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Governance of nature-based health promotion: public policy and volunteer organisations' innovations of outdoor activities among urban youth

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ABSTRACT

This article explores multilevel governance networking and innovation to better understand how nature-based public health can be promoted at a grassroot level within an urban context. Hence, the leading research question examines *the extent of networking and collaboration within state and municipal policymaking and the implementation of socially inclusive nature-based activities among urban youths conducted by local volunteer organisations*. Multilevel networking and collaboration represent an analytical alternative to bottom-up and top-down strategies, which dominate the socio-political policies of outdoor studies in several countries. The exploration draws on empirical research conducted in 2020 based on a qualitative design. A website review was carried out to analyse facilitated nature-based health innovations embracing educational activities, leadership, and organisation run by local volunteer organisations targeting youth aged 6–19 across Oslo, Norway's capital. The investigation was substantiated by twenty-eight interviews with leaders of volunteer organisations and primary healthcare coordinators in five of Oslo's fifteen city districts, exploring their organisational experiences and reflections on nature-based innovations as a measure to promote health. The governance approach revealed several paradoxes and ambiguities in policy and practice. For example, there is a gap between the policy vision and available resources. There is also a need to understand better the complex networks and collaboration of public agencies and dedicated volunteers, their organisations, and interests. Furthermore, the continuous professionalisation of the voluntary sector and its significance in building a governance infrastructure that increases the capability of ongoing nature-based activity innovations need to be developed to meet policy goals and young people's needs and interests. Social inequalities were reported among those participating in nature-based activities and those who were not engaged. This pattern follows the well-documented spatial distribution of socioeconomic disparities.

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Perspectives and research question

Among policymakers in Europe and further afield, there is a growing awareness that outdoor activities can benefit social inclusion, well-being, and health, according to the World Health Organization

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(WHO, 2010). As a result, a growing field of research is evolving to understand the impact of contact and reconnection with nature on forming and advancing young people's dispositions and quality of life (Chawla, 2020; Rickinson et al., 2004). Cross-international and cross-Nordic reviews on nature-based health interventions among youths conclude that there is a need to study the drivers and praxis developments (Shanahan et al., 2019; Steigen et al., 2016). To do so, this article explores multi-level governance networking and collaboration as drivers and theoretical framing for contemporary nature-based public health interventions within a Norwegian urban context. Thus, it aims to provide a deeper understanding of how nature-based health promotion can occur at grassroots level.

'Nature-based health interventions' embrace complex practical interventions such as green care, blue health, and nature/wilderness therapy. The equivalent Norwegian (and Scandinavian) concept of outdoor life – *friluftsliv* – embraces nature-based health promotion, a range of self-governed recreational activities, formal education, and multiple volunteer organisations signifying diverse human-nature relationships (Gurholt & Haukeland, 2020).

Multilevel governance networking and collaboration imply interconnected engagements of public and civil sectors as driving forces for socio-political transformations of welfare services, including outdoor life and public health. The term governance has a long lineage in English, offering multiple meanings of ruling and public sector reforms and social change (Henry, 2007). Based on a review of four edited volumes scrutinising governance, Ansell (2008, p. 461) claims that most researchers worldwide agree it implies greater involvement by non-state actors and more decentralised and pluralistic processes coordinated through public and civil networks. However, according to policy researchers Røiseland and Vabo (2008), Norway does not have a precise equivalent concept. Nevertheless, governance has long impacted the Nordic welfare model, including organised sports and leisure (Bergsgard et al., 2019a, 2019b). This article departs from Røiseland and Vabo's definition of governance as a 'non-hierarchical process through which public and private actions and resources are coordinated and given common direction and meaning' (2008, p. 86). Hence, governance indicates a shifting from state-centric and top-down ruling systems and markets. In their place, there are multilevel networks and partnerships where negotiations take place between the public and civil sectors, including voluntary organisations. These have come to the forefront to mobilise and coordinate activities and allocate resources providing social welfare in response to the proliferation of severe and unruly societal issues (Sørensen & Torfing, 2017, p. 826). Jenson (2015, p. 90) argues that 'sometimes services previously provided by governments are out-sourced to not-for-profit actors such as non-governmental organisations (NGOs) that operate as market actors.'

In the Nordic welfare model, the state has primarily provided social welfare, while the role of the voluntary sector – which commonly refers to associations run by membership fees and democratic principles (Frivillighet Norge, 2019), has been to establish links between individuals, civil society, and national politics. Norwegian sociologists Stende et al. (2020) argue that, in recent years, government welfare reforms have shown increased expectations of a diverse voluntary sector that includes NGOs in delivering public welfare services, even for non-members. In addition, Norway (and the Nordic countries) are ranked highest in Europe in terms of the proportion of the population engaged in voluntary work. Across the Nordic countries, *friluftsliv* federations express ambition to contribute towards building healthy and sustainable societies (Gurholt & Haukeland, 2020) and a willingness to embrace responsibility for the inclusion of immigrants (Pitkänen et al., 2017).

Governance theory has been introduced to study the changing relationship between Nordic welfare states and organised sports (Bergsgard et al., 2019a; Tin et al., 2020) and to understand contribution sport can play in promoting public health through increasing the population's engagement in physical activity (Aggestål & Fahlén, 2015; Tjønndal, 2018). Furthermore, governance has been introduced in Scandinavian nature management and outdoor recreation research (Gentin et al., 2022). This article, therefore, contributes new perspectives to outdoor studies by presenting an alternative to the bottom-up and top-down approaches that Passy and colleagues (2019, p. 77) claim dominate outdoor health promotion strategies internationally.

Against this background, the leading research question *examines the extent of networking and collaboration within state and municipal policymaking and the implementation of socially inclusive nature-based activities among urban youths conducted by local voluntary organisations.*

Methodology

The analysis draws upon a study conducted in 2020 by a team under my leadership (Gurholt et al., 2020), referred to as ‘the Oslo-study’ throughout the article. The study examined nature-based innovations targeting youth aged 6–19 across Oslo, Norway’s capital, and combined three data sources on policy and organisational levels: 1) an examination of the most recent policy documents – the constitutional white papers and action plans on state and municipal levels;¹ 2) a comprehensive qualitative website review charting facilitated nature-based activities offered to youth across Oslo; and 3) semi-structured interviews with twenty-eight purposely selected leaders of volunteer organisations and public healthcare coordinators working in five of Oslo’s fifteen city districts. These districts represent the higher, middle, and lower socioeconomic neighbourhoods as confirmed by public statistics.² Each district is governed by locally elected politicians and public administration managing local budgets and public issues, such as health and social care, to secure high user involvement. In addition, the districts characterised by culturally mixed neighbourhoods and lower economic status benefit from joint state–city urban development programmes which aim to increase social welfare services, including access to green spaces (City of Oslo/State Departments, 2020). The Oslo-study was anchored in the City of Oslo’s investment plan for sports and friluftsliv for 2021–2030, stating ‘Oslo should be well facilitated for sport and friluftsliv, especially among children and youth’ (City of Oslo, 2020, p. 6). Furthermore, the plan stated that the goal of the next decade(s) was to promote active living and enhanced social inclusion, quality of life, and health. The priority was to encourage those facing stressful life situations, and those who lacked support within their families, to use green spaces near their homes. The Agency for the Urban Environment initiated and financed the research as it wanted fresh insights into how the city could better direct their measures and increase the number of children and youth participating in friluftsliv. Hence, nature-based experiences were conceptualised as tools for reducing social inequalities in public health.

The research team worked collaboratively to refine the research questions and design, and generate and organise data. Inspired by a methodological approach Norwegian researchers Asdal and Reinertsen (2020) call practice-oriented document analysis, I later analysed the state and municipal policy documents as texts that act on, and interact with, the surrounding society. My focus was on the impact of the policy documents and how these were influenced by interactions with voluntary organisations. The online review included websites of all relevant voluntary associations and the five districts mentioned above, identifying nature-based innovations through outdoor activities, including information on target groups, leadership, the number of participants recruited, regularity, and duration. The results were attached to the final report, covering seventy pages of condensed displays, diagrams and contextualised accounts.

The semi-structured interviews lasted about 1½ hours each. Moreover, they comprised themes such as project development and planning, project application and financing, collaboration with public agencies, and recruitment of volunteers and young participants. First, transcripts of the interviews and the other data sources were analysed separately, following an inductive approach moving between coding, themes and concepts (cf., Kvale & Brinkmann, 2015). Next, the themes and ideas of the three data sources were connected, compared, interpreted and further developed as the research team moved from situated descriptions to accumulated interpretations. These were published in Norwegian.

In carrying out the reanalysis for this article, I worked reflexively by moving back and forth between the sources and levels of data, concepts and findings presented in the groundwork. I adopted an approach that aligns with the qualitative research conceptualised as a recursive and

iterative process (Cassidy, 2016, p. 402), wherein ideas and understandings are refined and validated. Furthermore, this process was stimulated by writing in English, which added a new semantic for comparison and validation that modified meaning.

The results are organised under four themes, which I discuss below: 1) multilevel and cross-sector policymaking, 2) implementation and innovation by volunteer organisations, 3) paradoxes and ambiguities in policy and practice, and 4) limitations and further research.

Ethical considerations

The City of Oslo defined the contract research's overall aims and themes. However, the urban environment agency in question did not influence the autonomy of the researchers regarding refining the research questions, methodology and design, theoretical framing, analyses, discussion of results, and conclusions. Throughout the process, the research team discussed the risks and benefits of the study, ethical considerations when approaching people of different sociocultural backgrounds and the need to avoid negative judgements and stigmatisation in dialogues, texts, and interpretations (Palmer, 2016). Qualified colleagues acted as critical readers, and the Norwegian Agency for Shared Services in Education and Research (Sikt.no) proved the ethical protocol (reference 935898).

Multilevel and cross-sector policymaking

Public access rights and multilevel nature-based health promotion

The Ministry of Climate and Environment (MCE) is responsible for the governance and preservation of nature. It is also responsible for making friluftsliv available to all. Hence, the environment policy concerns the climate crisis and biodiversity loss *and* manages democratic land-use opportunities, including the physical facilitation of self-governed outdoor life. Around the mid-twentieth century, friluftsliv for all became a national objective and was included in the broader state-driven environment, welfare, leisure, and social policies. These policies included social reforms and the promotion of public health by encouraging the population to take part in physical activities, sports, and friluftsliv (Gurholt, 2015; Tin et al., 2020).

Today, the MCE has a special duty promoting friluftsliv as a sociocultural field, and it embraces its voluntary organisations and the socialisation of the younger generations. Accordingly, the state's and Oslo Council's policy papers on friluftsliv (Meld. St. 18. (2015–2016), p. 7; City of Oslo, 2016, 2017, 2020) claim that engaging more young people, independent of their family backgrounds, to use green spaces near their homes is a primary objective. The documents argue that as the family has lost its hold, the voluntary sector has become critical in realising the policy objective. The government's action plan for friluftsliv (MCE, 2018, p. 26, 33) and Oslo's investment plan for sports and friluftsliv (City of Oslo, 2020) follow up by specifying that disabled and socially disadvantaged youth are primary targets. Thus, the state and city policies indicate that low-threshold, low-cost activities, free access rights to green areas and activities run free of charge by volunteers can bring about social inclusion, reduce social inequality, enhance health, and reduce health budgets. Consequently, expectations of the volunteers' ability to recruit children and youth, especially those threatened by marginalisation, are high. The policy documents also claim collaboration within civil networks might promote young citizens' involvement in policymaking and public debate.

Leaders and executive members of friluftsliv organisations have, over time, engaged in lobbying and public debate with state and municipal policymakers to strengthen friluftsliv as a public health policy by developing a governmental white paper (Meld. St. 18. (2015–2016)) and an operationalised action plan (MCE, 2018). In addition, by responding to public hearings, volunteer associations have influenced the state's and city's policies. When interviewed, local volunteer leaders hoped that

increased state budget and grants would follow this policy and stimulate collaborative innovation. Thus, they anticipated this would lead to increased member recruitment and improved social inclusion at the grassroots level which would further strengthen the voluntary sector.

Cross-sectorial responsibility and volunteers caught in ambivalence

The Oslo-study verified that the national sector policies on the environment and public health describe friluftsliv as a self-organised civil society domain. At the same time, friluftsliv is described as a multifaceted voluntary field that embraces environment, education, culture, and social care with broad political support. Accordingly, the government white paper and action plan for friluftsliv (Meld. St. 18. (2015–2016); MCE, 2018) expressed expectations of the far-reaching health and welfare effects of mobilising vulnerable groups through civil networks and volunteer organisations. However, the government white paper on volunteer policy (Meld. St. 10. (2018–2019), p. 7) also affirmed *autonomy* as fundamental to the voluntary sector. Hence, the primary mandate of volunteers is to serve their members' interests. Consequently, the voluntary sector seems caught in an ambivalent position. The organisations must balance their commitment to serving their members' interests with acting as a tool for realising the national policy objectives of social inclusion among non-members at the grassroots level. To reduce potential tensions, the government initiated grants to accomplish the policy objectives, encouraging the voluntary sector to develop innovative outdoor projects favouring youths with immigrant and low-income backgrounds.

Friluftsliv is also mandatory and promoted in national school curricula from kindergartens to higher education, but is regulated by the Ministry of Education and Research. Research on formal education in friluftsliv shows that actual teaching is the responsibility of individual physical education teachers and occurs irregularly, although it is being more successfully integrated into kindergartens and primary education (e.g. Abelsen & Leirhaug, 2017; Sanderud, 2022). Nonetheless, the Oslo-study documented that volunteer organisations offered nature-based programmes and activities in public schools. This indicates that the realisation of school-taught friluftsliv is multifaceted and deserves a separate analysis.

Implementation and innovation by volunteer organisations

A multifaceted voluntary sector

Friluftsliv-organisations have made their mark on Norwegian society, since the latter half of the nineteenth century, by promoting free roaming in outfields by marking trails, building shelters, and disseminating knowledge based on democratic intentions (Ween & Abram, 2012). The first associations mainly recruited males from the upper classes following old customs of wayfaring and dwelling in the sparsely populated countryside. Apart from this, they also found inspiration in European Romantic philosophy, and the mountains became their favourite landscape. Subsequently, the inter-war period witnessed the dawn of social class reforms. As a result, a new type of friluftsliv organisation emerged that targeted the political objectives of public health and democracy through the legal enforcement of public access rights to outlying land encircling urbanising areas, regardless of who owned the land.

Consequently, the voluntary sector holds diverse and contradictory values, spanning welfare services to market organisation. The sector is split into two national federations: the Norwegian Friluftsliv Federation [Norsk Friluftsliv] and the Friluftsrådenes Landsforbund. The former encompasses eighteen membership associations whose interests include mountaineering, hunting, angling, skiing, scouting, and more. Altogether the federation embraces personal memberships of nearly one million (about 20 per cent of the population) in local branches, whose size and societal impacts vary remarkably. The other alliance, the Friluftsrådenes Landsforbund, consists of twenty-

eight inter-municipal friluftsliv councils with a presence in 60 per cent of the country's municipalities. These councils align with NGOs, have elected politicians to serve on their executive boards and operate at the nexus of society's political and civil realms, promoting: 1) the protection of free public access rights; 2) the encouragement of an inclusive, low-threshold, and sustainable notion of friluftsliv; 3) the building of physical infrastructure that supports local hiking; and 4) the protection of landscapes suitable for friluftsliv.

Volunteers' implementation of nature-based public health promotion among youth

Since its establishment in 1936, the Oslo Intermunicipal Friluftsliv Council has initiated proactive policymaking on friluftsliv for the greater Oslo region based upon collaboration among its members, covering two counties, fourteen municipalities, and forty-two membership organisations. The latter represent friluftsliv, non-competitive nature sports, nature preservationists, 'local friends of forest areas', non-profit welfare organisations, and local branches of two worldwide children's associations, such as the Scouts.

The Oslo-study's review of more than forty volunteer organisations' web pages and the interviews it conducted found that sixteen organisations facilitated nature-based social activities like picnics in nearby green spaces; however, only four of these organised regular and all-season friluftsliv activities as their primary goal (Gurholt et al., 2020).

The Oslo Intermunicipal Friluftsliv Council operated with permanent staff in a trust-run outdoor centre owned by the city, providing year-round outdoor activities for immigrants as a component of the immigrants' mandatory and public introduction programme. By facilitating nature experiences, the programme pursued the attainment of competency in the Norwegian language, cultural perception, and knowledge on topics such as equality, democracy, and the voluntary sector. In addition, the two oldest and most well-established membership organisations, the Norwegian Tourist Association and the Association for the Promotion of Skiing, offered occasional free-of-charge events open to all citizens and specially designed projects targeting youth and schools in less affluent districts financed by public and private grants. Equipment was provided free of charge, and sometimes ordinary activities could be offered at subsidised prices.

Additionally, Wild X, a recently established organisation identifying itself as the 'only multicultural friluftsliv and environment organisation', facilitated weekly activities around an open house provided by the city, occasional weekend trips and holiday camps for those aged 12–25. However, primarily males with immigrant backgrounds were recruited. The state budget and public and private grants financed permanent staff and activities.

Nature-based health promotion by city districts' public health units

The public health units in culturally mixed and lower socioeconomic districts incorporated in state-city urban development programmes also organised occasional nature-based activities and holiday camps for children and youth. These events were offered free of charge, but they were few in number, arguably due to budget constraints. The inner-city district hosted an outdoor centre, founded in the mid-1990s by the first state-city urban development programme, which is today supported by the district's public health budget. It offers the most comprehensive outdoor programme for youth across Oslo, providing a range of activities – confusingly like those provided by the volunteer organisations – daily and year-round during school holidays, even at Christmas. All activities were accessible and provided without cost to children living in the inner city, including accessible equipment loans. Managers and permanent staff, who included outdoor instructors, teachers, and social youth workers, collaborated across the district's social care unit, schools, the police, and voluntary organisations. With ongoing planning, they gradually expanded their innovative activities by receiving public and private grants.

Cross-sectoral and multiple-level networking and innovative collaboration

The city's and government's policy and action plans on friluftsliv (City of Oslo, 2020; MCE, 2018) triggered a mobilisation of voluntary and not-for-profit organisations. As a result, staff and volunteers put significant effort into developing applications and initiatives at the grassroots level to achieve policy goals and meet the target audience's needs. Thus, multilevel cross-sectoral networks and collaborative innovations grew, sometimes even initiated by individual staff members who designed projects themselves in response to the announced public and private grants. This mobilisation led to expressions of optimism about their mission.

When asked about the significance of friluftsliv policy and practice for enhancing public health, the volunteer leaders and public health coordinators expressed a shared conviction that daily nature-based activities can improve young people's physical, mental, and social health. Additionally, they believed in the argument that the activities would positively impact the youth's social inclusion and trust in democracy. However, the city districts' public health coordinators did not often see young people using green spaces as part of their agenda, arguably, due to their primary goal of developing public health plans in each district and the limited resources allocated to young people. The leaders of the voluntary organisations expressed concern about the scarce funding and conflicts posed by their mandate to serve their members' interests.

At the local level, the Oslo Intermunicipal Friluftsliv Council invited public health coordinators, representatives from the urban environment agency, volunteer leaders, and researchers to monthly gatherings to stimulate dialogue and the mutual sharing of ideas, experiences, and transformative learning. Thus, a new arena for 'collaborative outdoor innovation' was created (cf., Sørensen & Torfing, 2017, p. 826). Their long-term vision was to improve public-volunteer governance, strengthen the public management and financing of friluftsliv and promote nature-based health.

The extended multilevel networking also comprised the primary user groups recruited through collaboration with schools, local volunteer centres, public managers, and volunteers' acquaintances. Offered activities became publicly available through announcements on the organisations' and city districts' websites. However, upon commencing the website mapping, the research team found that communications chiefly targeted adults with basic knowledge of the volunteer organisations. Only two sites were identified that targeted young people directly.

Paradoxes and ambiguities in governance policy and practice

A voluntary sector facing increased professionalisation and new risks

As there was considerable competition for limited grants, a further result was that project acquisition became a professional endeavour in which only the more prominent organisations participated. Planning and implementation could not be left to volunteers. Successful projects required sociocultural competency and capital, outdoor expertise, specialist administrative management, and higher educational attainment. The short time frame for planning and the annual financing procedures reduced predictability to a minimum and created significant uncertainty. Projects had to be launched before it was known whether financing had been secured. Therefore, it became crucial for organisations to manage their time and have binding agreements in place to avoid unexpected economic and social risks. Consequently, the associations were left with increased bureaucracy and a 'market-expanding effect' (cf., Jenson, 2015, p. 90). In addition, the volunteer organisations, led by permanent staff, had to foot the bill themselves if their applications were unsuccessful. These developments correspond with what Jenson defines as 'blurred governance boundaries' (2015, p. 90). The concept describes the intersecting relations and interdependency of public policy and funding, volunteers and not-for-profit organisations, and private funds financing the volunteers' production of essential public welfare and reduced health inequality.

To carry out socially inclusive nature-based activities successfully, the volunteers and the publicly run outdoor centre relied on external funding to recruit and keep the critical numbers of staff and volunteers which were needed to deliver predictable and high-quality services. However, well-qualified and dedicated volunteers were a limited and precious resource. Moreover, even if volunteer recruitment was successful, the costs of involving them required input from hard-working hired staff. These results are comparable with studies on public health promotion through sports organisations, showing that an insufficient influx of human and economic capital was a critical barrier to health promotion by physical activation (Tjønndal, 2018).

Another finding of the Oslo-study was that most voluntary organisations and public healthcare centres could offer free-of-charge placements to youth only in neighbourhoods which were included in the urban state–city development programmes where specific grants had been made available. However, paradoxically, the experiences of activity leaders suggested that even funded offers might benefit from low participation fees. For example, an event which was free of charge might be seen to signify that the event in question had little value. For this reason, potential participants might not have felt obligated to participate in activities they had signed up for, even when the events included food, transport, equipment, and overnight stays. Consequently, when young people who had signed up for an event either did not turn up, or pulled out at the last minute, the organisations lost funding and had to pay the extra costs themselves.

In general, nature-based health promotion, targeting youth, relied on higher-education expertise to craft high-quality engagement that directed young people's needs and interests. At the practitioner's level, the activities involved experiential learning, including knowledge about public access rights, sustainability, and civil society. These topics reflected the policy aims of enhancing the young participants' connection to the land and becoming active citizens contributing to local neighbourhoods while building self-confidence. However, research on the outdoor programme's short- and long-term effects is scarce and shows contradictory results. A recent ethnographic study on participants with minority backgrounds indicates that whilst some participants may report negative experiences, others may have positive feelings of inclusion and mastery of new social and practical skills (Broch, 2018).

Reproduction of social inequalities

Oslo is fast-growing with substantial immigration. The new citizens rely on civil society support to help them integrate within their new neighbourhoods and develop their language skills, cultural knowledge and familiarity with the northern landscapes and dark winters. Furthermore, immigrant families face higher-than-average unemployment rates, persistently low income, health issues, and cramped multigenerational living quarters (Ljunggren & Andersen, 2017). The proportion of children who grow up in persistently low-income families was around 20 per cent in 2019. The trend is growing (Espeland & Normann, 2021), with a majority having an immigrant background and tending to participate less in leisure and nature-based activities.

Sociocultural fields, organised sport and friluftsliv are notably dissimilar. The competitive logic of organised sport has a solid grip on youth across Oslo (Bakken, 2018) but does not align with ideas of public health promotion (Skille, 2010). In contrast, while friluftsliv organisations have concentrated on self-organised non-competitive hiking, they have paid minimum attention to facilitating regular (e.g. weekly) youth activities. The Scouts movement was an exception to this, but it is not as significant as it once was. Moreover, Norway has no tradition of running outdoor centres for learning outdoor skills and socialising, such as those found in the UK (Anderson et al., 2021; Prince, 2021). Consequently, participation in friluftsliv was, and still is, a self-governed activity. Only six per cent of hikers over eighteen in Oslo participated in organised groups (Kantar, 2021, p. 22). Correspondingly, young people mainly learn about nature and hiking through family, friends, and self-organised outdoor activities. As an integrated part of civil society, friluftsliv does not reflect the cultural diversity of the population of Oslo (Breivik & Rafoss, 2017). Socioeconomic inequalities are, therefore, pervasive.

A representative Young-in-Oslo-2018 survey (Bakken, 2018), distributed to 8,449 pupils in grades eight to thirteen, included six questions on friluftsliv-participation. On average, about half of the youths did not engage at all, or engaged less than once *a month* in any of the investigated core forest-friluftsliv activities, such as hiking, cross-country skiing, angling, or overnight camping. The results showed that socio-economic inequality and parental ethnic background systematically influenced who was regularly active and who was not. The high proportion of youths participating corresponded with more affluent socio-economic backgrounds and parents born in Norway. Conversely, the lowest activity rates were found among youth groups who had grown up in families with a socioeconomic status inferior to the Oslo average and whose parents were born outside of Norway. Among the youth whose socioeconomic family backgrounds aligned closely with the Oslo average, the chances of being active were roughly fifty-fifty. These results mirrored the spatially distributed socioeconomic and ethnic inequalities well-known across Oslo. The city districts with the most severe social concerns enrolled in the state-city social reform programmes had the lowest participation ratios (Gurholt et al., 2020).³

The facilitated nature-based activities only reached a limited number of the target groups. Thus, the aggregated number of participants and the scope of facilitated nature-based innovations targeting youth to promote health and social inclusion were few compared with the total number living in the five city districts, not to say in all of Oslo. The activities varied significantly in content, leadership, regularity, and duration. Due to annual funding procedures and limited grants, the prospects for most of the innovations were uncertain and could not be forecast. Thus, the existing social inequalities among those who participated in nature-based activities and those who did not engage, not only went unchallenged, but were replicated. The well-documented spatial distribution of socioeconomic disparities and unequal participation in friluftsliv seems resistant to change.

These results do not correspond with expectations expressed within policy documents and project rhetoric. So far, the policy appears more symbolic than sincere.

Unsolved ambiguities and unrealistic optimism

Researchers interrogating the dynamics of local governance claim that ambiguity is a central element that affects civil actors' ability to deal with challenges on the grassroots level. They argue that the public-volunteer bonding undermines the voluntary sector's independent status and its organisations (Aggestål & Fahlén, 2015; Bozzini & Enjolras, 2012). Such ambiguity was articulated in the state and municipal policy documents on friluftsliv and public health, indicating potential political and practical tensions between the autonomy of the voluntary sector and the public agencies seeking agency over civil society networks. Accordingly, social policy researchers are concerned about 'how policy and research communities now understand, shape and work to organise relations between civil society and the state and within the civil society itself' (Jenson, 2015, p. 89). Researchers in physical cultures and sports have, among other aspects, criticised the move in public health policy from government to governance due to its tendency to instrumentalise volunteers and make them shoulder responsibility for welfare services and social change, which they, as volunteers, cannot accomplish (e.g. Aggestål & Fahlén, 2015; Carter, 2015; Pullen & Malcolm, 2018).

The size of the social missions, the limited grants available, the unpredictability of the conditions under which the volunteers worked, and the responsibility they took on caused an unsustainable imbalance. Making volunteers responsible for bringing about social change to improve the quality of life for young people facing stressful situations may make both the young people and the volunteers vulnerable. For example, where responsibility for social inclusion falls principally upon volunteers, the task may become a burden and create a feeling of loss, unfulfilled expectations, broken promises and mistrust among young participants and volunteers if resources are subsequently withdrawn, and the innovations stop. Hence, the Oslo-study revealed a need to build enduring governance structures and organisational infrastructure that ensure regularity, continuity, predictability, and long-term effects if the set policy goals are to be achieved. In addition, young people's needs are to be met.

The Covid-19 pandemic made social innovation and tackling inequalities in friluftsliv more critical. It made visible a need for a public policy shift from emphasising physical facilitation for self-governed hiking and a taken-for-granted idea of friluftsliv as a shared culture to emphasising organised options for regular participation and learning. However, this policy has contributed to concealing the massive civil investments that only reproduce established socioeconomic inequality in friluftsliv. This was witnessed again when Norway faced the pandemic lockdown in mid-March 2020. Then, self-driven groups of family and friends spread across urban green spaces more often than in the preceding years (Venter et al., 2021), thus, indicating a growth in self-governed outdoor activities. Most likely, this 'wave' was affected by general travel restrictions to countryside cabins, social distancing, and a 'scorching' spring season.

Concurrently, other consequences of the lockdown gained little public attention. The government closed all leisure programmes for children and youth, even outdoors. In addition, reduced state-financed support for nature-based innovations made it difficult for the volunteer organisations to continue the work they had just commenced. Furthermore, the dependency on external financial support became evident, and the acquired expertise and network collaboration among volunteers, local health coordinators, and public agencies withered. Likewise, the total number of urban children and youth granted to engage in facilitated outdoor activities beyond the scope of their families ended up being minimal. Recent research (Broch et al., 2022) indicates that more children stayed indoors during the lockdown. The most damaging effects hit the socially disadvantaged youth, as they lost access to networks and activities beyond the constrained circumstances of their families.

Limitations and further research

This article aimed to better understand how governance networking can promote and provide nature-based health at the grassroots level in contemporary urban contexts. While the underpinning empirical research was rooted in local governance innovation across Oslo, its theoretical and practical implications have a broader relevance. According to Sørensen and Torfing (2015, p. 146), public mobilisation of organisational networks in response to the proliferation of severe societal issues in order to enhance social welfare among youth at risk of marginalisation is a European policy trend. However, the two renowned researchers conclude, 'it seems that the action still falls short of broader aims and aspirations' (Sørensen & Torfing, 2015, p. 150).

Compared to other cities, Oslo is fortunate regarding possibilities for exploring nature. The city's slogan, 'the blue and the green, and the city in-between', depicts its location between the fjord and the forest. In 2009, the parliament passed legislation safeguarding the 1,700 square kilometres of surrounding boreal forest from urbanisation, aiming to promote friluftsliv, nature experience, and nature-friendly sports (Gurholt & Broch, 2019). However, the Oslo-study confirmed that public free access rights to forests and sea, accessible within thirty minutes by public transport from around the city, is not enough to stimulate regular hiking.

The governance approach has revealed several paradoxes and ambiguities in policy and practice. First, there is a gap between policy vision and available resources. Second, there is a need to understand better the complex networks and collaboration of public agencies and dedicated volunteers, their organisations, and interests. Third, there is a need to understand better the ongoing professionalisation of the voluntary sector and its changing significance in building governance infrastructure to increase its capacity to meet the nature-based policy goals and young people's interests. Fourth, a cultural change is required that recognises the complexity of multilevel governance networking in allocating civil society resources. Fifth, there is a need for a cultural shift from exclusively emphasising welfare services providing physical infrastructure for self-governed activities to promoting participation and learning in locally facilitated nature-based activities (cf., WHO, 2021). Sixth, recognition is needed that all newcomers, young and old, regardless of their cultural background, need guided experiences to acquire minimum essential skills and experience to feel comfortable and competent in Northern natures, even in close-to-home areas. Seventh, patterns of social

inequalities, among those who participated in nature-based activities and those who did not, were reproduced and followed the well-documented spatial distribution of socioeconomic disparities.

Sørensen and Torfing (2017, p. 827) claim that the results and capacity of governance networking and collaborative innovation depend on 'how they are metagoverned', defined as the 'governance of governance'. However, the Oslo-study showed that no clear meta-governance was established in the public administration concerning the cross-sectorial management of outdoor activities. This lack of a body responsible for managing friluftsliv's sociocultural interests is not new (Tordsson, 2008). Hence, to contribute knowledge and build managerial strength, future research should employ longitudinal designs addressing the significance of meta-governance of multilevel networks and cross-sectorial collaboration to better understand how to facilitate nature-based public health promotion.

The Young-in-Oslo surveys have provided public agencies with research about sports facilities and youth participation in organised sports (Bakken, 2018; Strandbu et al., 2019). In contrast, youth participation in friluftsliv is substantially under-researched. Knowledge in this field is so deficient that the Norwegian Environment Agency (2019), responsible for implementing the state friluftsliv-policy and Norway's contribution to the United Nation's Sustainable Development Goals, admitted to not having the information required to qualify its judgements. Nevertheless, the environment agency optimistically argued that the number of youths participating in friluftsliv was 'probably high'.

Accordingly, a more action- and collaborative-oriented research approach might develop a better empirical and theoretical understanding of how nature-based innovation can occur at the grassroots level. Additionally, such an approach may contribute new knowledge on how volunteer organisations and public agencies might collaborate to create inclusive and sustainable outdoor communities. In addition, young people's perspectives on their connection with nature, and their needs and interests, which have not been addressed here, raise other important questions for future research.

Notes

1. Meld. St. 18. (2015–2016), Ministry of Climate and Environment, (2018), Meld. St. 10. (2018–2019), Meld. St. 19. (2014–2015), City of Oslo (2016, 2017, 2020) and City of Oslo/State Departments (2020).
2. <https://www.oslo.kommune.no/statistikk/#gref> [accessed 2020-2021].
3. Norwegian Social Research Institute (NOVA) leads the *Young in Oslo* surveys and the database www.ungdata.no in collaboration with the Regional competence centres for the field of intoxicants (KoRus).

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