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# Value Patterns in Four Dimensions among the Indigenous Sami Population in Norway

## A Population-Based Survey

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**ABSTRACT** *Background:* This is a population-based study that explores and describes a set of personal values in indigenous Sami and non-Sami adults in Norway. Norway ratified the ILO convention no. 169 concerning indigenous and tribal peoples in independent countries in 1990. In accordance with the convention the integrity of the indigenous culture and values shall be respected. Our aim is to describe and explore value patterns among Sami and Norwegian populations.

*Method:* Cross-sectional questionnaire. From 24 local authorities, a total of 12,623 subjects between the ages of 36 and 79 were included in the analysis. The survey instrument consisted of a 19-item questionnaire of personal values and the analysis was based on responses from 10,268 ethnic Norwegian (just 6 questions were asked to them) and 2,355 Sami participants (1,531 Sami and 824 mixed Sami/ethnic Norwegian participants).

*Results:* From the 19 values, Sami respondents held the following five personal values in the highest regard: being in touch with nature; harnessing nature through fishing, hunting and berry-picking; preserving ancestral and family traditions; preserving traditional Sami industries and preserving and developing the Sami language. On the other

hand, Sami respondents' least important values included modern Sami art and the Sami Parliament (Sametinget). The ethnic Norwegians also held being in touch with nature as a very important value. Sami reported significantly higher scores for experience of ethnic discrimination and fear of losing their work/trade than ethnic Norwegians. The last 13 questions were just asked to Sami and mixed-Sami respondents. According to those questions four dimensions associated with personal values were identified among the indigenous Sami population: "Traditional Sami Values," "Modern Sami Values," "Contact with Nature" and "Feeling of Marginalisation." Traditional and modern Sami values were both characterised by significantly higher scores among females, the lowest age bracket and those who considered themselves Sami. Within the Traditional Sami Values dimension, higher scores were also recorded in participants who were married or cohabiting, living in majority Sami areas, satisfied with "way of life" and members of the Læstadian Church. The Modern Sami Values dimension showed higher scores among participants with high household incomes. The Contact with Nature dimension had significantly higher proportions of Sami, married or cohabitants, and participants content with their way of life; age, geographical area and household income were found to be insignificant variables within this dimension. Feeling of Marginalisation was characterised by significantly greater proportions of males, individuals of working age, residence in Norwegian-dominated areas, self-perceived Sami ethnicity, low household income, poorer self-reported health and dissatisfaction with way of life.

*Conclusion:* Four distinct value patterns and relationships to well-being and self-reported health were identified in the indigenous Sami population. The four dimensions reflect important aspects of present-day Sami society.

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KEYWORDS value patterns, ethnicity, indigenous, health, Sami, SAMINOR

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## Introduction

The international community now recognises the importance of preserving the traditional knowledge and social values of indigenous peoples, such as those of the Sami in Europe's far north. This is particularly valid in a globalised world where scientific advances and fundamental values dominate a majority of social arenas (Bergström 2001). Høgmo (1989) defines "culture" as the common opinion people in a group ascribe to themselves and their surroundings:

Culture can be understood as a group of people's common ideas of values, thinking and ways of solving life tasks. In other words, the term refers to a system of interpersonal understanding mechanisms. (Høgmo cited in Fyhn 2013)

Høgmo (1989) says that Sami culture is described as shared Sami values, mind-sets and ways of solving life tasks. And therefore values are key elements of people's cultural repertoire (Lindholm 1997). The Sami are an indigenous ethnic group which differs in many respects from the general majority population (ethnic Norwegians) in areas such as social structure, language and culture (Eriksen 2003). Thus the use of the term *Sami values* refers to the collective Sami preferences of a cultural and immaterial nature. These values are sometimes difficult to identify in certain social arenas, partly because Sami values are not subject to formal and institutional change. Balto (1997) emphasises that the distinction between traditional and modern Sami knowledge and fundamental values lies in the contrast between informal socialisation and knowledge acquisition in the home environment in the traditional context, and, in the modern context, socialisation and education in formal educational institutions. In this regard such notions are used to stress that traditional Sami knowledge is developed in daily routines with a low level of socially imposed functional differentiation and specialisation, whereas modern Sami knowledge is largely associated with functional differentiation through requirements of formal education from modern educational institutions, for example to gain access to the labour market. In the early years of modernisation, consequently, the Sami were left behind. This was one of the causes of the development of stigma (Eidheim 1977), leaving Sami individuals in a latent position (Høgmo 1986). The Sami share a history of colonisation, occupation (during the Second World War) and nation-state assimilation (Hansen *et al.* 2008), the latter resulting in partial destruction of Sami cultural heritage and identity through systematic denial and stigmatisation of Sami values and norms. The political debate on Sami issues throughout

the twentieth century has pointed out that the greatest act of injustice committed against the Sami was the Norwegian Government's unwillingness to accept the fact that the Sami have their own values, norms, culture and identity (Eriksen 2003).

However, the circumstances have since changed and the situation may now be considered to be characterised by mobility and innovation rather than latency (Paine 2003). In 1980 two public committees were appointed to consider Sami cultural, linguistic, political and material rights, resulting in the Norwegian Parliament (Stortinget) passing the Sami Act in 1987 and the formation of the Sami Parliament (Sametinget) in 1989. Further, an amendment to the Norwegian Constitution (§108) was passed in 1988, obliging the Government to accommodate the Sami people in securing their language, culture and role in society, including the preservation of Sami social values. The International Labour Organisation (ILO) Indigenous and Tribal Peoples Convention (C169) of 1989 was ratified by Stortinget in 1990. Through these affirmative actions, Norwegian authorities took the initiative in including the Sami people by increasing their rights to participate in "official" society (Josefsen 2008).

Today the challenge faced by the Sami population consists of conserving traditional knowledge, values and cultural traits, whilst both the local community and the world continue to change (Flemmen & Kramvig 2008). Many Sami people find themselves in a transitional state where it is important to adapt to a new world without losing sight of (or forgetting) the values of the traditional world (Young 2008). Considering the processes of revolution and upheaval that the Sami have experienced (due to Norwegianisation, the building of nation-states, and, in recent times, the revitalisation and integration of Sami culture and identity in the modern nation-state and the international community), the Sami have progressed from being strongly stigmatised to being generally treated as equals (Pedersen, Høgmo & Solbakk 2012).

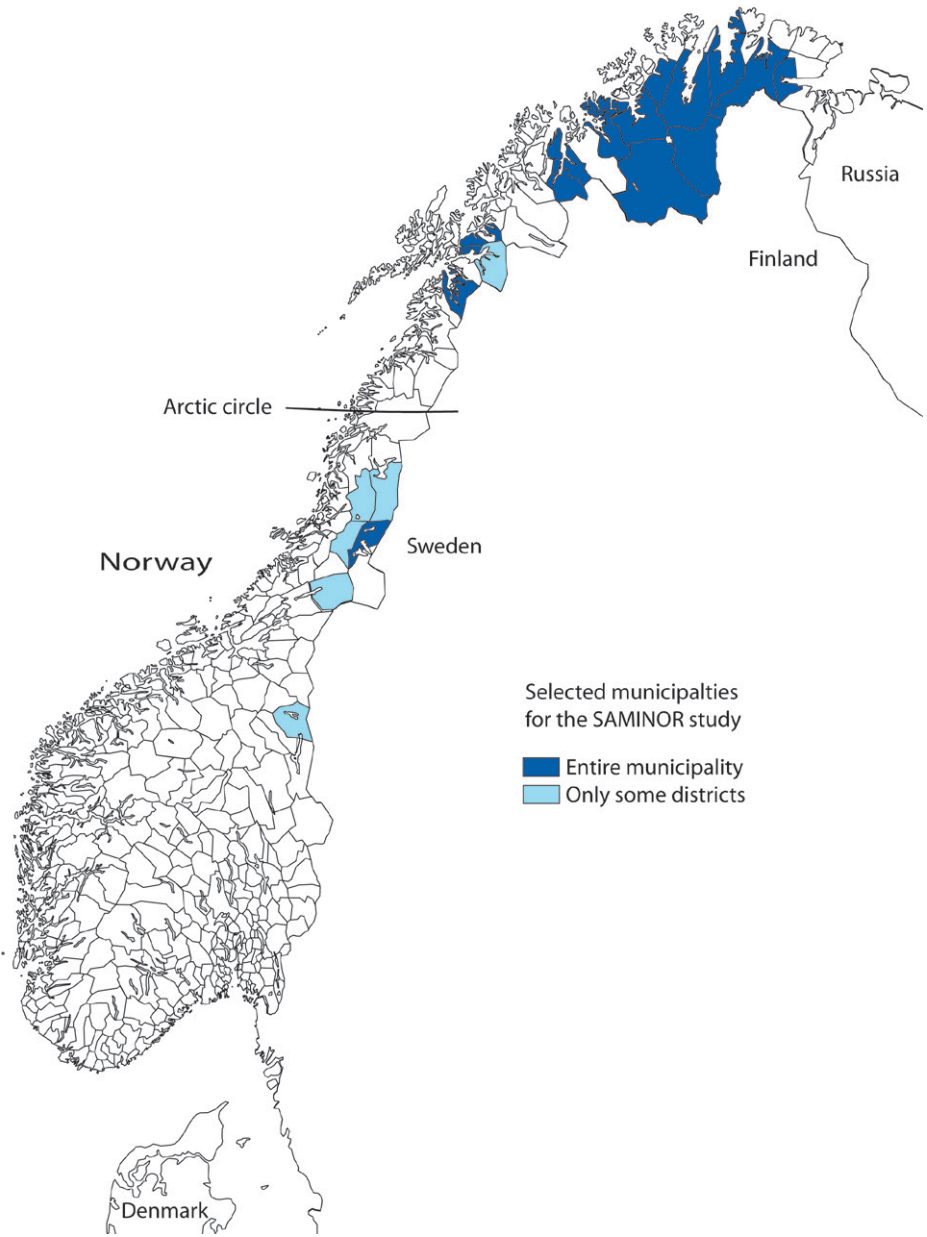
Values may be defined as an individual's understanding of what is considered to be fundamental goals for one's own existence and social development (target values, or terminal values) and perceived correct approaches to reaching these goals (median values, or instrumental values). This approach to determining values is *descriptive* because it paints a picture of what the members of the population themselves perceive as *the desirable* (Hellevik 2008). A *normative* approach, on the other hand, implies studying what religious, philosophical or other doctrines say about what one should desire; what is desirable. It is also possible to consider the expectations placed upon the individual by its surroundings, from informal expectations and norms to formal legislation and regulations (Hellevik 2008). The term *value*

is also used in everyday language in a more literal sense about that which is sought after (i.e., a desirable object).

Values have been granted pride of place in many analyses of social conditions. Researchers sometimes use *social background variables* or *characteristics* (such as sex, age, ethnicity, place of residence, level of education, profession and income) to help explain behaviour. Within the social sciences there is a high level of consensus regarding which specific variables are of interest in a survey. Specifically, within research into indigenous peoples, the ethnicity variable is often used to explain differences between the indigenous population and the general population; an example of which may be that Sami people are more concerned with the conservation of ancestral and family traditions than ethnic Norwegians. One of the questions that spring to mind, then, is what lies behind this ethnological difference? It is not immediately apparent why being Sami or ethnic Norwegian should be consequential for one's desire to conserve ancestral and family traditions. With such a substantial gap between the presumed cause (ethnicity) and effect (conservation of ancestral and family traditions) more information about intermediate mechanisms is required to understand what generates the correlation (Hellevik 2008).

*Attitudes* are explanatory variables that are often used to provide insights into such intermediate mechanisms. An attitude is a positive or negative emotional opinion that influences how people act given a certain phenomenon. For example, an individual's or a group's (i.e. the Sami) attitude towards harnessing the wild through fishing, hunting and berry-picking (i.e., whether one enjoys or dislikes fishing, hunting, berry-picking) can increase or decrease the probability of "being in touch with nature." Should such attitudes be used to explain the importance of "being in touch with nature" the distance between cause and effect would be so small that the explanation may be taken for granted and the result therefore seems too obvious to be of interest.

However, using attitudes to justify certain phenomena may be difficult because there are so many possible attitudes; perhaps just as many as there are phenomena. Therefore, it would be impossible to create a standardised set of attitude questions in a survey such as the SAMINOR study; on the other hand, social characteristics, which, using a few standard questions and variations may be used in almost any survey. This is where values become important. As predictor of individuals' behaviour, values are located between social characteristics and attitudes on the influence chain. Values arise from and are influenced by social background and group membership (Sami, Norwegian). They guide and (may) affect attitudes towards certain given phenomena. Thus, by using values as explanatory variables, some



Map 1. Study areas of the SAMINOR study.

issues relating to social characteristics and attitudes can be avoided. The distance between cause and effect is neither too great to make the findings difficult to understand, nor too small to make them uninspiring. Values, then, can provide meaningful predictions of health and well-being, in our case: Self-reported health and content with way of life.

### Goal (Purpose of the Study)

The purpose of this study is to highlight indigenous values among the Sami population in Norway. We want to test (1) how important different values are for the Sami population and the ethnic Norwegians (such as contact with nature, family, traditional values, modern values, feeling of marginalisation etc.); (2) identify and describe potential value patterns; and (3) potential explanation of how these factors interact with demographic characteristics (gender, age, marital status, living areas, income, religion) and predictors for well-being (content with way of life).

## Materials and Methods

### The SAMINOR Study

In 2003–2004 the Centre for Sami Health Research at UiT The Arctic University of Norway, in collaboration with the Norwegian Institute of Public Health, carried out a population-based survey (SAMINOR) in areas with mixed ethnic Sami and ethnic Norwegian populations. The SAMINOR study is a cross-sectional epidemiological study of adults in the five northernmost counties of Norway: Finnmark, Troms, Nordland, Nord-Trøndelag and Sør-Trøndelag (Map 1). The study has been described in detail elsewhere (Lund *et al.* 2007). Data was collected using a questionnaire on values, ethnicity, and social conditions. The questionnaire was self-administered and machine-readable.

### Sample

All inhabitants of the areas defined in the SAMINOR study between 36 and 79 years of age were invited to participate in the study. Of the 27,151 individuals who were invited to participate, 16,538 (60.6 %) participated and gave informed consent to the research. Of those attending the screening, 13,366 completed an additional questionnaire, which contained the questions on values (86 % of respondents to the initial questionnaire). Kvens (Finnish immigrants) (n=497) and participants who did not disclose ethnicity (n=246) were excluded from analysis. After these exclusions, the sample consisted of 12,623 individuals (46.5 % of those invited). The ethnic distribution was found to be 18.7 % indigenous Sami and 81.3 % ethnic Norwegian.

Table 1. The 19 value items

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**The 19 value items**
**Item no.**


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To be answered by all:

- V1 Is it important to you to have contact with nature?
- V2 Is harnessing of nature through fishing, hunting and berry-picking important to you?
- V3 Is maintenance of family traditions important to you?
- V4 Have you experienced bullying/discrimination due to your ethnic background?
- V5 Do you think discrimination of ethnic minorities can have negative impact on health?
- V6 Do you feel you are being forced from your work/trade?

Questions to those with Sami background:

- S1 Are Sami clothing traditions important to you?
  - S2 How important is *duodji* to you?
  - S3 What does maintenance and development of Sami language mean to you?
  - S4 Is it important to you to live in a community where you can meet other Sami on daily basis?
  - S5 Do you think maintenance of typical Sami industries is important?
  - S6 Is development of the modern Sami school system important to you?
  - S7 Is it important with modern work places in Sami communities?
  - S8 What does Sami media (radio, TV, newspapers, books) mean to you?
  - S9 What does modern Sami art mean to you?
  - S10 What do you think of the stronger international contact the Sami society and culture have obtained?
  - S11 What does the Sami Parliament mean to you?
  - S12 Do you consider pollution/interference with nature a threat to the Sami way of life?
  - S13 Do you feel that modern developments displace Sami culture?
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For value items V1 even V3 and S1 even S11 the respondents were given the option to range the experiences from: "Insignificant" (coded to the value "0" in the analysis), "Less important" (coded "1"), "Important" (coded "2") or "Very important" (coded "3").

For value items V5, V6, S12 and S13 the respondents were given the option to range experiences as "Absolutely not" (coded "0"), "To some extent" (coded "1"), "To a small extent" (coded "2") and "To a large extent" (coded "3").

For value item V4 the respondents were given the option to range the experiences from "Never" ("0"), "Rarely" ("1"), "Sometimes" ("2") or "Very often" ("3").

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## Study Variables

*Value questions:* There were 19 different questions about values (see Table 1). The questions on values reflect important aspects of Sami culture and identity. However, the six first questions (V1–V6) were also relevant to the non-Sami population living in Norway, whereas the next thirteen questions (S1–S13) were mainly relevant for the Sami population, and were therefore only asked to those with a Sami background.

*Ethnicity:* Ethnic classification was based on the question: “What do you consider yourself to be?” The available responses were: “Sami,” “Kven,” “ethnic Norwegian” or “Other.” Participants were allowed to provide more than one answer. Three categories were then created based on the responses: (1) Sami, (2) Sami/ethnic Norwegian (mixed background), and (3) ethnic Norwegian. The mixed Sami/ethnic Norwegian group had many similarities with the ethnic Norwegians, for example a strong Norwegian sense of belonging (Lund *et al.* 2007).

*Sami language AdminArea:* In 1990 the Norwegian Government amended the Sami Act (1987) to make the Sami language an official language in the local authorities of Kautokeino, Karasjok, Kåfjord, Nesseby, Porsanger and Tana. This area is referred to as the “Administrative Area of the Sami Language” (The Sami Act 1987). The Sami Act aims to safeguard and develop the language, culture and way of life of the Sami people in general, and within the Sami language AdminArea, the Sami population has the right to receive official correspondence in Sami and to use the language in official contexts and in schools (Jernsletten 1994).

*Gross household income:* The incomes of survey participants in 2003/2004 were categorised according to annual gross household income in Norwegian kroner (NOK). “Low income” was defined to be less than NOK 150,000, “Low-to-medium income” as NOK 151,000–450,000, “Medium-to-high income” as NOK 451,000–600,000 and “High income” as more than NOK 600,000.

*Religion:* Religion was assessed by membership in the Læstadian Church. Sami people differ as to religious upbringing. A special type of the Lutheran Church, Læstadianism, is widespread among the Sami in the Northern regions of Norway. The Læstadian religion was reported by 12.6 % of participants considering themselves Sami, 9.4 % of mixed Sami/ethnic Norwegian participants and 4.7 % of ethnic Norwegian participants.

*Self-reported satisfaction with way of life:* The respondents were asked: “On the whole, are you satisfied with your way of life?” with the available responses of “Very dissatisfied,” “Dissatisfied,” “Rather satisfied” or “Very satisfied.”

*Self-reported health:* This was measured using the following questions: “What is your current state of health?” Available responses were “Poor,”

“Not very good,” “Good” and “Very good.” During analysis, the variable was dichotomised into “Poor/Not very good” or “Good/Very good.”

### Statistical Analyses

Chi-square tests were applied to compare study variables in Sami, Sami/ethnic Norwegian and ethnic Norwegian adults. Value indices are presented in two bar charts. The first chart includes the five value items (one item was excluded as it had been presented previously (Hansen *et al.* 2008; Hansen, Melhus & Lund 2010) to Sami, Sami/ethnic Norwegian and ethnic Norwegian populations, while the second chart shows the 13 value items that apply only to participants of Sami background. Factor analysis of the 19 values was performed using SPSS v. 20, applying the principal component extraction of four factors with eigenvalues above 1.2 and Varimax with Kaiser Normalisation rotation method. To obtain factors that were straightforward to interpret, the specifications of the model were chosen by studying the screen plot. The four factors explained 61.1 % of the total variation in the data. Four factor-based scales were created by summarising the items with high loadings on each factor. To identify characteristics of each factor-based scale, univariate and multiple regression analysis were conducted separately for each of the four scales. The following variables were entered in the adjusted analyses: gender, age, marital status, the Sami language Admin Area, ethnicity, household income, religion, and satisfaction with way of life.

### Ethics Approval

The Regional Committees for Medical and Health Research Ethics (REK-Nord) approved the study. Participants included in the study provided signed written consent.

## Results

### Demographics

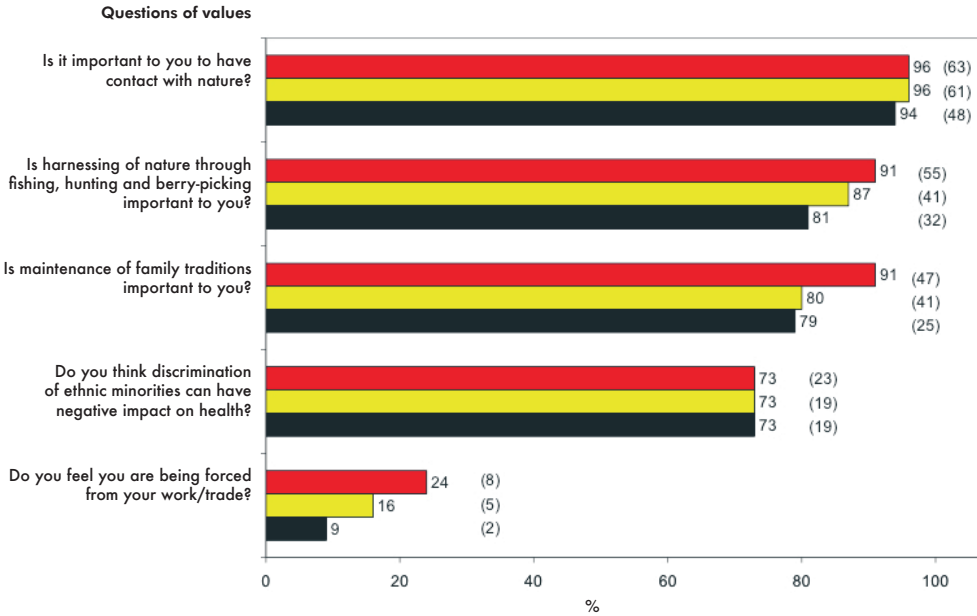
The study included a total of 12,623 participants: 6,009 males and 6,614 females. The mean age was 54.7 years (SD 11.0, range 36–79). Table 2 shows the characteristics of the sample divided into three ethnic groups: Sami (n=1,531), Sami/ethnic Norwegian (n=824), and ethnic Norwegian (n=10,268). We note that Sami and Sami/ethnic Norwegians are more likely to be single than ethnic Norwegians and have poorer self-reported health (poorest among the mixed Sami/Norwegians). Most of the Sami population live within the Sami Language AdminArea. The household income is somewhat lower for the Sami, however, this may be explained by internal trade and greater reliance on subsistence farming and husbandry. More Sami than

Table 2. Distribution of characteristics in the sample (n=12,623)<sup>1</sup>

	Sami (n = 1531) %	Mixed background (Sami/ethnic Norwegian) (n = 824) %	Ethnic Norwegian (n = 10268) %	Effect of ethnicity (p-value <sup>2</sup> )
<b>Gender</b>				
Male	48.1	48.7	47.4	
Female	51.9	51.3	52.6	0.72
<b>Age</b>				
36–49	38.4	39.7	34.6	
50–64	40.2	41.0	43.3	
65–79	21.4	19.3	22.1	0.002
<b>Marital status</b>				
Married/Cohabiting	71.3	69.0	78.2	
Single	28.7	31.0	21.8	<0.001
<b>The Administrative Area</b>				
Within	79.8	54.9	15.9	
Outside	20.2	45.1	84.1	<0.001
<b>Household income (NOK)</b>				
Low	15.3	13.6	9.6	
Medium low	56.1	55.7	56.0	
Medium high	25.9	28.1	30.7	
High	2.7	2.5	3.7	<0.001
<b>Religiousness:</b>				
<b>Laestadianism</b>				
Yes	12.6	9.4	4.7	
No	87.4	90.6	95.3	<0.001
<b>Content with your way of life</b>				
Very content	32.4	29.2	32.4	
Quite content	55.4	59.5	59.0	
Discontent	10.3	9.8	7.6	
Very discontent	2.0	1.5	1.0	<0.001
<b>Self-reported health (SRH)</b>				
Very good/good	67.2	63.3	68.3	
Poor/not very good	32.8	36.7	31.7	<0.005

<sup>1</sup> Subgroups might not total 12,623 due to missing values.<sup>2</sup> Chi-square test.

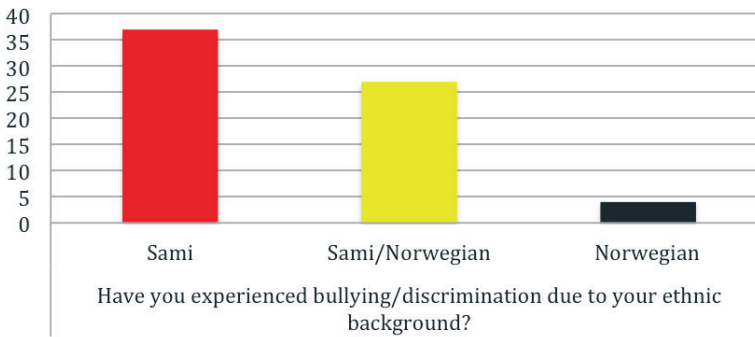
Fig. 1a. Values indices 1 (0–100%) SAMINOR study (2002–2004)



Label value = "Very important" + "Important" or "To a large extent" + "To some extent" ( ) = "Very important" or "To a large extent"

■ Sami ■ Sami/Norwegian ■ Norwegian

Fig. 1b. Experience of ethnic discrimination



ethnic Norwegians were members of the Læstadian Church. Satisfaction with “way of life” is practically independent of ethnicity. As 13 of the 19 value statements applied only to participants with Sami background, several of the analyses in this article concern specifically the 2,355 Sami participants in the sample.

### Questions on Values for Participants with Sami and Ethnic Norwegian Background

We can see that the desire to stay in touch with nature stands firm in both the Sami and the ethnic Norwegian populations. Sami participants, however, are more likely than ethnic Norwegians to respond that this value is “very important” (63 % versus 48 %). Utilising natural resources through fishing, hunting and berry-picking is more important to the Sami than to the ethnic Norwegians (91 % versus 81 %). The desire to conserve family and ancestral traditions is also more important to the Sami compared to ethnic Norwegians (91 % versus 79 %); however, on this particular question, those with mixed Sami and ethnic Norwegian backgrounds are more similar to ethnic Norwegians. On the question of whether discrimination of ethnic minorities may have negative health implications, the various ethnic groups seem to have similar views. However, 37 % of the Sami reported ethnic discrimination, 27 % among the mixed Sami/ethnic Norwegians, and only 4 % among the ethnic Norwegians (Fig. 1b). Last, but not least, we found that 24 % of the Sami population felt compelled to leave (or coerced out of) their line of work; this was a significant number compared to 16 % of those with mixed (Sami/ethnic Norwegian) background and 9 % of ethnic Norwegians (Fig. 1a).

### Questions on Values for Participants with Sami Background

Fig. 2 shows the 13 questions on values only relevant to the Sami population, listed according to support levels recorded in the survey. The strongest values within the Sami population (after contact with nature, use of nature and family traditions) were found to be the desire to preserve traditional Sami industries (89 %), closely followed by preservation and development of the Sami language (84 %), the importance of modern employment opportunities (80 %), the international contacts gained by the Sami community (78 %), living in a local community in which one may encounter other Sami people on a daily basis (74 %), and the development of the modern Sami education system (73 %). At the same time, many Sami people felt that modern developments had displaced the Sami culture (71 %). Further, a significant majority of those who consider themselves to be of Sami descent are interested in Sami media (71 %), Sami clothing traditions (70 %) and believe

Fig. 2. Value indices II (0–100%) SAMINOR Study (2002–2004)

**Questions of values**

Do you think maintenance of typical Sami industries is important?

What does maintenance and development of the Sami language mean to you?

Is it important with more modern work places in Sami communities?

What do you think of the stronger international contact the Sami society and culture have obtained?

Is it important to you to live in a community where you can meet other Sami on a daily basis?

Is development of the modern Sami school system important to you?

Do you feel that modern development displaces Sami culture?

What does Sami media (radio, TV, newspapers, books) mean to you?

Are Sami clothing traditions important to you?

Do you consider pollution/interference in nature a threat to your Sami way of life?

How important is *duodji* to you?

What does modern Sami art mean to you?

What does the Sami Parliament mean to you?

Label value = "Very important" + "Important" or "To a large extent"  
+ "To some extent" ( ) = "Very important" or "To a large extent."

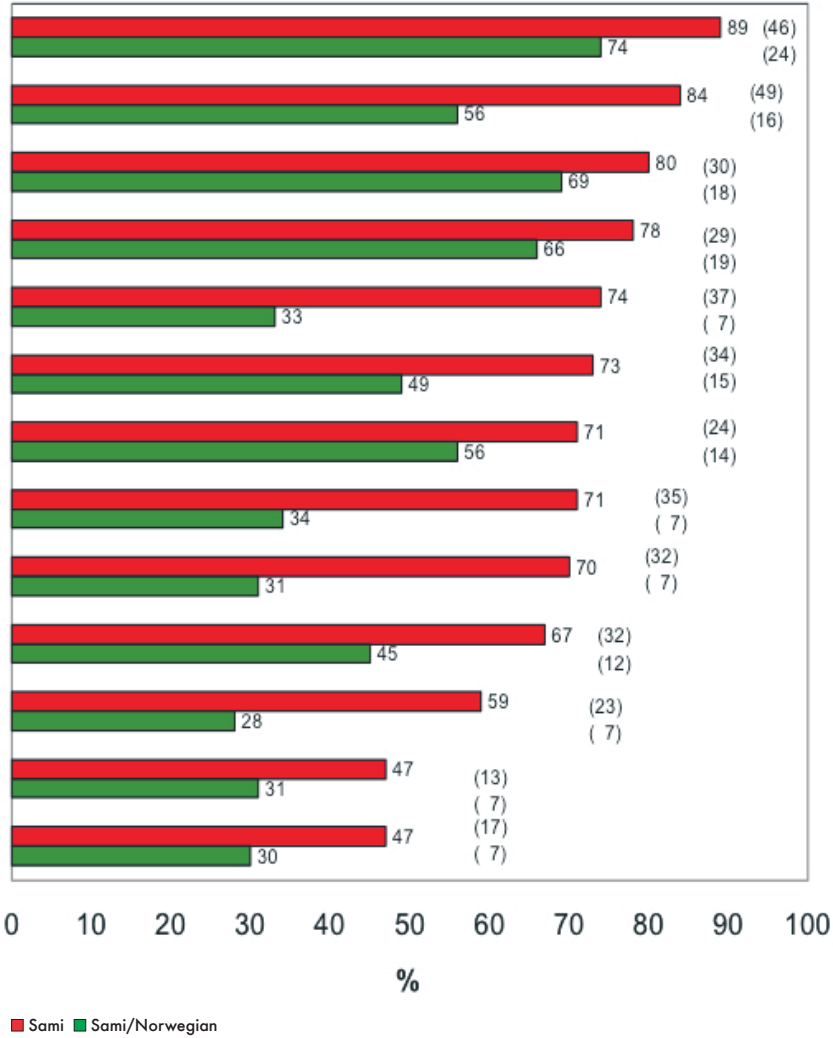


Table 3. Summary of exploratory factor analysis for 19 value items (n=2.355)<sup>1</sup>

Item	Rotated Factor Loadings <sup>2</sup>			
	Traditional Sami Values	Modern Sami Values	Contact with Nature	Feeling of Marginalization
Are Sami clothing traditions important to you?	0.82			
Is it important to you to live in a community where you can meet other Sami on a daily basis?	0.79			
How important is <i>duodji</i> to you?	0.77			
What does maintenance and development of the Sami language mean to you?	0.74			
What does Sami media (radio, TV, newspapers, books) mean to you?	0.70	0.45		
Do you think maintenance of typical Sami industries is important?	0.55	0.44		
Is maintenance of family traditions important to you?	0.53		0.44	
Do you consider pollution/interference in nature a threat to your Sami way of life?	0.47			
What do you think of the stronger international contact the Sami society and culture have obtained?		0.79		
What does modern Sami art mean to you?		0.70		
What does the Sami Parliament mean to you?		0.69		
Is development of the modern Sami school system important to you?	0.52	0.66		
Is it important to have additional modern work places in Sami communities?		0.57		
Do you think discrimination of ethnic minorities can have negative impact on health?		0.52		
Is it important to you to be in contact with nature?			0.88	
Is exploitation of nature through fishing, hunting and berry-picking important to you?			0.86	
Do you feel you are being forced from you work/trade?				0.74
Have you experienced bullying/discrimination due to your ethnical background?				0.63
Do you feel that modern development displaces Sami culture?				0.42
Eigenvalues	7.47	1.73	1.22	1.19
% of varians	39.3	9.1	6.4	6.3
$\alpha$	1.34	1.52	0.96	1.27

<sup>1</sup> n=Samis+Samis/ethnic Norwegian<sup>2</sup> Rotation Method: Varimax with Kaiser Normalization

Note: Factor loading over 50 appear in bold.



pollution or interfering with nature represents a threat to Sami existence (67 %). The two least important Sami values are Sami art (visual art, music, film and theatre) and the importance of Sametinget. However, the *duodji* (Sami handicrafts) gained higher scores than modern Sami art. Sami and mixed Sami/ethnic Norwegians have differing fundamental values, where the latter attach much less importance to Sami values.

## Value Patterns and Characteristics

Table 3 shows the factor loadings after rotation. The value items that cluster around the same components suggest that Component 1 captured all *the traditional Sami value variables*, with very high loadings (0.47–0.82). *Modern Sami values* were covered by Component 2, while Component 3 covered the *contact with nature* (and family traditions) variables. Finally, Component 4 accounted for the *feeling of marginalisation*.

Four linear regression analyses were performed to test for associations among the four factor-based value scale variables and selected characteristics. Table 4 presents the univariate and multivariate linear regression results. The Traditional and Modern Sami Values scales showed significantly higher scores in women, young respondents and those who consider themselves Sami (excluding participants of mixed Sami/ethnic Norwegian backgrounds). Within the Traditional Sami Value scale, higher scores were recorded in married and cohabiting participants, those living in Sami majority areas, those who were satisfied with their way of life, and members of the Læstadian Church. Also, within the Modern Sami Value pattern, respondents with the greatest household income scored higher. The Contact with Nature pattern scale was characterised by significantly higher proportions of married or cohabiting subjects and those who considered themselves as Sami and not Sami/ethnic Norwegian and were also more content with their way of life. Finally, participants with high scores on the Feeling of Marginalisation scale were significantly more likely to be male, of working age, living in Norwegian dominated areas, Sami (not Sami/ethnic Norwegian), low household income, and more dissatisfied with “way of life.”

Fig. 3 presents self-reported health (SRH) by the four factor-based value scales (in percentiles). Unadjusted estimates show that Sami respondents who score high for Traditional and Modern Sami Values have better SRH, and respondents who score high for Feeling of Marginalisation have poorer SRH. However, after adjusting for age, gender, marital status and geographical area, only Feeling of Marginalisation was significant ( $p < 0.001$ ).

Table 4. Regression models of variables associated with factor-based value patterns in Sami adult. Variables are mutually adjusted for each other.

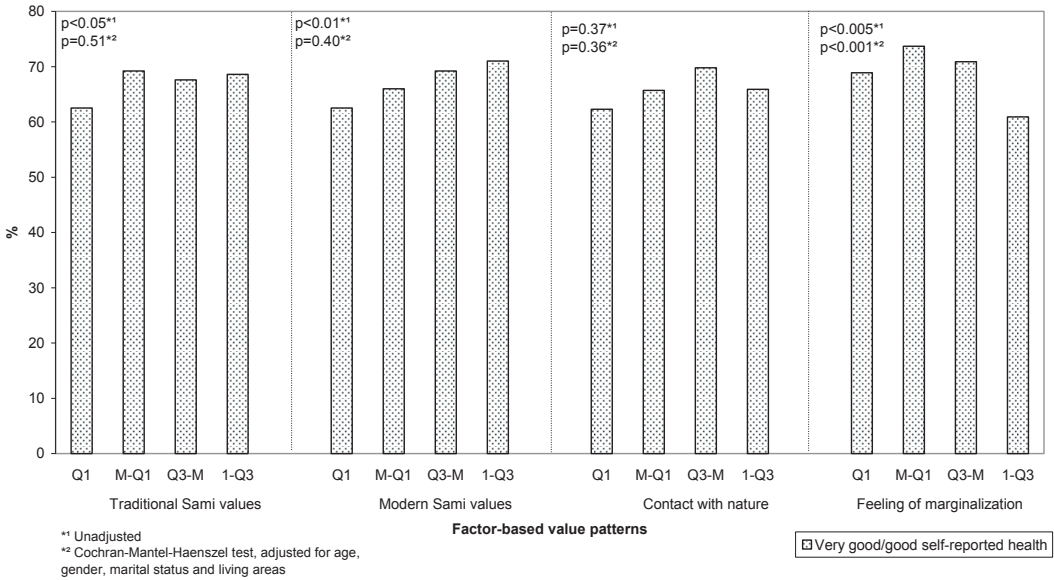
Models	Unadjusted $\beta$	Adjusted <sup>1</sup> B (SE B)	$\beta$	R <sup>2</sup>
<b>Regression 1: Traditional Sami Values</b>				
Intercept		23.89 (1.13)		
Gender	0.13***	1.11 (0.23)	0.10***	0.24
Age	-0.13***	-0.09 (0.01)	-0.16***	
Marital status	-0.07**	-0.61 (0.28)	-0.05*	
The Administrative Area	0.18***	0.99 (0.27)	0.08***	
Ethnicity	-0.43***	-4.80 (0.25)	-0.41***	
Household income	0.05*	-0.07 (0.21)	-0.01	
Religiousness	0.10***	1.82 (0.39)	0.10***	
Content with way of life	0.04	-0.44 (0.17)	-0.05*	
<b>Regression 2: Modern Sami Values</b>				
Intercept		14.52 (0.85)		
Gender	0.06**	0.41 (0.17)	0.05*	0.13
Age	-0.26***	-0.07 (0.01)	-0.20***	
Marital status	-0.06**	0.13 (0.21)	-0.02	
The Administrative Area	0.04	-0.07 (0.20)	-0.01	
Ethnicity	-0.21***	-1.86 (0.19)	-0.23***	
Household income	0.20***	0.81 (0.16)	0.13***	
Religiousness	-0.02	-0.21 (0.30)	-0.02	
Content with way of life	-0.02	-0.14 (0.13)	-0.02	
<b>Regression 3: Contact with Nature</b>				
Intercept		5.37 (0.25)		
Gender	-0.02	-0.10 (0.05)	-0.04	0.03
Age	0.03	0.01 (0.003)	0.04	
Marital status	-0.09***	-0.23 (0.06)	-0.09***	
The Administrative Area	0.04*	0.05 (0.06)	0.02	
Ethnicity	-0.08***	-0.14 (0.06)	-0.06*	
Household income	0.03	-0.04 (0.05)	-0.02	
Religiousness	-0.04*	-0.15 (0.09)	0.04	
Content with way of life	-0.12***	-0.21 (0.04)	-0.12***	
<b>Regression 4: Feeling of Marginalization</b>				
Intercept		6.64 (0.45)		
Gender	-0.08***	-0.34 (0.09)	-0.09***	0.10
Age	-0.10***	-0.03 (0.01)	-0.13***	
Marital status	0.02	-0.09 (0.11)	-0.02	
The Administrative Area	-0.04	-0.34 (0.11)	-0.08***	
Ethnicity	-0.18***	-0.83 (0.10)	-0.20***	
Household income	-0.03	-0.20 (0.08)	-0.07**	
Religiousness	0.02	0.33 (0.15)	0.05*	
Content with way of life	0.21***	0.52 (0.07)	0.18***	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

<sup>1</sup> B(SE B): Unstandardised coefficients and  $\beta$ : standardised coefficients.

<sup>2</sup> Gender: male = 1, female = 2; marital status: 0 = married or cohabiting 1 = single; The Administrative Area: outside = 0, within = 1; Ethnicity: Sami = 1, Sami/Norwegian = 2; Religiousness (member of the Læstadian community): no = 0, yes = 1; Content with way of life: very satisfied = 0, quite satisfied = 1, a little dissatisfied = 2, very dissatisfied = 3.

Fig. 3. Self-reported health by the 4 factor-based value scales (in percentiles)



## Discussion

We have investigated and described 19 value items and four factor-based value patterns in indigenous Sami and non-Sami subjects in Norway. Each pattern was characterised by demographic variables, socio-economic variables, self-reported health and satisfaction with way of life.

The analysis of factors (rather than single value items) focused our attention on understanding the structure of our set of value variables. Thus we reduced the data set to four meaningful factors, each of which makes a comprehensive statement on the anchoring or basis of values within the Sami world. Each of the 19 variables provided meaningful and important information on which values are critical to the Sami. However, by reducing the data set from variables to factors, the common variance within variables provides a minimal number of explanatory concepts. In our case, we found that the 19 variables encompassed the social dimensions Traditional Sami Values, Modern Sami Values, Contact with Nature and Feeling of Marginalisation. The four patterns represent important aspects of Sami culture, fundamental values and identity. Now let us take a closer look at these dimensions and their characteristics in a theoretical and practical approach, whilst emphasising the most prominent personal values revealed to be categorizable under each dimension. Let us start with the first and most prominent dimension, namely Contact with Nature.

### Contact with Nature

To stay in touch with nature stands firm in both Sami and ethnic Norwegian populations. We know from the World Values Survey 5 that Norway was the country among all countries surveyed that had the highest rate for importance of the environmental. And nature is important for the Norwegian people. According to Lehtola (2013) nature has always been the basis for the material as well as for the spiritual aspects of Sami culture and identity. The Sami life is based on balance with nature, and people treated the nature with gentleness (Fyhn 2013). Sami industries, use of natural resources and way of life as a whole are based on traditional knowledge (in Sami *árbediehtu*) based on the experience of generations through the use of nature and interaction with nature. Proximity to nature is still a fundamental part of Sami identity and understanding of self. Despite going through extensive modernisation, the Sami way of life has been maintained by later generations in traditional, nature-based industries. To most Sami people, the harvesting of natural resources for self-sustenance remains an important part of their lifestyle.

Despite going through extensive modernisation, the Sami way of life has been maintained by later generations as traditional, nature-based industries. To most Sami people, the harvesting of natural resources for self-sustenance remains an important part of the lifestyle. The Sami place “contact with nature” and “exploitation of nature through fishing, hunting and berry-picking” as the top two values (out of 19). Particularly important are these values within the Sami language AdminArea. Further corroborated by the fourth most important value (“maintenance of typical Sami industries”) the Sami culture undoubtedly displays continuity regarding the utilisation of the natural landscape and environmental resources.

### Traditional Sami Values

In Sami communities, knowledge pertaining to different areas of life has been developed, utilised, adapted and passed on from generation to generation without formal schooling. The notions of “traditional Sami knowledge” or “indigenous knowledge” allude to everyday or experience-based knowledge normally not systematised or made available through written media. Traditional Sami values, in this sense, exist not only in areas relating to the importance of typical Sami industries, family traditions, being in touch with other Sami people on a daily basis, production of *duodji*, Sami clothing traditions, the importance of Sami media, preservation and development of the Sami language, and fear of destruction of natural habitats (which may threaten the Sami existence). Rather, as the analyses presented in this article proclaim, traditional knowledge and fundamental values

relate to other areas as well, such as spirituality, preventive medicine and psychological concerns.

The traditional Sami values comprise practical and theoretical knowledge regarding the use of nature, understandings of an “inner nature” (i.e., regarding psychological matters), social relations, cultural and social institutions, and modes of expression (Bergstrøm 2001).

The Sami generally value family traditions more highly than ethnic Norwegians, and within Traditional Sami Values, “maintenance of family traditions” is the singularly most important value. This finding is supported by Somby who states: “Compared with the individualistic, Western Norwegian culture, Sami tradition more strongly emphasizes a familial self and more interdependent and hierarchical modes of relationship” (Somby cited in Bergstrøm 2001). To comprehend why family and heritage have such a central importance in Sami society, one must first understand the composition and function of early Sami societies. Whilst early Norwegian society was constructed with strong vertical connections (i.e., “masters” and “servants”) Sami society had a horizontal structure in which individuals were connected through the fact that *maadtoe* (the “ego’s” or the individual’s connection to relatives and friends) was juxtaposed with *sijte* (the communal fellowship; work/labour). These institutions complemented and completed each other; they were the building blocks of Sami society (Kappfjell in Eriksen 2003). The fact that ancestry is important, also in modern-day society, is confirmed through the first question newcomers to a Sami environment are asked: Whose son/daughter are you? After this point of contention has been resolved (regularly after a fairly long discussion), trust is considered established between the newcomer and the Sami individual, and conversation may progress to other matters.

Furthermore, children raised in a Sami community are surrounded by an extended family network; there are more words in Sami than in Norwegian and English to explain relations outside the “core” family. Sami children have more godparents when baptised than ethnic Norwegians. Thus, adolescents’ networks are enriched, and they develop both feelings of belonging and duty towards the community. Traditionally, the extended family network has shown its strength in being responsible for children, the sick and the elderly. Sami individuals with smaller family networks were considered “poorer” than those from larger families.

“Maintenance of typical Sami industries” is another value that ranks highly within Traditional Sami Values. This value may be regarded in relation to the value: “Pollution represents a threat to Sami existence.” The Sami are faced with great challenges with respect to creating diverse industries; in a time of man-made climate change and continued, global environ-

mental pollution, the traditional trades remain important, but so are new industries. The explosion at the nuclear power plant near Chernobyl in the Soviet Union in 1986 affected the traditional Sami way of life as reindeer meat was perceived to be unfit for human consumption due to radioactivity; in Norway, the South Sami were particularly affected. Traditional industries must exist within a globalised world in which industrial output and the requirement for economic growth are predominant, with their associated risks of environmental disasters. An important task for Sami society and the Norwegian Government thus becomes to preserve the traditional Sami industries, with a particular focus on fishing, farming, reindeer herding and environmental protection, as well as *duodji* to create a strong and thriving Sami society for the future. This is precisely what has been made clear by the Sami Parliament (Sametinget) in its inaugural decree:

Consequently, we understand that traditional Sami values [such as the existence of Sami culture and identity] are important, but we also remember that cultures [i.e., the Sami] are not static or living in a vacuum; they change in response to general societal developments.

On that note, let us take a closer look at Modern Sami Values.

### Modern Sami Values

Several important processes may be observed within the modern Sami society. First, international contacts established by the Sami have given the Sami culture new dimensions. The development has manifested itself through a step-by-step expansion of rights, one of which being the development and incorporation of indigenous peoples into a global network. This development has given the Sami people a feeling of belonging to a larger community and has strengthened the position of the Sami as an ethnic minority in relation to local communities and the world (Hernes & Oskal [eds.] 2008). While the mass media have helped launch the Sami people onto the global arena, Sami-language radio, TV, newspapers and books are introduced. Hyl-land Eriksen argues that communication with the outside world has made us more attentive to our internal differences (Eriksen & Eraker 2010). This is supported by Fredrik Barth's theory (Barth 1998), which states that we come to know ourselves through interacting with others. The greatest Sami project in modern times has been to become "one people, one nation" within four nation-states. Asle Høgmo maintains that an important premise for being presented as one nation is that: "The identity of a people may be perceived [...] as a great 'us,' a great community." In this process, the establishment of the Norwegian Sami Parliament has been an important event,

particularly for the Norwegian Sami. However, forming a shared, collective identity is a complicated and encompassing project regarding the Sami and modern societies as there are many “others” within the presumption of “us;” there are many ways to “be Sami” within different areas and social contexts. Partially, this is a result of early Norwegian assimilation policy whereby the Sami, in one way or another, *became* “Norwegian” *as well as* Sami (Paine 2003). Additionally, in today’s society, the individual has gained greater powers of self-determination, especially relating to forming one’s own identity; self-realisation may be considered an important characteristic of modernity. Combined with the former cultural postulations of equality and fraternity the perception of individual uniqueness grows, not merely collective uniqueness (Paine 2003).

We found that Sametinget is reported to be of little or no importance to 53 % of those who consider themselves Sami and to 70 % of those who consider themselves of mixed ethnic Norwegian/Sami background. The finding is consistent with other studies (conducted a few years before the collection of data for the SAMINOR study), which point to findings such as the fact that 60 % of the Sami population think Sametinget fails to focus on issues important to the Sami (Hauglin 2002). The perceived pessimism may be due to Sametinget representing a threat to what the Sami have accepted as their lives (their identity), whether they are their Sami or Sami/Norwegian lives (identities). In the words of Bjerkli and Thuen (1999):

the particularities of local values may lead Sami individuals [including subjects who regard themselves as Sami] to oppose political agendas intended to strengthen the position of the Sami in relation to the larger world.

Sametinget is hence faced with the enormous task of creating a shared Sami identity in a society in which individual “Saminess” takes a number of forms. The contemporary Sami school is another important institution in this regard. To build a community with shared values, educational institutions have had, and still have, a central place (i.e., the efforts of nation-building). During the “Norwegianisation process” the Norwegian Government attempted the assimilation of an entire Sami population through the application of ideas centred on nationalism and social Darwinism and using national security policy as pretext. In today’s society, education still plays an important role in socialising adolescents, perhaps simply because coming generations spend a great amount of time within the four walls of schools. Many people believe that the responsibility for the socialisation process has shifted from families to educational institutions over the past few decades. If we assume that such beliefs constitute accurate depictions

of reality, schools have gained greater responsibility in the dissemination of Sami identity and culture. This is not without complications as many Sami adults hold negative memories of their own education; to create an educational system in and for the Sami society would be time-consuming (Nergård 2006). Parents are concerned with their children gaining competencies within both the Norwegian (nation-state) and Sami societies. In many ways, one has realised that when interest in—and shared values between—schools and homes are strengthened, both desired socialisation and adolescents' learning improve (Balto 1986). This is not a new idea, however; the demand for a Sami educational system was first outlined by the schoolman Per Fokstad in 1924. According to Fokstad's vision of a "Sami school," tuition would be conducted in the Sami language, and teachers would be Sami. The Sami language as subject would not be elective but mandatory in the same manner Norwegian was compulsory for ethnic Norwegian pupils in Norwegian schools.

Fokstad thought the Sami themselves should formulate primary objectives and define regulations and instructions for such a system. A Sami school was to have a council of elected Sami representatives who would ensure that the school matured according to Sami political ambitions (Myklevoll 1995). Now, almost 90 years later, the Sami educational system is still a work in progress; the implementation in 1997 of the Sami curriculum for *grunnskolen* (the 10-year obligatory primary and secondary school) and *Kunnskapsløftet* (educational reform of 2006) represent steps in the general direction of a Sami school. However, from the point-of-view of the Sami, such measures are primarily amendments to what remains a "fundamentally Norwegian" system.

### Feeling of Marginalisation

Hansen and colleagues found that a large proportion of Norwegian Sami individuals experience discrimination based on their background (Hansen 2011; Hansen *et al.* 2008), with affirming findings from studies into the Sami youth populations in the Nordic countries (Omma 2013; Turi 2011). Furthermore, the results demonstrate that ethnic discrimination is associated with inferior self-perceived health and psychological distress (Hansen *et al.* 2010; Hansen & Sørli 2012), which is supported by several other studies across multiple population groups in a wide range of cultural and national contexts (Williams & Mohammed 2009), including indigenous communities in the circumpolar north (Young & Bjerregaard 2008). These findings suggest that perceived discrimination is an important emerging risk factor for negative health outcomes.

As our article reveals, it is predominantly young Sami males living



in Norwegian-dominated areas who experience marginalisation, poorer self-reported health and dissatisfaction with way of life. In previous articles, we have shown that Sami people, experience ten times more discrimination than ethnic Norwegians (Hansen 2011), and that those Sami men were more than twice as likely as non-marginalised Sami from Sami majority areas to report lifelong cardiovascular disease (Eliassen 2012) and they also had higher stress levels and poorer SRH (Hansen *et al.* 2010: 111; Hansen 2012: 26).

Furthermore, this may be seen in light of the fact that Sami males are somewhat less educated than Sami females, who are on par with the ethnic Norwegian population, and for whom statistics reveal that the rate of employment in primary industries such as reindeer herding, farming and fishing within Sami areas has declined in the past few decades (Lund *et al.* 2007; Hansen 2011).

### Strengths

The large sample size makes the study representative for the 36–79 year old Sami and ethnic Norwegians living in semi-rural areas of northern Norway. The findings add new empirical knowledge to the understanding of the relationship between ethnicity and personal values, a topic that has scarcely been investigated in Norway. However, one limitation needs to be noted. The study has a cross-sectional design; causality must be handled with caution.

### Conclusion

In this article we have investigated 19 different values among Sami and ethnic Norwegians.

Among the Sami the most highly regarded values are: being in touch with nature; harnessing nature through fishing, hunting and berry-picking; preserving ancestral and family traditions; preserving traditional Sami industries and preserving and developing the Sami language. In contrast, Sami respondents' least important values included Sami art and the Sami Parliament (Sametinget). Sami experience more discrimination and fear of losing their work/trade than ethnic Norwegians.

In addition, we applied the methods of factor analysis to place values in relation to one another (common variance) and we discover that our questions on values describe four "value dimensions" within Sami society: Traditional Sami Values, Modern Sami Values, Contact with Nature and Feeling of Marginalisation.

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