


# Gender, sports, and belonging. The role of sports participation in residential preferences among girls and boys living in Norway's rural peripheries

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 The gender gap in residential preferences among rural youth has been documented in several studies – and for the most attributed to educational aspirations, employment, and income opportunities. The hereby study adds to this block of research by addressing the role of sports. Sports has been connected to place belonging. As a traditional masculine arena, sports can also be assumed to contribute to the gender gap in belonging. On this background, the study explores the role of sports participation in rural girls' and boys' residential preferences. As theoretical framework, feminist theories of gendered space contrasts feminist theories of sports participation, supplemented by elements from poststructuralist theories. Data consisted of school surveys from pupils aged 13–16 years living in Norway's most peripheral municipalities (N=11,971). The analyses confirmed a gender gap in residential preferences. Boys more often considered living in their native municipality compared to girls. The role of sports was on the contrary more surprising. Rural girls who participated in sports had higher predicted probabilities for preferring to live in the native municipality compared to non-participants, but this was not the case for boys. Findings indicate that for girls living in rural Norway, organized sports represent arenas for positive place relations. This diverges from prevailing assumptions of gendered rural space. Furthermore, the study questions common representations of sports arenas as local hearths for masculine versions of Northern rural identity. New developments in leisure's spatial and social organization within the rural periphery are discussed as potential reasons for these results. By combining and contrasting different strands of feminist thinking, the study gains new insights into gender, sports, and place belonging in the digital age.

Keywords: residential preferences, sports participation, place, youth, gender, belonging

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## Introduction

The Norwegian Ministry of Local Government and Regional Development report from 2019–2020 identifies that rural out-migration creates social, demographic, and financial challenges for left-behind regions of the North (Heleniak 2020, Meld. St. 5. 2020, Syssner 2022). Gender is an important dimension in this process. Women have a higher propensity for moving from rural areas (Heggen 2013, Høydahl 2023), and a skewed gender balance in the countryside is a reason for concern in many Northern countries (Leibert 2016, Rauhut & Littke 2016). This study concerns a phenomenon that lies ahead of actual migration, namely rural young people's assessments of their native places as suitable places to inhabit at a later stage in life. Life plans merge with place assessments into what is often termed residential preferences, the answer to the question: 'Where would you like to live when you grow up?'

The gender gap in young people's residential preferences refers to the fact that girls and young women tend to prefer urban settlements more often than boys and young men (Rye 2006, Heggen 2013, Leibert 2016, Rauhut & Littke 2016). Although structural factors like education, employment and income opportunities are recognized as primary driving forces behind rural-urban migration (Thissen *et al.* 2010), the gender gap is often explained in terms of traditional gender roles and local patriarchal structures in the countryside (Rye 2006, Rauhut & Littke 2016). Since the 1990s, feminist-inspired rural research suggests that rural girls generally turned against their native places of living as they grew up (see Dahlström 1996). Rural boys were portrayed as backward-oriented, old-fashioned, and thus immobile, while mobile girls in search of education and the urban version of 'the good life' were considered agents of modernity (Kenway *et al.* 2006, Bye 2009, Leibert 2016).

'Gendering of space' (Massey 1994) was a key concept in these feminist approaches to rural research. It refers to the social construction of space through gender relations (Massey 1994, Dahlström 1996). The process has its roots embedded in divided production spheres, with home/reproduction being female and public/production being male, but the dichotomy also includes leisure spaces. Gendered leisure practices tend to favor boys' dominance and control over leisure arenas. Power relations entangled into young people's perceptions of place and space and girls are alienated in their local leisure environments (Rose 1993, Massey 1994, 1998). Massey (1994, 185) describes her childhood football and rugby fields of Manchester as "entirely given over to boys". Thus, sports and other leisure participation strengthen negative place relations for girls, and likely for boys who disregard old-fashioned gender roles (Rose 1993, Massey 1994, 1998, McDowell 1999). This perspective has had a strong impact in rural studies, migration studies, and geographies of the Nordic region since the 1990s (Berg & Forsberg 2003, Rye 2006).

Research on rural gender balance and young people's preferences for leaving or staying is part of a long research tradition in the Nordic countries (Dahlström 1996, Rye 2006, Rauhut & Littke 2016, Rönnlund 2020). The hereby study contributes to this line of research by adapting a gender perspective upon leisure's potential for strengthening young people's sense of belonging. Local governments often highlight rich leisure opportunities and facilities in their efforts to attract young people to stay, to return or to settle down (Kettunen & Prokkola 2022). Explicit or implicit ideas about belonging often underlie these policies: that local leisure will generate belonging, and that belonging will make it more difficult to leave or strengthen the propensity to return or settle down. A multitude of meanings and dimensions apply to the concept of belonging, but a common thread is that belonging describes connectedness to people, places, or cultures (May 2013, Cuervo & Wyn 2017).

In line with conventional thought as well as mainstream leisure theories, sports bind people together. Studies among youth confirm that improved social inclusion and enjoyment are important outcomes of participation in sports (Seippel 2006, Skille & Østerås 2011, Strandbu *et al.* 2016). Sports are particularly high ranked and popular among modern leisure types, and it is recognized as a positive activity in childhood and youth (Roberts 2016). Through their sociality and structuring, sports are generally considered a base for belonging and integration (Kenway *et al.* 2006, Seippel 2006), as well as strengthened well-being (Roberts 2016), enjoyment, and fun (Seippel 2006, Skille & Østerås 2011, Pielichaty 2020, Skauge & Rafoss 2020).

In the Norwegian society, sports clubs are more integrated at the local level compared to commercial training studios, due to voluntary recruitment of managers and coaches, democratic organizations,

local fundraising, and parents' involvement. Furthermore, sports and *friluftsliv* (outdoor life) are symbolic ingredients of Norwegian nationhood and childhood (Seippel 2006, Green *et al.* 2015). Recent decades' gender transformation in youth sports was particularly strong in Norway and the other Nordic countries (Green *et al.* 2015, Cooky & Messner 2018, Alsarve & Tjønndal 2020), which share a joint historical legacy of broad political support for social and gender equality. However, persevering male dominance is recognized in many sports contexts (Cooky & Messner 2018, Alsarve & Tjønndal 2020). As a socio-spatial practice, sports have been and continue to be gender divided, in the sense that girls and boys frequently join separate training activities, teams and leagues (Green *et al.* 2015, Roberts 2016, Skauge & Rafoss 2020). Norway provides a good example for a study of how sports participation is associated with place relations among girls and boys.

Following mainstream leisure thinking, girls' sports participation may reduce the gender gap in young people's residential preferences. According to feminist perspectives upon gendered space of the 1990s, the gender gap in preferences may instead widen as an effect of girls' participation, because power relations in sports as well as in other leisure spaces tend to turn girls away from "the male periphery", as Dahlström (1996, 259) named it. These counter positions represent very different approaches to a common everyday activity in childhood and youth, forming the theoretical framework for this study. I ask whether sports participation is associated with residential preferences in favor of rural pupils' native municipality. Further, I ask if there is a gender gap in residential preferences, and what role sports participation plays in this. 'Gendering of space' is the theoretical starting point for the study, contrasted with feminist theories of sports, introduced in the next sections. Different feminist approaches are supplemented with poststructuralist approaches as I examine girls' and boys' residential preferences in the rural periphery of Norway in the late 2010s.

## Theoretical approaches to young people's residential preferences

To feminist geographer Dahlström (1996), periphery is not only about distance, but also about power. Periphery exists as a negation to center, dominated by patriarchal production systems and patriarchal gender relations. Dahlström describes sports and outdoor life in rural Scandinavia as typically male and rejected by rural girls, who are oriented towards education and modern life in the cities. Girls are dissatisfied with the opportunities they have in rural areas, and they seek better lives elsewhere (*ibid.*). Gendered migration streams from the periphery are caused by the 'gendering of space'. This provides an alternative model for understanding residential preferences as compared to a structural perspective where preferences reflect macro-level material structures that inform young people's place relations (Rye 2006, Farrugia *et al.* 2016). Assessments of job opportunities or educational opportunities are supposedly incorporated into individual life plans and "imagined spatial futures" as Rönnlund (2020, 124) puts it.

With poststructuralism and the 'cultural turn' in the social sciences, survey-based studies of migration motives and preferences were replaced by qualitative studies of people's place images and the multiple ways in which such images guide migration behaviors (Berg & Forsberg 2003, Rye 2006). Collective representations of rurality and urbanity in local youth culture constitute migration potentials, which indirectly contributes to individual migration decisions (e.g. Bjarnason & Thorlindsson 2006, Thissen *et al.* 2010, Haukanes 2013). Influences from poststructuralist thinking can also be recognized within "feminist geographies of difference" (Johnston & Sidaway 2016, 287), where specific gendered outcomes of gender makings in different places are important to recognize. Compared to feminist theories of the 1990s, focusing on universal gender structures that create gender differences, poststructuralist thinking focuses upon variations in the ways gender is performed, and performed *differently*, across time and space, according to social and local contexts (Forsberg & Stenbacka 2013, Johnston & Sidaway 2016). Girls' and boys' sports participation may thus give different results in terms of belonging or residential preferences, depending upon local or regional culture and historical gender regimes. The plural gender interweaves with other social identities (Rose 1993). Forsberg's (1998) three regional gender contracts in Sweden illustrate this point, as they are based in differences in production, resources, social and family life: the traditional gender contract, the modernized, and the non-traditional gender contract.

Preferences in favor of the native place of living can indicate a sense of belonging (Haukanes 2013). Interconnections between social relations and place relations are important in this respect: the fabric of young people's relations to family and friends influences their belonging. In youth, leisure activities like sports represent social network potentials, as well as material and sensory place experiences. Development of technical skills, physical coping and mastery are inherent in sports participation (Strandbu & Hegna 2006). It can be seen as an embodied and affective process; a maker of place relations, a potential maker of belonging. To see place relations as outcomes of embodied and affective processes in youth represents a different theoretical perspective upon residential preferences (Kenway *et al.* 2006, Farrugia *et al.* 2016). According to May (2013), belonging involves a process wherein the self identifies with or connects to the surrounding world, be it to social groups, places, cultures, or physical objects. There is a performative element in belonging (May 2013, Cuervo & Wyn 2017). Young people may enact their belonging through sports. Young people's perceptions and assessments of present-day places of living connotes emotions related to the self and what many will call *home*.

Attachment to childhood places has been confirmed as an important determinant of migration decisions and mobility patterns in studies from Northern regions (Bjarnason & Thorlindsson 2006, Moilanen 2012). Directly or indirectly, emotions may balance or disturb assessments of prospects, opportunities, and dreams in young people's ideas of where to live when they come of age (Bjarnason & Thorlindsson 2006, Corbett 2013). Emotional place relations can literally be 'a mix of feelings' that vary over time. Such an approach receives support from empirical research, which concludes that young people simultaneously can express belonging and a wish to move out (Rönnlund 2020). A conceptual change from migration to mobility takes account of ambivalence and ever-changing place relations. A life-phase approach to residential preferences, which Rye (2006) advocates, reflects this conceptual shift from mutually exclusive migration decisions to floating mobility patterns.

### **Feminist theories of sports**

In contrast to mainstream ideas of leisure, a key argument of feminist sports researchers', inspired by poststructuralism, is that sports participation reproduces hierarchical gender norms and identities (Messner 2007). However, the history of feminist thinking comprises alternative theoretical models, wherein sports are associated with emancipation and empowerment. The opening up of sports clubs and competitions for women's participation was important in early feminism, and a central question was whether (and when) sports participation led to empowerment (Hargreaves 1994, Cooky 2018). In a study among young female athletes in Norway, Strandbu and Hegna (2006) found that sports participation empowered girls through embodiment, skills development, and "expansion of gender scripts for girls" (*ibid.*, 122–123). Walseth (2006, 461) concludes in a similar direction in a study of female sports participants with Muslim backgrounds in Norway: playing sports was a "place of refuge", and participation fostered belonging.

Feminist contributions to sports research inspired by practice theory and Bourdieu (1977, 2000) focus upon transformative everyday life experiences (Strandbu & Hegna 2006). The point is that the development of practical sports skills combined with socially situated identity work changes young people over time, thus girls may become empowered and emancipated through sports participation. Sports represent social experiences of community and competition, equality and difference, and inclusion and exclusion. Strandbu, Stefansen and Smette (2016) found that participation protects against social vulnerability in locales where sports' position is strong. Youth sporting cultures relate to the sports communities or locales in different ways, creating different types of belonging (Walseth 2006).

This represents a link to theories of gendering of space. Bourdieu's (1977, 2000) term *hexis* describes both the appearance and the performance of the body. Different social groups carry different *hexis*, reflecting their relative class positions in society, but *hexis* is also gendered according to power differences between the sexes. Bourdieu (2000) shows how girls and boys are socialized into specific ways of thinking and acting the body, which in turn are valued differently (Skauge & Rafoss 2020). To McDowell (1999, 68–69), ideas about embodiment concern positionality and location. Countless repetitions of movements and acts result in pre-conscious, pre-linguistic, non-

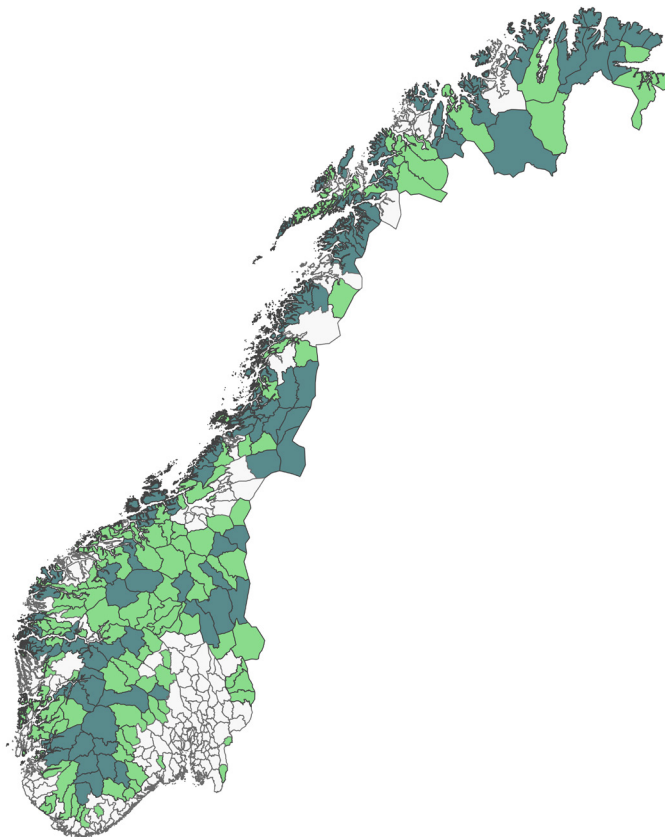
representational co-constructions of the body and the space, hence *hexis* is an important key to understanding young people's place relations (Farrugia *et al.* 2016). Embodied practices may contribute to senses of belonging (May 2013). Thus, a key question is whether girls' sports participation in gendered sports fields pushes girls' preferences into negative directions, as Massey (1994) foresaw, or into urban directions, as Dahlström (1996) suggests.

## A gendered youth study

### *Youth survey data from a national data collection scheme*

National representative youth survey data retrieved from the national data collection scheme *Ungdata*<sup>1</sup> from the years 2016, 2017 and 2018 forms the base for the analyses. Data collection took place during school hours. The participants were aged 13–16 years, and their participation was voluntary and anonymous. The Norwegian Data Protection Authority approved the surveys. Information letters and procedures follow recommended guidelines.

The net study population counted 11,971 respondents living in 110 of Norway's most peripheral municipalities, all placed at the next-lowest and very lowest level of centrality within Statistics Norway's national centrality index (level 5 and 6). The centrality index divides municipalities into six levels of centrality, calculated from a combination of travel distance to jobs and availability of public and private service functions, like schools, health services, shops and cultural institutions (Statistics Norway 2020). Figure 1 shows a map of all municipalities at centrality level 5 and 6.



**Fig. 1.** Norwegian municipalities at centrality levels 5 and 6 in Statistics Norway's centrality index. Data source: Statistics Norway, Høydahl 2017.

Every municipality in this category may cover several local communities with long distances between them. This is sparsely populated land: the municipalities at the least central levels cover 72% of the total land areal of Norway but represent only 14% of the population (Meld. St. 5. 2020), and men outnumber women (Rye 2006, Høydahl 2017, 2023). For a young person to consider these municipalities as places to live later in life involves taking account of physical distances, educational opportunities, employment opportunities, and social life.

### *Gendered crosstabulations and logistic regression models*

To describe gendered patterns of associations between sports and residential preferences, I analyzed girls and boys as separate groups. Main results were verified with additional analyses in a combined data set. Crosstabulations were used to describe associations between sports participation and residential preferences. Next, the predicted probability for preferring to live in the current municipality later in life as a function of sports participation was calculated, based in odds ratios from multiple logistic regression analyses. Results were presented in Average Marginal Effects (AME), which is well suited in logistic regression models when the purpose is to compare statistical effects across different groups (Mood 2010). Furthermore, AME allows for a more intuitive interpretation compared to odds ratios because change is expressed in percentage points giving the average conditional effect: the change in predicted probability for having 1 on the binary dependent variable (i.e., for preferring to live in the current municipality later in life), as a result of one unit's change in any given independent variable, controlled for all observations in the dataset (*ibid.*).

Logistic regression models were adjusted for effects from factors that associate with residential preferences as well as sports participation: age (Hidalgo & Hernández 2001, Roberts 2016, Skauge & Rafoss 2020), mental health (Faulkner & Tamminen 2016, Cooky 2018), and class-related factors (Rye 2006, Andersen & Bakken 2019) indicated by variables for cultural capital and subjective poverty, educational aspirations and school belonging (Rye 2006, Gulløy 2020, Stenseth & Bæck 2021), social relations (Kenway *et al.* 2006, Corbett 2013), and certain evaluative aspects of place assessments (Moilanen 2012, Corbett 2013, Rauhut & Littke 2016).

### *Measures of residential preferences, sports participation, and control variables*

The question *Kan du tenke deg å bo i kommunen din når du bli voksen? (Would you consider living in your current municipality when you grow up?)*<sup>2</sup> forms the base for the dependent variable. A dummy variable had 1 assigned for participants who responded 'Yes' (37%). Participants responding 'No' (22%) or 'Don't know' (41%) made up the reference group (0). The fact that two in five participants responded 'Don't know' reflects a general uncertainty about future life plans, choices, and opportunities, but also that there are several possible interpretations of this hypothetical question. The verb 'consider' points to an act of unfettered assessment of different options. 'When you grow up' may refer to a point in time when respondents are out of childhood, but still young, or it may refer to a process of settling down for family life at a later stage. The intended meaning from the survey planners probably went in the 'settle down' direction, in line with a structural understanding of residential preferences, but the participants may also have comprehended this question as being about educational plans, lifestyle preferences or belonging. To respond to this survey question is simultaneously a cognitive and 'rational' assessment of the balance between 'pros and cons' for the place in question, a social signal of identity and belonging, and a deep sentiment: a feeling of meaning and attachment to place.

The key independent variable of participation in sports clubs was measured with the question *How many times during the last month did you participate in activities, meetings, or training organized by the following associations, clubs, or societies?* The response options were 'Never', '1–2 times', '3–4 times', and '5 or more times'. As for control variables, the school level indicated pupils' age. In a set of two dummy variables, participants in 9<sup>th</sup> and 10<sup>th</sup> grade were assigned 1 with participants in 8<sup>th</sup> grade as reference group (0). To adjust for mental distress in youth, six items were combined, based in Kandel and Davies' (1982) and Hopkins Symptoms Checklist (Derogatis *et al.* 1974): *During the past week, have you been affected by any of the following issues: 1. Felt that everything is a struggle 2. Had sleep problems,*

3. *Felt unhappy, sad, or depressed*, 4. *Felt hopelessness about the future*, 5. *Felt stiff or tense*, 6. *Worried too much about things*. Response categories were 'Not been affected at all' (1), 'Not been affected much' (2), 'Been affected quite a lot' (3) and 'Been affected a great deal' (4). Participants with a mean value of 3 or higher on the combined measure were assigned 1 in a variable for being quite affected by indications of depressive moods. Participants with a mean value below 3 formed the reference group (0). Participants that perceived that their family had been poorly off all the time or most of the time in the last two years were assigned 1 in a measure for self-perceived poverty, while participants who perceived that their families had been well off all the time or most of the time, or neither well off nor poor, formed the reference group (0).

To measure cultural capital, a question about the number of books at home was recoded into a set of two dummy variables. Participants having from 20 to 500 books at home and those having more than 500 books (1) were compared to participants with fewer than 20 books at home as a reference group (0). Social relations were measured from the question: *How happy or unhappy are you with your friends?* Response alternatives were 'Very unhappy', 'Slightly unhappy', 'Neither happy nor unhappy', 'Slightly happy' and 'Very happy'. As an indicator of reduced school belonging, participants who somewhat agreed, somewhat disagreed, and totally disagreed in the following statement: *I feel that I fit in among the other pupils at school*. It formed a set of dummy variables, with participants who totally agreed as the reference group (0). To measure lack of educational aspirations, participants who did not believe they would take on higher education in universities or colleges, and those who were not sure about this, formed a pair of dummy variables. Participants with higher education plans formed the reference group (0). Satisfaction with the local community was measured from the question *How happy or unhappy are you with the local community where you live?* Response alternatives were 'Very unhappy', 'Slightly unhappy', 'Neither happy nor unhappy', 'Slightly happy' and 'Very happy'. To account for the neighborhood's attractiveness, I constructed a measure from a question on the assessment of local sports facilities. Response alternatives were: 'Very good', 'Quite good', 'Neither good nor bad', 'Quite bad' and 'I don't like it at all'.

Table 1 presents frequency distributions of independent variables, mean scores (M) and standard deviations (SD) upon the dependent variable for girls and boys in all subgroups.

**Table 1.** Study population characteristics and scores on the dependent variable. Based on data from Ungdata surveys 2016, 2017 and 2018.

Study population characteristics	N	Percentage	Would consider living in current municipality when growing up (0 = No, Do not know; 1 = Yes)			
			Boys (N = 5,957)		Girls (N = 6,014)	
			M	SD	M	SD
Total	11 971	100.0	0.44	0.50	0.29	0.46
<b>Participation in sports clubs last month</b>						
Never	4 748	39.7	0.43	0.50	0.23	0.42
1–2 times	1 159	9.7	0.47	0.50	0.34	0.47
3–4 times	1 129	9.4	0.49	0.50	0.35	0.48
5 or more times	4 935	41.2	0.44	0.50	0.33	0.47
<b>School level</b>						
8 <sup>th</sup> grade	4 032	33.7	0.44	0.50	0.32	0.47
9 <sup>th</sup> grade	3 824	31.9	0.44	0.50	0.28	0.45
10 <sup>th</sup> grade	4 115	34.4	0.45	0.50	0.28	0.45

<b>Mental distress</b>							
Pupils being very or quite affected by indications of depressive moods (mean value of 3 on the combined measure for indications)	1 513	12.6	0.28	0.45	0.17	0.37	
Pupils not being affected by indications of depressive moods	10 332	86.3	0.45	0.50	0.32	0.47	
Missing information	126	1.1	0.44	0.50	0.39	0.49	
<b>Self-perceived poverty in the last two years</b>							
The family has been well off all of the time/most of the time	8 976	75.0	0.46	0.50	0.32	0.45	
The family has been neither well off nor poor	2 175	18.2	0.38	0.49	0.25	0.43	
The family has been poor all of the time/most of the time	536	4.5	0.34	0.48	0.17	0.37	
Missing information	284	2.4	0.35	0.50	0.27	0.45	
<b>Cultural capital</b>							
Less than 20 books at home	1 439	12.0	0.41	0.49	0.21	0.41	
20–500 books at home	8 611	71.9	0.45	0.50	0.31	0.46	
More than 500 books at home	1 787	14.9	0.42	0.49	0.28	0.45	
Missing information	134	1.1	0.39	0.49	0.2	0.41	
<b>Satisfaction with friends</b>							
Very unhappy	448	3.7	0.48	0.50	0.27	0.44	
Slightly unhappy	382	3.2	0.30	0.46	0.17	0.38	
Neither happy nor unhappy	796	6.6	0.29	0.46	0.16	0.37	
Slightly happy	2 611	21.8	0.38	0.49	0.24	0.43	
Very happy	7 377	61.6	0.48	0.50	0.34	0.47	
Missing information	357	3.0	0.46	0.50	0.28	0.45	
<b>Reduced school belonging</b>							
I feel that I fit in among the other pupils at school: Totally agree	6 290	52.5	0.49	0.50	0.37	0.48	
I feel that I fit in among the other pupils at school: Somewhat agree	3 884	32.4	0.39	0.49	0.25	0.44	
I feel that I fit in among the other pupils at school: Somewhat disagree	1 243	10.4	0.33	0.47	0.19	0.39	
I feel that I fit in among the other pupils at school: Totally disagree	465	3.9	0.27	0.44	0.13	0.33	
Missing information	89	0.7	0.46	0.50	0.26	0.44	



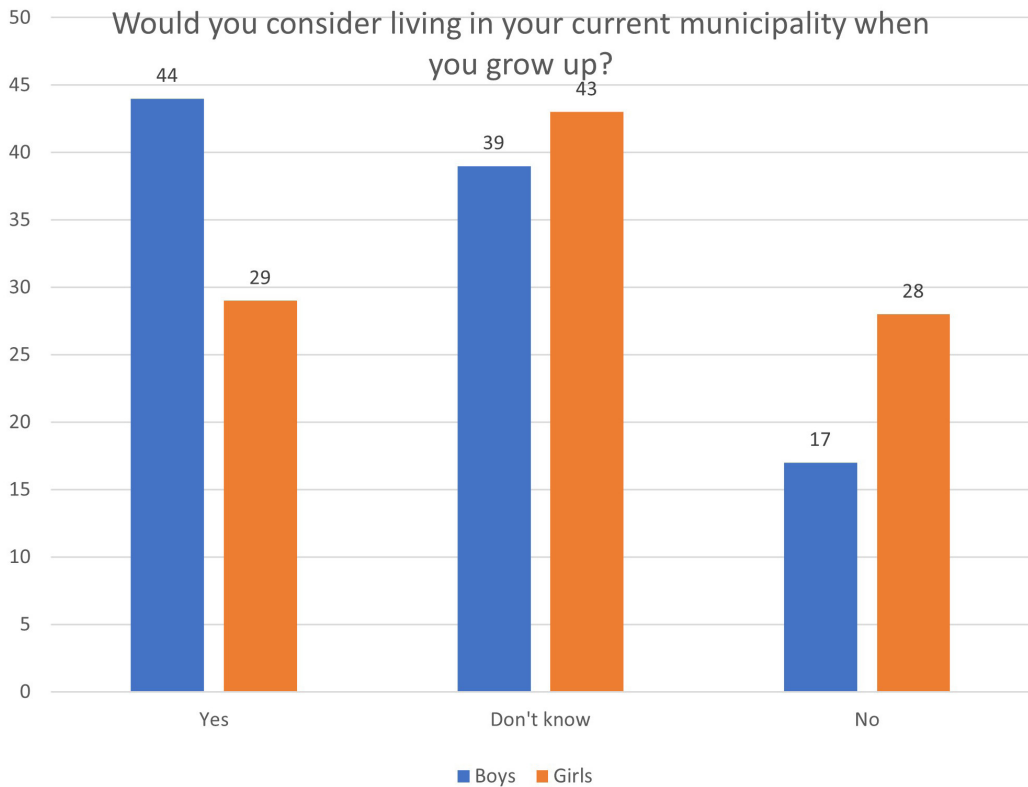
<b>Lack of plans for higher education (universities and colleges)</b>							
Believe they will pursue higher education	5 907	49.3	0.42	0.49	0.31	0.46	
Not sure	4 233	35.4	0.41	0.49	0.26	0.44	
Do not believe they will pursue higher education	1 501	12.5	0.55	0.50	0.28	0.45	
Missing information	330	2.8	0.47	0.50	0.36	0.48	
<b>Satisfaction with the local community</b>							
Very unhappy	778	6.5	0.31	0.46	0.15	0.35	
Slightly unhappy	1 111	9.3	0.23	0.42	0.11	0.31	
Neither happy nor unhappy	2 123	17.7	0.28	0.45	0.16	0.37	
Slightly happy	3 404	28.4	0.38	0.49	0.29	0.45	
Very happy	4 177	34.9	0.60	0.49	0.5	0.5	
Missing information	378	3.2	0.45	0.50	0.26	0.44	
<b>Assessment of local sports facilities</b>							
Very good	3 706	31.0	0.51	0.50	0.39	0.49	
Quite good	4 522	37.8	0.49	0.50	0.27	0.45	
Neither good nor bad	1 892	15.8	0.37	0.48	0.23	0.42	
Quite bad	817	6.8	0.39	0.49	0.24	0.43	
I do not like it at all	768	6.4	0.33	0.48	0.19	0.4	
Missing information	266	2.2	0.3	0.5	0.27	0.45	

## A gender gap in residential preferences

Figure 2 shows the complete distribution of responses to the question about residential preferences for boys and girls ( $\chi^2 = 339.7$ ).

Boys more often had a preference in favor of their native municipality compared to girls. This was also reflected in Table 1, where the mean score for stating yes on the question *Would you consider living in your current municipality when you grow up?* was 0.44 for boys on a 0-1 scale, and 0.29 for girls. Thus, the gender gap in residential preferences was confirmed, in line with previous descriptions of rural boys as more homebound compared to rural girls (Heggen 2013, Leibert 2016, Rauhut & Littke 2016).

Bivariate statistics in Table 1 showed that sports participation increased mean scores on the variable for having preferences in favor of the native municipality, in line with mainstream sports theory (Seippel 2006, Skille & Østerås 2011). Mean values for having a positive residential preference increased by activity, up to the level of being active 3–4 times in the previous month, and then dropped, but this drop in means was significant for boys only ( $F=7.70$ ,  $p < .031$ ). Thus, boys displayed a curved association between preferences in favor of the native municipality and sports participation, meaning that the most active boys less often preferred the native municipality, compared to those who were quite active. Furthermore, the difference in means between non-participants and those who participated 1–2 times in the previous month was larger for girls ( $F=96.84$ ,  $p < .001$ ) compared to for boys ( $F=9.43$ ,  $p < .041$ ).



**Fig. 2.** Residential preferences among girls and boys in percentage. N=11,971. Based on data from Ungdata surveys 2016, 2017 and 2018.

### A gendered pattern of association between sports participation and residential preferences

Results from bivariate analyses were adjusted when controlled for compositional effects in Table 2, showing AME from logistic regression models for the impact of sports participation upon preferences for living in the native municipality when growing up (binary dependent variable), controlled for school level, depressive moods, self-perceived poverty, cultural capital, lack of plans for higher education, reduced school belonging, satisfaction with friends and the local community and assessment of sports facilities. These analyses included participants with complete data only. Only female participants had a higher predicted probability for preferring to live in the native municipality later in life, compared to being inactive (Table 2, Model 2). Moderately active girls (participating 1–2 times in the previous month) had 8 percentage points higher predicted probability for a positive preference, compared to inactive girls. As for boys, there were no significant effects upon residential preferences from sport participation, compared to being inactive in sports (Table 2, Model 1).

In Model 3, an interaction term gave the combined effect for being a girl and participating in sports, compared to being inactive, while the indicator 'Girls' gave the effect for inactive girls with reference to inactive boys (Table 2). Inactive girls reduced the predicted probability for having a positive residential preference with 14 percentage points with reference to inactive boys.

**Table 2.** AME from logistic regression models for the impact of sports participation and control variables upon preferences for living in the native municipality when growing up. Separate analyses for boys, girls and the total study population. Based on data from Ungdata surveys 2016, 2017 and 2018.

		Model 1 Boys (N= 5,293)		Model 2 Girls (N=5,499)		Model 3 All (N=10,792)	
		AME <sup>1</sup>	Robust standard errors	AME <sup>1</sup>	Robust standard errors	AME <sup>1</sup>	Robust standard errors
<b>Gender</b>	Girls (ref. boys)					<b>-0.14***</b>	0.02
<b>Participation in sports clubs last month</b>	1–2 times last month (ref. no participation)	0.00 <sup>ns</sup>	0.02	<b>0.08***</b>	0.02		
	3–4 times last month (ref. no participation)	0.03 <sup>ns</sup>	0.02	<b>0.07**</b>	0.02		
	5 or more times last month (ref. no participation)	-0.03 <sup>ns</sup>	0.02	<b>0.04**</b>	0.01		
	Boys with sports participation 1–2 times or more last month (ref. inactive boys)					-0.02 <sup>ns</sup>	0.01
	Interaction term: girls with sports participation 1–2 times or more last month (ref. inactive girls)					<b>0.08***</b>	0.02
<b>Control variables</b>							
School level	Grade 9 (ref. Grade 8)	0.00 <sup>ns</sup>	0.02	0.01 <sup>ns</sup>	0.01	0.01 <sup>ns</sup>	0.01
	Grade 10 (ref. Grade 8)	0.02 <sup>ns</sup>	0.02	<b>0.03*</b>	0.01	<b>0.03*</b>	0.01
Mental distress	Very/quite affected by indications of depressive moods: (ref. not affected)	-0.05 <sup>ns</sup>	0.03	<b>-0.05**</b>	0.02	<b>-0.06***</b>	0.02
Self-perceived poverty	Poor all of the time/most of the time in the last two years (ref. well-off, or neither well-off nor poor)	-0.06 <sup>ns</sup>	0.04	-0.06 <sup>ns</sup>	0.03	<b>-0.06**</b>	0.02
Cultural capital	20–500 books at home (ref. less than 20 books at home)	0.02 <sup>ns</sup>	0.02	<b>0.06**</b>	0.02	<b>0.03*</b>	0.01
	More than 500 books at home (ref. less than 20 books at home)	0.01 <sup>ns</sup>	0.03	0.04 <sup>ns</sup>	0.03	0.02 <sup>ns</sup>	0.02
Social relations	Satisfaction with friends (1–5; higher numbers means more satisfied)	<b>-0.06***</b>	0.01	<b>-0.04***</b>	0.01	<b>-0.05***</b>	0.01

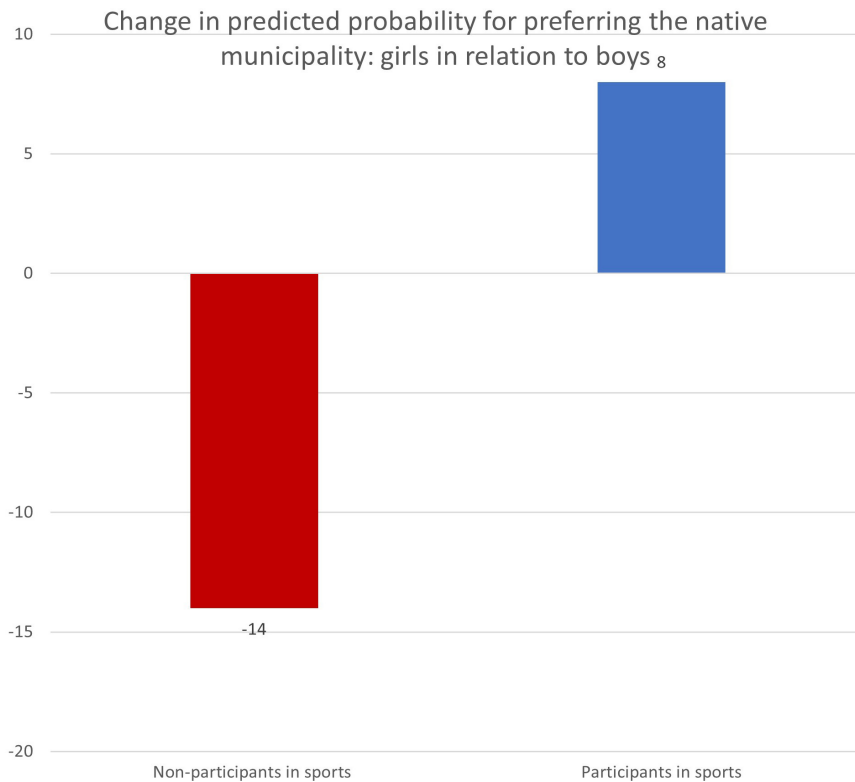
Reduced school belonging	I feel that I fit in among the pupils at my school': Somewhat agree (ref. totally agree)	<b>-0.06***</b>	0.02	<b>-0.06***</b>	0.01	<b>-0.06***</b>	0.01
	I feel that I fit in among the pupils at my school': Somewhat disagree (ref. totally agree)	<b>-0.09**</b>	0.03	<b>-0.06**</b>	0.02	<b>-0.08***</b>	0.02
	I feel that I fit in among the pupils at my school': Totally disagree (ref. totally agree)	<b>-0.13**</b>	0.05	<b>-0.08*</b>	0.04	<b>-0.11***</b>	0.03
Lack of plans for higher education	Do not believe they will pursue higher education (Ref: expect to pursue higher education)	<b>0.15***</b>	0.02	<b>0.06*</b>	0.03	<b>0.12***</b>	0.01
	Not sure (Ref: expect to pursue higher education)	0.01 <sup>ns</sup>	0.01	-0.01 <sup>ns</sup>	0.01	0.00 <sup>ns</sup>	0.01
Place assessments	Satisfaction with the local community (1–5; higher numbers mean more satisfied)	<b>0.12***</b>	0.01	<b>0.12***</b>	0.01	<b>0.12***</b>	0.01
	Assessment of local sports facilities (1–5; higher numbers mean poorer facilities)	<b>-0.02***</b>	0.01	<b>-0.02**</b>	0.01	<b>-0.02***</b>	0.00
Pseudo R <sup>2</sup>		0.07		0.1		0.1	
Wald statistics for logistic regression models		437		515		1133	

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001, ns (not significant), <sup>1</sup>AME = average marginal effects

Figure 3 gives a graphic presentation of the change in prediction as a function of sports participation, based on AME from Model 3, Table 2. It follows from subtracting girls' predicted percentage points from boys' predicted percentage points in each group (participants and non-participants, respectively).

As a function of participation in sports, the gender gap changed. Girls outside sports (non-participants) had a lower predicted probability of wanting to live in the native municipality when growing up, compared to boys outside sports. Girls participating in sports had a higher predicted probability, compared to participating boys. Furthermore, the gap also decreased. Sports participation associated with reduced gender differences in residential preferences, thereby potentially 'undoing gender', as Deutsch (2007) put it. According to the logic of traditional rural male cultures, sports participation will foster belonging and make boys more inclined to prefer their native places (Massey 1994, Dahlström 1996, Kenway *et al.* 2006), but this did not materialize in the current study. How can these results be explained?

Many researchers point to a stronger presence of competition and performance orientation among boys compared to girls in sports (Kenway *et al.* 2006, Skille & Østerås 2011, Alsarve & Tjønndal 2020). Skauge and Rafoss (2020) describe this change as structured: a gendered individualization process. In general, the literature reports that girls tend to prefer individualized lifestyle sports and body image/appearance-related sports more often, compared to boys (Seippel 2006, Green *et al.* 2015). Girls and boys ascribe different meanings to exercise/training activities and participation in sport, and girls are



**Fig. 3.** Percentage points change in predicted probability for having a preference for living in the native municipality for girls in relation to boys. Non-participants and participants in sports. N=10,792. Based on data from Ungdata surveys 2016, 2017 and 2018.

more individualized and reflexive in their motives and participation compared to boys because they are framed differently within the sports field (when it comes to body regimes for instance) (Skauge & Rafoss 2020). However, class intersects with gender in complex ways. Skille and Østerås (2011) found that academically oriented boys were far more competitive and oriented towards self-confidence, compared to carpenter-studying boys who trained with weights to get larger bodies, while academically oriented girls shared this preference for winning with their male peers. My findings confirm that educational plans associate with residential preferences, in line with previous studies which pinpoint that it is a clear class dimension in rural young people's process of becoming 'stayers' or 'movers' (Rye 2006, Bye 2009, Eriksen & Andersen 2023). Participants who had no plans to enter higher education increased their predicted probability of considering living in the native municipality, compared to participants with higher educational plans. The association was strongest for boys (Table 2). The general quest for education in contemporary society represents a powerful condition that feeds urban residential preferences among young people (Corbett 2013, Farrugia *et al.* 2016, Kettunen & Prokkola 2022). By early teenage years, pupils in the regions covered by this study face crucial decisions about leaving or staying at home related to the education they plan for (Rye 2006, Stenseth & Bæck 2021). Structural opportunities and constraints may vary, but the general trend is one of limited job markets and long distances in peripheral regions (Meld. St. 5. 2020).

The study also points to research which find that the school arena has a key position in young people's place belonging (Gulløy 2020, Eriksen & Andersen 2023). If participants disagreed that they

fitted in at school, their predicted probability for having a positive residential preference decreased compared to participants who agreed to fitting in (Table 2). School is the only arena where all peers at the same age meet on a daily base, and a lack of belonging to school probably transmits to other arenas, as previously observed (Strandbu *et al.* 2016, Dalen & Seippel 2021).

The body's significance for self-esteem and identity in youth may be part of the explanation. Although 'the body as project' also relates to boys, girls are more exposed to pressure from marketing and social media as well as from peers (Haugen & Villa 2006, Strandbu & Hegna 2006, Nielsen & Thorne 2014, Cooky 2018). Positive effects from participation upon girls' and women's social, psychological, and physical well-being and health are generally acknowledged in sports research (Cooky 2018), including in types of sports with a distinguished male domination (Alsarve & Tjønnndal 2020, Pielichaty 2020). Organized sports activities can strengthen girls' sense of control and make them more satisfied with their bodies and lifestyles.

From a socio-spatial perspective, the results support the idea that sports participation pushes girls' place relations into a positive direction due to improved social relations, friendship, and enjoyment. This is an interesting twist to mainstream leisure theories, pointing to improved social inclusion and enjoyment as likely outcomes of sports (Seippel 2006, Skille & Østerås 2011, Strandbu *et al.* 2016). If interpreted in a causal manner, gender affected *whether and how* sports participation affected young people's thinking about residential preferences. In other words, gender appeared important in associations between sports participation and preferences, but not in the way commonly modelled by early feminist researchers.

Girls' rejection of their places of living was more common among non-participants, instead of the other way around. Inactive girls reduced their predicted probability for having a positive residential preference with 14 percentage points with reference to inactive boys (Figure 3). This may relate to being excluded from important social processes among peers. Social legitimacy and power transmit from sports to other arenas, like school and social media (Strandbu *et al.* 2016, Dalen & Seippel 2021). In Australia, Tonts and Atherley (2010) conclude that competitive sports contributed through symbols and narratives to an apparent 'sense of place', but that the unifying and egalitarian place identity also had exclusionary and marginalizing dimensions. A recent Norwegian study shows that rural girls without higher education aspirations were those who least wanted to stay in rural communities, partly due to "a toxic social environment" (Eriksen & Andersen 2023, 12).

Participation in sports contribute to social integration, but it also builds upon previous integration from other arenas (Strandbu *et al.* 2016, Dalen & Seippel 2021). Several studies report on girls' experiences of social control, gossip, and social exclusion in rural settings (Glendinning *et al.* 2003; Haugen & Villa 2006, Rauhut & Littke 2016). The organized framework that sports represent may reduce social and sexist pressure upon girls and provide girls with strengthened networks, perhaps also *better* friendships, in a situation with digital bullying and repressive social media literally 'all over the place' (Décieux *et al.* 2018, Craig *et al.* 2020, Lien *et al.* 2023). This effect pertains to boys as well, but according to a network analysis from Dalen and Seippel (2021), girls' teams' social networks had a higher number of social relations and were more clustered, compared to networks in boys' teams.

Although the above results point towards gender-sensitive mechanisms involved in sports, the opposite causal direction of the association may also be true: that girls who see themselves living in the native municipality as grown-ups have a higher propensity for involvement in sports. Results from an alternative specification with sports participation as outcome (dependent) variable and all other variables of the study as predictors, including an interaction term for being a girl and preferring the native municipality (not shown) supported the presence of a reverse causal relationship between sports participation and residential preferences. Girls with preferences for the native municipality increased the predicted probability for participation in sports clubs by seven percentage points compared to girls without a positive preference. For boys, it was the other way around: with a positive preference, the predicted probability for being a participant in sports clubs was reduced by seven percentage points compared to boys without a positive residential preference.

These findings give additional weight to the conclusion that associations between sports and residential preferences are fundamentally different for girls and boys, as the initial gender gap in Table 1 indicates. Perhaps boys' place perceptions are unrelated to their leisure habits, as suggested

in a Norwegian study of organized leisure, place relations and belonging (Gulløy 2020). Is this a confirmation of the *gendering of rural space*, but without the anticipated effect from sports participation? Results can be interpreted as an indication of how sports cultures and values have changed over time.

### Changed sports, changed geographies

Although most Norwegian sports clubs still carry the name of their locality, links between sports and locale may have weakened in arenas that boys often attend. People living in less central regions of Norway are more often members of sports organizations compared to people living in more central regions, but they are not as often very active (Vaage 2015). Growth in individual and informal sports types taking place in commercial settings or natural surroundings is a Nordic leisure trend (Skille & Østerås 2011, Green *et al.* 2015, Skauge & Rafoss 2020). Common sport types among young people are martial arts, athletics, and gymnastics/aerobics. Weight/strength training, which often takes place in studios, was among the sports types with the strongest activity increase among young people 13–15 years old in Norway between 2004 and 2013, included in the least central regions (Vaage 2015). As Walseth (2006) notes, sports participation and belonging are not automatically linked, and different types of sport link to different strengths of belonging.

The role of sports participation in rural boys' everyday life may thus be transformed into less of a *local* activity. Instead, the meaning of sports is derived from the pleasures of being healthy and strong, of competition and mastering (Seippel 2006, Skauge & Rafoss 2020). Furthermore, fighting idleness and inactivity are important reasons for participation in sports (Strandbu *et al.* 2016), in line with the general individualized health discourse in society.

Football is the most common organized sports type for children and young people in the Nordic region (Seippel 2006). In Norway, football is also one of the most popular types of organized sports among girls, along with handball (Green *et al.* 2015, Vaage 2015). Large game sports like football and handball take place in specific sports facilities. Access to facilities as well as to active teams in the right age group is often restricted in the survey municipalities with their steadily decreasing populations of children and young people. Between 1978 and 2023, the number of 15-year-olds in Norwegian municipalities at the lowest centrality level (level 6) decreased from 5,000 to 2,600 (Høydahl 2023).

Organized sports activities are vulnerable to activity reductions in peripheral regions. The iconic national sport of cross-country skiing is not as common as it used to be. Participation is relatively expensive and technically demanding. Long distances means that young people living in these regions depend on parents willing to drive them a long way to training facilities, matches and training sessions if they want to take part in organized sports. Not all parents are willing or able to participate in this costly family transport system. Strengthened demands upon parents for engagement and economic resources represent a potential push-out factor for participation in organized youth sports (Andersen & Bakken 2019). In the least central municipalities of Norway, class constraints and spatial constraints may thus overlap and together contribute to gendered outcomes of individualization of sports.

Studies within this research field generally describes masculinity in rural places as closely linked to manual labor, physical challenges, and identities of work (e.g. Bjarnason & Thorlindsson 2006, Bye 2009, Moilanen 2012, Corbett 2013), but the dynamic and diverse manners in which rural boys construct their gender identities are also highlighted (Kenway *et al.* 2006, Bye 2009, Trell *et al.* 2014). Implicit in theories of gender constructions is that male gender identities are constructed as well as female. To 'do gender' in line with the dominant gender scripts applies to all young people (Forsberg 1998, Skauge & Rafoss 2020). Forsberg and Stenbacka (2013) conclude that, in their study of Swedish 'gendered ruralities', gender identities were renegotiated in complex processes that included competing gender identities, feminization, and male dominance. Norwegian research comes to similar conclusions. New caring practices and new ways of being a rural man are identified, while place loyalty is enacted in specific practices of hunting and outdoor life (Krange & Skogen 2007, Bye 2009). Depending on dominant gender contracts, new gender practices, and changing institutional contexts of family and education, associations between sports, belonging and residential preferences may transform.

## Final thoughts on gendered youth studies in shrinking Nordic regions

The study illustrates the difficulties in determining place relations from a dichotomous gender perspective alone. Massey (2005) refused the categorical binaries of feminist geography from the 1990's in her book *For Space*, because they were misleading as analytical tools and made space invisible. She argues against feminist positions that see space as exterior/female/object, in contrast to time as interior/male/subject. Nielsen and Thorne (2014) describe gender as tending to mix up with other distinctions in 'messy', non-dichotomous ways.

The presence of a broadly supported and institutionalized gender equality regime in Norway may partly explain why young girls strengthen their probability for expressing a preference for their native rural municipality when they participate in sports, instead of the opposite result. According to Berg and Forsberg (2003), concepts and theories from Britain's rural and gender research were poorly fitted for Scandinavian research settings. The latter countries' egalitarian gender relations contrasts Britain's complementary gender relations (*ibid.*).

A related explanation is that sports strengthen girls' local and social integration and feelings of belonging in the digital age. Gendered sports fields may imply specific ways of doing sports, but also of doing place. Participation perhaps counteracts borders between inside and outside, 'our' and 'their' place. Findings indicate that for girls living in small and sparsely populated municipalities of the Nordic regions, organized sports represent arenas for positive place relations. Furthermore, the study questions common representations of sports arenas as local hearths for masculine versions of Northern rural identity. This diverges from prevailing assumptions of gendered rural space.

By combining different strands of feminist thinking in an empirical analysis of girls' and boys' residential preferences, this study gains new insights into gender, sports, and place belonging in the digital age. As such, it presents research on what it means to live in "shrinking rural territories", as Syssner (2022, 113) formulates it. One practical implication from the results is that local governments and agencies may continue to highlight sports infrastructure to attract young people, and especially girls, to the countryside. Young people's agency and perspectives should be recognized in the planning and policy development of shrinking regions, as Kettunen and Prokkola (2022) suggest.

As I presented though (see Figure 2), many participants in this study were uncertain about their residential preferences: in itself an indication of the need for more research to capture the depth and characteristics of girls' and boys' residential preferences. This in turn provides important feedback to questionnaire designers and youth survey programs. Regional variations in young people's place relations and sports participation need comparative study designs and cluster analyses. Longitudinal studies to account for development of place relations following different types of sports participation can contribute to theoretical development of causal models. Finally, comparisons of sports with other leisure types will add a deeper understanding of sports as a tool for creating positive place relations and social integration in youth.

## Notes

<sup>1</sup> The data employed in this study were retrieved from the data base 'Ungdata 2010–2018' (Frøyland 2017). The Ungdata surveys are financed by the Norwegian Directorate of Health. Anonymous data were provided by Norwegian Social Research (NOVA) through Norwegian Centre for Research Data (NSD – Norsk senter for forskningsdata (now: Sikt)). Neither NOVA, Norwegian Directorate for Health, nor Norwegian Centre for Research Data are responsible for analyses or interpretations in the current study. For more information about the Ungdata survey system, see: <http://www.ungdata.no/English>

<sup>2</sup> Translated by the author. Other survey questions used in this study are translated by Ungdata (Frøyland 2017)

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