constantly in a flow of sensing, responding, and valenced feelings, striving for optimal feeling of well-being or homeostasis to keep ourselves in the ease direction of the salutogenic scale (Antonovsky, 1987; Damasio, 2018; Merleau-Ponty, 2012). Constantly being played by Life, we sound and resound, feeling and releasing feelings whether they are painful or pleasurable. From my perspective, yoik as an organic part of daily life appears not only as very useful and healthy, but also as pragmatic and practical, acknowledging our basic psychobiological needs and responding to them in an appropriate manner. Referring to Gaski (2011), I would thus say that yoik is like *duodji*, a piece of Sami traditional craft which is considered as valuable due to both its beauty as well as its usefulness.

According to Stern (2004), our first relationship is repeated throughout our lives in all situations where we are in need of other peoples’ care. As the person dependent on other peoples’ care might feel delicate and vulnerable, it is required that the caregiver is able to attune to or tune into the person in need of care. Interpersonal attunement is thus a crucial ability in all healthcare professions containing direct human interaction (McCluskey, 2018; Stern, 2004). With additional reference to Hart as well as Zaki and Ochsner, and the concepts of *neural resonance* and *interpersonal field of resonance*, I argue that attunement in interpersonal relationships is a form of interpersonal musicality (Hart, 2008; Zaki & Ochsner, 2012). Thus, caretaking is musical activity, whether inaudible or audible. This applies to

caretaking from the beginning of life until the end, or in Valkeapää's words, as long as "the River of Life" "plays within" or "sings in" a person.

At the end-of-life care, the requirement for interpersonal musicality and attunement ability is actualized as necessary in caregivers in cases where individuals are affected by, for example, dementia. This condition often means a deteriorating sense of self and experience of personhood, and thus potentially a feeling of dis-empowerment. In the lives of people in need of care with a background in yoiking environments, attuned caregivers who are able and willing to yoik can make a great difference. I discuss this in greater detail in what follows.

Yoik is said to be a way of remembering, a way of presencing or bringing to life things here and now (Hilder, 2015), see *Theoretical perspectives/About the Sami and yoik*. Thus, yoiking with the older adults with dementia may resonate with their embodied younger beings still present in the implicit memory of the body (Lindvang et al., 2018), or the history of the body (Csordas, 1994), diminishing anxiety caused by disorientation (Hämäläinen et al., 2020). The participants in our studies reported yoik as having the effect of seemingly wiping the symptoms of dementia away, as if the person was present here and now (Hämäläinen et al., 2021). This indicates that yoik may presence not only something outside the person like family members and places, but the person themselves, their *personhood* (Hämäläinen et al., 2020). What happens in the course of this presencing of implicit embodied memories, experiences, lived lives, and personhood, might be scientifically challenging to measure or quantify in their entirety. Despite my conviction of psychological phenomena's biological correlations, I argue that many psychological phenomena due to their complexity are easier to grasp as observable phenomena without quantification, phenomena that we might, or might not understand. How we understand and interpret phenomena in turn depends on our lifeworlds and preconceptions (Gadamer, 2004; Wifstad, 2018).

In our Study 3 we argue for yoik as a musical manifestation of person-centered care (Hämäläinen et al., 2020). According to Kitwood, the founder of person-centered dementia care, the requirement for enforcing the personhood of a person with dementia is meeting the universal psychological needs of *love, identity, inclusion, attachment, comfort* and *occupation* (Kitwood, 1997). This requires knowledge of the habits, abilities, values and preferences of the person (Kitwood, 1997). As yoik is closely connected to persons and their character features as well as their lived lives with landscapes, places, and occupations, local yoiks from the area a person has spent their life in will potentially meet these requirements. As personal

yoiks are often expressions of love and affiliation, given by the loved ones of the subject person, they certainly meet the six basic psychological needs enforcing personhood when applied appropriately. In this way, one immediate personhood presencing measure that might be easily applicable in residential care settings, could be learning if only one yoik melody known in the actual area. As one of the participants in Study 3 said, how many songs do we know anyway? We constantly learn new ones, so how much effort would it cost to learn a few yoik melodies (Hämäläinen et al., 2020)?

According to Kitwood, these six mentioned psychological needs must be met in relationships with persons with dementia (Kitwood, 1997). Personal yoiks are created in relationships, and manifest relationships between people. Thus, they meet this requirement. Furthermore, all yoiks are somehow expressions of relationships, because creating yoik to any subject, human or other than human, is an event of relating and connecting to it. And whether personal or not, those yoiks which have followed the person from the beginning of life, even from the time in mother's womb, truly have their origins in the person's first relationship and first environment (Fedor-Freybergh, 2021; Hoover & Metz, 2021; Jones et al., 2019; Lehrner & Yehuda, 2018; Smaling et al., 2017; Stern, 2002; Van der Bergh, 2021; Verny, 2021). In the lives of those Sami who are born within a living yoik culture, yoik is thus their first music. With the person's possible first music in mind, I argue that it is therefore important to include mindful application of yoik in the repertoire of musical dementia care. Here, with "mindful" I mean that possible negative connotations are screened in advance (Norton, 2016). With "repertoire" I refer to healthcare personnel's knowledge about and awareness of some characteristics in yoik melodies and performance practices. Mindfulness regarding musical practices applies to any musical application in dementia care, as music causes our bodies to involuntarily co-resonate through its vibrations (Daughtry, 2015). Research on music-based activities referred to in this thesis' theoretical background justifies this argument, stressing particularly the importance of familiar or self-chosen music at the end-phase of life (Evans et al., 2019; Gerdner, 1997, 2000; McDermott et al., 2014; Norton, 2016; Sihvonen et al., 2017; Swall et al., 2020; Särkämö, 2017). Relational attunement is warranted along the whole "journey of our days" until it "is completed". This is stressed especially in person-centered dementia care, where tuning into the subject person's personhood is fundamental for the success of music-based activities and interventions (Evans et al., 2019; McDermott et al., 2014; Swall et al., 2020). As we argue in our Study 4, yoik embodies all these characteristics of musical care. Furthermore, Lindvang and colleagues refer to resonance in music therapy as

“resounding with the different emotions in a musical interaction” in three different ways as sympathetic resonance, voice resonance, and affective resonance (Lindvang et al., 2018, p. 8). These resonant aspects are embodied in personal yoik, independent of whether the context is aimed to be therapeutic or not. Voice resonance is obvious in yoik as a vocal art, but the affective and sympathetic resonances, including a yoiker being aware of the other persons feelings in their own “emotional and/or somatic” (Lindvang et al., 2018, p. 8) experience, are also present in personal yoik practices. Moreover, these three resonances are active in yoiking other-than-human entities as well, as the yoiker’s voice resonates their sympathetic affections attuned to the yoiked entities.

4.4 Colonizations and decolonizations: the importance of acknowledging yoik as embodied health knowledge

This thesis begins with a quote of the missionary Isaac Olsen in the early 18th century. The quote depicts the indispensability of yoik in Sami lives at that time. Yoik was considered as absolutely necessary for a person’s life, health, success, and happiness. The Sami should yoik all the time. I argue that, in our studies, the participants’ descriptions of their individual yoik experiences articulate the reasons for Olsen’s description: they present yoik not only as something heartfelt, something that refers to your innermost being, but also as an *existential necessity*, as organic and natural as singing is for birds.

In this thesis I refer to the sorcery ban as the first known measure negatively affecting the practice of yoik. Schefferus described the Sami and their way of life in the 17th century, the same period of time when yoik was actually banned, carrying the death penalty from 1609 (Graff, 2004; Schefferus, 1674; Wersland, 2006). The sorcery ban was effectuated in 1609, about a hundred years before the publication of the quote of Olsen, see *Theoretical perspectives/About the Sami and yoik*. Towards this backdrop it could be argued that yoik has been more or less shamed for 350 years, if counted in accordance with minimal change in the Norwegianization policies expressed in the new School Act of 1959 (Eriksen & Niemi, 1981). However, the impression of attitudes associated with yoik in the course of these 350 years contains contrasts. One example is the Sami yoik poem *Moarsi fávrrot*, see *Theoretical perspectives/About the Sami and yoik*. Schefferus’ book with its descriptions about the Sami and their life evoked great interest in contemporary Europe, and the yoik poem *Moarsi fávrrot* became the main inspiration for the development of European romantic poetry at that time (Gaski, 1996; Nordin & Ojala, 2019). Hence, during the same 17th century, yoik inspired

developments of contemporary European poetry *and* was also persecuted as the devil's service.



Hoffmann, M. (1737). Carl von Linné in Sami dress. Foto: Mikael Wallerstedt. With permission of Svenska Linnésällskapet [The Swedish Linné Society].

After the repeal of the yoik ban in the 18th century, yoik was admired by European scholars who were fascinated by the Sami culture. One example of these scholars was Carl von Linné, the Swedish researcher known particularly for his botanical work. He let himself be portrayed in full scale Sami dress, even equipped with a Sami drum (Nordin, 2018). The clergy, however, continued condemning yoik and Sami spirituality. One illustrating example is a story of yoik originating from the devil's spit on a hot stone. An old lady had then licked the spit and started yoiking (Graff, 2016; Wersland, 2006). During the pronounced time of Norwegianization, efforts were made to Norwegianize the Sami, that is, "help" them develop and leave behind

the Sami cultural markers as explained in *Theoretical perspectives* (Eriksen & Niemi, 1981; Evjen et al., 2021; Minde, 2003). Yoik practices and attitudes towards them vary at this time from yoik being considered as a sin, something primitive and old fashioned, to being useful and even necessary in the context of certain activities, such as reindeer herding (Graff, 2016). This means that the Sami were told over generations to both yoik and not yoik. In the first and foremost arenas for Norwegianization, the schools, the attitudes among the teachers varied as well. There were schools where restrictions towards Sami cultural markers were outspoken and rigid and those where they were not. Ola Graff describes in his book *Joikeforbudet i Kautokeino (The Yoik Ban in Kautokeino)* how the contradictory messages about yoik put the Sami under cross-pressures: you should yoik, and you should not yoik (Graff, 2016). The same contradiction is still found in Sami communities in attitudes towards yoik, where yoik is considered both a sin and a treasure lying closest to your heart (Hämäläinen et al., 2020, 2021).

The period of Norwegianization included outspoken and clearly defined measures of assimilation policies, although the exact timeframes are debated. Similar policies were applied in other Sami inhabited areas as well, in Sweden, Finland and Russia. Additionally, other measures conducted from the 17th century in the inter-Fennoscandian area affected Sami lives in fundamental ways and are considered colonization, although carried on in a different manner than colonialism overseas (Lehtola, 2015; Nordin, 2018; Nordin & Ojala, 2019). The motivations to these kinds of measures were political and carried out in order to establish and enhance national boundaries through cultural and settlement directed actions (Cramér, 2012; Eriksen & Niemi, 1981; Kent, 2014; Nordin, 2018; Nordin & Ojala, 2019).

Later, in repeated re-negotiations and re-establishings of borders due to wars between the states in Sami inhabited areas, many Sami families and even communities were forced to relocate and re-establish themselves in entirely new and unfamiliar places (Kent, 2014; Lantto, 2010). In Norway, this culminated during and after WWII, with attempted deportations of the entire population from Finnmark due to the German scorched-earth tactics and the post-war rebuilding and structural changes of society (Kent, 2014). Hence, during the 350 years of yoik persecution time, many of the Sami were forced to restrain from their traditional religion, traditional vocal art, language, homelands, and livelihoods. In the present day, despite efforts in recent decades to re-establish the Sami's human rights as Indigenous people, Sami traditional livelihoods are under constant pressure from commercial interests

within mining, fishery, oil industry, and the so-called “green change”—massive establishment of wind turbines in areas that have been grazing lands for reindeer since time immemorial (Aslaksen & Porsanger, 2018; Normann, 2021).

Thus, ever since the recorded period of the history of both Sami and yoik, there has been an ongoing double-standard and mixed messages from the political, cultural, and spiritual or clerical powers and structures of the dominant society towards the Sami. Capsulized, these messages include: i) you are admirable – you are lower developed, ii) yoik is beautiful poetry – yoik is the devil’s work and iii) you should disappear or become like us – you should be authentic (Evjen, 1997; Evjen et al., 2021; Eriksen & Niemi, 1981; Hansen, 2011; Hilder, 2015; Hjulman, 2017; Fossheim & Ingierd, 2016). Today, there is a discourse concerning whether these attitudes have ceased to exist. As one of the consequences of these attitudes and policies, a Sami revival movement has since the 1970s claimed the right to self-determination in multiple areas of society and culture. However, the effect on yoik has been notable. Yoik, alongside assimilation and the vanishing of the Sami and their culture, has disappeared from many Sami inhabited places and regions (Grenersen, 2002; Hilder, 2015; Jones-Bamman, 1993; Lehtola, 2015). If we were to draw a “yoik map” over the effects of a living yoik tradition today, the map in Figure 3 below would look very different from the one in Figure 2 presented in the section *Theoretical perspectives/About the Sami and yoik* earlier in this thesis.



Figure 3. A probable, tentative map of areas where the traditional use of yoik as an integrated part of daily life is practiced. This is for illustration and not to be understood as exhaustive.

It is near-at-hand then to ask the question about the effects of these processes on Sami health. As mentioned in *Theoretical perspectives/Consequences of colonization and assimilation on Sami health*, according to studies on Sami health issues, similar tendencies are found in Sami and other Indigenous populations. However, it is not possible to map all of the health consequences of the embodiments of assimilation, colonization, yoik restrictions, and cross-pressure exactly, because of the assimilation and the consequent “disappearance” of many persons with Sami heritage who might carry such embodiments (Cramér, 2012; Csordas, 1994; Hämäläinen et al. 2018; Kent, 2014; Nordin, 2018; Lehtola, 2015). This applies to those who changed their identities regardless of how voluntarily, and whether they moved away from or stayed in traditional Sami living areas (Aslaksen & Lian, 2019; Bjørklund, 1985; Lehtola, 2015; Lundby 2009; Oskal & Aslaksen, 2018; Pedersen & Høgmo, 2012). This also applies to their descendants regardless of their level of knowledge about their Sami ancestors.

The mechanism of disease generation is connected with the disruption of natural functions within the organism when a person is exposed to an overwhelming stress overload of some kind (Entringer & Epel, 2020; Karlamangla et al., 2002; Kirkengen, 2010; McEwen, 2003; McEwen & Stellar, 1993). Entringer and Epel refer to a meta-analysis of studies in correlation between stress and disease development during the evolution of this research field (Entringer & Epel, 2020). They stress the importance of understanding the allostatic load as fragility in homeostasis (Entringer & Epel, 2020). If the stressful stimuli continue over time, the effects lead to damages in the organism's regulatory systems. Entringer and Epel quote Hans Selye's statement: "Every stress leaves an indelible scar, and the organism pays for its survival after a stressful situation [...]" (Entringer & Epel, 2020, p. 104537). Hence, we can only imagine the inscriptions in the bodies exposed to conflicting messages like "you should yoik – you should not yoik", "you should be authentic – you should be like us" and "you are noble – you are less worth than us", or the inscriptions of repetitive loss of land and opportunities to pursue traditional livelihoods (Össbo, 2021), loss of language and cultural identity (Friborg et al., 2020), as well as inscriptions of violations in childhood (Eriksen et al., 2018; Fellitti et al., 1998; Friborg et al., 2020), adulthood (Hansen, 2015), and on structural levels (Clarke & Yellow Bird, 2020; Kirmayer et al., 2014). These inscriptions and scars the exposed people carry are part of the embodiments of individual and collective experiences of actual people, both historical as well as contemporary. Moreover, we do not know the art and properties of the embodiments the impact of the mere change of identity has had on those ancestors who more or less voluntarily chose identity change as a necessary means of survival. Such inscriptions and traces are part of the histories of the exposed minds and bodies in csordasian sense (Csordas, 1994).

However, the consequences of the Sami cultural revival movement—claims of self-determination, as well as the renewed interest in yoik and other Sami cultural markers—create new, and re-new traditional yoik practices (Hilder, 2015). The Sami today inhabit the entire Fennoscandia. Hence, the practice of yoik is not limited to the "core" Sami areas either. Post-war structural changes have driven people—Sami as well as others—from rural areas to larger urban centers in order to gain education and employment opportunities (Broderstad & Broderstad, 2012; Broderstad & Sørli, 2014; Dankertsen & Åhren, 2018; Pedersen & Jensen, 2015). Moreover, modern communication technology has enabled Sami cultural workers, activists, scholars, and others to both spread their ideas and create communities online independent of the living places of the respective persons. If the tendency of yoik and Sami

revival movement continues to develop in the same direction as up until today, we could further modify the Figure 2 “yoik map” in *Theoretical perspectives/About the Sami and yoik*, into an imaginary, emerging yoik map as illustrated in Figure 4 below.



Figure 4. A probable, imaginary map over the future use of yoik. This map is meant to show what is possible when the Sami inhabiting whatever areas in the current Sami inhabited states, including the largest cities, revive their cultural practices like many young people are doing, displaying this in public, as can be exemplified by Ella Marie Hætta Isaksen, Agnete Saba and Marja Mortensson.

Despite the many demonstrations of yoik’s revival and strength, structures of colonization regarding yoik are still maintained. Colonization today occurs in subtle forms (Aslaksen & Porsanger, 2018; Normann, 2021; Wekker, 2016). As one of the participants in the second data collection stated, one of the consequences of Norwegianization is that public sectors such as healthcare services actually maintain colonizing practices today (Hämäläinen et al., 2020). This occurs most likely without awareness and without notice by the persons executing it. In nursing literature, this kind of lack of awareness and reflection is addressed as causing *cultural unsafety*, while *cultural safety* is warranted as a prerequisite for effective nursing. To provide culturally safe nursing, the persons involved need to reflect over and be

aware of their own cultural influences and stance, and the power positions between people in different roles in their work (Browne et al., 2009; Cohen-Fournier et al., 2021; Papps & Ramsden, 1996). I argue that the same goes for any public services. Cultural safety or the lack of it happens at an interpersonal microlevel whenever public services are delivered. In the single encounters between individuals, the unaware embodiments of colonization may come to expression in different modes of communication. “Different modes of communication” involve the choice of language, but also physical bodies in different levels—buildings, interiors, and clothing that is allowed or required, as well as organization and contents of time and activities in the service enterprises. With “organization and contents of time and activities” I refer to when and what is conducted of medical and other therapies, and pastime activities and so forth, in service enterprises such as nursing homes. I will explain this in greater detail in the following.

Care for older adults and persons with dementia is basically organized according to national standards set in accordance with the norms of the majority culture (Browne et al., 2009; Cohen-Fournier et al., 2021; Papps & Ramsden, 1996). As such, this is not necessarily criticizable. However, when the individual receiver of care is concerned, from the person-centered care perspective, some need for modification might occur. When people develop dementia, common symptoms include difficulties in orientation. Recognizable surroundings are important, because the person with orientation difficulties, which are often combined with other symptoms like loss of memory and cognitive functions, naturally may become anxious, not understanding what is going on nor recognizing their environments. The reactions of the unsafe persons to the perceived unsafety may sometimes be aggressive (Kitwood, 1997; Norton, 2016). In residential care, the ordinary daily routines may in such situations appear as unsafe or even threatening for the person in concern. Examples of this kind, I was told during the second data collection, were descriptions of older adults who had lived their entire lives within reindeer husbandry. In their youth, this included sleeping fully dressed to be ready to go out anytime in case it was needed for the sake of the reindeer. How would it then be for such a person to be expected to change into thin clothing for the night, and lie down barefoot in a bed? And why would it be perceived as safe to have your clothes taken off, and get showered by strangers? Why would a shower be perceived as safe? How would it be for a person with Sami as a first language, if no one around understood what they were trying to say, even simple things like “I am thirsty”?

As one participant expressed it in Study 4, whenever older adults must adjust to systems and routines alien to their language, customs, and environments, it is equal to placing them back on the school bench to be further assimilated, or in Norwegian context, Norwegianized (Hämäläinen et al., 2021). It might not be feasible to customize Norwegian healthcare in its entirety to enable cultural safety for all healthcare users belonging to cultural minorities in a multicultural country. On the other hand, some participants in Studies 3 and 4 suggested relatively easy and reasonable measures applicable in the individual daily encounters between service providers and receivers (Hämäläinen et al., 2020, 2021).

The position of yoik in nursing homes may serve as an example of the ongoing unaware further colonization, as well as the decolonizing potential in it. All the healthcare workers, as well as the relatives of the older adults with dementia, reported of the benefits that yoiking had for reminiscing, motoric- as well as mood regulation functions. However, yoik was only sporadically applied. As one participant said, yoik was always the last in the queue when songs for different occasions were chosen. The Norwegian songs came first, although no one really reflected over the matter. The quote of a participant of “... we are so Norwegianized that we are not even aware of it” (Hämäläinen et al., 2020) is illustrative of the phenomenon of colonizing the minds of people. Colonization of the mind happens when it is the colonizer’s language, attitudes and standards that become a norm, the matter-of-course (Chilisa, 2017; Davison & Díaz Andrade, 2018; Eriksen et al., 2019; Hoefnagels & Diamond, 2012; Lehtola, 2015; Nakata, 2002, 2007; Smith, 2012; Wekker, 2016). The colonized phenomena live in the margins, sometimes as exotic spice seasoning the norm, and sometimes just as unpronounced, half-conscious shame.

4.4.1 *Cultural or Indigenous?*

Our studies on yoik experiences in general, as well as in care contexts, suggest that yoik may function in ways similar to other music-based activities. Mindfully applied, yoik may function as regulative for moods and emotions, and enhance personhood through familiarity, belonging, and reminiscence functions. The reason why this is not applied is, according to many of the participants in our studies, the legacy of Norwegianization, that is, assimilation and colonization. I argue that this phenomenon is further reflected in research literature on Indigenous health musicking and music therapy. As I demonstrated in *Theoretical perspectives/Arts, music, health and well-being related to yoik*, the literature mostly focused on “cross-”, “multi-“ or “inter-cultural“ music therapy or music and health practices, rather

than “Indigenous”. In Study 4 we argued that music-based interventions involving Indigenous people are not merely about cultural differences, as would be the case between, for example, Norwegian and Finnish music practices. Indigenous peoples’ histories contain too often histories of what Laila Susan Vars, the Sami lawyer and current principal of the Sami University of Applied Sciences, calls *cultural genocide* (Vars, 2017). Cultural genocide refers to

... a coordinated plan of different actions aiming at the destruction of essential foundations of the life of national groups, with the aim of annihilating the groups themselves. The objectives of such a plan would be disintegration of the political and social institutions, of culture, language, national feelings, religion, and the economic existence of national groups, and the destruction of the personal security, liberty, health, dignity, and even the lives of the individuals belonging to such groups (Luck, 2020, chapter 2).

Cultural genocide and similar actions were motivated by social-Darwinist ideologies including ranking orders of ethnic and cultural groups of people, dividing them into “higher” and “lower” developed ones, see *Theoretical perspectives/About the Sami and yoik* (Eriksen & Niemi, 1981; Evjen, 1997; Evjen et al., 2021; Evjen & Beck, 2015; Hansen, 2011; Hilder, 2015; Hjulman, 2017; Fossheim & Ingierd, 2016; Lehtola, 2017; Minde, 2003; Wekker, 2016). Whether or not we agree on the use of the term *cultural genocide* regarding the Sami (Evjen et al., 2021), colonization, assimilation, and dehumanizing the Sami and other Indigenous people and their cultural expressions over a long period of time has left traces, as discussed above. Indigenous musical practices and traditions are not unaffected by what happened to people. Therefore, I argue that it is not enough to study “cultural differences” in researching music therapy or music and health in Indigenous contexts (Hämäläinen et al., 2021), as being offended is basically not a cultural feature. Nor is it enough to be “culture” sensitive in the narrow sense of the concept (Browne et al., 2009) in work involving people with varying backgrounds, as in, for example, the care of older adults. Knowledge and awareness about historical facts possibly involving collective trauma as well as the health disruptive effects of such events may be beneficial in order to gain an idea of the possible embodiments the people in need of care might be living with. Regarding the Sami, this is not only an issue in care professions in the so-called Sami core areas, but in the whole Fennoscandia, as people with Sami origins inhabit the entire countries (Broderstad &

Broderstad, 2012; Broderstad & Sørli, 2014; Dankertsen & Åhren, 2018; Pedersen & Jensen, 2015; Hämäläinen et al., 2021; Seurujärvi-Kari & Virtanen, 2020). These matters are the reason why I prefer the word “sensitive” instead of “culture sensitive” in some of the passages earlier, although we applied the latter concept in our Study 4 (Hämäläinen et al., 2021). Sometimes the word “culture” applied in different contexts seems to blur the actual power relations, their origins and causes. Culture sensitivity is not an issue in healthcare services, or research for that matter, with regard to Norwegian or other majority populations. It is as if culture is something that concerns the “others” while majority defines the standard without having a culture. The word “culture” may thus maintain othering attitudes and even contribute to stigmatization (Browne et al., 2009; Nakata, 2007).

However well-intended, healthcare systems and practices like most societal structures, may be argued as originating from assimilatory and colonial ideas and practices because they are defined by and rooted in the dominant culture’s norms, standards, and knowledge production (Clarke & Yellow Bird, 2020; Denzin, et al., 2008; Kovach, 2009; Lehtola, 2015; Mihesuah & Wilson, 2004; Nakata, 2002, 2007; Smith, 2012; Wekker, 2016). Regarding music-based activities in residential care contexts, it is a matter of the knowledge of the histories of people and their lives, as well as awareness of their individual needs and preferences (Evans et al., 2019; Hämäläinen et al., 2020, 2021; McDermott et al., 2014; Swall et al., 2020). Music and music-based activities and interventions require particular awareness, as implicit musical memories are deeply embedded in our embodied lives (Hämäläinen et al., 2020; Norton, 2016).

Colonization in the past as well as in the present, in overt as well as covert forms, leaves deep traces in our human bodies and the structures we as humans build and maintain (Yellow Bird, 2016; Clarke & Yellow Bird, 2020). At the same time, the potential for decolonization is there, at least in the everyday interpersonal encounters, at what is called the microlevel. This is true both in everyday informal life settings as well as professional interactions in institutional care contexts (Browne et al., 2009; Camphina-Bacote, 2002; Cohen-Fournier et al., 2021; Hämäläinen et al., 2020, 2021; Papps & Ramsden, 1996). Participants in Studies 3 and 4 suggest that learning, even if only a few yoik melodies, might enhance the experience of acknowledgement of the personhood of a person living with dementia. The person might

feel being *seen*, as was stated by Berit Alette Mienna⁷ (Hämäläinen et al., 2021). I see this as similar to what Siegel refers to as *feeling felt*, as said by one of his clients who characterized this experience as therapeutically relieving (Siegel, 2012). Taking into account the unknown number of persons with Sami background and embodiments—open or hidden—living in nursing homes all over Fennoscandia, it might be justified to include mindful application of yoik in the musical environments of nursing homes. This would be in line with person-centered- as well as Music-Based Environmental care (Nasjonalt kompetansesenter for kultur og helse, n. d.) Furthermore, considering the unknown number of people unaware of their implicit embodied memories of their Sami ancestors, the suggestion of implementing, even if only a few yoiks, in nursing home repertoires might offer emotional nourishment for even more of those who might truly need it. Individual public service providers are, then, in a key position to either decolonize or further colonize the users of these services. In Studies 3 and 4 the focus is on people in need of care, in particular older adults living with dementia. However, the focus might be widened to include any public service. With this I do not mean to say that every person providing public services should yoik, but service providers could contribute to the decolonization of public service encounters with potential experiences of colonization by sincerely tuning into and resonating with the users of these services and their possible histories. These kinds of interpersonally attuned, culturally and historically aware encounters could contribute to what Michael Yellow Bird calls *neurodecolonization*, that is, decolonization in psychobiological and neural levels (Yellow Bird, 2016). Decolonization at individual neural levels in encountering public services could contribute to cultural safety for people with embodied experiences of colonization (Browne et al., 2009; Camphina-Bacote, 2002; Cohen-Fournier et al., 2021; Hämäläinen et al., 2020, 2021; Papps & Ramsden, 1996; Yellow Bird, 2016).

The earliest descriptions of yoik culture depict yoik as something the Sami would integrate into all their living, including daily life mundane activities as well as spiritual ritual and ceremonial practices. Yoik was seen as something necessary for health, well-being, happiness, and success (Graff, 2004; Wersland, 2006). Today, in a “post-yoik-shaming” time, a time with many different strong cultural influences, many Sami still consider yoik as an organic part of life, as some of the participants in our studies verbalize it (Hämäläinen et al.,

⁷ Berit Alette Mienna is quoted in the referred papers anonymously. However, she wrote to me on 15.05.2021 asking to be quoted with her full name in all future publications.

2021). Yoik can be seen as a Fennoscandian Indigenous art of musicking, an ongoing act of living your life musically. Christopher Small referred mostly to African music traditions when he launched the concept of musicking (Small, 1998). I do not know to what extent Small had knowledge about yoik. Either way, the concept of musicking could equally well have been created in the context of yoik culture and practice. As yoik is referred to as a way of being in the world, I argue that it can certainly be said to be a musicking way of living, much older than this academic term.

Presencing through tuning into and resonating appears to be health knowledge which is embodied in yoik culture. In *Theoretical perspectives/Embodiment, health, and yoik* I asked if embodiment can also be understood as “bringing to life/being”, “bringing to existence”, “bringing to physicality” or just “expressing”. I argue that these concepts can be used synonymously to a certain extent with regard to yoik. For is it not when a skilled yoiker expresses a yoik’s subject so vividly, that the subject’s presence can be *felt*? In other words, is it not that the yoiker has brought the yoiked subject to life, to being, to existence, and also to physicality in the feelings and sensations of those bodies that are witnessing and thus co-resonating with the event of yoiking and the yoiked subject?

4.4.2 *Do glaciers listen?*

In her book *Do glaciers listen?* Julie Cruikshank describes Athapaskan and Tlinglit native epistemologies connected to the natural environments, where glaciers constitute and occupy a considerable space (Cruikshank, 2006). Being humans, we can only access knowledge about human experiences despite our advanced scientific methods. We do not know with certainty about possible experiences any others besides human beings because we will always interpret phenomena through our own, human consciousness. In the example Cruikshank offers, it is part of the Indigenous knowledge system of the Athapaskan and Tlinglit people involved in her book to consider natural environments as sentient beings. This knowledge accordingly informs and guides the behavior of the Athapaskan and Tlinglit peoples (Cruikshank, 2006). She also refers to this knowledge as a kind of local ecological expertise about local ecological circumstances. Michael Yellow Bird describes something similar when explaining the relation of Indigenous peoples to their environments (Clarke & Yellow Bird, 2020). According to him, Indigenous people relate to everything in their environments as sentient beings (Clarke & Yellow Bird, 2020). With reference to Sundberg, our environments are abundant with resonating surfaces (Sundberg, 1991). According to

Jenny, matter reacts to sound vibrations (Jenny, 2001; Moon, 2020; Kulig, n. d.). Hence, the sounds we produce affect our environments at least on some vibrational level.

The Figure 2 “yoik map” in *Theoretical perspectives/About the Sami and yoik* shows historical traditionally Sami inhabited areas. By drawing this map, I suggest that yoik sounds have reverberated in a large part of Fennoscandia. Yoiks are—in addition to people and many other things—given places, sites, landscapes, and natural elements (Gaski, 1999). From a scientific perspective, we do not know whether glaciers, or mountains and rivers listen. Nonetheless, whether they do or do not, showing recognition, respect, love, and affiliation by yoiking them might not cause harm. Berit Alette Mienna’s narration of the change in her perception of and feelings towards a well-known mountain after making a yoik for it serves as an example of the relationality of yoiking: it creates a bond or a connection between the yoiker and the subject of the yoik, as she also verbalized it (Hämäläinen et al., 2017). Whether glaciers, mountains, rivers do or do not listen, bonding with environments by expressing them musically does something to the one who executes this act. “Musical-relational environmental care” this act could be called. Michael Yellow Bird calls it “sentient ecology”, referring to David Anderson (Clarke & Yellow Bird, 2020, p. 47). The Indigenous people who have practiced these forms for communication with their natural surroundings for ages might have kept on with their practices as a matter-of-course without special namings. If glaciers and other other-than-human entities *do* listen, yoik and other Indigenous music practices’ revival truly has a global mission.

We could also ask the question the other way round and ask whether *we* listen to the rivers, mountains, and glaciers?

When listening to something, we need to quiet ourselves, and feel into or attune to the other subject. This is described as a basic element in empathizing with something (Clarke, et al., 2015). When we empathize with something or someone, we feel the other subject without losing ourselves, as described by Clarke and colleagues. In a way, then, listening, attuning to, and empathizing can be seen as related functions in us. These kinds of functions resemble other Indigenous music cultures mentioned in *Theoretical perspectives/About the Sami and yoik*. I presented examples from some other Indigenous music cultures with certain similarities to yoik. Musical descriptions with idiophonic sounds in sonic alignment with individuals, animals, environments, and lands are connected to individual and collective identities, ancestors, and land (Amman, 2013; Cruikshank, 2006; Diamond, 2019; Hauser,

1992; Hoefnagels & Diamond, 2012; Nattiez, 1983; Nikolsky, 2020; TED, 2012). These traditional Indigenous music practices are named “mimetic Indigenous genres” by Diamond (Diamond, 2019, pp. 255, 256). They are also connected to storytelling and descriptions of daily life activities. Furthermore, they might be directly connected to survival, exemplified with presencing the animals to be hunted (Nattiez, 1983) or anchoring the individual to themselves in harsh environments (Nikolsky, 2020). Hence, this kind of musical practice can be seen as related to yoik in principally similar functional ways. Storytelling and descriptions of daily life, land, and environments may liken yoik’s function as a “way of remembering” (Arnberg et al., 1969; Edström, 1978; Graff, 2004; Hilder, 2015; Jones-Bamman, 1993; Turi, 2012). Remembering may also mean presencing, which is contained in yoik’s system of knowledge (Hilder, 2015; Somby, 1995). Remembering as such might be an intellectual and distanced event. Presencing, on the other hand, is a powerful and vivid version of remembering, bringing the emotional experience of the subject close to you.

To the best of my knowledge, the health promotion potential of several Indigenous music cultures is yet to be explored. While saying this I do not mean to despise what has already been done (Bad Hand, 2002; Bassett, 2012; Crawford O’Brien, 2008; Gioia, 2006; Hanssen, 2011, 2013; Lauw, 2016; Morales-Hernández & Urrego-Mendoza, 2017). Furthermore, functional parallels to yoik may indicate still undiscovered resources in yoik as well as other Indigenous musics, which could benefit humans universally. With this I do not mean that those undiscovered resources should be managed in line with colonial traditions of taking until there is nothing left. Neither do I intend to strip bare the mysteries of human experience (Justice, 2016) with my interpretations of yoik’s health connections. I acknowledge and honor the fact that yoik as a system of knowledge may contain depths I have no idea about. For me as a noninitiated scholar writing about yoik, the unknown domains of yoik appear as something comparable to *anahata nada* – the universe’s primordial creative force, an inaudible sound whose manifestations the sensible reality represents (Losseff & Doctor, 2016). On the other hand, yoik’s unknown domains might appear as something like the Great Mystery, according to Justice (2016), an Anishinaabe term for the creative force in the universe. It is profound and ultimately unknowable, and should be acknowledged and honored as such (Justice, 2016, loc. 512)

5. Methodological considerations

Here, I want to discuss rigor or trustworthiness in the studies of this thesis and the thesis itself. My point of departure is the four cornerstones of rigor explained under the heading *Methodology/Quality in qualitative research* – credibility, dependability, transferability and reflexivity, as defined by Baillie (2015), Jootun and colleagues (2009), Vaismoradi and colleagues (2013, 2016), and Vaismoradi and Snelgrove (2019). When referring to these authors I explained what is meant by each of these concepts and how they are attained. Furthermore, I want to discuss my methodological-theoretical stand with reference to Creswell's five approaches (Creswell, 2018) within the frames of critical qualitative inquiry and Indigenous methodology (Denzin & Lincoln, 2000; Denzin et al., 2008; Smith, 2012).

In *Theoretical perspectives/Valkeapää and my position between knowledge systems*, I presented some fundamental questions a researcher must consider: What kind of and whose values, knowledge, and worldviews is this research reflecting? What kind of power relations does this research support and contribute to, through knowledge production? I stated those questions to display the importance of the researcher's ethical academic stance throughout the research process. As stated in the *Methodology*, within qualitative research the choice of theoretical positioning defines the subsequent methodology (Justesen, 2010). Furthermore, in my view, rigor in (qualitative) research cannot be considered outside the questions of values, knowledge, worldviews, and power relations. That is why not only the theoretical foundation, but also the question of rigor, is both academical and ethical.

5.1 Quality in qualitative research

In this section I will discuss those aspects of credibility, dependability, transferability, and confirmability not discussed yet in this thesis.

Credibility, that is, the research results making sense, requires member checking, prolonged time in the field, triangulation, peer debriefing and negative case analysis (Baillie, 2015). Under the heading *Methodology*, I explained which of these actions were and were not conducted. Here, I will discuss two of the measures not applied: prolonged time in the field and negative case analysis.

“Prolonged time in the field” depends on the definition of “the field”. It also involves the question of whether your position as a researcher is one of an insider or outsider. For an insider there is no need for prolonged time in the field. Instead, the insider needs to consider

other challenges to rigor in their research. I clarified early on in this thesis that my perspective is that of a visitor. As I have not grown up nor lived in Sami communities, my position is that of an outsider. During the time of the studies, I did not stay beyond ordinary visiting time in many of the places where the participants live. On the other hand, I have spent time in the Sami cultural field extensively attending language and other courses as well as various events and arrangements. I have followed and am following diverse Sami media in North-Sami and other languages. In my private life I have personal bonds to people who happen to have a Sami cultural background. In this sense of “the field”, both the direct and indirect feedback I have received confirm that the research results do make sense despite my position as an outsider.

From informal settings I know that so-called negative cases exist. It is generally known throughout Sami communities that conflicting attitudes towards yoik within the Sami community do exist, and Sami who consider yoik as a sin and as the devil’s work do exist (Graff, 2004, 2016; Hilder, 2015; Hämäläinen et al., 2017, 2018, 2020, 2021; Jones-Bamman, 1993; Wersland, 2006). These attitudes were referred to by the participants in our studies (Hämäläinen et al., 2017, 2020, 2021). Moreover, Ola Graff (2016) has reported on other aspects connected to the phenomenon of the yoik ban within the Sami community. His investigation shed light on this phenomenon depicting it as far more nuanced than the one motivated by religious puritanism. However, none of the participants in the studies referred to in this thesis represented these kinds of attitudes themselves. Hence, no negative case analysis was conducted. I discuss this further below under the heading *Representativity and desirability of research: who participated*.

Dependability means that the research process, including its decision path, is transparent (Baillie, 2015). In the published papers the decision path of the studies is made as explicit as possible. What is not mentioned in them is the first decision to start exploring the possibilities of investigating possible connections between yoik and health, including the desirability of research on this kind of topic. The initial motivation to start searching health research databases for research on yoik and health/Indigenous singing and health was coincidental, a result of a short informal post-lunch chat on my first day at a new workplace. At a lunch meeting I had presented myself and my research interest—musical perception and its significance for health. On our way out of the meeting, a colleague asked whether there was any living music culture my research interest could be related to. I replied “...well, yoik

could be one that is closest I guess, as far as I know...”. My colleague asked then: “Has yoik’s connection to health been investigated?” After a short silence where I felt “something happening” I replied: “... I don’t know.” My first work task was, then, to search for this kind of research. It is not within the scope of this thesis to go into a deeper study of contemporary individual research motives beyond the mere interest for the research topic. I had not studied yoik nor Sami issues before. I had always thought I should not, as I do not have a Sami cultural background. Thus, the initial research decision, that is, to start searching for research literature on the topic of yoik and health, was in this case not a result of a long-lasting persistent interest on the very topic. It was a simple informal question that set it all in motion.

Transferability refers to the possibility of the findings to be transferred to another setting. According to Baillie (2015), it is attained through rich descriptions of the setting and participants. I have explained in *Theoretical perspectives* how certain features in yoik can be found in other Indigenous peoples’ music traditions. This includes some of their implicitly understood reasons for why their traditional music practices are necessary for their well-being (Hoefnagel & Diamond, 2012; Diamond, 2019; Cruikshank, 2006; Nikolsky, 2020). Therefore, the findings of our studies might be transferable to other similar settings to some extent. The studies could be criticized for not providing descriptions rich enough, as we have excluded many participant characteristics beyond the necessary minimum. We have justified this with the privacy of the participants. The Sami community is small, and “everyone knows everyone” is a common saying. An only slightly more vivid description of the single participants would have revealed them and violated their privacy (Fossheim & Ingierd, 2016).

Confirmability is attained through the researcher’s reflexivity over their position and influences and confirms their awareness of themselves as research instruments (Baillie, 2015, p. 37). Regarding my familiarity with and relationships to the participants, there is a difference between the groups of participants in the two data collections. In the first one, I met all but one for the very first time when I presented myself and the project and asked about their interest to contributing. I returned to some of the participants from the first data collection when preparing the second. Thus, those who participated in both knew me from the first one already. Regarding reflexivity over myself as research instrument, I have provided some basic background information about myself in *Preface, Theoretical perspectives/Valkeapää and my position between knowledge systems*, as well as in *Methodology/My scientific position and choice of method*. I have also clarified the occasion

that initiated the research project in the first place. Furthermore, I have clarified my initial grade of familiarity to the research field. Here, I will reflect further over my research motivation and some primary central choices I have made initially and along the way. I will discuss and justify these choices, which are also related to Indigenous methodology.

Beyond the initial coincidental question that put it all in motion, what is my motivation to research issues regarding yoik and health? With a disciplinary background in musicology, I have been particularly interested in the connections between singing and health, and health musicking. The question about connections between yoik and health emerged as I was basically preparing to work on another, in my perception, slightly related theme within health musicking. The first measure was to find out whether this topic has been researched. With limited results, the next measure was to clarify the desirability of this topic. Desirability contains the question about the desirability of a nonindigenous researcher as well, as the history of Indigenous peoples' research experiences is far from ethical (Evjen, 1997; Evjen et al., 2021; Lehtola, 2017; Smith, 2012; Wekker, 2016; Nakata, 2002, 2007). I prepared the first data collection to clarify these questions, fully aware of the uncertainty of the desirability of research on this topic. As the yoik-scape at that time was quite taboo, I did not expect anyone to want to participate.

When I began to explore the field of Indigenous singing/yoik and health, I was unfamiliar with the concept of Indigenous methodology. However, my musicological education from The Norwegian University of Technology and Science (NTNU) had given me an understanding that traditional Western fine art music is a genre, a cultural expression just like any other, and represents only a tiny part of cultural and musical expressions both historically and globally, although it is considered the very foundation of musicology as a discipline (Nettl, 2001). Outside this genre exists an abundance of musical expressions based on, as well as expressing, endless variations of experiences, knowledge, traditions, and embodiments of human being-in-the-world. This kind of thoughts are also discussed by Christopher Small (Small, 1998). I learned that the analyzing methodologies developed to understand Western fine art music worked to *that end*. Those methodologies would not be suitable for exploring or explaining other musical genres based on epistemologies, tonalities and traditions other than Western fine art music. In other words, I learned that Western fine art music is one genre among many, and that different genres have different characters enabling them to function for different purposes, not the least as expressions of various ways

of human-ness. Hence, I learned that the ranking of genres with Western fine art music as a mean standard for what music is and how it should be analyzed and understood might be off-target. Consequently, I entered yoik research with what I consider a rather democratic understanding of music as an expression, aware of the mentioned abundance of epistemologies and traditions from where all the different musical as well as other cultural expressions originate. This understanding embodies a respect for others' cultural possessions in a broad sense of the concept. I also understood that I was entering an unknown land as a guest and wanted "to listen, learn, and walk gently" (Justice, 2016, loc. 560). Moreover, our research team's experience in the publishing process was that it was really challenging to publish papers about a topic so unfamiliar to the international academic community. Within the limited word-count in academic and scientific journals, we had to use space for elementary background information about fundamental information such as what yoik is, who the Sami people are and the history of Norwegianization. Furthermore, we also encountered some out-of-date stereotypical attitudes regarding Indigenous musical styles and had to use space to explain why our study would not enhance common stereotypes and what our study was actually about, based on what the participants shared with us.

5.1.1 *Representativity and desirability of research: who participated*

Despite the aims as well as the results of our studies, this research is not necessarily desirable for all the yoikers, nor all the Sami. Because of the novelty of the research topic, the first approach was pragmatic; I would interview anyone with relevant experience willing to talk with me.

The first data collection proved this research topic as very welcome (Hämäläinen, et al., 2017). However, I acknowledge that only 13 people were interviewed. They may represent some of those desiring this kind of research, but the number of Sami *not* interviewed is much larger, and we do not know the perspectives of people not interviewed. We may add to the number of pro-research Sami those with whom I talked initially but did not manage to find time to interview, and those with whom I have talked outside the project informally. Those included, the number of pro-research Sami persons becomes larger, although still smaller than those who did not express an opinion. Hence, there is an obvious selection bias here. From this point of view, the desirability of this research, as well as the relevance of the results, could be a matter of discussion. The second data collection was motivated by some of the results in the first one. I did not have much of an idea of what I would encounter in the

field in the course of the data collection with regard to anything. I was therefore surprised to receive the feedback that studies on yoik experiences in care contexts were both wanted and needed.

It is, of course, not possible to estimate how the current investigation would have run if it was initiated differently. During the time of the first data collection, regulations for studies of Indigenous matters in Norway, such as collective approval from the Sami Parliament or anything alike, were nonexistent (Sámediggi, 2019). Had they existed, and we had not been approved, our investigation would not have been carried out. In such a case, we would not have the implications and information we have today. The yoikers are most probably aware of the benefits of their practice, while nonyoikers might not be.

The participants in both data sets were from different backgrounds, of various ages, had different exposure to yoik culture, as well as varying levels and sorts of education. In the first data set, the participants' gender representations and representations of Sami inhabited areas were also more even than in the second. What was common for all of them, however, was their love for yoik, their understanding of the mechanisms that have led to the conflicting attitudes towards this traditional form of expression, and their wish to contribute to an investigation that might reveal dimensions not yet acknowledged or documented in yoik. For some of these participants it was of heartfelt importance that yoik should be understood as the treasure it is for its practitioners. At the same time, we in the research team were not convinced of the feasibility of any study of this topic. In our perception, the initial information needed to be gathered from single persons who wanted to share it. Their voices, although not many in number, were as important to be heard as any others.

I have mentioned the question of power relations in *Theoretical perspectives/Valkeapää and my position between knowledge systems* when positioning myself in the cultural interface between Western academia and Indigenous knowledge. Furthermore, I mention this question in the *Discussion* when discussing our publications and the concept "culture sensitivity". I also state that quality in qualitative research involves the question of power relations. I have provided historical examples of asymmetrical power relations in research regarding Indigenous people, and how we still are dealing with the consequences of this history in public institutions. Capsulized, in academia I see the questions of power relations connected to knowledge production as such, through questioning whose knowledge is produced under which conditions, for whom, and for what purposes. Who defines the

criteria for “knowledge”? Below, I consider the question of power relations from yet other angles.

In every community there are power structures, whether acknowledged or not. Taboos and conflicting issues are often connected to such internal power structures in a community. Sami society is not free from hierarchies and power structures either (Drugge, 2016; Eriksen, 2017; Kuokkanen, 2015; Lehtola, 2015; Olsen, 2016). The scandals uncovered in media disclose that neither Sami nor other Indigenous societies are unknown to such structures (Eriksen, 2017). Therefore, it may be beneficial with regard to some themes that they are researched by an outsider. The same may apply to collective consent, which is often mentioned in an Indigenous research context. The concept “collective consent” evokes questions about who represents “the collective” and why. A further question might be whether the individual is truthfully represented in the “collective”.

Within any communities there might be members who have views differing from those of the majority in some matters (Drugge, 2016; Kuokkanen, 2015; Olsen, 2016). How will those individuals be heard if the collective or chosen leaders are those approving research projects? How will complicated, controversial, or difficult issues surface if research is collectively approved or initiated from the community in concern? How will anything be different, or new knowledge be generated?

In our studies, the question of who the participants were is interesting from the aspect of power structures and power issues. Some of the participants wanted to know who the others were to secure the quality of the information I would receive. The topic was so important to them that they wanted to be sure I would not be misguided. I referred to my duty of confidentiality regarding the identity of the others, while securing that, in my opinion, the information I had received was valid. Nevertheless, I had a feeling that those who asked were not less worried about the quality of my research after receiving my answer. These kinds of incidents left me with a sharpened awareness of my contribution to this research as *one of many possible* perceptions of yoik. This means there may be others, each being equally valid whether contradicting each other or not.

This research was not initiated from the Sami community, nor was it applied collectively, accepted or approved. Can we then at all talk about reciprocity, research being grounded in the community, or other values central to methodologies suggested for research on Indigenous issues?

As mentioned, when the first data collection was conducted, the attitudes around yoik were quite different from those publicly displayed today. The topic was considered controversial. However, some of the participants stated that “it is easier to speak about these matters to an outsider, someone not involved beforehand, someone without family- or extended family ties to any Sami community.” Hence, the reason why I did this research is because, initially, some people shared their yoik experiences with me. Therefore, this research is important to some of the Sami, among them some of the tradition bearers.

Yoik is so many things that we would have received different information with additional participants from additional geographical regions. Likewise, we would have received a greater variety of information if we had used additional methods of data collection and analysis. Within the frames of our referred studies, I have presented what was possible to do within the circumstances these studies were conducted in. I have presented a representation of what the participants shared in the interviews, as well as my interpretations of them. Furthermore, I have discussed the latter with as many of the participants as possible, in order to write an agreeable representation of what the participants shared and disseminate it in a manner that as many as possible could agree upon. My understanding of a democratic research process includes the participants’ freedom to choose to what extent they involve themselves.

5.1.2 The methods of analysis

The methods of analysis we applied were conventional qualitative content analysis (QCA), thematic analysis (TA) and directed QCA (Hsieh & Shannon, 2005; Vaismoradi et al., 2013, 2016; Vaismoradi & Snelgrove, 2019). Vaismoradi and colleagues provide in the three referred papers, from different angles, the similarities and differences between QCA and TA, although both are classified as descriptive designs and share many features (Vaismoradi et al., 2013, 2016; Vaismoradi & Snelgrove, 2019). According to Vaismoradi and colleagues (2013), the basic difference between TA and QCA is the level of interpretation versus the level of description. Practically speaking, we can speak about whether we are looking for manifest or latent content, manifest being more descriptive and latent being more interpretive in character. In TA, the manifest and latent are integrated and inseparable categories. In QCA, the researcher can choose between the two (Vaismoradi et al., 2013, 2016). In both approaches, looking for themes is fundamental, as themes essentially contain content that answers the research questions (Vaismoradi et al., 2013, 2016).

Based on the descriptions of the similarities and differences of TA and QCA provided by Vaismoradi and colleagues, and Vaismoradi and Snelgrove (2013, 2016, 2019), as well as Hsieh and Shannon (2005), I want to justify my argument of applying the three approaches of analysis mentioned above. In analyzing our first data set we applied conventional QCA, as we were conducting interviews with open-ended questions about an issue rarely investigated before (Hsieh & Shannon, 2005; Hämäläinen et al., 2017). In the second data set we applied two analyzing methods reported respectively in Studies 3 and 4, namely TA and directed QCA (Hsieh & Shannon, 2005; Hämäläinen et al., 2020, 2021; Vaismoradi et al., 2013). The question here is the difference between conventional QCA and TA. With regard to our studies, I see the difference between these analyzing methods in the levels of interpretation we applied. I argue that in Study 1 we did not go deeply into interpretation. Capsulized, I would say that we gathered the manifest quotations of the participants and interpreted them as fitting into theories of salutogenesis and emotion management (Hämäläinen et al., 2017). In Study 3 we included both manifest and latent content in the quotations of the participants (Hämäläinen et al., 2020). According to Vaismoradi and colleagues (2013), these two are inseparable in TA, while in QCA the researcher can choose between them. We went deeper into interpretation in Study 3 with regard to latent content. We interpreted latent meanings in the quotations from the participants, for example, their unprompted, spontaneous utterances of yoik's bodily impact (Hämäläinen et al., 2020).

However, one aspect to discuss is why I consider the analysis of Study 1 (Hämäläinen et al., 2017) as conventional QCA and the analysis of Study 4 as directed QCA (Hämäläinen et al., 2021). Both were conducted with an interview guide that predefined at least some of the thematic categories. Predefined categories are, according to Shieh and Shannon (2005), one of the typical features of directed QCA. Both studies held on to manifest quotations from the participants. There is, however, one crucial difference between the two studies at the point of departure. While collecting and analyzing the first data set, there were two scientific papers putting yoik into a health context, yet in a slightly more indirect manner than we aimed to (Hanssen, 2011, 2013). We were studying a highly understudied topic. In Study 4, we analyzed data collected directly as a consequence of the first data collection. Our Study 4 was based on pre-existing studies and something we already had implications about, although not to an extent sufficient to talk about pre-existing theories. According to Shieh and Shannon (2005), this is a trait of directed QCA.

The data collected in the studies referred to in this thesis were rich, with additional possibilities for analysis and interpretations. Other analyzing methods could have given results with extended nuances. We could be criticized for impoverishing the rich materials, that is, not utilizing the potential of data extracting that exists within. This kind of critique is justified. Our choice of limiting approaches was due to pragmatic reasons, to be able to report results in scientific publications within a reasonable timeframe outlined for the project.

I acknowledge that our analytics follow Western academic standards, as does our reporting of the results (Coleman, 2012; Denzin et al., 2008; Smith, 2012). This also is due to the pragmatics of the total conditions these studies were conducted within. The pragmatics in research involves the questions of what is practically speaking possible to do within the economical and other resource frames of the actual research. That again depends on the conditions for funding, which may include guidelines for where and in which language to publish the results, which in many cases is guided by the paradigm the funders are influenced by. Hence, the question of quality in research, qualitative or other, inevitably involves more or less implicit paradigmatic questions. The process of knowledge production is not isolated, neutral, or free from values and cultural influences. Knowledge production happens within a certain paradigm confirming or challenging it. These aspects are part of my discussion of not only quality in qualitative research but also Indigenous methodology as well. I argue that the basic values of Indigenous methodology—democracy, respect, reciprocity—are and should be as expected in all research on people.

5.2 Considerations on indigeneity and being subject to a certain methodology

There are great individual variations in expressing “Sami-ness” by the persons identifying as Sami. Yet I see this sentence in and of itself as problematic, for who belongs to this group and for what reasons? Not all those perceiving themselves as Sami belong to the electoral “legalized” census officially acknowledged as Sami (Seurujärvi-Kari & Virtanen, 2020). And concerning those who do, why should someone due to their origins be a subject for a particular methodology? Why is that not just another face of stigma (Atkinson & Ryen, 2016)?

While communicating with another person, whether as a researcher or as a fellow human, is it not natural to tune into the other person’s horizon of understanding (Gadamer, 2004), independent of affiliations to same or different cultural groups? “Communicating” can be understood here both directly and concrete as face-to-face situations, as well as indirectly,

for example through the process of analyzing research data and writing (Denzin et al., 2008). Is it not, then, expected that a researcher or service provider does likewise? Is it possible to perceive concepts like “indigenous” and “culture” as stigmatizing and supportive of prejudices (Nakata, 2007)?

My experience based on my encounters with different Sami persons is that Sami culture is diverse in many regards, such as beliefs, practices, and ways of living. By stating this I am aware that I might offend someone. However, as mentioned at the beginning of this thesis, there are many Sami languages and cultural expressions of Saminess with both similar and distinguished features. Sami people and communities have for centuries pursued different ways of living depending on the environments they have had to survive in. In modern times this has meant also living in urbanized ways and environments, making one’s living in various professions and positions (Broderstad & Broderstad, 2014; Broderstad & Sørli, 2012; Dankertsen & Åhren, 2018; Pedersen & Nyseth, 2015). Therefore, what concepts like “Indigenous methodology” and “culture sensitivity” signify for me in my work as a researcher is an attempt of sensitivity towards the person in front of me. Regardless of my grade of success in this approach, it includes a humble openness with regard to everything I do not know, be it about Sami culture(s) or the other person’s way of living their Saminess.

As described in *Theoretical perspectives/About the Sami and yoik*, and discussed earlier, the assimilation and colonization of the Sami went on for centuries (Eriksen & Niemi, 1981; Evjen et al., 2021; Evjen & Beck, 2015; Graff, 2004; Hilder, 2015; Kent, 2014; Lehtola, 2015; Minde, 2003). It was at times outright violent, not only structurally but directly on the individual level as well (Myrvoll, et al., 2015). Sami population and culture has “disappeared” from many places without the dislocation of people (Bjørklund, 1985; Lehtola, 2015; Pedersen & Høgmø, 2012). Hence, it is impossible today to outline the real amount of people with Sami origins. Consequently, it is impossible to know who embodies historical trauma articulated as, for example, feelings of shame due to identity or family history. I could exemplify this by using myself as a case: I might have personal experiences, implicit memories as well as inherited embodiments similar to those of many Sami. I might not want to share them with research funders, participants, co-authors, or anyone else wanting to judge my hereditary or cultural belonging. Nonetheless, my personal embodied experiences might offer a well-adjusted basis to understand Sami epistemologies, trauma, shame, as well as the power of cultural expressions. By saying this I am not claiming to be perceived as an insider

with regard to Sami culture and research on Sami issues. Having grown up as a member of the majority culture, I am, and always will be, an outsider. I only want to provide an aspect to the insider-outsider dichotomy in order to stress that this dichotomy does not need to be an either-or kind of issue. There are many examples of nuances in Sami cultures as well as individual expressions of Saminess in the large geographical area considered as Sami land today, as is in the mental area that can be called as Sami living space. Within this multiplicity of Saminess, some consider themselves as more insider than others, and the criteria versus experiential realities of Saminess are under constant negotiation (Seurujärvi-Kari, 2020). Hence, I argue that methodological choices should be scrutinized and adjusted in awareness of what is appropriate for the people and individuals concerned.

5.3 Indigenous methodology and reciprocity

As I entered yoik and health research, the topic was to some extent understood as taboo and conflicting by all those I spoke with. It is questionable to what extent such research topics are initiated by people living in the midst of them. Indigenous researchers Eriksen (2017), Kuokkanen (2015) and Olsen (2016) have respectively discussed this while discussing internal power relations in communities (Eriksen, 2017; Kuokkanen, 2015; Olsen, 2016). In addition to the previously mentioned possible benefit of the researcher being an outsider, confidentiality due to the study conducted within the faculty of health sciences was for some of the participants an important factor for participation. For this reason, I chose to exclude the so-called give-back seminars and workshops with the participants. I discussed these issues with the interested participants individually or in groups, in accordance with their preferences. I included in these conversations the conduction of an advisory dissemination plan for the research results. This plan is meant to guide an overall giving-back according to the participants' preferences, depending on the accessibility of the dissemination channels. We would consider the Sami public spaces like media, festivals, conferences, and other events as the primary dissemination contexts. However, it is not a given that the Sami platforms and their administrators agree on this. On the other hand, other than Sami public spaces are also important. I argue that, after all, the overall weight of ignorance about Indigenous matters lies on nonindigenous parts of societies. For the sake of decolonization, the need (if not demand) for information about indigenous matters is urgent among the representatives of the dominant nonindigenous parts of society. Hence, I have presented our published studies live and online wherever I have gained access to, in seminars, conferences, and other arrangements, both Sami and other kinds. For my part, presenting our published studies in non-Sami

arrangements is an attempt to decolonize through information. Hopefully, this will “give-back” in the long term.

Regarding reciprocity, I had some unexpected experiences regarding the concept of “gift”. Kuokkanen (2007) has discussed this concept from several theoretical perspectives (Kuokkanen, 2007). She discusses the differences in the meanings of “gift”, from exchanging gifts as a part of building relationships, through reciprocal trade, to the practices of giving within Indigenous cultures (Kuokkanen, 2007). According to Kuokkanen, there are profound differences in the attitudes guiding the opposites of Western and Indigenous modes of gift. Preceding the first meetings for research conversations with unknown people, I had challenges in knowing whether I should give something, and if so, what should it be. I knew I had no knowledge about any possible Sami norms and standards, and as an immigrant in Norway I am basically always insecure about the norms. What I was totally unprepared for was that I would be given something, apart from the time and the information shared by the participants, which was and is an invaluable gift for me.

5.4 Indigenous versus qualitative

One of the themes of methodological discussions is whether Indigenous methodology is different from well-designed and well-conducted user-participatory-based qualitative methodology, and if so, in which way? I argue there are aspects of Indigenous methodology that differ from qualitative methodology containing user-participatory research. I discuss these differences as I understand them in what follows.

Within qualitative research there are different methodological approaches with regard to participant involvement. Qualitative research in and of itself is not necessarily collaborative in the sense of involving the participants beyond delivering data. However, collaborative qualitative research displays very similar features to Indigenous research methodologies. As described in the *Methodology*, it is democratic in that the participants are invited to partake in all phases of the research, starting with the choice of the research topic. Participants may contribute to conducting a literature review, collecting and analyzing data, cowriting scientific papers, and disseminating results (Kovach, 2009). Qualitative scholars Atkinson and Ryen scrutinize the justification of Indigenous methodologies as something distinct (Atkinson & Ryen, 2016.)

Certainly, these questions are not something I consider myself as authorized to answer definitely. I suggest that in the contact zone between Indigenous methodology and collaborative qualitative methodology, we move in one of the possible cultural interfaces between the different knowledge systems warranted by Nakata (Nakata, 2002). However, there might be one significant difference between collaborative qualitative and Indigenous methodologies I would like to point out. This is the aspect of awareness of colonization and its consequences and thereby the call for decolonization in research. Indigenous peoples embody these issues (Chilisa, 2017; Coleman, 2012; Denzin et al., 2008; Nakata, 2007; Smith, 2012). Others or nonindigenous people embody these issues as well, but in a different manner because of their different lifeworlds. I justify this statement with the case of the Sami in Norway and the Norwegian education system as an example: The Sami as well as Norwegians all go through a uniform education system, free of charge and with a uniform education plan. Equality in education is the idea behind this. In this education system the pupils and students learn about Norwegian history, culture and folklore (Lile, 2011, 2019). However, this education does not include a thorough history of Norwegian colonization of Sami land, cultures and livelihoods, nor its consequences (Lile, 2011, 2019). Consequently, the Norwegian students remain ignorant of the public, legalized and social-Darwinistic motivated violation, which their fellow citizens, the Sami, carry embodied inherited memories of. On the other hand, the Norwegian Sami experience nonexistence in Norwegian history, while carrying and living with the family narratives, contemporary experiences, as well as embodied inherited memories of colonization and assimilation. In order to enjoy the basic human rights of their own language, culture and traditions, the Sami have to fight the unintended further colonization caused by the Norwegian collective ignorance (Lile, 2011, 2019). Hence, both the Sami and Norwegians embody the history as well as the consequences of colonization and assimilation, the former as the colonized and the latter as the colonizers or ignorant reproducers of colonization. These positions might be reflected in the embodied unaware attitudes of researchers as well. Furthermore, as embodied and unaware, these positions might become expressed in emotions, body-language and nonverbal communication in data collection situations (Baillie, 2015; Denzin et al., 2008; Jootun, 2009). Hence, if nothing else, the researcher's embodied history might constitute the very difference between well-designed collaborative qualitative research and Indigenous research methodology (Denzin et al., 2008). Hence, ultimately, Gadamer's concept of the united horizon of comprehension (Gadamer, 2004) requires particular awareness and effort to understand with

humility (Justice, 2016) as outsiders studying Indigenous matters. The centuries long assimilation and colonization we all embody in some ways have deeply inscribed our bodies (Kirkengen, 2010). Hence, I am not sure whether outsiders ever can “do” Indigenous methodology (Denzin et al., 2008). Is it, after all, possible to understand another person’s perspective, embodiments and lifeworlds, despite Gadamer’s hermeneutic circling (Gadamer, 2004)? For the same reason I think only Indigenous researchers can create knowledge within an Indigenous paradigm (Held, 2019; Kuokkanen, 2000). I do believe that the best that those who are not Indigenous researchers can do is to inform themselves, attune to, and empathize as well as possible. This includes understanding with humility (Justice, 2016) and accepting that no one can fully understand the other person’s embodiments (Nakata, 2007). What, on the other hand, is possible for anyone is to listen empathetically to the musicalities of our respective knowledge systems, if we are to attain dialogues where everyone’s purposes are served, coming together on the different cultural interfaces between us (Diamond, 2019; Nakata, 2002, 2007).

Conclusion

The overall aim of this dissertation was to explore deeper the possible connections between the traditional Sami vocal art of yoik and health and explore the possible health benefits connected to the practice of yoik. I wanted to find some answers to the question “What can we understand about some of the health knowledge embodied in yoik?” I sought the answers through subquestions of yoik experiences as described by both yoikers as well as nonyoikers. Furthermore, I wanted to find some relevant theoretical frames some of yoiks possible health connections could be explained within. Hence, I found it necessary to contribute to the body of knowledge of yoik and health balancing at the interface of different disciplinary cultures and ways of knowing. I wanted to open up spaces for a possible dialogue about purposefulness of how we listen to the musicalities in our different knowledge systems.

To summarize, yoik appears as embodied knowledge about fundamental principles of human self-regulation, its nature, as well as its prerequisites. As presented in this thesis, self-regulation is learned in the attuned interaction between mother or other primary caretakers and the child at the earliest phase of life. I have argued for the traditional practice of *dovdna*, a child’s own yoik-to-become, as an acknowledgement of this. Attuned interaction between mother or other primary caretakers and the child creates the fundament for, and enhances, the child’s personhood. Further learning of self-regulation competence is connected to self-expression, attuning to yourself, other people, as well as other-than-human subjects. Yoik is applied as a musical version or expression of all that. Moreover, yoik enhances belonging to and connection with something beyond yourself—land, community, ancestral history, culture, nature, and so forth. Self-regulation, attunement, personhood, sense of self, contact with yourself and your feelings, connection with and belonging to something beyond yourself are all fundamental human psychobiological needs. The basic psychobiological needs are linked to our basic salutogenic requirements of meaning, manageability, and comprehensibility, which together contribute to the sense of coherence. When these needs are met, we can maintain the preconditions for homeostasis and health. Hence, yoik appears as a musical embodied tool of empowering oneself and others to the basic salutogenesis of self-regulation and homeostasis, that is, promoting health and well-being through tuning into oneself and one’s environment in a musicking existence. The health knowledge embodied in yoik practice refers to the relational musical character in the sensible world between humans, as well as human and other-than-human entities. This knowledge is transmitted and reproduced in yoik tradition belonging to and carried on by a particular Indigenous people, the Sami of

Fennoscandia. This knowledge, however, may be valid beyond this local Northern corner of Europe for humanity as a whole.

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Appendices



Yoik experiences and possible positive health outcomes: an explorative pilot study

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Yoik experiences and possible positive health outcomes: an explorative pilot study

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ABSTRACT

Background: Yoik is an old vocal music tradition of Sami, the indigenous people inhabiting Northern Fennoscandia and Kola peninsula in Russia. Studies of music therapy (MT) and especially singing have documented improvements in social and overall functioning in people with severe mental disorders and positive effect on depressive symptoms and sleep quality. Possible connections between yoik and health are so far underexplored.

Objectives: The overall aim of this study was to explore whether yoik may have the potential to positively influence people's health and well-being. The research questions were: 1. What are different persons' experiences with yoik? 2. Can yoik experiences be related to health outcomes?

Methods: Explorative, qualitative interviews with 13 participants were conducted in the Norwegian counties Finnmark, Troms, Nordland, and Trøndelag.

Findings: The findings suggest qualities in yoik that are comparable to positive effects of Music Therapy (MT) in general. Yoik may contribute to emotion management, i.e. processing negative emotions and inducing positive ones in people acknowledging yoik as something positive.

Conclusion: Yoik may be considered an important marker of social and cultural belonging for many Sami people. Yoik seems to have an underresearched potential as an intervention in culture sensitive healthcare and health promotion work that deserves to be further investigated.

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Background

The history of the Sami people of the circumpolar Fennoscandia is in many aspects the history of other circumpolar indigenous people, including colonisation, discrimination and marginalisation over centuries [1,2]. Important examples from Norway are Christian missionary prosecutions against Sami because of "sorcery", i.e. practising pre-Christian religious rituals [3–5], ownership of land reserved for Norwegians only [6], and the period of "Norwegianisation" from about 1850 to 1959 [4,7]. During this period, the governmental aim was to shape the Sami into "good Norwegians" by suppressing Sami identity, denying the native language and replacing it with Norwegian language, and establishing Norwegian cultural markers. During this period, many Sami children were housed in boarding schools, away from their familiar cultural context [1,8–10].

Based on public health studies in other circumpolar first nations with a similar history, such as the Iñupiaq in Alaska and Kalaallit of Greenland, it is

reasonable to assume that this history would influence Sami public health too. However, studies show that the Sami exhibit better overall health status, and do not suffer the same high rates of substance abuse, suicide, or unemployment [1,2,10]. Furthermore, the incidences of cardiovascular diseases, diabetes, lung cancer, and different infectious diseases among the Sami does not differ significantly from that of the majority of the Norwegian population. They are, however, remarkably better than respective rates in other circumpolar and arctic populations. It has been hypothesised that the early post-World War II governmental investments in an equal educational and healthcare system for all citizens have adjusted the socio-economic and public health differences between the Sami and the majority population (1,2,10). However, it is also possible that other significant factors have been influential, such as the rising of Sami self-awareness in the post-World War II era, culturally as well as politically [11,12,13]. So far, the possible positive influence of such cultural and social

factors on health in Sami areas is largely underestimated. This article is thus based on a pilot study that explored a Sami cultural factor, the yoik, and its possible potential in health promotion in forms of everyday emotion management and self-expression.

Yoik and its position among Sami people

Yoik is considered one of the oldest music forms in Scandinavia [14–16]. It allows and cherishes a wide range of vocal expressions, and melodic and rhythmic variations [5,9,15–17]. Yoik is comparable with singing because both are vocal expressions, but they differ in important aspects such as yoik's referential symbolic function, i.e. that yoik refers to and symbolises an object/subject musically and thus, according to yoikers, always expresses something directly with its melodic and rhythmic organisation [3]. Yoik can be considered a very significant cultural means of communicating within Sami culture. In particular, the personal yoik communicates core values in the lives of many Sami, such as cultural identity, connection to a community, and the value and dignity of a person. There is nothing similar to the personal yoik in other Scandinavian music and singing traditions. It communicates deeply and directly a person's place in and significance for his or her social surroundings [3,5].

Personal yoik is given away from one person to another, often from a parent/grandparent to a child as an expression of love and affiliation. The yoiker expresses his/her perception/impression of the character of the other person in the melodic and rhythmic organisation of the yoik, as well as in the vocal performance. The yoiker may or may not use a few words, such as the person's name. A personal yoik is usually a positive acknowledgement of a person, a personal attribute that accompanies the person throughout life.¹ Yoiking your own yoik is considered as bragging. Thus, a personal yoik is also an important marker of social and cultural belonging; as long as someone is yoiking you, you know you belong to a community [3,9].

Yoik today is a part of the Sami cultural revitalising movement. At the same time that we have the first generations growing up without a personal yoik, the young Sami are embracing their cultural heritage in new forms, and yoik is taught and studied in kindergartens, schools, weekend workshops, and especially at festivals. Hilder even claims the festivals today being a kind of "indigenous museum" [12: 181] where long-lost

archived yoik materials are coming to life again by being practised [12].

Music therapy, health and emotion regulation

Music therapy (MT) may be defined as "the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program" [18].

MT contains a wide range of methods from listening to recorded music, actively making music using instruments including your own voice, moving to music, and/or writing songs [18]. During the last decade, MT as a non-pharmacological intervention for several diseases has shown a variety of benefits. A systematic review documented improvements in social and overall functioning in people with severe mental disorders, as well as positive effect on depressive symptoms and sleep quality. Improvements in communication, better quality of life, and reduction in feeling isolated were reported. In cases with Parkinson's disease, improved motoric functions related to the use of MT were revealed [19]. A literature review of effects of arts concluded that music reduced anxiety and stress, and enhanced relaxation [20]. The same was found for patients with coronary heart disease [21]. Studies have also revealed that singing may improve speech flow and intelligibility in neurological disorders such as Parkinson's disease and aphasia [22,23]. MT studies have also documented the effectiveness of preferred and/or familiar music [24] and singing [25] in emotion regulation, i.e. reducing unwanted and inducing preferred emotions [24,26]. MT based on familiar music and/or songs can improve memory, communication, mobility, moods and behaviour, and reduce anxiety and depression in persons with unspecified dementia [27–30]. In late-stage Alzheimer's disease, patients who were singing familiar songs improved their conversational abilities, mood, sense of belonging and worthiness [31]. We hypothesise that such positive connections between singing and health might also apply to yoik, because yoik is basically one traditional indigenous mode of singing.

Despite the positive results of studies of MT/familiar songs and the fact that yoik is an important marker of social and cultural belonging among Sami people, we have only found one single study that so far has investigated yoik in a healthcare context [32]. The focus was on successful intercultural communication in dementia

¹However, yoik expressing negative feelings towards someone does exist. Graff [3] mentions a yoik made by a jealous young man to his rival.

care, and yoik served as an example of the significance of culture-specific symbols [32]. There is thus a lack of knowledge on yoik's possible significance for positive health outcomes. This applies in general to indigenous singing traditions and possible connections to health. Ethnomusicology has mapped a lot of indigenous music and health traditions, but the connections are mostly investigated with regard to ceremonial and ritual practices, i.e. intentional healing practices [33,34]. The possible health benefits of everyday singing traditions of indigenous peoples seem to be rather unmapped, also within medical ethnomusicology, which is about "practices of music and healing [...] from a cultural standpoint" [35].

Aims and objectives

The overall aim of this study was to explore yoik's possible significance for health in terms of well-being and quality of life. The research questions under investigation were:

- (1) What are different persons' experiences with yoik?
- (2) Can yoik experiences be related to health outcomes?

Participants and methods

Participant recruitment and characteristics

Participants were recruited in several ways. The criteria for recruitment were (i) any experience of yoik, either performing or receptive, and (ii) willingness to talk about yoik experiences. According to Graff [3], yoik was originally a common type of musical expression and communication all over areas inhabited by Sami [3]. Today however, people seem to have different views on yoik: there are those who yoik and/or cherish yoik, and those who regard yoik as a sin and condemn it [3,9,15]. The reason for this might be found in the assimilation processes starting from Christianisation in the early 17th century, culminating in the period of Norwegianisation from 1851 to 1959 [4,7] and the complex aftermaths of these processes [36]. Possible positive and negative attitudes and emotions related to questions about yoik in participants were acknowledged in the recruitment process and the interviews.

The first author participated as part of the audience in events concerning the topic of yoik, and other Sami health or cultural matters. During these events, she asked nine persons that had spoken in public if they

would be interested in participating in a pilot study investigating possible connections between yoik and health. They were told that the aim of this study was to explore whether a larger study on this issue was interesting and possible to conduct. Two other possible participants were contacted via Facebook. Furthermore, an e-mail request was sent to the leader of Juoigiid Searvi (the Yoiker's Union), who forwarded it to the members. In addition, two persons regarded by the research group as key informants were approached by e-mail, and a third one by phone. All these possible participants then received information letters about the project. If they agreed to participate, they returned a declaration of consent. Six out of nine who were approached in arrangements consented. From the Yoiker's Union three were interested, and one consented. One of three of the key informants consented. Finally, five participants joined the project through "the snowball sampling method" [37], where participants invited other possible participants in co-operation with the first author. Altogether, 32 possible participants were contacted and 26 letters of information were sent or handed out. Thirteen persons with an age span between 24 and 77, different levels of general and music education, professions, and various yoik backgrounds, gave their consent to participate (Table 1).

The majority of participants were yoikers and Sami. The definition of a "yoiker" here means a person who has any experience of active yoiking by him/herself. Only a few were professional musicians, here defined as people who make their living primarily through playing one or more instrument(s). This also includes instrument teachers and music therapists, performing and/or

Table 1. Participant characteristics.

n=13	Women	Men
Gender	6	7
Age	58–77	24–70
Sami	5	6
Non-sami	1	1
Yoik background	5	3
Grown up with yoik		
Education, not musical		
<7 years	2	
7–9 years	1	
Higher education, 4 years or less	2	3
Higher education, more than 4 years		1
Education, musical		
High school		1
Higher education 4 years or less		1
Higher education Master's level or more	1	1
Musicians		
Professional	1	3
Amateur		2
Yoiking practice		
Yoikers	5	5
Non-yoikers	1	2

composing music. The level of musical education varied. The definition of “Sami” is here based on what the participants spontaneously said about themselves, for example: “Although I’m Sami, yoik was considered a sin in my family...” and/or “Although I’m not Sami, I experience yoik as something extraordinary powerful...”. Therefore, the categories “Sami/not Sami” here express a subjectively experienced cultural identity [38]. The gender balance related to the total age span is unequal. This is due to the total amount of time available to conduct the study, combined with the persons available to be interviewed within a certain period of time. In other words, we did the interviews that were feasible. Of those who were invited but not participated, four persons directly refused, three because of “lack of knowledge and/or time” and one because of religious reasons. The rest either did not respond to written inquiries, or kindly expressed interest but without making commitment.

Methodological approaches

The under-researched and experience-based issue under investigation demanded a flexible and open-ended research design, and thus a qualitative methodological approach was chosen. An explorative, qualitative approach was also suited to develop knowledge that could generate empirically and theoretically based hypotheses for a larger study [39]. We chose an inductive methodological approach, and based our empirical analysis on participants’ descriptions of, and reflections on, their yoik experiences. Although we had in mind the documented positive effect of music and singing in several therapeutic contexts, and hypothesised that yoik might have a similar function, we chose not to directly mention such a connection during the interviews if the participants did not introduce the connection themselves. Based on patterns revealed in the analysis of the conversations with the participants, relevant theories of emotion management and salutogenic and culturally sensitive healthcare were included.

Qualitative interviews

Individual face-to-face interviews were conducted by the first author in places chosen by the participants. This included cafés, private homes and outdoors. The interview sessions varied from 1 to 3 h. The interviews were directed toward understanding the participants’ perspectives on their experiences as expressed in their own words [40]. We understand research interviews to be interactional, reciprocal, and reflexive processes in certain social and cultural contexts. Interview data are

thus perceived as socially constructed, based on the interaction between researcher and participant [41–43]. The main interview themes were: yoik experiences, the eventual prerequisites or contextuality of yoik experiences, and yoik compared with singing. A semi-structured interview guide was developed with input from all the authors in our multidisciplinary research group. The interview guide functioned as a checklist to ensure that every interview would include the same core topics. The interviews were conducted between March and May 2015, recorded digitally, and transcribed verbatim and anonymised by the first author. The interview languages were Finnish and Norwegian. When the first author/interviewer apologised for not being able to do the interviews in Sami, the Sami-speaking participants were rather surprised; none of them had even thought of that being an option.

Content analysis

The interview transcripts were analysed through content analysis, i.e. the systematic classification process of coding and identifying different themes or patterns [44]. The interviews were first intensively read as a whole to gain a general understanding of different aspects of the material with relevance to the main research questions. The interviews were then re-read and coded in empirical and theoretical terms and the codes were discussed and confirmed in meetings between all authors.

Ethics

Possible participants received letters of invitation that included ethical information and information about the study aim. Those who agreed to participate provided their written consent. Voluntary participation as well as the option of withdrawal at any time was emphasised both prior to and during the study. The authors have not provided any information in this article that may identify participants. The interviews were conducted with sensitivity to the situation of each of the participants [45] and with a culturally sensitive research approach [46]. As yoik might have very different connotations to different people, a culturally sensitive research approach in this project would mean awareness of this variety and awareness of possible consequences of participating in the study. For the first author who conducted the interviews, it also meant being aware of her possible lack of insight into sensitive issues that the research theme might generate. Thus, she ensured that the participants were the ones who would determine the amount and the type of

information they would share, having empathic communication as her overall attitude [47,48]. The latter included also making the participants aware of the potential emotional responses from talking about a personal and possibly sensitive topic, and inviting them to contact her any time for any reason.

Findings

Yoik may function as emotion management

Ten out of 13 participants were yoikers. Eight had had yoik as part of their adolescence. The majority of the participants (nine out of 13) said that they were currently not exposed to yoik in their everyday lives.

The overall result derived from the empirical analysis was that there seem to be possible connections between yoik and positive health outcomes. Both yoikers and non-yoikers, being either Sami or Norwegian, reported feelings like “joyful”, “light”, “easy”, and “connected to something beyond myself”, when either yoiking or hearing yoik. Those who had personal yoiks felt “deeply honoured and acknowledged”, “seen as I really am” and “touched in my innermost being” when someone yoiked them. Those who yoiked actively, used words like “free”, “flow”, “intuitive”, “touch” and “deeper” when characterising their yoik experiences.

When the participants were asked about yoik settings – “When, where and what do you yoik?” – their answers revealed that yoik is used in both social situations and when being alone. Personal yoik is used to greet, lift up and honour a person, but also to recall a person not present: “When you think about someone or miss a person and you yoik that person, it is as if the person is there with you”. Several had experiences from personal yoik being used to process a loss of a loved one. One participant explained: “When a close relative died it was very difficult, but I kept on yoiking this person’s yoik... hour after hour... and gradually... I felt I came through the worst peak of the sorrow”.

Also landscapes, atmospheres, places, situations, weather, animals and emotions were yoiked: “When I’m really angry I yoik a special yoik so everybody can here it and know I’m angry!”, said one. Another said: “... we had walked all the long way up on the mountain, and there they were, turf after turf with these golden berries, and it was all so sweet, so the yoik just came out of me ...”.

You know I’ve been seeing that mountain all my life, but first when I yoiked it I felt I got really close to it... like yes, it’s my, and my family’s and my ancestors’ mountain... we’ve wandered there for generations...

it is ours, it is part of us... I felt a different kind of connection to it when I yoiked it...

When the participants were asked to summarise what yoik means to them in one word or a short sentence, many of them said: “Yoik is communication, a way of remembering”, “Yoik is like having a friend” and “Yoik is a connection to something beyond myself”. Some said it meant “Everything”. Many participants also meant that yoik is a culture-specific means of self-expression.

It is also noteworthy that those participants who had experienced hurtful restrictions to yoiking had kept on with it, or if they had stopped, they had later started yoiking again. One said: “Yoik has survived such a long time because it has had value for people. Otherwise it would have died out”.

Discussion

The introductory presentation of MT research revealed various benefits of music and singing used as non-medical interventions [25–30]. The findings in this pilot study suggest qualities in yoik that are comparable with positive effects of MT in general. Yoik might have a function as what could be described as an ongoing musical self-regulation with a number of benefits following a continuous musical expression of one’s reality with the means always at hand – one’s own voice.

The empirical patterns derived in this study give a complex picture of the significance of yoik for the participants. Yoik’s significance is not bound to being a practising yoiker yourself. Nor is it bound to a person’s cultural or musical background, gender, age or general education, or to being continuously exposed to yoik. These findings imply something about the power of yoik in general for the participants in this study. We acknowledge also the particular significance and symbolic value of yoik for those of the Sami who appreciate yoik. The fact that yoik, despite the many restrictions, has survived through centuries and is still vividly alive and practised, indicates deeper meanings still to be explored.

Yoik as emotion management

The common response of feeling “joyful”, “connected”, “honoured” and “happy”, despite different ages and backgrounds, indicates that yoik can have a capacity to lift people up. Also, yoik being described as “like having a friend”, and yoiking used to cope with painful or difficult emotions such as loss, anger and sadness indicate that yoik can have qualities and meanings that contribute to emotion management, i.e. how people

relate to and handle their emotions (see *Emotion regulation, emotion management and self-regulation*).

When you have a friend you are not alone, you are supported. Being supported helps to keep your balance in life's ups and downs, as does expressing and managing your emotions instead of suppressing them [49]. In our interpretation, yoik is being used as emotion management by the participants in this study. Yoik may be considered a tool to express and process negative emotions, as well as expressing and inducing positive emotions.

Emotion management is important because all emotions, both positive and negative, correspond to different physiological reactions. This is mostly known from studies of stress and the fight-flight response, but applies to other emotions as well [50,51]. According to Antonovsky, the human organism cannot keep a constant state of arousal due to emotional charge, no matter whether the emotions are pleasurable or unpleasurable [49]. Emotion management and self-expression seem to be necessary for our self-regulation competence, i.e. our ability to manage our emotions and behaviours, and take care of ourselves in different life circumstances. This is crucial for our salutogenesis, i.e. how we promote and maintain our health and well-being [49]. Our salutogenic ability – and thereby our self-regulation ability – in different, and especially, in challenging circumstances, is commonly called resilience [20]. Based on the participants' descriptions of their experiences with yoik, it is reasonable to assume that yoik may contribute to such essential abilities for people who relate to it.

Emotion regulation, emotion management and self-regulation

In this article, we have used the concepts “emotion regulation”, “emotion management” and “self-regulation”. The term “emotion regulation” is used in the MT literature when various types of MT have been implemented by healthcare professionals in order to regulate the emotions of the participants. “Emotion management” is a term we use to describe how the participants in this study use yoik as a self-administrated application in life in order to handle/manage their own emotions. We therefore perceive emotion management as a component in self-regulation. Based on this study, we argue that yoik seems to have the potential to contribute to emotion management and thereby self-regulation for those who include yoiking in their lives either by yoiking actively, listening to yoik, or being yoiked by someone. This may open up several possibilities in applying yoik in culturally sensitive healthcare practice and

healthcare education [38,52,53]. Furthermore, it is reasonable to assume that using yoik as “familiar music” in adequate healthcare settings could be equally beneficial as in cases described in MT in general [24,25,27–30]. This could be the case, for example, for dementia care, psychological disorders such as depression and anxiety, or as part of rehabilitation procedures in neurological disorders such as Parkinson's disease, aphasia or stuttering [22–30].

We have not succeeded in finding any studies about indigenous health and well-being considering the significance of singing traditions as such. The studies we have found refer to singing as part of traditional pre-Christian ritual or ceremony, which are then reported as contributing to health and well-being. Our approach to yoik was explorative; we wanted the participants to word their yoik experiences themselves despite the yoik context. The Sami yoik may, and may not, be used as a part of ritual and ceremony, both Christian and pre-Christian. The ritual use of yoik may potentially be a controversial topic among the Sami. However, to discuss the reasons for this is beyond the scope of this paper. Therefore, we chose to leave the yoik context open to the choice of the participants to describe if they wanted to. We found it sufficient if the participants shared their yoik experiences in their everyday, mundane lives.

Methodological considerations

We do not claim to have gathered neutral, “objective” information on yoik experiences in this qualitative and explorative study. The interviews were particular social situations in particular contexts, where the participants related both to events and their meanings [43,54,55]. A possible weakness with qualitative research may be the lack of generalisability. However, the open-ended research questions in this study are not directly transferable to a quantitative design. Moreover, the aim of the study was not to make empirical generalisations the way empirical generalisation is possible in, for example, survey research, but to transfer experience-based knowledge as working hypotheses that can provide a valuable contribution to unexplored topics [39] such as yoik experiences and a possible positive connection between yoik and health. Because of time and resource limits, we were able to do only one set of interviews. Repeated interviews might have added more in-depth information [56]. Narrative analysis might have offered richness and additional dimensions [38].

This was a pilot study, however, and we argue that important empirical patterns that deserve further investigation have been revealed because of the chosen

methodological approach. Through its illumination of people's perspectives and experiences, qualitative research methodology may contribute a particular type of useful evidence for caring practices. In our opinion, qualitative study results such as those revealed in this study have the potential to be meaningfully translated into practice in ways that place people as human beings at the centre of care [57,58].

Conclusion

Yoik does not necessarily have a conscious and outspoken purpose. To search for its function and potentially health-bringing potential implies looking for what is not necessarily said out loud. Still, based on the findings of this study, it seems that yoik may be good for people's health as a means of emotion management and self-regulation. Yoik may give a sense of belonging for many Sami people. This study indicates that yoik may have an underresearched potential as an intervention in culturally sensitive healthcare and health promotion work that deserves to be acknowledged and further investigated.

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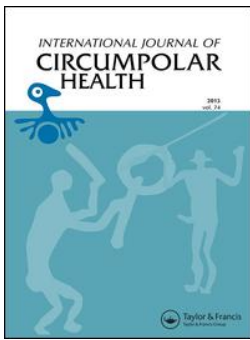
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Sami yoik, Sami history, Sami health: a narrative review

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Sami yoik, Sami history, Sami health: a narrative review

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ABSTRACT

Music as a possible health-promoting agent has attained increasing academic and scientific interest over the last decades. Nonetheless, possible connections between indigenous singing traditions and health beyond traditional ceremonial healing practices are still under-researched worldwide.

The Sami, the indigenous people living in Northern Fennoscandia, have a distinct ancient vocal music tradition called “yoik” practiced from immemorial times. The Sami share a history of assimilation with many indigenous people. During this period of nearly 400 years, yoik alongside other cultural markers was under hard pressure and even banned at times.

Compared to other indigenous people in the Arctic, Sami public health shows few significant unfavourable differences to the majority population. The potential role of yoik as a protective health and resilience factor within the Sami culture is the topic of this review. We suggest a two stage model for the health promoting effects of yoik through i) **emotion regulation and stress relief** on the level of the individual, and ii) as a **socio-cultural resilience factors** within the Sami population. This review is to be understood as theory-building review article striving for a scholarly review of the literature.

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Introduction

A characteristic cultural feature of the Sami, the indigenous people living in Fennoscandia [1], is its form of singing, the yoik [1]. Yoik has particular vocal characteristics, an ancient history, and is still a living tradition within the Sami culture. What makes yoik distinct at least in some Sami-dominated areas is that it is practiced in many situations as part of everyday life. Since everything can be expressed as a yoik, people may accompany their daily activities with it. Yoik as traditional singing is thus a part of everyday life.

The survival of yoik through the centuries despite acculturation and assimilation pressures is in itself a remarkable phenomenon. Therefore we hypothesise that there may be an apparent benefit of yoik and yoik practice within the Sami culture that has protected this cultural marker from extinction. Compared to other indigenous people in the Arctic, Sami public health shows few significant differences to the majority population. Therefore, we assumed that yoik may have had and possibly still has a role as a health promoting and/or resilience factor within the Sami culture.

Music, as a particular human entity, has been used throughout times mostly in everyday life to express or alter moods, feelings and emotions [2]. Singing as such can be seen as a fundamental form of self-expression and self-regulation, containing both individual as well as social aspects [3]. Traditionally peoples all over the world sing or have songs accompanying different activities, moods, life events and occasions [4].

Music therapy (MT), as the clinically applied form of music, embraces a wide range of methods including different forms of singing [5]. During the last decade MT has build up an evidence base revealing promising indications of music’s curative potential in neurological as well as psychological disorders [6–11]. Recently the role of music in a wider health perspective of health promotion, that is music as a salutogenic agent, has been widely acknowledged. This development resulted in a new scholarly discipline called “Music and Health” (MH). In addition to traditional music therapy issues, MH focuses specifically on how music may be used to increase wellbeing and quality of life [12–14].

A systematic literature search in medical or musical databases on “Yoik/Joik/jojk/sami singing and health” in

2015 and 2016 revealed no results. This does not mean that the significance of yoik as a potential health promoting factor has been unnoticed in academic writing, but in most health related research reports this hypothesis has been discussed within a broader context of culturally important activities or contents of life [15–18]. To our knowledge, there is only one qualitative pilot study [19] directly targeting the question, whether actively practicing or passively listening to yoik can have health-promoting effects and could thus be a cultural resilience factor within the Sami culture. Due to the distinct features of yoik, which can and is often practiced without the use of words, directly expressing feelings and describing its subject with musical means, we hypothesise that a potential mechanism of action maybe through emotion regulation and the feeling of belonging. The aim of this paper is to review the accessible literature in order to build up a body of evidence supporting this theory.

Material and methods

Because the body of knowledge specifically on yoik and health is so limited, we support our theory with evidence of possible benefits of singing to health, literature describing yoik and its possible functions, and evidence on factors that promote and support health. We present studies of Sami public health and a short overview on Sami history to illustrate the complexity of the topic.

Our main sources of references are international medical and musical library databases PubMed, ScienceDirect, Web of Science and JStor and Norwegian databases for university libraries. We used search words “Yoik/Joik/joik/sami singing and health”, “indigenous singing/music and health”, “music and emotions”. Inclusion criteria for yoik was works concerning yoik as music. Nonetheless, the topic turned out to be too heterogeneous and complex and possibly not clinical enough for a systematic or scoping review. Therefore this review is to be understood as theory building Review article striving for a scholarly review of the literature. Moreover, these results are integrated in well established knowledge and theories from stress research, behavioral medicine and health psychology.

The Sami

Sami is a common name for groups of indigenous people with closely related languages and cultural features, living mainly in northern parts of Norway, Sweden, Finland and Russia. Lifestyles and traditions connected to hunting, fishing, reindeer husbandry and

respectively related craftsmanship are often associated with Sami culture [20]. Today less than 10% of individuals with Sami heredity are actively pursuing these traditional practices [20].

This paper focuses on Sami living in Norway, because Norway hosts the greatest part—about 70%—of the total known Sami population of the four countries [21]. Consequently, most of the public health research related to Sami heredity is done among the Sami living in Norway [22]. “The Sami living in Norway” consist of different groups like South Sami, Lule Sami, North Sami and Skolt Sami. This division is based on linguistic and geographical differences and contains of course several other features connected to culture, traditions and places [1]. The Sami were acculturated in the aforementioned countries through an assimilation politics using educational and other public systems. A substantial number Sami children were placed in boarding schools, often miles away from their homes. The purpose of these measure was assimilate these children to the dominating culture by means of education [23–26]. These children, whose native language was Sami, had to learn to speak and learn in Norwegian and refrain from their native language [21].

The most intense period of acculturation in Norway was from 1851 to 1959. In this period the idea of “Norwegianisation” was a leading ideology based on social-Darwinistic ideas of ethnic Norwegians’ racial superiority, and the importance of nation building with monocultural norms [27–31]. The latter was particularly important in the rebuilding period after WWII [28,29]. Today the majority of Sami live well integrated life as part of the Norwegian society. This is also the case for those who are self-identified as Sami and choose to participate in Sami culture and politics [32].

Currently the revitalisation of the Sami culture has grown strong and the Sami traditions have been reinvigorated by an increasing awareness and conscious efforts to preserve the Sami culture as a unique and valued part of the Norwegian society. With the foundation of the Sami Parliament of Norway 1989 [33] and the introduction of Sami as the third official language in Norway this process has had visible success. Nonetheless, the revitalising process is by no means concluded and this is particularly true regarding unsolved issues such as the utilisation of natural resources within the traditional Sami geographical regions. Conflicts between mining and reindeer herding, small- and large scale fishery, and other industrial enterprises raise fundamental questions about the rights and ownership of water and land [30].

Sami health studies

The history of Sami is to a certain extent similar to the histories of other indigenous people including colonisation, acculturation and marginalisation through forced assimilation and discrimination. The consequences of this history commonly observed in indigenous populations are high rates of suicide, unemployment, substance abuse, low socio-economic status, and somatic diseases like CVD, diabetes, obesity, cancer and early mortality [21].

Sami public health has been subject to systematic long-term investigation for example in the SAMINOR-programme conducted in Norway in 2003–2004 and 2012–2014. This programme covered physical, psychological and health service issues of Sami living in different areas in Norway [34]. The SAMINOR-programme was preceded by the Finnmark study conducted in 1974–2000 which included the whole population of Finnmark—the Sami, Norwegians, Kven, and any others who live in the area [35]. Before these studies only some isolated reports from physicians working in North-Sami areas are available, reporting issues like tuberculosis, echinococcus and high rates of infant mortality [36–38].

Compared to other indigenous people in the arctic circumpolar area, evidence based on data from SAMINOR shows that the Sami living in Norway do not reveal significant differences in most of their public health markers and self-reported health compared to the majority population [21,39,40]. However, the Sami do differ from the majority population in that Sami women have higher adult obesity rates in Sami majority areas, and the prevalence of diabetes is higher among Sami in Southern regions where they are a minority [41]. Considerable differences are reported in self-reported cardiovascular diseases between Sami and non-Sami in northern municipalities [42].

Some studies suggest that the *similarity* in the frequency of lifestyle-related health challenges in Sami and majority population might be a result of assimilation and acculturation, because transition into the culture's lifestyles may be followed by an increase in the prevalence of related diseases like CVD, diabetes, obesity and cancer [40,43]. Eliassen and colleagues [42] discuss that these diseases may also be understood as caused by chronic stress related to assimilation politics. According to Hansen [21], chronic stress due to ethnic discrimination in areas where Sami are a minority could be a source of a wide range of chronic diseases. Moreover, Samis are to a higher degree than the majority population disposed to violence, ethnic discrimination and bullying [44,45]. Thus, it is unclear, whether the similarities between the Sami and

the majority population are a consequence of similar lifestyle, leading to a similar prevalence of lifestyle related diseases, or the consequences of acculturation pressure, which in consequence leads to a similar disease rate, despite that fact that the Sami culture may include inherent resilience factors with regard to public health.

Nonetheless, there are also caveats regarding the interpretation of Sami health studies: i) The investigation of Sami public health maybe hampered due to low participation rate in some communities [42], ii) public health surveys might not reach all individuals who might be defined as Sami descendants, because a person has to self-identify as Sami. In particular the North-South migration wave as a result of the burned earth politics of the retreating German troops in World War II known as the “burning of Finnmark”, has scattered people of Sami heritage over the whole of Norway. Many of those who came as refugees to the south decided to not identify themselves as Sami [21,28–30,45–49]. As a consequence, persons of Sami descent are possibly living everywhere in Norway even though they are not aware of it.

As a conclusion, there are no major relevant differences between the Sami population and the main population in Norway. Whether this fact is a consequence of a common lifestyle or other reasons remains unclear.

Yoik and its history

Yoik, the singing tradition of Sami, is considered to be ancient with roots presumably in prehistoric times [23,50]. It is unique to the Sami culture and particular among European singing traditions [50]. This singing tradition is characterised by a special vocal technology that utilises nearly the whole range of the human natural vocal potential [51] and was originally without instrumental accompaniment. Use of words could vary from one region to another, from nearly none in North Sami language area to long epic descriptions in East Sami in Kola Peninsula. The melodies with regular rhythmic and melodic patterns could often be freely played with and improvised on [1,23,50,52]. Additionally, yoik could also be applied to story-telling [24,53].

The most commonly referred form of yoik is a direct, vocal musical expression of anything at the yoiker's perception at the given moment, therefore emotions, landscapes, animals, birds and other people are yoiked [23]. Yoik often accompanies daily living and moods continuously similar to a “sonic painting” of the yoiker's

mind. Or as Buljo [23] writes: “The Sami yoik everything that belongs to human life”. According to yoikers you do not yoik about something, you yoik the thing itself [17,52]. Therefore yoik can be seen as a kind of “act of creation” as well as self-expression. It can be a way of recalling something or someone or of giving a musical name to something or someone. When missing a person or a place, yoiking the yoik belonging to the missed object or person gives the yoiker the feeling of it [17,23,53]. Therefore, unlike tone-painting, yoikers regard yoiking as a direct communication with the innermost being of the object/subject being yoiked [17,20].

Historically yoik was also used as part of shamanistic healing rituals and was a means of achieving an altered state of consciousness [23,54]. It was most likely therefore that yoik along with other pre-Christian cultural elements and customs was banned as “sorcery” during the early 17th century. The Christian missionaries associated yoik with pre-Christian heathen ceremonies and condemned them as “serving the Devil” [54]. Death penalty as punishment for yoiking ended first at the beginning of the 18th century. However, “sorcery” and yoik as part of it was still prosecuted [24,55,56].

Originally yoik was practiced in different forms all over the Sami-inhabited area [24]. However, during the assimilation process of the Sami culture yoik as well as many other traditional cultural features of the Sami were fundamentally weakened and had seemingly disappeared in some regions [20,47]. Moreover the societal and cultural development of what we call “modernity”, that is transition from rural to industrial-technological culture [42], has likely changed the extent to which yoik is used [20].

However, yoik is going through a fundamental revival as a musical expression. It is taught in kindergartens, schools, high schools and universities, weekend workshops and, not least, festivals [1,19]. Not only that yoik has survived a history of assimilation pressure as an element of vocal expression and communication in everyday life for many Sami, it has evolved to new forms and in fusion with different musical styles [1]. Alongside the current revival of the Sami culture, especially the younger generation finds yoik anew as a marker of identity and belonging.

Singing, emotion regulation and well-being

Singing is for humans worldwide a way to celebrate life and death, to sooth sorrow and pain, to agitate to work as well as to war, to describe feelings and to tell stories. Singing has its place in spiritual and religious contexts in prayers, hymns and praise of the objects of beliefs.

Singing traditions of many nations reveal that singing has had a natural function as a description and expression of the ongoing activity, situation or mood of the singing person.

Singing as practiced in Western cultures has received increasing scientific interest during the last decades. Several studies indicate a connection between singing as a means of self-expression, regulation of emotions, and health and well-being [57–59]. Moreover, the availability of psychobiological methodology over the last decades such as the ambulatory assessment of humoral stress markers or functional imaging have confirmed that the experienced stress releasing effects of music have indeed a psychophysiological bases [60,61]. As Hou in his review elucidates, music-evoked emotions can modulate activities in both cortical and subcortical systems, and across cortical-subcortical networks [61]. Exactly these networks, which extend from the anterior cingulate gyrus to the amygdala are integral and essential to the generation and regulation of emotions. It is particularly interesting that these networks exhibit disturbed functioning in mental and emotional psychiatric disorders.

Nonetheless, the potentially beneficial effects of indigenous singing traditions have to our knowledge predominantly been investigated as an integral part of healing rituals and here in particular within Native American contexts [62,63]. Vocal practices are understood as a natural and self-evident part of these of traditional healing methods and enhance the efficiency [62–64].

In a recent qualitative pilot study on the topic “Yoik and health” conducted in 2015, Hämäläinen and colleagues hypothesise that yoik must be considered an important marker of social and cultural belonging for many Sami people and, moreover, that it may contribute to emotion management [19]. The authors argue that yoik presents a means for a direct and non-cognitive expression of emotions [19]. It is thus different from talking about or discussing feelings, and is in this way rather similar to art related expressions of emotions such as for example painting. An important distinction to other arts is that yoik in some Sami population groups is an inherent part of everyday life, practiced continuously, accessible to everybody, and introduced during the first day of life. It might be interesting in this context, that the singing traditions of for example Inuit of Greenland and Native Americans have many functional similarities with those of the Sami [64–67].

In summary, the fact that singing can promote emotion regulation and stress release and can thus contribute to mental health and possibly beyond that to

general health issues is reasonably well documented. Indigenous forms of singing have rarely been investigated with regard to their general health promoting effects, even though their impact within healing rituals is well documented. Preliminary results suggest that the way yoik is practiced where it is still practiced in the traditional way, namely as an integral part of everyday life, makes this form of singing a potential means of emotion regulation and stress relief for individuals who practice it.

Allostatic load and resilience

Both positive and negative emotions correspond to physiological changes. This connection is mostly known through stress and the fight-flight response, however, all emotions including positive ones, have a physiological component to them [68,69]. According to Antonovsky [70] any emotion whether positive or negative, maintained over time, represents a load to human organism if not acknowledged and handled somehow, such as by adequate expression. Therefore, emotion regulation is necessary for human homeostasis, that is physiological balance and feeling of wellbeing, and an important component in human self-regulation competence [70].

Antonovsky introduced the term “salutogenesis” as a covering concept for factors supporting the maintenance and/or restitution of health. In a salutogenetic perspective, the questions of what causes disease (pathogenesis) is of lesser importance than the question of what maintains health (salutogenesis) [70]. As early as in the 1970s James P. Henry postulated a direct connection between coronary heart disease and chronic stress [71–73]. Henry’s original hypotheses have been modified considerably e.g. to the framework of the allostatic load model which describes the health impact of stress and stressful/traumatic events over the life span [74–76]. However, the fundamental assumption that chronic stress has the potential to lead to chronic disease, or at least has a negative impact on the course of chronic disease, is generally accepted. The role of trauma and especially collective trauma has received wide interest, in particular in connection with the allostatic load model. This model predicts that it is the accumulation of stressful events that may lead to a higher vulnerability for disease, such as Alzheimers disease in old age [74,76].

Significant connections have been found between disadvantageous historical factors like discrimination and assimilation pressure and unfavourable public health factors such as high rates of suicide, unemployment, substance abuse, low socio-economic status, and somatic

diseases like CVD, diabetes, obesity, cancer and early mortality in indigenous populations [21,40]. However, compared to other indigenous populations, these public health marker rates are better in the total population of the Sami living in Norway. Where Sami differ to the worse from the majority population in Norway is in their disposition to discrimination, bullying and violence [21,44]. Nonetheless, social support within a group, in particular a cultural group, constitutes a significant socio-cultural resilience factor, as has been established for example Holocaust survivors. Social support can provide a strong protective factor against the long-term consequences of trauma [70,77]. Insofar is the hypothesis that belonging to a specific cultural subgroup may have served as a protective factor evident.

With regard to the potential role of yoik as a cultural resilience factor Bals and colleagues report participation in traditional and cultural activities being a significant protective factor for Sami youth mental health [15]. Moreover, in a study of cultural resilience factors among Sami adolescents living in a Sami community, personal yoik was established as being such a factor [16]. Hanssen has presented some interesting findings suggesting a possible significance of yoik as a valuable cultural symbol in intercultural health care communication with elderly Sami patients in nursing homes [17,18]. Moreover, Hämäläinen et al. conclude that yoik serves as a cultural resilience factor by being an important marker of social and cultural belonging and an instrument for emotion management on an individual bases [19].

In summary, in the light of the context of salutogenesis, yoik may support individual health through emotion regulation and stress relief on the basis of the person. Beyond that, the fact that yoik represents a fundamental marker of socio-cultural belonging makes this particular form of indigenous singing likely an element of cultural resilience within a population based perspective.

Conclusion

The aim of this review was to investigate the role of yoik as a potential health promoting factor within the Sami culture. After reviewing the available evidence, we suggest a two-step model for how yoik can promote health:

Individual level

Yoik serves as a means of **emotion regulation and stress relief** on the level of the individual. To actively yoik and to listen to yoik evokes positive emotions and

feelings of belonging. These have been established as an important factor promoting salutogenesis.

Population level

Yoik is a significant cultural marker who has survived throughout centuries, even though it was heavily persecuted. Cultural markers serve as symbols of identity and belonging. Such symbols in a particular a cultural group, can constitute powerful **socio-cultural resilience factors**.

The role of positive emotions, optimism and belonging/social support as health protective factors has long been established. Even though many of these results are derived from severely traumatised groups, such as holocaust survivors, the accumulated knowledge has nonetheless general and fundamental significance for our understanding of resilience [5–7]. The role of positive emotions such as love and the social bond for human and animal well-being has meanwhile been accepted even in neuroscience [8]. What is less known is the acknowledgement of music as a related human expression. Jaak Panksepp, the pioneer of affective neuroscience describes in his hallmark publication, *Affective Neuroscience—The foundation of human and animal emotions*, the role of music as such: “That audiovisual experience speaks to us of our humaneness and our profound relatedness to other people and the rest of nature” [9]. It is striking how much this understanding of music resembles the meaning of yoik expressed by many yoikers. What could confirm the neuroscientist’s perspective better than the statement of a female yoiker Biret Risten Sara from Northern Norway: “Where words end and become insufficient to express the depth of the experience, that is where yoik begins” [78].

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The art of yoik in care: Sami caregivers' experiences in dementia care in Northern Norway

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Abstract

Purpose: Yoik is the traditional vocal art of the Sami, the indigenous people of Fennoscandia. The Sami people, their land and their culture have been subject to colonisation and assimilation for centuries, hence the practice of yoik was lost in many regions. Despite an increasing awareness of the benefits of health musicking, yoik is only sporadically included in musicking practices in dementia care contexts. Therefore, the purpose of this study is to explore Sami caregivers' yoik experiences in formal and informal care contexts.

Design: Qualitative in-depth semi-structured interviews with 17 Sami relatives of care receivers, and healthcare professionals. Qualitative content analysis from subthemes to main themes was used to identify themes.

Findings: The research revealed two key findings: 1) yoik enlivens, empowers, induces “good feelings” and enables reminiscence functions in elderly persons with dementia or impaired overall functioning, 2) yoik is not systematically applied in in-care contexts due to the history and consequences of assimilation and colonisation.

Originality/value: This study explores some of the consequences of colonisation and assimilation on healthcare services and provides insights into an under-researched topic, the function of yoik as a music-based practice for the well-being of older adults. The study reveals that yoik can act as an attunement tool. Yoik may manifest and enhance connectedness to oneself, to the natural environment and to the community. This type of attunement lies at the heart of person-centered care.

Keywords

Sami yoik, yoik in care, embodiment, colonisation and assimilation, qualitative study, music and wellbeing

Background

The Sami, yoik, and the history of colonisation

The Sami are indigenous people living in an area that spans four contemporary countries: Russia, Finland, Sweden and Norway. The Sami, their land and culture (e.g. language, clothes, customs) have been colonised and assimilated for centuries, starting with Christian missionaries labelling them “delusional” people and attempting to “civilise” them from the beginning of 17th century onwards (Viridi, 2007; Wersland, 2006). The most intense and systematic period of Sami assimilation in the region was from the mid-19th century to the decades immediately following World War II, which emphasised social cohesion as a component of nation-building and post-war rebuilding (Minde, 2003). The colonisation and assimilation of Sami people culminated in the four respective states’ adoption of nation-building policies primarily based on monocultural norms. In Norway, where this study took place, this policy was called “Norwegianisation” (Minde, 2003). The Sami share this history of colonisation and assimilation with many indigenous peoples throughout the world (Minde, 2003).

Yoik has been practiced since ancient times as a part of everyday life, most probably in all Sami inhabited areas (Graff, 2004). The features of yoik traditions vary from region to region, and even from family to family. However there are some similarities common to all regions, such as, 1) the expressive vocal ideal, also including sounds of nature and animals as a marker of quality, 2) the use of melodic features that enable improvisation and adaptability to various daily life situations, and 3) the referential, symbolic function—linking or connecting a yoik to a specific subject (Graff, 2004; Hilder, 2015). A common expression describing this connection is that a yoiker “yoiks someone or something rather than [yoiking] about it” (Hilder, 2015, p. 6). A distinct category of yoik is the *personal yoik* describing a particular person (Graff, 2004). A personal yoik often belongs as intimately to a person as a name, and is also called a person’s musical name. Early Christian missionaries’ descriptions of yoik provide some of the most detailed documentations of the practice. They describe yoik as so important and essential to Sami people that practicing it in everyday life as well as in ritual contexts was perceived as a prerequisite for a person’s health, wellbeing, happiness and success in life (Graff, 2004). Nonetheless, the Christian missionaries condemned yoik as the “devil’s work” and as a kind of sorcery. Consequently, yoik was banned by the Danish-Norwegian king in 1609 (Wersland, 2006), and a yoiker was at risk of being punished by death for engaging in the practice until the 18th century (Graff, 2004). Later, during the Norwegianisation period, yoik was unwelcome in public places and deemed un-Norwegian (Graff, 2004, 2016; Minde, 2003). These measures had detrimental consequences for yoik as a living tradition. Yoik went from being abundantly practiced in different forms throughout the vast territories inhabited by the Sami to gradually disappearing from many Sami areas and communities (Graff, 2004; Grenersen, 2002). Yoik’s survival despite the pressure of assimilation and colonisation indicates its fundamental role and significance within Sami culture (Hämäläinen, Musial, Graff, Olsen & Salamonsen, 2017).

Yoik revival and other decolonisation measures

Ever since the multi-artist Nils-Aslak Valkeapää started introducing yoik in fusion with other music styles to mass media and public spaces in late 1960s, yoik has gone through what Hilder calls a “revival” (2015). From being the “devil’s work” and something many people would only do privately, yoik has become an increasingly accepted public practice, is mixed with new music styles, and is a subject of teaching and exploring in both university courses and public workshops (Hilder, 2015). In 2017 and 2018 yoik was even a form of Saturday night entertainment in Norway’s national media in two program series, “Muitte mu”

(Remember me) and “Stjernekamp” (Battle of the Stars) (Amlie, 2018; Blaauw-Hval, 2018; Solbakk, 2018). Moreover, in recent years increased public awareness of the Sami people’s original presence across extensive areas of Fennoscandia (Cramér, 2012; Kent, 2014; Nordin, 2018; Sjöström, 2018), and their loss of land and livelihoods, has resulted in measures attempting to amend and compensate some of the harm caused by colonisation. Yoik as an audible Sami presence in public spaces is growing. An example of an increasingly visible Sami presence in public is the growing use and crafting of the *gákti*, the traditional Sami dress, as well as other Sami traditional handicrafts or *duodji*, which have become a popular pastime (Eriksen, Valkonen & Valkonen, 2019).

Parallel to these efforts to be more inclusive and recognise the value of Sami traditions within Norwegian popular culture, an important official measure in addressing the impact of colonisation is the establishing of the Truth and Reconciliation Commission in Norway in 2018. The Commission’s mandate is to delineate and carry out an investigation of the effects of Norwegianisation policies. Acknowledging and investigating the painful consequences of centuries of colonisation and assimilation may contribute to Sami and non-Sami peoples within Norway finding ways to reconcile. The findings of the commission will no doubt call for raising awareness of how colonisation and assimilation has been enacted and may still be maintained within public sector structures and practices. Implementing strategies to counteract and repair the harm done in order to decolonise will be an important on-going project in public policy and services such as healthcare. Our study explores if the Sami cultural practice of yoiking can contribute to healthcare services.

Health musicking, personhood, cultural safety and embodiment

The literature on possible connections between yoik and health is limited. Hence, we present some closely related aspects from research on music and health in this section. Furthermore, we present additional concepts that will add to the understanding of different aspects of yoik in institutional care contexts.

Research on music therapy has revealed promising indications of the benefit of music in the treatment of a substantial number of conditions, especially dementia (Sihvonen et al., 2017). Familiar music has been shown to be effective in reducing anxiety and agitation as a consequence of disorientation and impaired cognitive functions for people with dementia (Sihvonen et al., 2017). According to McDermott (2014), the success of music-based interventions in dementia care is often due to their acknowledgment of the importance of *personhood* (Kitwood, 1997) and connectedness, as well as their use of emotionally meaningful activities with participants (McDermott, Orrell & Ridder, 2014). Pioneering work on the importance of the concept of *personhood* in healthcare services for older adults was developed by Kitwood in the 1990s (Kitwood, 1997). From Kitwood’s perspective, the effects of our relating to each other are not only psychosocial, they are also neurological or psychobiological, as our interpersonal experiences inevitably involve our physiological reactions to them. Acknowledging each other’s personhood is one of the key components in healthy relationships, including those in care contexts. McDermott and colleagues suggest that music familiar to and preferred by the person with dementia connects him/her to his/her identity and sense of self, as music is closely linked to personal life events, life story and the individual personality (McDermott, Orrell & Ridder, 2014). Successful interventions in dementia care based on the use of familiar music have led to a countrywide implementation in Norway under the concept “Musikkbasert Miljøbehandling” (MMB) or Music-based environmental treatment (Myskja, 2012; Nasjonalt kompetansesenter for kultur, helse & omsorg), and within the international

community of music and health professionals, similar measures are being investigated and implemented (McDermott et al., 2018; Ridder, Stige, Qvale & Gold, 2013).

Awareness of the significance of cultural qualities within health musicking, i.e. music-based interventions and activities, is increasing worldwide (Kenny, 2016; Olsen, 2017). Furthermore, *cultural safety* is an established concept particularly relevant in healthcare practices in indigenous and multicultural groups (Browne et al., 2009; Papps & Ramsden, 1996). The concept includes regard for the physical, mental, social, spiritual and cultural components of the person in need of care, as well as the care provider's self-reflection regarding their own attitudes towards the person in need of care, including possible power issues between the care seeker and the care provider (Papps & Ramsden, 1996). Cultural safety can be seen as an application of the principles in *indigenous methodologies* in the field of professional healthcare (Porsanger, 2004; Smith, 2012). An important aspect in health musicking is the music-based intervention providers' awareness of colonisation and assimilation histories of indigenous peoples (Truasheim, 2014), because these histories belong to the *embodied knowledge* of the people concerned (Csordas, 1994; Engman, 2019; Kiil & Salamonsen, 2013; Merleau-Ponty, 2012). According to Merleau-Ponty's phenomenological perspective, our perceptions and awareness of the phenomena in the world belong to our bodily being-in-the-world, as perceptions and awareness occur and happen within our bodies. Hence, every perceived phenomenon is simultaneously a bodily sensation, thus belonging to whatever we embody as part of our *embodied knowledge*. Consequently, activities and impulses relating to sensory recognitions, i.e. embodied knowledge and memories, have been introduced as an important way to maintain quality of life in dementia care (Gonzalez & Kirkevold, 2014). Gonzalez and Kirkevold (2014) exemplify this with the use of horticulture, also called "sensory gardens". Recognisable, familiar song and music as yoik, is in line with the horticulture-based idea of using the senses to calm down and feel good, as well as to awaken reminiscences of embodied memories.

Yoik as health musicking?

In 2015, our explorative study on yoik and its possible connections to health was conducted. Due to the history and consequences of colonisation and assimilation, it was uncertain whether such a study was feasible at all or what the outcomes would be (Hämäläinen et al., 2017). In the study, participants were asked about the desirability of research regarding yoik and health topics, as well as their general yoik experiences. The study turned out to be highly desired and welcomed by the participants. The findings revealed yoik's innate qualities to be very useful in everyday self-regulation and ensuring good living and quality of life. This was the case on both individual and societal levels. The current study is directly motivated by our previous study (Hämäläinen et al., 2017). Regarding yoik in care contexts, only two studies have investigated this aspect (Hanssen, 2011, 2013). The studies by Hanssen emphasised the importance of understanding cultural symbols in intercultural dementia care, with yoik as an example. Despite the need for cultural awareness and safety (Browne et al., 2009; Kenny, 2016; Olsen, 2017; Papps & Ramsden, 1996), the use of yoik in institutional care (in this paper called "in-care") contexts is under-researched. Yoik is significant for a growing number of Sami people despite its historical repression as a Sami cultural practice. Findings from research on health musicking, as well as the limited documentation of yoik's health potential, evoke questions of whether and how yoik could function in care contexts.

We aim to explore Sami care receiver's relatives' and healthcare staff's experiences of applying yoik in care contexts. We explore issues connected to yoik and cultural awareness and safety in particular with elderly persons and persons with dementia.

Research question

What are the selected research participants' experiences with yoik in care contexts?

Methods

This study reports on data collected in 2017 via qualitative interviews about participants' experiences with yoik in care contexts. The research project was funded by the Northern Norway Regional Health Authority (in Norwegian "Helse Nord").

Recruitment of participants

The primary criteria for the recruitment of participants was that they should be associated with the Northern Norway Regional Health Authority primary administration area, either privately or professionally. This geographical area includes the northernmost counties Nordland, Troms and Finnmark. This area contains both regions with strong living yoik traditions as well as regions where yoik is not a pronounced practice, and could thus provide varied information. Participants could include: yoikers; healthcare workers in northern regions with yoik experiences; Sami persons with private and/or professional care experiences who were located in or originated from northern regions of Norway; non-Sami individuals and Sami not currently living in this part of the country were included as possible participants, but all the participants were currently living in the northern municipalities. The researcher approached potential participants at events related to Sami topics. Some of the participants were contacted by SMS or e-mail in the first phase of the project in the period from March to May 2017. Additional participants were recruited through snowballing, i.e. a participant invited or suggested others to join (Malterud, 2001). Thirty-three people were contacted, and 17 people consented to participate. Reasons given for choosing not to participate in the study varied from lack of time and relevant experience to a general unwillingness to be a study participant.

Description of participants

Table 1. Description of participants

Participants n=17
Gender: Men : 1 Women: 16
Age span: 33–50 years: 4 51–70 years: 10 71–88 years: 3
Caregivers role in the interview: Informal*: 6 Formal**: 10 Mixed: 8
Relation to yoik: Professional yoiker : 4 Unprofessional yoiker: 9 Non yoiker: 2 Experience of yoik in daily life: 9 Do not know yoik from growing up: 4

Education level:

Primary school: 2
 High school: 5
 Bachelor level: 5
 Master level: 4
 PhD level: 1

Recruited by:

By first author in Sami events: 4
 From former studies on the topic: 5
 Snowballing: 8

* a family member

** in this context, a person working or having worked within healthcare, including as a voluntary, unpaid worker, e.g. a regular visitor

All participants had a self-reported Sami background. The participant group was strongly gender-biased, with one male and 16 females, between the ages of 33 and 81. Their educational backgrounds varied from one year at public school to doctoral level (PhD) post-secondary studies. Ten out of the 17 identified as “formal caregivers”, i.e. persons working or having worked in healthcare professionally. These individuals predominantly worked in elderly care and dementia care. Six identified as “informal caregivers”—for example, relatives of a person with dementia who provided care in an informal way or in an informal setting. Some of the professional healthcare workers also reported that they had experience as relatives to persons in care. The participants’ yoik backgrounds varied from being unfamiliar with yoik to being an active yoiker since childhood. Six participants had not grown up with yoik and four had origins in areas without known yoik traditions at the time the data was collected.

Data collection

The data collection took place during 2017 in the counties Nordland, Troms and Finnmark in Norway.

Qualitative methodologies are designed to collect in-depth data (Erlingsson & Brysiewicz, 2013; Malterud, 2001). The strength of qualitative open-ended interview design lies in reporting the participants’ lived experiences by allowing the interviewee leeway to follow their own lines of thinking in response to the interviewer’s questions (Erlingsson & Brysiewicz, 2013; Kvale & Brinkman, 2009). This open-ended approach is different from more structured interviews in which responses are limited by the questions and the focus and direction of the responses is primarily directed by the interviewer. Open-ended interviews may reveal information not foreseen or directly requested by the interviewer in relation to the topic, allowing new information to emerge with participants’ responses (Bengtsson, 2016). Hence, qualitative methodologies are suitable to explore under-researched issues, such as potential connections between yoik and health, and to initiate change in existing practices such as the public healthcare system (Denzin, 2016).

We chose qualitative in-person interviews to collect data since the topic is potentially sensitive due to the colonisation and assimilation policies (Denzin, 2016) in Norway that may have impacted the research participants. Possible consequences of these policies for the participants might include painful memories and experiences associated with Sami cultural markers such as yoik, as well as scepticism towards people in positions of power. An explorative research approach gives space to participants’ lived experiences and is concerned with participant safety. We therefore designed both the information letter and the interview guide in a way that emphasised the voluntary and confidential character of what the participants would share, including the participation itself. Furthermore, the interview guide was organ-

ised in a way that honours the common Sami cultural feature of storytelling, with open questions encouraging sharing experiences and thoughts. The interviews were conducted at times and in locations preferred by the participants, which included outdoor locations, work offices and private homes. The interviews were conducted in the Norwegian language and lasted from 1 to 2.5 hours.

Analysis of data

Examples of questions from the thematised interview guide (Kvale, Brinkman & Torhell, 2014) are: i) What do you think about yoiking in a nursing home? ii) What do you think about healthcare personnel yoiking at work? In the examples above, the predefined themes are underlined as i) yoiking in a nursing home, ii) healthcare personnel yoiking at work.

As the interview questions were open-ended, we chose a qualitative content analysis and used an inductive approach, allowing emerging themes in addition to the predefined ones (Bengtsson, 2016) and the inclusion of theoretical approaches. This type of analysis was chosen in order to stay as close to the participants' own wordings as possible, thereby letting their voices be heard (Bengtsson, 2016; Graneheim & Lundman, 2004). As this approach resulted in very rich data, this paper reports and discusses emerging themes in particular (see Table 2, 3), while themes included in the interview guide are mainly discussed in another paper under preparation.

We used respondent validation as a quality assurance for our work (Kvale et al., 2014; Malterud, 2001). The anonymised and pre-analysed transcripts of the interviews were sent to the respective participants, with an invitation to comment upon them. The transcriptions also contained suggestions for possible quotes, translated into English, that the researchers considered important to use in publications. Neither of the participants commented on the transcripts immediately, but nine commented later in new encounters with the first author.

Ethics

This study was registered with the Norwegian Centre for Research Data (NSD) as project number 52997, 2016. As participation required written and informed consent, the potential participants received project information in advance. Data storage and data handling were performed according to NSD guidelines. The participants' identities are anonymised.

Findings

The findings are presented in tables, quotes and explanations. Table 2 presents quotes that are interpreted by the authors as the participants' "embodied experiences". Table 3 presents the participants' reflections on why yoik is not excessively implemented in institutional care despite its experienced benefits.

Table 2. Examples of meaning units describing how yoik affects body and mind, creates an interpersonal connection and resonance, and reconnects people and nature.

Meaning units (in Norwegian)	Condensed meaning unit Translated into English	Interpretation of the manifest/underlying meaning	Subtopic	Main topic
HN1702: “Inga Juuso er munter, (man) har lyst til å hive seg rundt..”	You want to “throw yourself around” along with yoik	Yoik makes you want to move vividly	Yoik makes the body move	Yoik affects the body & mind
HN1704: “Mor og en annen satt på kjøkkenbordet og joiket..., liv i kroppen” (manifest) “han var myk i kroppen, satt der og smilte” (latent) “joik er sjelelig massasje”	While yoiking my mother became animated He listened smiling, his body was relaxed Yoik is massage for the soul	Yoiking animates Listening to yoik relaxes the body and mind Yoik makes you feel good in body and mind	Yoik affects the desire to move Yoik contributes to overall wellbeing	
HN1702: “Valkeapää sine joik minner om fjell, vann...”	Yoik reminds me of mountains and water	yoik evokes feelings and memories of nature	Yoik presences nature	Yoik connects persons to their memories of nature
HN1711: “fuglene kvitrer sin melodi..” “joiken får vinger”	like the birds chirp their melody yoik gets wings	Yoik is natural like birds singing		
HN1716: s.2 “de spør hvem sin jente jeg er. Og jeg forteller – og de husker ikke. Men så joiker de pappajoiken...”	The elderly recognise me through my father’s yoik	The elderly forget names but remember the persons yoik	Remembering characteristics of a person	Yoik reconnects people to the community: to themselves and where and whom they belong to
HN1711: “det var ei dame som hadde mista språket, og som hadde mista stort sett alt av uttrykk ...gikk rundt og hun joiked for å si: se på meg”	A woman who had lost all other forms of communication, she yoiked as though saying “Look at me”	Yoiks to communicate	A wish to communicate	
HN1707: “Yoik er forbindelse til den personen du joiker”	Yoik is connection to the person being yoiked	Connection	Making a connection to a loved one	

Yoik enlivens and brings to life

The *emerging themes* related to yoik practice among elderly people living with dementia are outlined in Table 2. These themes include observations of the bodily impact of yoik in formulations such as “shining up”, “being here and now”, “moving along”, “posture” and “dancing”. The participants expressed that the bodily impact of yoik is clearly visible in

elderly people living with dementia. “It is like turning on a switch, you can see a totally different reaction, they wake up, a smile comes on their faces, you can see it in their eyes...” (participant 14, healthcare worker).

All the interviewees, both relatives as well as healthcare personnel who had experience with yoik, reported that yoik enlivens, empowers, induces “good feelings” and enables reminiscences among elderly Sami people living with dementia or impaired overall functioning. One participant, a relative, stated that:

All the elderly wake up, pay attention and attend to their surroundings when we yoik with them. They start communicating through it. Yoik is really like nourishment, it truly enlivens you. The whole atmosphere in the room changes when you yoik in a nursing home (participant 8, relative).

Another participant, a healthcare worker, commented that:

Yoik is originally a very natural thing to do... as a natural thing alongside your daily life activities... And of course, yoik kind of grows wings when you yoik outdoors, in nature. So in a way you bring nature into the nursing home when you yoik there. Yoik creates a connection between the patient and the natural environment (participant 11, healthcare worker).

A third participant, also a healthcare worker, explained it like this:

You know they ask me whose daughter I am, but they won't remember the name of the person mentioned. But when I yoik my father's yoik, they know immediately who we are talking about. So they may forget everything else except the yoik (participant 16, healthcare worker).

Not all of the participants were familiar with yoik in their everyday environments. However, those participants were either open or positive to yoik, as exemplified in these quotations: “Yoik touches the heart, it works for everyone. Yoik goes deeper than anything else” and “[There was] no yoik in my home area, only Laestadianism. I feel alive when I hear yoik”.

Yoik is not used in accordance with its potential

Despite the participants' overall positive experiences of yoik in both institutional and home-based care, it transpired that yoik is not systematically applied in in-care situations. As yoik is a mode of communication, healthcare workers who grew up with yoik as part of their everyday lives did yoik at work. Moreover, these healthcare workers saw the clear benefits of this cultural practice, especially for the elderly with dementia. This is a shared experience with many close relatives of dementia patients: “There are elderly people who [...despite all the shaming,] only communicate with yoik when they get deep into dementia”. This quote refers to the shaming of yoik in the centuries of colonisation and assimilation, either in the form of Christian missions or of Norwegianisation, as described in Background. And yet, deep in dementia, yoik bypasses this shaming. It turned out, however, that not all healthcare workers are familiar with yoik and the natural movements connected to it. Several participants reported incidents where a resident in a certain situation, deep in dementia, while trying to express him/herself with yoik or yoiking motions, was hushed and told to stop “that nonsense”.

Table 3. The participants’ reflections over the unsystematic and random use of yoik in institutional care

Participants’ commentaries/meaning unit	Themes identified/condensed meaning	Category
HN1706: ...it’s because of Christianity, the Christian relatives and elderly NOT affected by dementia might not like it. Those affected by dementia, they return to yoik... Laestadianism especially has done a lot of harm to yoik culture.	Yoik might offend Christian relatives, esp. Laestadian ones	Reasons why yoik is not systematically applied in care
HN1707: From early on you understand quickly where and when to yoik and when not, like in church. On the other hand, we do yoik our hymns.	Be careful before yoiking Yoik might offend	
HN1709: My mother never yoiked, so I didn’t either, so as not to embarrass her. Sami cultural expressions were not allowed when I went to school.	Yoik might offend Sami cultural markers are undesirable Norwegianisation	
HN1715: The more I see it, the more I think: “What a horrible violation against fellow humans” Norwegianisation has been. Like in my home area, it turned out to be totally inhabited by Sami, but it took me years to find out. And in coastal areas they’ve lost all of their Sami inheritance, all of it! I mean, how has it been for my grandparents for instance? They dressed in <i>gákti</i> all the time, and suddenly it wasn’t good enough. You suddenly have to be something other than yourself to be... a good enough human.	Sami cultural markers might offend Sami cultural markers are undesirable Being Sami is not good enough Norwegianisation	
HN1717: I didn’t grow up with yoik. Around me it was like “Hush, you shouldn’t yoik”.	Yoik is undesirable	

“Norwegianisation” and its consequences was a theme that all participants discussed and identified as an important reason why yoik is not practiced on a regular basis in Sami health-care contexts. A healthcare worker who had not grown up practicing yoik commented: “Basically we are so Norwegianised that we are not even aware of it... We certainly have to consciously lift yoik up to keep it going, we have to use it more... Now that more and more people are becoming aware of their Sami origins, and they sew and wear their *gákti*, it is becoming increasingly natural to yoik more as well.”

Common statement: “Yoik could easily be implemented”

The participants spontaneously offered some practical advice in order to encourage non-yoikers to approach the use of yoik melodies in a safe and sensitive manner. According to a participant, one only had to learn a very few yoiks to be able to use yoik in care situations. Showing such an interest and making a slight effort could bring the healthcare worker closer to the person with dementia, contributing to care beyond the merely practical necessities of daily life. Some participants underscored that the use of personal yoiks should be clarified with the patients’ relatives in cases where it is not obvious that yoiking may have a positive effect. In group settings and in general, well-known traditional yoiks could be used. According to the participants, the challenge with the healthcare personnel’s lack of yoik competence could be solved easily with audio-recorded yoiks. They recommended that healthcare personnel learn some yoik melodies and adjust them to daily life situations in care contexts, so the yoik could be communicated by a person. Recordings could possibly be used as initial support.

Discussion

Yoik as embodied knowledge: a way to connect and remember

The experiences of formal and informal caretakers in this study clearly demonstrate yoik’s positive bodily impact on older people living with dementia. It is as if the bodies of these elderly people recognise and resound with the yoik, as if the resonance of yoiks from their upbringings or healthier days has the power to tone down the symptoms of dementia. An important aspect is that yoik is deeply connected to nature, bringing “nature into the nursing home” (Table 2). These aspects can be interpreted as being related to possible *embodiment* of the persons with dementia (Merleau-Ponty, 2012). They may also relate to success factors of *connectedness* as well as *emotionally meaningful activities* for health musicking in dementia care as described by McDermott and colleagues (McDermott et al., 2014), and the *familiar music* referenced by Sihvonen (2017). The Sami generation living in nursing homes today grew up in close connection to nature (Eriksen, Valkonen & Valkonen, 2019). For someone living in an institution, we can only imagine the feelings evoked by familiar yoiks connected to familiar places in nature. Based on the results of this study, we argue that the most common definition of yoik as “a way of remembering” is truly precise, “remembering” considered not only as a cognitive function, but in broader and complete understanding, as *presencing* the subject of yoik (Hilder, 2015). Yoiks of familiar places in nature could function as “musical sensory gardens”, presencing the embodied memories of natural environments for persons in care who are unable to go outdoors due to impaired motor function. Yoikers describe yoiking as something one thinks about as though that person or something was right there with them. According to our study, this resonating or resounding – “the way of remembering” as though the subject of the yoik is there, present with them – may be understood as essential to yoik and its impact on wellbeing.

The participants’ yoik experiences illustrate yoik as being empowering, enlivening, a body-and-mind experience, and something that makes them feel happy (Table 2). Furthermore, the participants’ yoik experiences in in-care contexts reveal yoik as a strong agent for reminiscences, as well as for emotional, cognitive communication and motor functions in persons with dementia. The participants’ experiences reveal yoik to embody the success factors of health musicking with persons with dementia – familiar music, emotionally meaningful activities, and acknowledging as well as reconnecting the person to her/his personhood (Kitwood, 1997; McDermott et al., 2014; Sihvonen et al., 2017). Among the partici-

pants, these experiences are common to both the healthcare workers and the close relatives. However, this study has also revealed that participants experience that yoik is not being prioritised or systematically applied in in-care settings, despite the positive potential the participants have observed. Applying music-based activities in a sustainable way is generally acknowledged as a challenge (McDermott et al., 2018), and in the case of yoik, even more so. In in-care settings, yoik still lives on the margins, although the yoiking participants in this study experienced that in-care use of yoik could enhance wellbeing if applied in daily life situations. We suggest that for Sami elderly living with dementia, yoik could be an alternative in dementia care settings similar to the way that sensory gardens currently are (Gonzalez & Kirkevold, 2014).

The impact of colonisation, assimilation and Norwegianisation

The potential consequences of colonisation and assimilation of the Sami are so multifaceted that they cannot be covered in the limited scope of this paper. The Sami were assimilated by force (Graff, 2016), and the majority of them surrendered their cultural markers in order to survive (Table 3). The periods of assimilation particularly affected Sami spirituality and aesthetic cultural markers. In regions where yoik did not cease to exist altogether, the transition to Christianity forced yoik into private or secret domains (Graff, 2016).

The traces of assimilation and colonisation may be perceived in the subtle feelings of shame many Sami have expressed that they carry in relation to their Sami identity or heritage (Somy, 2015). It is worth inquiring into the effect the two predominant messages about yoik many Sami have heard throughout their lifetimes – “yoik touches the heart, it is a way of remembering your loved ones and blessing the connection with the spirit of nature” and “yoik is the devil’s work” – have had on Sami people’s perceptions and feelings about yoik. On the one hand, one might long for the language, the yoik, the acknowledgement of who one is. On the other, one may bear a general sense of shame for the very same things, transferred through generations of Sami people who were oppressed and devalued (Somy, 2015). The uninformed or negative attitudes towards yoik among the non-Sami healthcare workers in this study may be understood against this background.

Yoik and person-centered care: decolonising elderly care?

Based on the findings in this study, we argue that the Sami personal yoik appears to be a musical acknowledgement of and attunement to the other person’s personhood. While preparing the study, we questioned the advisability of personal yoik as an intervention in care contexts. The participants focussed more on just “yoik”. When asked about who should apply personal yoiks, the participants’ most prominent, common concern was one of respect and mindfulness of the person being yoiked. In that sense, anybody could learn the personal yoik melodies of persons in care in co-operation with the persons’ family members. Independent of the yoik skills of the healthcare worker on duty, the fact that a person hears his or her (personal yoik) melody might contribute to a feeling of empowerment and *cultural safety* for that particular person living with dementia (Browne et al., 2009; Papps & Ramsden, 1996). Nonetheless, as emphasised by participants in this study, it is fundamental that the healthcare worker acts with a respectful and positive attitude instead of “hushing away” or neglecting yoik in institutions. The experience of cultural safety might be much better for a person living with dementia when hearing his/her own personal yoik compared, for example, to listening to contemporary music from a random radio station. This applies to the experience of having one’s personhood acknowledged, which can be linked to attunement to the person in care. Minimal Sami cultural knowledge among healthcare personnel

may provide some attunement tools. Without such knowledge, healthcare personnel run the risk of providing “culturally unsafe care” of elderly persons who have a deteriorating perception of their surroundings. We argue that such “culturally unsafe care” may maintain mental and cultural colonisation in institutional care contexts.

Some of the participants in this study suggested concrete measures for the implementation of yoik in in-care settings that anybody would be able to do. According to them, in cases where the use of personal yoik is unclear, the ‘general yoiks’ could be applied. General yoiks are those describing animals, places and commonly known persons. They have a less intimate character than many personal yoiks. According to the study participants, it is important to keep in mind the original yoik performance tradition, which is without instruments. It is that form of yoik that possibly falls in the “familiar” category for elderly Sami. Such concrete measures for the implementation of yoik in in-care settings may contribute to “unofficial” decolonisation on an interpersonal level.

Conclusion

The aim of this study was to explore informal and formal caregivers’ experiences with yoik in the context of caring for elderly people with dementia. The findings indicate that the participants experienced yoik as enlivening, as empowering, as inducing “good feelings” and as enabling reminiscences amongst older adults with dementia. The participants also reported that elderly people living with dementia who yoik or make yoik motions are not necessarily met with understanding and supporting attitudes from healthcare staff, illustrating the need for further exploration of the potential of yoik intervention in dementia care and for yoik training for staff in these contexts.

Using yoik in care contexts for elderly Sami people living with dementia can be understood as a person-centered, culturally safe and sensitive care. A person-centered care approach can contribute to safeguarding the embodied personhood of the individual person and preventing the loss of dignity that often follows the onset of dementia. In our understanding, yoik is like a musical application of person-centered care in Sami care contexts. Moreover, and of equal importance, yoik manifests and enhances a person’s connectedness not only to his or herself, but also to his or her community. With regard to decolonising institutional care, we argue that the call for cultural awareness, sensitivity and cultural safety in healthcare practices should be taken seriously. This applies in particular to music-based activities, as music can engage people at deep levels within their embodied lives.

Limitations of the study

The small sample size in this study does not allow for generalisation of the results. This methodological approach can, however, guide possible subsequent studies on a larger scale (Malterud, 2001). The 17 participants in our study included only one male. This gender imbalance might reflect the gender disposition of caregivers, whether formal or informal, in Norway – especially in elderly care. Research on the possible use of yoik in Sami healthcare is potentially a highly complex issue due to the history of colonisation of Sami people and territory, and its consequences, which might explain why this is an under-researched topic. In the initial approach to a possible sensitive topic, we turned to persons with the ability to consent and cause the topic can be sensitive, a study was necessary before including people in vulnerable situations. In order to gather information, we thus included relatives and caregivers with relevant experience who consented to participate in the study. We argue that we collected potentially valuable information despite our pragmatic approach.

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Conflict of Interest

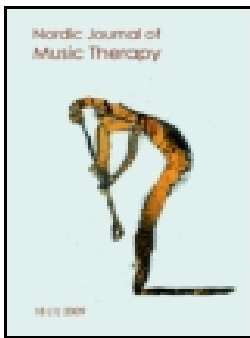
The researchers in the multidisciplinary research group are of different professional, geographic and cultural origins. Some of them are new to investigating Sami issues, while others have years-long experience and an ongoing professional focus on Sami issues in Norway. Due to the quality of their work in the field of Sami issues, these researchers are respected and acknowledged both among the Sami as well as majority cultures. Some of the research group also have a multi-ethnic background, including Sami roots.

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Yoik in Sami elderly and dementia care – a potential for culturally sensitive music therapy?

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ABSTRACT

Introduction: The positive impact of familiar, individualized and patient-preferred music in dementia care is acknowledged in the literature. However, traditional indigenous music practices in care contexts are less studied. This study focuses on *yoik*, a traditional vocal music of the indigenous Sami people of Fennoscandia. The aims of this exploratory study were to investigate key participants' experiences with yoik in care settings, as well as their thoughts with regard to a future study of yoik as a non-pharmacological intervention in Sami elderly and dementia care.

Method: Qualitative in-person in-depth interviews with close relatives of persons in need of care, as well as healthcare professionals were analysed using qualitative content analysis.

Results: The participants shared that they had observed positive effects whenever yoik was applied in Sami elderly and dementia care, even in persons without a known yoik familiarity. No unwanted effects were reported. The participants supported the idea of a possible clinical investigation of yoik as culturally sensitive music therapy in the future. They recommended that yoik should be implemented on a regular basis in Sami elderly and dementia care.

Conclusion: The participants agreed that yoik has potential as a non-pharmacological intervention in Sami elderly and dementia care, and that further investigation is warranted.

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KEYWORDS Sami yoik; indigenous singing; dementia; qualitative research; music therapy

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Introduction

Sami are the indigenous people living in Northern Fennoscandia and yoik is their traditional music. According to Arnberg, Ruong and Unsgaard,¹ yoik is considered the most ancient form of music known in Scandinavia (Arnberg, 1969). A particular variant of yoik is the *personal yoik*. It is used similar to a person's name, but also in other significant ways and contexts. Yoik has fundamental relevance in the lives of many Sami (Graff, 2004; Hämäläinen et al., 2017, 2018; Hilder, 2015).

The benefits of music therapy and familiar music in elderly and dementia care are generally acknowledged (Aldridge, 2005; Gerdner, 1997; Livingston et al., 2014; Myskja, 2012; Sihvonen et al., 2017). However, little is known about traditional indigenous music in care contexts. This may be due to issues related to persecution of and assimilation pressure on many indigenous people, including the Sami.

During the Christianisation of the Sami, yoik was interpreted to be associated with pre-Christian rituals and banned for centuries (Graff, 2004). Nonetheless, yoik has survived, and is still a living tradition for many Sami. However, yoik as music therapy has not been systematically implemented or systematically studied in Sami healthcare, nor in elderly and dementia care. This may be linked to the fact that yoik is a cultural identity marker of the Sami and connected to a painful history of cultural assimilation pressure. The aim of this early phase study was thus to explore the existing experiences of the use of yoik in Sami elderly and dementia care, and the Sami healthcare users' feelings and opinions with regard to future research on possible health effects of yoik implemented as music therapy in Sami care contexts. This study is based on the same set of interviews as our recently published article (Hämäläinen et al., 2020). As it was not possible to report on the rich materials from the interviews to a satisfactory extent in one article, the two articles report on different research questions, different parts of the interviews and different theoretical perspectives.

The Sami

The Sami consist of several subgroups with varying linguistic and cultural features (Hilder, 2015). Yoik is their traditional singing style (Hämäläinen et al., 2017, 2018). The exact number of persons with a Sami cultural background is difficult to estimate. However, in Norway's northernmost counties Troms and Finnmark, several municipalities are considered to be predominantly Sami populated (Slaastad, 2016).

The Sami were assimilated by the dominating cultures in the respective countries through Christianisation as well as educational and other public systems. Christian missionaries deemed yoik as sinful as early as 1609 (Graff, 2004). However, the most intense period of assimilation pressure in Norway was from ca. 1850 and continued for about 100 years (Graff, 2004; Hansen, 2011; Hilder, 2015; Minde, 2003). These assimilation policies were called "Norwegianization" (Minde, 2003). The social-Darwinistic ideology behind these policies and the related goal was to foster Sami

¹Matts Arnberg was a Swedish musicologist known for his exceptional work on collecting, recording and publishing living folk music for the Swedish radio archives all over Sweden in 1950s and 1960s for documentation purposes. This work includes yoik as well. Dr. Israel Ruong, a respected Swedish-Sami yoiker, scholar and pioneer in Sami education and research, was his partner in yoik collections and publication referred here. Håkan Unsgaard was the head of Swedish Radio's district office in Sundsvall (Austerlitz et al., 1971; Svenskt visarkiv (The centre for Swedish folk music and jazz research), 2016).

development by transforming Sami people into Norwegians. Sami culture was considered as lower developed, not viable, and thus doomed to extinction (Eriksen & Niemi, 1981c; Hämäläinen et al., 2017, 2020, 2018; Hansen, 2011; Jones-Bamman, 1993; Minde, 2003; Pedersen & Høgmo, 2012). As part of the processes of Christianisation and Norwegianization, conflicting attitudes among the Sami towards yoik and other cultural markers developed, and yoik as a living tradition suffered substantially (Graff, 2016; Hilder, 2015; Jones-Bamman, 1993).

Yoik

This section offers some general features of yoik, as comprehensive descriptions are found in the referenced yoik literature. Yoik and other indigenous singing traditions are often associated with different modes of chanting connected to pre-Christian rituals and ceremonial practices linked with altered levels of consciousness (Jones-Bamman, 1993). However, the participants in recently published studies of yoik and health describe contemporary yoik practices primarily as a culturally significant daily musicking practice, connected to daily life activities and interpersonal relationships (Hämäläinen et al., 2017, 2020, 2018). Ritual and ceremonial practice of yoik may still exist (Graff, 2004; Hämäläinen et al., 2017; Jones-Bamman, 1993), but currently the musicological focus is on yoik's meaning as a cultural marker rather than on altered levels of consciousness (Graff, 2004; Hilder, 2015; Jones-Bamman, 1993; Stoor, 2015).

Yoik encompasses a wide range of vocal expressions from imitations of animal sounds to other possibilities within the capacity of human voice (Daling, 2014). Personal variations and improvisation on yoik's short melodic and rhythmic motives are common and encouraged. The melodic motives may be within major, minor, as well as pentatonic and microtonal modes, and the rhythmic motives may vary within regular meters and free non-rhythmicality. Both melodic and rhythmic motives are repeated and improvised on according to the yoiker's preferences. These kinds of yoiks may have a circular or chain-like musical form, and the yoiker may interrupt the yoik anywhere in the course of it (Buljo, 1998). Traditionally yoiks were performed unison, a cappella, as an integral part of daily life. The yoiker may or may not use words, and yoiks can be performed alone or in groups, independently or as (a part of) a narration (Graff, 2004; Hilder, 2015; Jones-Bamman, 1993; Marainen, 2020). The many variations in yoik features and styles follow the linguistic regions in Sami inhabited areas (Hilder, 2015). For a non-yoiker it may be challenging to define what is yoik and what is not, as many yoiks appear to be song-like with similar musical phrasing as common folksongs in the region, following minor/major tonalities. What makes yoik different from singing is its reference function, i.e. that yoik by its organization of musical elements (e.g. tones, timbre, rhythms, melodic and rhythmic motives, tonality, and tonal ambitus), usually symbolizes or refers to a subject (Graff, 2004). Precision in the musical description of a yoik's subject is highly valued (Graff, 2004; Hämäläinen et al., 2017, 2020, 2018).

Yoik's subject could be a natural element like a landscape or an animal (Dikkanen, 2020; Persson, 2020), a psychological element like a feeling or a memory (Vahlberg, 2020), or a social element like a description of another person called the *personal yoik*. The personal yoik is an in-depth communication of a person's place in and significance for their community. The personal yoik's features are unique among Scandinavian music traditions (Graff, 2004; Jones-Bamman, 1993). Personal yoik is usually received from another person, often from a close family member or another close person. In

personal yoik, the yoiker vocally expresses and performs their impression of the core character of the other person in the melodic and rhythmic organization of the yoik (Hämäläinen et al., 2017). Yoik's performance practice may also add elements of movement and drama to yoik. A well-known element is the so called *yoik hand*, a hand-movement characterizing the yoik's movement or its subject (Graff, 2004). In family relations, as well as in other close relations, yoik is primarily an expression of love and affiliation and evokes strong feelings (Hämäläinen et al., 2017). Many yoikers capsulize yoik as a way of remembering, because as long as someone is yoiked, the person belongs to a community (Graff, 2004; Hilder, 2015). Hence, yoik is a significant cultural means of communicating core values like cultural identity, as well as honoring and connecting a person to a community (Graff, 2004; Hämäläinen et al., 2017; Jones-Bamman, 1993).

In a qualitative study we conducted in 2015, yoik's possible significance for health, wellbeing and quality of life was investigated (Hämäläinen et al., 2017). Listening to yoik and the act of yoiking were characterized by the study participants as very positive and joyful experiences, even for those who grew up in a time where yoik and yoiking were subjects to restriction, and practiced in privacy (Hämäläinen et al., 2017).

Dementia

In the current study, we explored yoik experiences in Sami elderly and dementia care in preparation of a future intervention study. It is estimated that 80,000 Norwegians have dementia and that at least 10,000 new cases occur per year. Accordingly, the socio-economic costs are remarkable: A review from leading European economies in 2009 revealed a mean total annual cost of 28,000 Euro per patient (Jönsson & Wimo, 2009).

Dementia affects the lives of the diseased persons and their families dramatically (World Health Organisation, 2019). Common symptoms for dementia are reduced cognitive functions like memory, speech impairment, problems in orientation as well as well as a reduced ability to plan or comprehend. These symptoms cause most patients to feel depressed, anxious and irritable, and often lead to social withdrawal. Changes in personality, hallucinations and delusions may also occur as the disease progresses (Jönsson & Wimo, 2009; World Health Organisation, 2019). Consequently, the ability to function in daily life decreases substantially.

In many western societies, the prevalence of dementia is increasing and this is true for Sami populations as well (Helsedirektoratet (Norwegian Directorate of Health), 2013). Treatment with psychopharmacological drugs is often associated with an acceleration of the dementia processes and increased risk of serious side-effects such as falls, memory loss, and constipation (Livingston et al., 2014). Therefore, non-pharmacological interventions such as music therapy are important additions to dementia care (Fusar-Poli et al., 2018).

Music therapy and music-based activities

Research suggests that the benefits of music therapy and music-based activities for people with dementia include reduced short-term agitation and symptoms of anxiety as well as improved cognition, mood and quality of life (Fusar-Poli et al., 2018; Livingston et al., 2014; Sihvonen et al., 2017). In the field of institutional dementia care, music therapy and music-based activities have been evaluated as cost effective,

easy to apply, and safe methods for the handling of various daily challenges (Sihvonen et al., 2017). Beyond systematic reviews, single studies have reported reduced agitation and a possible reduction in psychotropic medication (Hsu et al., 2015; Ridder et al., 2013), as well as improvements in communication and connectedness with other people, better quality of life, decreased anxiety as well as reduction in feeling isolated (Hara, 2011; Kvamme, 2013). Music therapy and music-based interventions based on the patient's preferred, familiar or individualised music and songs seem to have the capacity to improve memory, communication, mobility, self-consciousness as well as mood and behaviour in persons with unspecified dementia, and even in late stage Alzheimer's disease (Arroyo-Anlló et al., 2013; Dassa & Amir, 2014; Gerdner, 1997, 2000; McDermott et al., 2018; Myskja, 2012; Särkämö et al., 2014; Sihvonen et al., 2017). Parsons (2018) study on clinical improvisation with persons with dementia symptoms draws on the work of Aldridge (2005), as well as Aigen's (2005) thoughts on music-centred music therapy (Aldridge, 2005; Aigen, 2005). Parsons mentions the importance of the ideas of "emotionally informed music" and "musical simplicity and space" (Parsons, 2018, p. 15) in order to identify musical structures that contribute to reconstruct some of the boundaries caused by dementia (Parsons, 2018).

Beyond national Norwegian recommendations for effective and safe ways to provide music activities and music therapy, there are to date no particular cultural specifications (Myskja, 2012). Within music therapy, clinicians and scholars have acknowledged the importance of individual's cultural background when considering musical preference (Aldridge, 2005; Van Bruggen-Rufi & Vink, 2010). Yet, in Norwegian dementia care the documentation of possible effects of culturally sensitive music therapy and music-based activities is limited (Myskja, 2012). Internationally, the importance of culture sensitivity is acknowledged within multicultural, cross-cultural and global music therapy, and culture sensitive, context aware, and culture-centered music therapy is addressed (Gerdner, 2015; Lauw, 2016; Swamy, 2014; Van Bruggen-Rufi & Vink, 2010). Despite the fact that these aspects are being increasingly acknowledged in contemporary multicultural societies, it is important to consider not only cultural diversity, but also potential differences between *cultural* and *indigenous* aspects, regarding music as well as other therapeutic contexts. Indigenous matters and history often include serious historical collective and individual trauma, such as the exploitation of land, the rejection of beliefs, religion and spiritual needs, the denial of language and basic human rights (Truasheim, 2014). Hence, culturally sensitive music therapy in indigenous groups of people must not only be aware of cultural differences, but about the embodied histories of peoples as well (Morales-Hernández & Urrego-Mendoza, 2017; Truasheim, 2014). Much of the research literature on music and health activities among indigenous people tends to focus on music as part of traditional ceremonial and ritual practices (Hämäläinen et al., 2018; Kenny, 2016; Morales-Hernández & Urrego-Mendoza, 2017). The health-related aspects of indigenous peoples' important everyday mundane music activities have received less attention.

To the best of our knowledge, only one scholar has so far investigated yoik in a health care setting involving elderly Sami with dementia (Hanssen, 2011, 2013). The focus of Hanssen's study was on understanding the significance of culture-specific symbols, such as yoik, in successful intercultural communication in dementia care (Hanssen, 2011). Hanssen concluded that a prerequisite, but also a challenge, for successful intercultural health care is openness towards different cultural symbols' possibly deep significance for the patients. Being culturally

sensitive means to have cultural knowledge, and to meet patients with an open, curious, and person-oriented attitude. This represents an approach towards delivering culturally safe care, as described in Camphina-Bacote (2002). Based on the findings of both Hanssen and Hämäläinen, it would be timely to investigate the potential benefits of yoik as a culturally specific music therapeutic intervention in elderly and dementia care (Hämäläinen et al., 2017, 2020, 2018; Hanssen, 2011).

Yoik and Norwegianization of the Sami people-ethical considerations in research

Due to histories of colonization and assimilation, studies concerning indigenous people always include ethical questions. The past, with its questionable motives and objectifying of indigenous peoples, obligates any research to investigate the ethics, desirability and appropriate methodology of a research topic for and with the people it concerns, before carrying out any research on the actual topic itself (Minde, 2003; Smith, 2012).

A systematic participant involvement and a democratic research process is commonly required. The research should be grounded in and benefit the participating community (Smith, 2012). In this project, we invited the participants to participate in all phases of the study, to the extent they themselves wished to.

Study aims

The general aim of the study was to explore whether the study participants thought that yoik as indigenous singing has therapeutic potential in Sami elderly and dementia care. Furthermore, if so, the study should investigate whether the study participants thought that yoik's potential as a music therapeutic intervention should be investigated in a larger study. Particular emphasis was placed on the participants' yoik experiences with regard to Sami elderly, with or without dementia.

The research questions were: Could yoik be applicable therapeutically in care situations? If so, should yoik's therapeutic impact be studied systematically in a larger study in the future?

Method

Design

A qualitative research design with open-ended in-depth interviews was chosen to explore participants' experiences and meanings in an under-researched field. Our approach was phenomenological and descriptive. We applied directed content analysis with predefined coding categories, and looked for manifest content in the interviews (Hsieh & Shannon, 2005).

Ethical considerations

The study was registered with the Norwegian Centre for Research Data NSD (project number: 52,997). Data were stored and managed according to the procedures

suggested by NSD- Norsk senter for forskningsdata (Norwegian centre for Research Data, n.d.). Written informed consent was obtained from all participants.

Participants

Because of the exploratory nature of this study, we aimed to investigate the use of yoik in care situations in general with a focus on elderly and dementia care. As yoik at the time of the investigation was still regarded as a challenging subject to study, we were open to include people with any experiences and thoughts of yoik in healthcare, in order to explore whether research on this topic was feasible at all.

People were eligible to participate in the study if they (a) were connected to the Northern Norway Regional Health Authority administration area, either professionally or privately. 'Professional' refers to any healthcare profession – e.g. nurses, doctors, art and music therapists, while 'private' refers to next of kin; or (b) originated from, or lived and worked in the counties Nordland, Troms and Finnmark; (c) had personal or professional experience related to yoik and/or Sami care, even if they themselves were not of Sami origin. The first author approached a total of 33 possible participants directly. Six persons who were approached in public arrangements like local seminars, conferences and events about Sami issues targeting both professionals and lay persons, enrolled in the study. The first author also contacted some of the participants of a previous study on yoik via email or text message and five of them joined (Hämäläinen et al., 2017). Six other participants were recruited using snowballing sampling (Babbie, 2010).

Eligible participants received information about the project in advance, including the interview guide and information about the possibility to withdraw from the study at any time. Seventeen people gave their written informed consent to participate and were interviewed. Reasons for not participating were practical issues like lack of time, not being willing to be interviewed, or people stating that they lacked relevant experience and insight.

Qualitative interviews

Due to the novelty and complexity of the research topic, we used qualitative semi-structured interviews with open questions (Denzin & Lincoln, 2000). The interviews were guided by the following questions:

1. What are the participants' experiences with (a) yoik, (b) yoik with older adults, (c) yoik versus singing, and (d) yoik in care situations in general?
2. What are the participants' (a) attitudes related to the use of yoik in care situations, and (b) thoughts and opinions about yoik's significance?
3. What do Sami users of health care services think about research on yoik as a music therapeutic intervention in care situations? What are the participants' possible methodological preferences for this kind of research in elderly and dementia care?

Some participants preferred to be interviewed together. One such group consisted of two healthcare workers, the other of a family member and a former healthcare worker.

The first author conducted the interviews in May and June 2017 in places chosen by the participants such as private homes, the participants' working places, or outdoors. The interviews lasted between 1 and 3.5 hours. They were audio recorded and transcribed by a professional transcriptionist, except the two group interviews, which were transcribed by the first author. The interview language was Norwegian, as was the transcription language. The transcriptions were anonymized before analysis.

Analysis

We consider knowledge production through qualitative methods as interpretive, reflexive, socially situated and constructed (Denzin & Lincoln, 2000; Hämäläinen et al., 2017; Hsieh & Shannon, 2005; Schreier, 2012). The interviews resulted in rich data. Because of the character of our research questions, we chose to use a method of analysis that limits the amount of information instead of widening it. We conducted a qualitative content analysis as this method is considered reductive (Schreier, 2012), and a suitable and descriptive analytical approach when exploring under-researched phenomena (Hsieh & Shannon, 2005) such as yoik in care situations.

Qualitative content analysis is characterized by a possibility to choose initially whether to include both latent and manifest content of the data in the analysis process or not (Vaismoradi et al., 2013). We chose to include manifest content in order to analyze the participants' statements as closely as possible, and at the same time, be able to condense the richness of the data (Vaismoradi et al., 2013). We conducted a directed content analysis as we applied *a priori* code categories derived from the interview guide (Hsieh & Shannon, 2005). The *a priori* main code categories were (a) yoik experiences, (b) yoik experiences in care situations, (c) yoik's significance, and (d) desirability of future research studies. These main categories included *a priori* determined subcategories such as "yoik experiences," "yoik experiences in care situations," "possible restrictions related to yoik," and "yoik versus singing." The category of "desirability of future research studies" included a subcategory of "possible research methodologies."

We used respondent validation, also called member checking to strengthen the validity of our interpretations of the data (Hsieh & Shannon, 2005; Kvale & Brinkman, 2009; Malterud, 2001). The anonymized and analyzed interview transcripts were sent to the respective participants for their input. We did not receive any comments on the analysis. The transcriptions also contained excerpts of quotes to be included in publications. The participants were invited to either accept, correct or reject the use of these quotes, and everyone accepted.

Results

Participants' characteristics

The mean age of the participants was 59 years (range: 33 to 81 years). Thirteen participants were between 50 and 64 years. The participants' yoik background varied from yoik being something alien to being an active yoiker since childhood. One participant was male. Six participants had not grown up with yoik, whereas four out of 17 had origins in an area without known yoik tradition but restrictive attitudes towards yoik at the time of the data collection. Ten were healthcare workers, six were

close relatives to an elderly or a person with dementia, and one was an elderly yoiker. The categories are overlapping for most of the participants: some healthcare workers were also close relatives, some relatives also worked as volunteers in healthcare settings. The level of education varied from one year elementary school to a doctorate degree, but most participants' level of education was equivalent to high school and college. None of the participants stated being a music therapist.

Yoik's significance

Yoik's significance was reported to follow the individual from the beginning of life to beyond death. Some of the eldest participants knew yoiks belonging to persons who had lived 200 years ago. Yoik's significance was expressed in statements referring to fundamental, natural needs, for example, self-expression:

Yoik is an expression for feelings, which is a universal need. You know the birds twitter, they twitter their own melody to their nestlings so they learn to recognize and to express themselves. In Sami culture we used to give a child a *dovdna*, a little childlike yoik-to-become, adjusted and dedicated to that specific child. (participant 11)

Moreover, participants shared that the personal yoik has a significant cultural value:

For young people living in Sami areas it is priceless to get their own yoik. You know, today they have access to everything, but it is not personally theirs. The yoik you have, it is yours forever. Even when you pass away, the yoik remains. Yoik is a real treasure, kept alive by a very little number of people, as compared to the other thing. (participant 10)

Experiences related to the use of yoik in general and in care contexts specifically

The participants reported mostly positive yoik experiences, referring to yoik as being a fundamental, existential necessity:

Yoik is a way of structuring time, a way of thinking. Actually we could say that yoik is a way of being in the world. A mode of existence. (participant 5)

Yoik is my life. It is around me all the time, in my work, in my freetime, in my sorrows and my joys ... Without yoik, it's almost like having chopped off an arm. (participant 7)

The participants acknowledged, however, that other people could have negative experiences, and reasons to refrain from yoik, due to religious connotations:

I can understand that many Sami don't yoik. It has to do with the taboo around it: It is heathen, only drunk people yoik etc. Especially the religious stigma is very strong. (participant 7)

One participant described a very significant vocal praxis from the region without outspoken yoik tradition, called *árrmme*. This is a form of lament and has some functional similarities to yoik without being quite the same.

Many participants reported positive experiences with the use of yoik in elderly and dementia care. Ten participants reported that those afflicted by dementia might forget names and faces of their loved ones but still remember their yoiks. Seven participants capsulized yoik being like the best of medicines for the elderly with dementia.

Common experiences of using personal yoiks were from contexts where the healthcare worker knew the resident(s) and their family, and knew their personal yoiks. In those cases, yoiking common loved ones was like a conversation about them. Yet, the

yoiking healthcare workers appeared to be unaware of the possible scientific value of their everyday musical activity. They were rather happily surprised that a researcher showed any interest in it.

Some participants had experiences with yoik being a taboo in healthcare settings. An example of this was a description offered by two healthcare workers in a nursing home. They described situations in which they shared yoiking with someone – a resident, a visitor, or healthcare personnel – and everyone was having a positive experience with it in terms of recognition, memories, joy and contentment. Yet, some of the residents wanted to be assured that no outsiders had heard it and asked to not tell anybody that they joined yoiking. However, experiences indicating a taboo related to yoik were few among the participants in this study. Some participants expressed concern about the impact Christianity has had on elderly Sami living with dementia:

It is dreadful. I work in a section with most Sami speaking patients, and some of them belong to this group who have been “brainwashed” with the idea that yoik really is a sin and a shame, and then there are these patients who are so deep in dementia that these rules are no longer valid. For the latter, yoik is what is left as a means of communication. (participant 11)

An additional theme identified was the non-Sami healthcare workers’ lack of knowledge of the Sami cultural markers important to elderly persons in care. This was perceived by the Sami healthcare workers as unawareness of these markers in everyday matters. Participants shared that this lack of knowledge was exemplified by hushing occasionally yoiking elderly.

When asked about differential experiences of yoik versus singing, some of the healthcare workers shared that they had seen an observable difference in reactions by the residents with dementia in response to Norwegian songs, as compared to yoik:

We sing all kinds of nice Norwegian songs in every occasion, while yoik remains always as the last in the queue. It’s ok, of course, they do like it when we sing those nice Norwegian songs. But when we yoik, there’s life! The difference is huge, you see it in their faces, in their body postures, you feel it in the atmosphere! (participant 15)

Finally, when participants were asked about the option of healthcare personnel applying their personal yoik and yoiks of their families in an imaginary situation where they were in need of someone’s care, most were open to this idea. One participant shared:

I think I would feel myself *seen* if someone yoiked me, even if the person was not my family. You show a certain interest to a person trying to learn the person’s yoik. (participant 4)

Another participant stated:

If I was residing in a nursing home, I would have liked that someone came who knew the yoiks I know so I could yoik along with them. It doesn’t matter who the persons were, just that they knew the yoiks so that I could join in and yoik with them. (participant 6)

One participant, a practitioner of traditional yoik, expressed it like this:

There is something in yoik we need, it does something to us. It is like a massage for your soul. And when you yoik another person you see the person, not only the outside, but the person. And yoik awakens your memories. When I’ve met elderly people, and yoiked them, I’ve seen almost like a kind of blooming, their youth showing in their faces and their smiles. It feels like turning on a light in another person. I feel we are in contact with the fountain of life when we are in contact with yoik. (participant 4)

In summary, the healthcare workers interviewed in this study emphasized the positive significance yoik may have for the elderly. They also shared thoughts about utilizing yoik's potential to improve the everyday quality of life of the elderly and persons with dementia.

Thoughts and opinions about research on yoik in elderly & dementia care

Regardless of age, education level, or yoik background, the participants supported the idea of investigating the therapeutic potential of yoik for elderly and persons with dementia in a future study. This was commented on by several participants such as participant 12: "Finally there is someone who is interested in this, this is a fantastic idea!"

Some participants elaborated on their point of view:

Yoik is part of the person accustomed to it. So what we do when we ignore this fact, is that we actually violate the person and his or her basic needs on a daily basis. I think the least we can ask for is to document the effect of yoik in elderly care, and thus validate yoik's function and place in Sami healthcare, so that the persons in need of yoik can feel safe. (participant 11)

Participants in yoik restrictive areas (see eligibility criteria) who were not familiar with yoik also welcomed the idea of future research on the impact of yoik on older adults and people with dementia in care contexts. Despite the restrictive attitudes towards yoik in their home areas, they suggested that it could not be harmful to include yoik in dementia care. One participants offered further explanation:

The hard rigidity disappears from most people when they are hit by dementia. Many of the learned societal rules about what you should and should not like fall away when you're hit with dementia. (participant 1)

The participants had various ideas and suggestions for data collection methods when we told them we would be interesting in pursuing further research to better understand the therapeutic benefits of yoik. The participants' ideas and suggestions can be capsulized in some participants preferring participatory observation, while others preferred questionnaires, surveys and interviews. With one exception, the participants were receptive to the use of video recording. In alignment with principles of indigenous methodology, the participants' preferences for specific research methods will constitute the foundation for research protocols for our possible future studies in this area.

Discussion

The overall findings of this study indicate that yoik is experienced as a creative vocal practice with significant value as a facilitator of everyday wellbeing, supporting fundamental human needs of self-expression, communication, social inclusion, and the feeling of being alive. This applies to experiences connected to dementia care as well. Yoik appears to connect the persons living with dementia with their past, and offers them an opportunity to recall their family members, ancestors and their lived lives. This connection appears to function as enlivening on one hand, and as calming on the other. Furthermore, patients not familiar with yoik also appear to enjoy yoik as a musical experience. Participants were supportive of the idea of using yoik both as part of music therapy and as an integrated part of care. Participants also supported the

pursuit of additional investigation on the impact of yoik on older adults and people with dementia in future studies.

An unexpected finding was the positive response from four participants who grew up in regions known for restrictive attitudes towards yoik (Jones-Bamman, 1993). These persons were most familiar with Laestadian hymns (Jones-Bamman, 1993; Læstadius, 2019) instead of yoik. Therefore, we expected more yoik restrictive attitudes from these participants, especially in the context of elderly care. Due to the impact of both Norwegianization as well as Christianity (Graff, 2016; Jones-Bamman, 1993) the tradition of yoik suffered substantially in these regions (Hilder, 2015). Elderly people in these regions grew up in times of total condemning of yoik, and might thus perceive it as unsafe (Eriksen & Niemi, 1981c; Hämäläinen et al., 2017; Hansen, 2011; Mінде, 2003; Pedersen & Høgmo, 2012). There might be several explanations for the unexpected positivity. First, we might have recruited only participants with a positive attitude towards yoik, and they might thus not be representative of the majority from those regions. Another possible explanation might be that in yoik restrictive regions, yoik might not be openly discussed, but similar phenomena might occur under a different name. The vocal praxis called *ármme*, a distinct vocal praxis and a form of lament from the region without outspoken yoik tradition, is an example of this. One reason for this kind of renaming could be safeguarding a precious tradition by disguising it through renaming.

With regard to yoik in care situations, the participants spoke mostly about their experiences with older adults. The expression of yoik being “the best of medicines” condenses the experiences reported by participants familiar to yoik. Yoik was reported to evoke life and function as a means of reminiscence and recognition when names and faces were forgotten. Also the notion that yoik remains as the mode of communication when everything else is lost, emphasizes the importance of this traditional practice. Despite the significant impact of restrictive assimilation policies on yoik in this generation of Sami, the value of yoik appears to go deeper. This effect might reflect the ancient origins of yoik and its fundamental embedding as part of the Sami culture (Arnberg, 1969).

The findings in this study not only support but also enrich the theoretical aspects of patient-preferred, individualized or familiar music known from research on music therapy and music-based activities (Arroyo-Anlló et al., 2013; Dassa & Amir, 2014; Gerdner, 1997, 2000; McDermott et al., 2018; Myskja, 2012; Särkämö et al., 2014; Sihvonen et al., 2017). Yoik, due to its characteristics described earlier, enriches the concepts of “individualized,” “patient-preferred” and “familiar” with “dedicated to” and “musically describing” the persons themselves, their loved ones as well as their surrounding natural environments (Graff, 2004; Hämäläinen et al., 2017, 2020, 2018; Hilder, 2015; Jones-Bamman, 1993; Stoor, 2015).

The participants had only positive experiences with the use of yoik in elderly care. This finding was unexpected as well, due to our above-mentioned preconception of conflicting attitudes towards yoik within Sami communities. At the same time, the participants also reported that yoik was not used on a regular basis or systematically. This might indicate a certain precaution towards the use of yoik, possibly causing a bias: healthcare workers might carefully ensure that the situation is acceptable for yoiking, and thus the experiences are only positive. On the other hand, this would be an appropriate approach to ensure cultural safety in any music-based activities with elderly, whether applied in therapeutic or leisure time settings, and whether “cultural”

refers to indigenous or other types of music. However, considering that yoik is reported to be like a way of being in the world, a life necessity and something that brings you closer to the fountain of life, the positive experiences of yoik with Sami elderly appear less surprising. It would therefore be interesting to explore the use of yoik experiences with elderly Sami in a study including several nursing homes, among them also some located outside the traditionally Sami inhabited areas.

We also explored the differences between observed effects of yoiking versus singing. Participants reported that a clear difference was observable in the residents' immediate reactions as reflected in their facial expressions, body posture and in the atmosphere. This difference was described as singing being nice, while yoik evoked "life!" Meanwhile, it must be noted that these observations were reported by healthcare workers in nursing homes in areas with a living and strong yoik culture. Nonetheless, these observations support the idea that a more structured use of yoik as a non-pharmacological music therapeutic intervention is desirable at least in those regions. Furthermore, for people with yoik as music of their childhood and youth, the practical care in a nursing home that include yoik would contribute to a person-centered and culturally sensitive care.

The participants' positive attitude towards the question of researching yoik in Sami elderly and dementia care differ from conflicting attitudes to yoik that still can be found in Sami communities (Graff, 2016; Hämäläinen et al., 2017, 2020, 2018; Hilder, 2015; Jones-Bamman, 1993). While yoik may evoke strong positive feelings, it may evoke negative emotions as well (Graff, 2016; Hämäläinen et al., 2017, 2020, 2018). These conflicting attitudes have contributed to the taboo on yoik. Therefore, the participants' unison welcoming of future research was unexpected. The yoik-practicing healthcare workers were unaware of yoik's importance and possible therapeutic and scientific value. For them, yoiking was a matter of everyday practice.

Despite the fact that conflicting attitudes about yoik persist within Sami communities, participants in this study acknowledged yoik as something that goes beyond being a central and important cultural marker. They acknowledged yoik as necessary for existence, as expressed in the metaphor of "fountain of life," and characterized yoik as a treasure and a way of being in the world. The notion that being unable to yoik would be as having an arm chopped off, describes yoik as an organic part of a person. The comparison of yoik to birds' singing characterizes yoik as natural and inevitable part of life, as singing is for birds. Yoik can thus be considered as embodied knowledge, passed on through generations (Kiil & Salamonsen, 2013). The embodied knowledge of yoik transmits connection with family members and ancestors, with nature, and with the ancient history of the Sami. This might be one of the reasons why yoik survived assimilation pressure. Yoik is currently undergoing a powerful revival especially within the younger generations (Hämäläinen et al., 2020; Hilder, 2015; Jones-Bamman, 1993).

The findings in this study confirm, supplement and extend findings from our former study on yoik and health, where yoik was reported to be an important cultural identity marker for many Sami persons, as well as a means to emotional regulation (Hämäläinen et al., 2017, 2018). Although our current study was not an intervention study, the findings are aligned with findings from research on music and dementia in the past decade (Dassa & Amir, 2014; Hsu et al., 2015; Kvamme, 2013; McDermott et al., 2018; Myskja, 2012; Ridder et al., 2013; Särkämö et al., 2014; Sihvonen et al., 2017; Van Bruggen-Rufi & Vink, 2010). Moreover, we argue that the findings in our study indicate that yoik, if included, might potentially enrich not only

the theoretical aspects of individualized, patient-preferred and familiar music, but also the different music practices within music therapy and music-based activities. For those familiar with yoik it appears to be a life necessity. Yoik in a music therapeutic setting could serve as “emotionally informed music” providing a “musical simplicity and space” (Parsons, 2018, p. 15), due to its non-complicated musical structures and openness for improvisation enabling playfulness as well as individual and situational adjustments (Graff, 2004; Hämäläinen et al., 2017, 2020, 2018; Hilder, 2015; Jones-Bamman, 1993). As the remaining mode of communication when everything else deteriorates, yoik might offer a valuable contribution to the music-based interventions and practices with older adults with what Aldridge calls *dialogic*-degenerative diseases (Aldridge, 2005). Aldridge (2005) argues for this term as an alternative to *neuro*-degenerative diseases, as these diseases ultimately disrupt the individuals’ possibilities of communication with their social environment (Aldridge, 2005).

Culture sensitive health and elderly care is a national question

In the briefing and debriefing conversations before and after the interviews, some additional aspects surfaced that are worth mentioning here. One of them was that the project topic is not a concern for the registered Sami areas only: in Oslo, the capital of Norway, there are Sami residents in at least 11 nursing homes. Oslo is located far away from the areas commonly considered as Sami. Little is known about the situation in other large Norwegian cities, but it must be assumed that the situation is similar. Securing good and adequate healthcare for Sami elderly – dementia as well as general healthcare – requires information about Sami cultural features in healthcare training, including music therapy education and praxis. This is not yet present for example in nurse education today in Norway to a satisfactory extent (Eriksen et al., 2017). However, it is not expected that all non-Sami music therapists and other healthcare workers in Norway and neighbouring countries should yoik. Yet, it is reasonable to assume that if they were sufficiently informed about yoik, they might identify it when it occurs in care situations, respond adequately and deliver culturally safe care (Camphina-Bacote, 2002). This would give healthcare workers a minimum of culturally sensitive knowledge to enhance the confidence of the elderly person with dementia. Music therapists as professionals are particularly important in this sense because of the character of their work.

Methodological considerations

A central research question for this study was to investigate what Sami users of healthcare services thought about the idea of investigating yoik as music therapy in Sami elderly and dementia care context in future studies. Prior to starting this study, we anticipated that participants may possibly feel that yoik is something so private and personal that it should not be researched. Moreover, we thought it might not be advisable that someone outside the Sami culture investigated the topic. It turned out that we were wrong with regard to both concerns. To the question of the participants’ views about a non-Sami researcher studying this topic, the attitudes were those of acceptance. The most important thing to the participants was that the person conducting the study show respect and be aware that they may have

a substantial lack of knowledge about certain aspects of the Sami culture (if the person is not Sami themselves). In future research studies, the researcher should also have a guide who knows the culture, is a yoiker, and speaks Sami language(s). Finally, participants recommended that the results be shared with the Sami communities.

Strengths and limitations

Besides the possible recruitment bias mentioned earlier, there may have been a selection bias concerning gender. The composition of the group of participants in this study reflects the gender balance in health- and elderly care professions in Norway, both being dominated by females. What the group composition of the participants does not reflect is the amount of Sami who yoik compared to the estimated total Sami population size. Although yoik may be seen as iconic to the Sami culture, the majority of the Sami people today do not yoik, due to reasons explained in the introduction. Furthermore, the rather homogenous age- and geographical distribution of the participants does not reflect the total Sami population. Regarding the geographical distribution of the participants, most of them lived in municipality centres in rural areas. However, similar to the general population, the majority of the present-day Sami live in urban areas (Broderstad & Broderstad, 2014; Broderstad & Sørli, 2012). Yet another possible selection bias, the absence of music therapists, might reflect the employment grade of music therapists within Sami healthcare. Furthermore, it might reflect music therapists' level of 'yoik awareness' or 'yoik knowledge', thus reflecting the level of yoik competence in general in healthcare professionals' education, including music therapy. However, in our opinion, these limitations do not reduce the value of the data collected, as some hitherto undocumented knowledge concerning Sami yoik has been disclosed. The data collected in this study also reveal possible explanations to the sensitivity of this research topic. The ability to adjust to a sensitive topic can be considered as a strength in this study, reflecting our understanding of ethical research methodologies. Our study outlines some of the conditions required for a potential research of yoik as a music therapy intervention in Sami elderly and dementia care. Furthermore, our study contributes additional knowledge of issues within culturally sensitive music therapy. Our findings may thus have transfer value to other cultural minorities in any society, not least those with indigenous populations.

Implications for music therapy

The reasons for the absence of music therapists among the participants were complex. They include the fact that there were no music therapists working in those institutions we managed to recruit from, or if there were, the music therapist(s) might lack relevant experience. However, music therapists might find this study adding useful information to guide their professional praxis. No matter where music therapy professionals work, the findings of our study call for increased awareness not only of including indigenous music into the music therapy repertoire, but also for knowledge of the possible assimilation history of the actual group of indigenous people, as this history often disregarded traditional indigenous music (Olsen, 2017). Olsen addresses this competency as an ability of being *culturally empathetic* (Olsen, 2017). Music therapy, music-centered or not, touches people in a particular way because it utilizes music, thus

reaching deep levels of our sentient bodies (Aigen, 2005; Levitin, 2013). In the case of our study, the mode of indigenous music is, as mentioned, traditional yoik a cappella. In other groups of patients or clients in other places, it could be something else. In order to work in the focus person's best interest, therapy needs to meet the person at "home," i.e. in therapeutic landscapes where the person feels familiar and safe (Mehus et al., 2019; Truasheim, 2014).

Conclusion

Yoik has been described by many scholars since the seventeenth century, but little is known about yoik from a health perspective (Arnberg, 1969; Graff, 2004; Hämäläinen et al., 2017, 2020, 2018; Hilder, 2015; Jones-Bamman, 1993; Stoor, 2015). The results of this study reveal yoik as an existential necessity for many of the participants of this study. The participants agreed unanimously that yoik has a potential as a non-pharmacological intervention in Sami elderly and dementia care, and deserves to be further investigated.

The work of the Truth and Reconciliation Commission is taking place in Norway right now. One measure of reconciliation could be increasing the necessary efforts on a practical every day level to provide culturally sensitive and safe elderly and dementia care. Moreover, it is expected that the knowledge and expertise about culturally sensitive and safe music therapy will be of relevance for future dementia care given the steadily increasing group of immigrants within Norwegian and other communities.

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Forespørsel om deltakelse i forskningsprosjektet

"Joik og helse"

Bakgrunn og formål

Dette brevet er en informasjon og forespørsel om deltakelse i forskningsprosjektet «Joik og helse». Du inviteres til å delta i et forprosjekt med tanke på et større prosjekt senere. Hovedprosjektet er tenkt som en doktorgradsstudie i samarbeid med NAFKAM (Nasjonalt forskningscenter innen komplementær og alternativ medisin, Institutt for samfunnsmedisin), Senter for samiske studier, og Tromsø museum, alle ved UiT Norges arktiske universitet.

Både forprosjektet og hovedprosjektet vil rette oppmerksomheten mot joik, fordi joik, sammenlignet med andre folkelige sangtradisjoner, har særegne trekk for eksempel om hvordan man bruker stemmen, når og hvor man joiker, og hvordan en joik blir til. I tillegg er joiken blant de eldste sangtradisjonene i Europa som fremdeles er i live.

I forprosjektet forespørres personer som har personlig erfaring med og forhold til joik om intervjuer. Hensikten med forprosjektet er å samle inn viktig bakgrunnsinformasjon fra slike nøkkelpersoner for å kunne lage en kvalitetssikret doktorgradsstudie. Hensikten med doktorgradsprosjektet er å finne ut av og belyse et mulig aspekt ved joiking som hittil ikke har fått vitenskapelig oppmerksomhet, nemlig joikens mulige rolle som helseforebyggende faktor. Joiken blir i prosjektet betraktet mot en teoribakgrunn som handler om de grunnleggende forutsetninger for menneskets helse og evne til å leve med forskjellige påkjenninger. Prosjektet vil bidra med studier om hvorvidt sang som sådan, og joik som en egenartet form for sang, kan bidra til helse og livskvalitet.

Hva innebærer deltakelse i studien?

Kunnskapen som prosjektet søker er enkeltmenneskers erfaringer og opplevelser i forbindelse med joiken. Spørsmålene som stilles i intervjuet er åpne slik at de gir rom

for den enkeltes fortelling. Det betyr også at den enkelte informanten selv regulerer hvor mye og hva slags informasjon som deles.

Praktisk gjennomføring

Intervjuene vil bli gjennomført der du foretrekker det. Tid og sted avtales nærmere mellom deg og intervjuer, undertegnede forsker Soile Hämäläinen. Det vil bli benyttet digital opptaker i intervjuene. Opptakene vil bli skrevet ut av intervjueren etterpå.

Hva skjer med informasjonen om deg?

Alle personopplysninger vil bli behandlet konfidensielt, og intervju-utskriftene vil bli aidentifisert, slik at du ikke kan gjenkjennes. Resultater av undersøkelsen vil bli publisert i vitenskapelige tidsskrift. Alt datamateriale, uavhengig av om det publiseres eller ikke, blir anonymisert og oppbevart slik at bare den som gjennomfører undersøkelsen kan identifisere den enkelte informant. Data lagres i en elektronisk database som ligger på et passordbeskyttet område. Kun personell tilknyttet studien vil få tilgang til studiens data. Alle personer som arbeider med studien, er underlagt taushetsplikt. Databehandlingsansvarlig for prosjektet er Institutt for samfunnsmedisin, UiT Norges arktiske universitet.

Forprosjektet skal etter planen avsluttes 31.12.2015. Datamaterialet blir likevel oppbevart inntil videre slik det er beskrevet ovenfor til bruk i evt. hovedprosjekt. Ved avslutning av hovedprosjektet, vil Tromsø Museum, Universitetsmuseet ta kontakt via forskeren for å gjøre en avtale med hver enkelt deltaker om å få tillatelse til å oppbevare de aidentifiserte intervjuene på de betingelsene deltakerne selv måtte ha. Museet ønsker å ta vare på dette materialet fordi det kan inneholde unikt kunnskap om et nytt kulturelt forskningsfelt. De som ikke vil ha sine intervjuer arkivert, vil få de slettet.

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke til deltakelse uten å oppgi noen grunn. Dersom du velger å trekke deg, vil alle opplysninger om deg bli slettet.

Dersom du samtykker til å delta, vennligst send inn samtykke-erklæring i vedlagte svarkonvolutt. Samtykke-erklæringen som skal returneres til NAFKAM er merket med rød skrift. Når undertegnede forsker har mottatt samtykke-erklæringen vil hun kontakte deg for nærmere avtale for intervju.

Har du videre spørsmål til studien, ta kontakt med

Forskningsleder Frauke Musial, NAFKAM, UIT Norges arktiske universitet, tlf. 77649282/77646650 (sentraltbord), e-post frauke.musial@uit.no

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08.04.2015

Mvh

Soile Hämmäläinen

Forsker

Frauke Musial, Ph.D.

Forskningsleder NAFKAM

Mottakers kopi

Samtykke til deltakelse i studien «*Joik og helse*»

Jeg har mottatt informasjon om studien, og er villig til å delta.

Jeg ønsker å bli kontaktet via

telefon: _____ (nummer, tid på dagen)

e-post: _____ (adresse)

papirpost: _____ (adresse)

(underskrift, dato)

Dette arket fylles ut og returneres til NAFKAM i vedlagte frankerte svarkonvolutt.

Samtykke til deltakelse i studien «*Joik og helse*»

Jeg har mottatt informasjon om studien, og er villig til å delta.

Jeg ønsker å bli kontaktet via

telefon: _____ (nummer, tid på dagen)

e-post: _____ (adresse)

papirpost: _____ (adresse)

(underskrift, dato)

Mottakers kopi

Forespørsel om deltakelse i forskningsprosjektet

«Joik i samisk helse og omsorg/eldreomsorg»

Bakgrunn og formål

Dette brevet er en informasjon og forespørsel om deltakelse i forskningsprosjektet «Joik i samisk helse og omsorg/eldreomsorg». Du inviteres til å delta i et forprosjekt som vil undersøke om det er behov for/ønske om et større prosjekt om dette temaet.

Hensikten er å finne ut hva samiske brukere av helsetjenester ønsker når det gjelder bruk av joik i livssituasjoner hvor man trenger offentlige helsetjenester, for å kunne tilby tjenester som samiske brukere er fornøyd med og har tillit til. Vi vet at joiken, og særlig personjoiken, kan ha stor betydning for den enkeltes følelse av verdi, tilhørighet, velvære og selvfølelse. Samtidig vet vi at det blant både joikende og ikke-joikende samer kan være sterke meninger om hvor og når det skal joikes, og hvem som skal joike med hvem. Derfor ønsker vi å få klarhet i om joik bør brukes, og eventuelt hvordan, i forbindelse med helsetjenester. Dette prosjektet har spesielt fokus på eldreomsorg og demens. Prosjektet ønsker å bidra til en bevisstgjøring om joiken som en ressurs som kan brukes for å bidra til en bedre livskvalitet hos personer rammet av demens eller andre nevrologiske sykdommer/skader. Det er i dag dokumentert at kjente sanger eller musikk kan fungere på den måten. Joiken som en tilsvarende mulig ressurs er ennå ikke undersøkt tilstrekkelig.

Vi henvender oss til mennesker som har personlig erfaring med eller forhold til joik, og som kan ha erfaringer med eller synspunkter om prosjektets tema.

Både dette forprosjektet og et eventuelt senere hovedprosjekt er et samarbeid mellom flere helse- og kulturinstitusjoner. Prosjektet ledes av NAFKAM (Nasjonalt forskningscenter innen komplementær og alternativ medisin, UiT) ved professor Frauke Musial. Samarbeidspartnere er seniorforsker Anita Salamonsen i NAFKAM/RKBU (Regionalt kunnskapssenter for barn og unge, UiT), professor Henrik Schirmer og professor Elena Kamycheva i UNN (Universitetssykehuset i Nord-Norge), førsteamanuensis Berit A. Bongo og førsteamanuensis Grete Mehus i forskningsgruppen RRNH (Rural and Remote Nursing and Healthcare in Arctic and North-Sami Areas, UiT) og professor Ola Graff i Seksjon for kulturstudier, UiT. Forskeren i prosjektet er musikolog Soile Hämäläinen, tilknyttet NAFKAM, UiT.

Hva innebærer deltakelse i studien?

Kunnskapen som prosjektet søker er enkeltmenneskers erfaringer, opplevelser og ønsker angående bruk av joik i forbindelse med for eksempel demens. Spørsmålene som stilles i intervjuet er åpne slik at de gir rom for den enkeltes fortelling. Du finner vedlagt en liste over kjernes spørsmålene under tittelen «Intervjuguide». Disse vil gi et inntrykk av hva som vil bli spurt under intervjuet. Den enkelte deltakeren regulerer selv hvor mye og hva slags informasjon som deles.

Praktisk gjennomføring

Intervjuene vil bli gjennomført på et sted du foretrekker. Tid og sted avtales nærmere mellom deg og intervjuer som er forsker Soile Hämäläinen. Det vil bli benyttet digital opptaker i intervjuene. Opptakene vil bli skrevet ut av en profesjonell transkriptør.

Hva skjer med informasjonen om deg?

Alle personopplysninger vil bli behandlet konfidensielt, og intervju-utskriftene vil bli avidentifisert, slik at du ikke kan gjenkjennes. Resultater av undersøkelsen vil bli publisert i vitenskapelige og faglige tidsskrift. Avidentifisert datamateriale blir oppbevart inntil videre til bruk i evt. hovedprosjekt, og deretter slettes. Alt datamateriale, uavhengig av om det publiseres eller ikke, blir anonymisert og oppbevart slik at bare den som gjennomfører undersøkelsen kan identifisere den enkelte deltakeren. Data lagres i en elektronisk database som ligger på et passordbeskyttet område. Kun personell tilknyttet studien vil få tilgang til studiens avidentifiserte data. Alle personer som arbeider med studien er underlagt taushetsplikt. Databehandlingsansvarlig for prosjektet er Institutt for samfunnsmedisin, UiT Norges arktiske universitet.

Prosjektet avsluttes 31.12.2017. Avhengig av resultatene i undersøkelsen, altså hva deltakerne synes om nødvendigheten/ønskeligheten av et større prosjekt, vil et større prosjekt eventuelt bli planlagt. Hvis et større prosjekt ikke er ønskelig, vil resultatene av undersøkelsen brukes til å forbedre og presisere informasjonen i temaheftet «Helse- og omsorgstjenester til den samiske befolkningen i Norge». Det betyr at du ved å delta i undersøkelsen er med på å utvikle helsetjenestene til den samiske befolkningen.

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke til deltakelse uten å oppgi noen grunn. Dersom du velger å trekke deg, vil alle opplysninger om deg bli slettet.

Dersom du samtykker til å delta, vennligst send inn samtykke-erklæring i vedlagte svarkonvolutt. Samtykke-erklæringen som skal returneres til NAFKAM er merket med rød skrift. Når undertegnede forsker har mottatt samtykke-erklæringen vil hun kontakte deg for nærmere avtale for intervju.

Har du videre spørsmål til studien, ta kontakt med

Prosjektleder, professor Frauke Musial, NAFKAM, UIT Norges arktiske universitet, tlf. 77649282/77646650 (sentralbord), e-post frauke.musial@uit.no

Forsker Soile Hämäläinen, NAFKAM, UIT Norges arktiske universitet, tlf. 99010155, e-post soile.hamalainen@uit.no

Dato

Mvh

Soile Hämäläinen, MA

Forsker

Frauke Musial, Ph.D.

Professor NAFKAM

nafkam



Mottakers kopi

Samtykke til deltakelse i studien «Joik i samisk helse og omsorg/eldreomsorg»

Jeg har mottatt informasjon om studien, og er villig til å delta.

Jeg ønsker å bli kontaktet via telefon: _____ (nummer, tid på dagen)

e-post: _____ (adresse)

papirpost: _____ (adresse)

(underskrift, dato)

Dette arket fylles ut og returneres til NAFKAM i vedlagte frankerte svarkonvolutt.

Samtykke til deltakelse i studien «Joik i samisk helse og omsorg/eldreomsorg»

Jeg har mottatt informasjon om studien, og er villig til å delta.

Jeg ønsker å bli kontaktet via telefon: _____ (nummer, tid på dagen)

e-post: _____ (adresse)

papirpost: _____ (adresse)

(underskrift, dato)

Intervjuguide for prosjektet «Joik i samisk helse og omsorg /eldreomsorg»

Spørsmål til dem som intervjues for første gang:

1. Joiker du? Hvis ja, når / hva / hvorfor joiker du? Hvordan har du lært å joike?
2. Hvordan føles det når du joiker/hører joik? Joikes det mye rundt deg?
3. Er det noen situasjoner/plasser hvor du ikke joiker? Hvorfor?
4. Har du opplevd restriksjoner mot joik? Hvordan var/er det for deg?
5. Synes du at det er en forskjell på joik og sang? Hvis ja, hvordan vil du beskrive forskjellen?
6. Hva syns du om at joik blir blandet sammen med annen musikk?
7. Hvordan ville du beskrive hva joik betyr for deg?
8. Er det noe mer du vil fortelle som vi ikke har snakket om?

Spørsmål til dem som intervjues for annen gang:

1. Hva slags tanker / følelser har du fått i etterkant av prosjektet du var med på? Er det noe annet eller mer du har kommet på som du ikke fikk sagt den gangen?
2. Hvis noe skulle ha vært gjort annerledes, hva skulle det vært og hvordan skulle det ha vært gjort?

Spørsmål til alle:

1. Se for deg en situasjon hvor du eller noen som står deg nært er helt avhengig av hjelp fra andre.

Hva tenker du om joik i en slik situasjon? Fortell gjerne om dine erfaringer med joik i en slik situasjon hvis du har noen.

2. Hva tenker du om å joike for eksempel i et sykehjem / aldershjem? Fortell gjerne om dine erfaringer hvis du har noen.

3. Se for deg en situasjon som i spørsmål 1. Se for deg i tillegg at du eller den andre har blitt innlagt i sykehus / sykehjem. Hva tenker du om at personalet skulle joike? Hvordan hadde det vært for deg å få høre din egen joik? Fortell gjerne om dine erfaringer hvis du har noen.

4. Hva synes du om tanken på å undersøke bruk av joik i demensomsorg i et større prosjekt? Hvordan skulle man gå frem for å gjøre noe slikt? Eller hadde det vært bedre å la være, og i så fall, kan du utdype hvorfor?

5. Er det noe jeg ikke har spurt deg om som du ønsker å føye til? Eller noe mer du ønsker å si om joik?

Om formidling av forskninga “Joik i samisk helse og omsorg/eldreomsorg”

Ved Nasjonalt forskningssenter innen komplementær og alternativ medisin – NAFKAM, UiT
Finansiert av Helse Nord
Prosjektleder Frauke Musial

Prosjekthistorikk

Dette prosjektet er et korttidsprosjekt finansiert fra Helse Nord i 2017, ledet av prof. Frauke Musial ved NAFKAM. Samarbeidspartnere i dette prosjektet er Henrik Schirmer og Elena Kamycheva i UNN (Universitetssykehuset i Nord-Norge), Berit A. Bongo og Grete Mehus i forskningsgruppen RRNH (Rural and Remote Nursing and Healthcare in Arctic and North-Sami Areas, UiT), Anita Salamonsen i NAFKAM/RKBU (Regionalt kunnskapssenter for barn og unge, UiT) og Ola Graff i Seksjon for kulturstudier, UiT. Forskeren i prosjektet er Soile Hämmäläinen, tilknyttet NAFKAM, UiT.

Hensikten med prosjektet har vært å finne ut

1. hva samiske brukere synes generelt om idéen om å forske på temaet «Joik i samisk helse og omsorg/eldreomsorg» og om det skal forskes videre/mer på temaet
2. deltakernes egne eventuelle erfaringer rundt temaet
3. om det trengs en større intervensjonsstudie
4. hva slags forskningsmetoder kunne være tilrådelige i en slik intervensjonsstudie

Metodikk har vært kvalitative forskningsintervjuer individuelt og i grupper. “Brukere” har vært både pårørende og helsefagarbeidere.

Resultater tilsier at forskningstemaet er ønsket. Det vil bli søkt videre finansiering for et hovedprosjekt.

For en slik søknad er det fint å ha samarbeidspartnere, f.eks. for datainnsamling og forskningsformidling. Jeg ønsker tilbakemeldinger på om dette kunne være noe for deg/din arbeidsplass.

Formidling av resultater

Det er dessverre ingen automatikk med videreføring av et forprosjekt til et hovedprosjekt.

Selv om dette prosjektet er et korttidsprosjekt og pilotstudie, er kunnskapen som allerede har kommet frem av den art at den er viktig å bli videreformidlet. Slik kan resultatene komme til den

samiske brukeren av helsetjenester til gode uavhengig av om vi får midler til å forske på dette videre eller ikke.

Jeg ønsker derfor å drøfte med dere en formidlingsplan. Det er å betrakte som et forslag og et utgangspunkt utarbeidet av meg og prosjektinstituttets medieteam. Tidsrommet for gjennomføring kan være inneværende kalenderåret.

Kontaktinfo: Soile Päivikki Hämäläinen, soile.hamalainen@uit.no, 99010155

Utkast til formidlingsplan

Steder å kontakte for artikkel/ innslag:

1. *Sagat*
2. *NRK Sápmi*
3. *Sámi magasiidna*
4. *Labyrint*: UiTs formidlingskanal, langlesing i populærvitenskapelig format
5. *Nord universitet* avd. Helsefag

Steder å sende artikkel:

Nifab.no
Forskning.no
Helsefak blogg
Sykepleien

Andre formidlingsoppdrag:

Rural and remote nursing and healthcare in arctic and north Sami areas (RRNH): En forskningsgruppe knyttet til sykepleieutdanning i Hammerfest og en av våre samarbeidspartnere i piloten om joik i samisk eldreomsorg

Utviklingssenteret

Nettverk for helsetjenester i sørsamiske områder: ved Ánne Lájla Westerfjell Kalstad, leder i Samisk legeforening. Nettverket strekker seg over til sørsamiske områder i Sverige.

SANKS

UiT: Helsefag - Aldring og eldreomsorg – master, profesjonutdanning medisin/psykologi, Demens og alderspsykiatriske lidelser – enkeltemne?

UiT Harstad, Institutt for vernepleie: foredrag/workshop?

Nord universitet avd. Helsefag: foredrag/workshop?

Global health v. UiT?

Barentssekretariatet?

Nrk.no: Ekko, Norgesglasset, Norge nå, Odđasat, Studio Sápmi?

svt.se?

yle.fi?

Steder å holde presentasjoner:

Foreslåtte formidlingskanaler 2018

Disse er foreslått i tillegg til vanlig vitenskapelig publisering og formidling

Steder å kontakte for artikkel/innslag

1. Ávvir, Sáágát, Finnmark Dagblad, Sør-Varanger avis, iFinnmark, Lapin Kansa

Andre lokale og regionale aviser som feks Nordlys, Finnmarken, Avisa Nordland, Fremover, Trønderavisa, Adresseavisen?

2. NRK Sápmi – ved M. S. Holmestrand, Berit Nystad
3. Sámi magasiidna – v Kirsi Paltto
4. Labyrint
5. Nord universitet avd. Helsefag
6. Ukeblader: Norsk ukeblad, Hjemmet, Allers, Familien

Steder å sende artikkel

Nifab.no

Forskning.no

Helsefak blogg

Sykepleien

Fagbladet

Tidsskriftet?

Presentasjoner

Samarbeidende institusjoner i prosjektet:

RRNH ved sykepleieutdanningen i UiT Campus Hammerfest – forelesninger (Soile)

Utviklingssykehjem i Karasjok + deres nettverk: deltakelse i resurssgruppemøter, årlige og regionale samlinger. Legge til en infopakke om tradisjonell joik som integreres i infopakken om kulturforståelse og etikk som utarbeides til helsepersonell. Dette nettverket inkluderer helsefaglinjer videregående skoler.

Mulige samarbeidspartnere og andre:

Nettverk for helsetjenester i sørsamiske områder – inkluderer svensk side “Kunskapsnätverk för samisk hälsa”

SANKS

Helseutdanninger: foredrag/workshop eller annen formidling ved

- Opplæringskontorene for offentlig sektor, her er lenke til f.eks Finnmark: <http://ok-finnmark.custompublish.com/helse-og-oppvekst.351083.no.html>
- UiT Helsefak;

Campus Harstad, Institutt for vernepleie

Nord universitet avd. Helsefag

Sametinget

Samiske kultur- og språksentre

Sámi allaskuvla

Demensforeninga m. Lokallag

Sámi nisson forum

Oslo Sámi searvi

– enn andre lokale sameforeninger?

Regionalt samisk kompetansesenter RESAK / Bufetat i Karasjok

Plattformer online

Aldring og helse: demensskolen

- Her mangler helt gamle minoriteter. Vi kan begynne med å tilby en pakke om samiske eldre
😊 **De har laget en egen sak om samisk demensomsorg med fokus på joik**

e-helse?

Andre formidlingsoppdrag

NRK Puls, NRK Ekko/populær viten, Frokost-TV, Norge nå

Svt.se

Yle.fi

Demensdagene, Forskningsdagene, Aldring og helse-fagdage