Can sufficiency become the new normal? Exploring consumption patterns of low-income groups in Norway

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Abstract

Sufficiency has gained increased attention within sustainable consumption research in recent years. Often presented in opposition to guiding principles like efficiency, which discuss sustainability issues alongside ideas of economic growth, sufficiency offers alternative sustainability pathways that highlight the need to reduce consumption. This paper discusses the interrelation between sufficiency principles and consumption patterns of low-income groups, exploring how sufficiency could support the needs of vulnerable groups in society. Low-income groups use fewer material resources than high-income groups due to their comparatively limited economic resources. However, low-income groups at risk of relative poverty are also vulnerable to various factors that can significantly impact their health and wellbeing. Studying low-income groups offers possibilities for understanding the work that goes into establishing sufficiency-oriented practices and the potential pitfalls of the sufficiency discourse. Through our qualitative study of low-income groups in Norway based on focus groups and interviews, we identify three different characteristics relating to sufficiency. First, *sufficiency as a necessity*, pointing to situations where lack of economic resources forces low-income groups to consume frugally; second, *sufficiency as opposition*, where low-income groups pursue sufficiency goals because they do not identify themselves with mainstream growth narratives and consumption patterns; and, third, *sufficiency as reframing sustainability*, where sufficiency arguments give value to low-consumption patterns positioned against technology-centred and green consumerist narratives about sustainability.

Keywords

Sufficiency, low-income groups, reduced consumption, justice, practice theory

Key messages

- The paper studies the interrelation between sufficiency principles and consumption patterns of low-income groups.
- The paper identifies three characteristics: sufficiency as a necessity, as opposition, and as a reframing of sustainability.
- A normalisation of reduced consumption for the well-off would help low-income groups and advance sufficiency principles.

Introduction

Substantial evidence now suggests that without large-scale cuts in the volume of energy and resources appropriated by high-income nations planetary boundaries will continue to be transgressed (Hickel et al., 2022; Richardson et al., 2023). Accordingly, the 2022 IPCC report on mitigation of climate change mentions that sufficiency policies, defined as "a set of measures and daily practices that avoid demand for energy, materials, land and water while delivering human well-being for all within planetary boundaries", can contribute to mitigating emissions alongside efficiency and renewable energy policies (IPCC, 2022, p. 31). Transitioning from decades-long reliance on efficiency strategies, including supply-side technology enhancements, waste minimisation, and electrification, to sufficiency poses a significant challenge in economies heavily reliant on substantial material and energy flows. How can we achieve reductions in consumption?

Efficiency efforts tend to make only specific solutions possible—often high-tech and gadget-oriented—to solve problems relating to climate change or loss of nature (e.g., Shove 2018; Wilhite 2016). For instance, people might think they have become more sustainable when buying a new, A-labelled dryer, although a drying rack uses much less energy. In contrast, the sufficiency concept offers an alternative way of thinking about sustainability pathways that highlights the need to define limits for consumption. The sufficiency perspective (i.e., Princen, 2005) is placed in the 'strong' sustainability category (Spangenberg and Lorek, 2019), calling into question the premise that economic growth can help sustainability efforts (Hickel and Kallis, 2020). While there is an increasing interest in approaches to the concept (see, e.g., Callmer, 2019; Sandberg, 2021), no agreed procedure exists for how sufficiency can be understood, studied or operationalised. There is thus a need for empirical studies that shed light on factors enabling or challenging the enactment of sufficiency and which explore how the overarching objectives of sufficiency approaches relate to local contexts and practices (Jungell-Michelsson and Heikkurinen, 2022; Spangenberg and Lorek, 2019).

Employing a constructivist practice perspective (e.g., Halkier and Jensen, 2011), this paper aims to bring the still abstract questions of sufficiency into a more tangible discussion of what sufficiency can look like. The study is based on storytelling workshops and interviews with 73

people from low-income groups in three different Norwegian cities. Apparent paradoxes characterise Norway's sustainability transition: it is an affluent, oil-rich, welfare society with high levels of individual energy and resource use. Nevertheless, Norway also has ambitions of being a frontrunner internationally in certain climate policy areas like the electrification of transport and industry (Korsnes et al., 2023). In a society where high consumption levels are the norm, consumers with limited resources are likely to feel excluded. We understand poverty as a concept relative to the norms and practices of a given culture and society (Ekström and Hjort, 2010; Eskelinen, 2011). While sufficiency approaches necessitate a reduction in average consumption levels (see, e.g., Callmer, 2019; Mont et al., 2013), there is a lack of emic perspectives on the sufficiency context specific to low-income groups, particularly within high-income nations (Hamilton et al., 2014).

Since average consumption levels in Norway are considerably higher than globally, a larger share of the Norwegian population must reduce consumption to be within planetary boundaries (Gough, 2020; Hickel et al., 2022). Indeed, if sufficiency approaches aim to enable good lives for all, irrespective of geographical location (see Brand et al., 2021), average consumption levels in Norway might need to get closer to the levels of Norwegian low-income groups. Our objective in studying sufficiency in the context of low-income households is thus two-fold. First, our starting point is that sufficiency comes into being through the work and actions of actors and the relations they establish with their surroundings and material belongings. Studying low-income groups with low consumption levels offers possibilities for understanding the type of work that might go into sufficiency in practice. It offers insight into what can promote, challenge and limit consumption reduction initiatives. Second, by studying consumption within households that are at risk of poverty and social exclusion, we can highlight and give voice to the perspectives of these groups, explore tensions between their experiences and mainstream societal discourses on consumption, and ultimately help better attune the thinking on sufficiency to the needs of vulnerable groups. We do not want to downplay the difficult situation of low-income groups in Norway today, but rather to better understand how everyday life can be improved for all with lower consumption levels. Based on these two objectives, we pursue the following research questions: How do low-income groups' consumption patterns relate to notions of sufficiency? How can sufficiency be

promoted to support the needs of vulnerable groups in society while encouraging sustainable consumption levels on a national and global level?

Sufficiency, practice theory and consumption
Relating sufficiency to consumption and low-income

Consumption research has a long history with many approaches (Miller, 2005). The (un)sustainable consumption field developed as a response to perspectives that mainly emphasised consumers as active participants in the market or focusing on technological solutions while overlooking political and everyday life aspects of implementing effective strategies to reduce consumption (Sahakian et al., 2022). Many ongoing efforts to discourage excessive consumption that build on such framings have had limited success (Cohen, 2010; Wilhite, 2016). Thus, perspectives from sustainable consumption have provided a counterbalance to perspectives that see consumers as atomistic and individualised, where consumption results from choices and behaviour (Sahakian et al., 2022; Wilhite et al., 2000).

Here, we focus on groups with low incomes that consume less than average. We do not refer to these groups as 'poor' although our informants sometimes self-identified as such. Research on poverty in high-consuming cultures points out that poverty is always relative to the norms of any given society, where "'normal life' is structured around consumption" (Hamilton et al., 2014, p. 1834). Through questioning preconceived ideas around what is understood as contentment, pleasure, vulnerability and social exclusion, Hamilton et al. (2014) point out that more nuanced approaches to making lives better for poor people are needed. In other words, when the social order is centred on consumption, the only tool in the toolbox for 'solving' poverty is to make 'them' consume more. On the other hand, if low consumption is normalised, there will likely be less stigmatisation. For instance, a recent study of 300 European households found that voluntary reduction of indoor temperature and laundry cycles was possible without any notable technological interventions (Sahakian et al., 2021). The study, amongst other things, pointed to the importance of confronting 'normality'; for instance, what is considered 'clean' could be reconfigured to reduce wash cycles (see also Jack (2013; 2021) on challenging cleanliness conventions).

There is a crucial difference between voluntarily reducing consumption levels and being forced to do so for various reasons (e.g., Leipämaa-Leskinen et al., 2016). People who voluntarily reduce consumption always have the option to back out – reducing the mental strain compared to what low-income groups face. Looking at sufficiency, Gorge et al. (2014) found that groups that experienced 'voluntary' and 'obligatory' sufficiency alike were marginalised. Nevertheless, for those who lived sufficiency-oriented lives voluntarily, marginalisation was experienced in relation to friends and family who did not understand them, whilst for obligatory groups, "isolation is expressed when they feel frustrated with a restriction that does not provide a real living choice" (p.18). The authors show how a dominant social paradigm that promotes consumerism, individualisation and an 'always more' mentality makes it more difficult for both groups to lead sufficiency-oriented lives. In other words, targeting dynamics that shape the collective level could make it easier to adopt lifestyles that involve less consumption (see also Brand et al., 2021). Challenges of overcoming social expectations with sufficiency strategies were also found in the work of Callmer (2019), who studied people who refrained from buying new things for a whole year. Informants were seen as extreme or weird, for instance, when they could not buy gifts for children.

While non-voluntarily sufficiency can be associated with vulnerability, social stigma and exclusion, there is often a tendency to downplay the agency in which marginalised groups perform consumption. Offering a more nuanced conceptualisation of low-income groups, Leipämaa-Leskinen et al. (2016) have suggested the term "non-voluntary anti-consumption" to highlight the agency these groups demonstrate. Their study of poor consumers in Finland identified three types of practices in their data: engaging in the simple life, mastering consumerism, and exploiting systems. The authors find that all three practices can be characterised as hidden (i.e., not visible) and repressive (i.e., unwanted). However, they also point to how the practices can be characterised as innovative (i.e., can spur novel forms of consumption and consumption resistance). For instance, being unable to travel abroad for a vacation can be experienced as repressive and hidden, but it could also lead to innovative holidaying methods. In effect, we can see the forms of opposition that low-income groups perform as resources to draw on for themselves and the wider society. Nevertheless, we must stress that low-income groups do not represent a homogenous group with similar

experiences, and studies that provide insight into this diversity seen from low-income groups' perspectives are necessary (Hamilton et al., 2014).

Operationalising sufficiency through a constructivist practice approach

"(…) each marketed unit generates more wants than it satisfies. If new things are made because they are better, then the things most people use are not quite good. New models constantly renovate poverty. The consumer feels the lag between what he has and what he ought to get." (Illich, 1973).

As this quote by Ivan Illich points out, the problems of relative poverty and the construction of new wants that quickly become needs have existed for a long time. Our point of departure is that needs and wants over time are socially constructed through slow and steady increases in resource intensity, leading to a normalisation of consumption at higher and higher levels (Shove, 2003). This normalisation implies that new products continually become taken-for-granted essentials in everyday life coping (Hand and Shove, 2007). The realisation that our needs are dynamic makes it essential to ask what lies behind the construction of current needs, particularly in a context where resource use must be limited to avoid transgressing planetary boundaries and where resources are unevenly distributed. Consequently, we do not aim to define what is considered enough or too much at a universal level. Although valuable research has ventured in this direction (e.g., Gough 2020), recognising that needs are socially constructed means that a 'bottom' or 'top' level will also be socially constructed. Our task, then, is to understand present-day constructions of need and identify ways to pinpoint and steer constructions and practices in a direction that will allow humans to lead good lives within planetary boundaries. Thus, as applied here, the sufficiency concept critically explores the construction of needs, opening for an analysis that problematises what is *enough* and *too much* while recognising that today's consumption levels are neither inevitable nor necessary.

Sufficiency is sometimes seen as an *organising principle* (see, e.g., Princen 2005; 2022), implying that the level of analysis is not at an individual level but at a societal, collective, or shared level. Our ambition in this paper is, accordingly, to overcome a narrow focus on individual choices and green consumerism. Instead, we study the everyday life practices of low-income groups, seeing practices as "…shared, routinized, ordinary ways of doings and sayings, enacted by knowledgeable and capable human agents who – while interacting with

the material elements that co-constitute the practice – know what to do next in a non-discursive, practical manner" (Spaargaren et al., 2016, p.8). This definition recognises the material and shared dimension of practices but also emphasises that human agents are knowledgeable and know what to do in a practical, embodied way. Consequently, consumption is not a practice but a "moment in almost every practice", emphasising the relationships between materials, societal arrangements, politics and norms, infrastructures, and available services in shaping and constraining consumption patterns (Warde 2005, p. 137).

Through this perspective, our aim is to unpack 1) the participants' practical understanding of what to do; 2) their procedures, meaning the rules and arrangements they follow; 3) their engagements, meaning their normative and moral orientations; and 4) how they establish and cultivate relations with their material possessions when enacting sufficiency (Halkier and Jensen, 2011). This approach helps us see the practices of low-income groups as 'continuous dynamic and relational accomplishments' (Halkier and Jensen, 2011, p.106). For instance, what is considered 'healthy' or 'sustainable' is not a pregiven category but can be understood by looking at how the 'doing' of health and sustainability is carried out in and between practices. In this way, we can understand the situation of low-income groups from their lived experiences and how these potentially mismatch with established, shared practices, such as being clean, healthy, or having enough. When practices relating to everyday coping are *not* widely shared, as one can say about the practices identified here, the normalisation of high consumption levels becomes even more evident. We thus analyse sufficiency as enacted through participants' understanding of their own needs and how they can be fulfilled, the procedures they follow when consumption moments are embedded into their daily life, the meaning they attach to consumption and how it relates to their worldviews, and lastly how the material items play a role in shaping consumption moments in daily practices.

Methods: Storytelling workshops and interviews

Our analysis employs data from a qualitative study on low-income households in Norway as part of the project "Co-producing energy and climate policies: Justice and equity in sustainability transitions" (COJUST) funded by the Research Council of Norway. Data was

generated between 2021 and 2022 in Trondheim, Bergen, and Stavanger, among Norway's largest municipalities.

We used two data generation methods: a variant of focus-group interviews called 'storytelling workshops' and individual in-depth interviews. We used storytelling workshops to create non-judgmental and safe environments that encouraged people to share their stories, learn from each other and engage in mutual and empathetic dialogue, not only between participants but also between the participants and researchers facilitating the discussions (see Mourik et al., 2017). As pointed out by Browne (2015: 198), this type of focus-group interview enables "intimately political conversations about aspects of everyday practices that might be difficult to access or articulate through other research methods". The workshops were framed within the broader topic of sustainability and asked participants to share their reflections on the three domains of housing, mobility and food consumption and services. We inquired about everyday practices such as eating, cooking, shopping, staying warm and moving from A to B. Each workshop focused on only one of the three domains but was open to discussing other domains if participants mentioned them. We organised three workshops in Bergen, three in Stavanger and four in Trondheim. The workshops followed a three-step process facilitated by the researchers. First, we briefly introduced the challenges of equity and social justice in sustainability transitions. Second, the participants were encouraged to spend some minutes writing down their own stories related to the three domains before sharing these with the other participants while discussing commonalities, differences, and challenges. Third, and lastly, we asked participants to reflect on desirable futures and share possible actions that could improve the situations they experienced. In addition to the workshops, we conducted 20 individual interviews using a semi-structured approach. These interviews let us discuss the participants' everyday practices (sayings and doings) in-depth and covered the same three domains.

Through the storytelling workshops and interviews, we had the opportunity to interact with 73 people from low-income groups. These individuals included single-parent families, young adults, elderly, immigrant groups, people who rely on disability benefits, and those struggling with substance abuse or mental disorders. In other words, these groups are not homogenous, and their low income is manifested in several different contexts (see also Hamilton et al.,

2014). We collaborated with each city's local non-profit organisations (NGOs) to recruit participants for our workshops and identify individuals for interviews. We also used the snowball method, asking our informants for suggestions of other people to interview. To define 'low-income', we approached the category as a relative construct, which people could either self-identify when we asked, or we assumed that they were in those groups based on how we recruited them through the local NGOs. Our definition of 'low-income' was guided by the EU definition of "at risk of poverty or social exclusion", implying that they had a disposable income "at 60 % of the national median equivalised disposable income after social transfers", experienced material or social deprivation, or lived in a house with low work-intensity (Eurostat 2022).

All storytelling workshops and interviews were audio-recorded and later transcribed into text. The material was then thematically coded using the software NVIVO. The analysis followed an abductive process influenced by constructivist grounded theory, where we developed theoretical and conceptual insights firmly rooted in the participants' experiences while being informed by existing literature (Charmaz, 2006). Our analysis has been guided by our constructivist approach to practice theory, shaping how we conceptualise practices and identify units of analysis. We conceptualise consumption as a moment in practices constituted by today's economic systems, material flows and societal institutions. As such, our analysis has aimed at understanding how low-income groups enact sufficiency in this wider understanding of consumption. This includes gaining insight into how low-income groups incorporate consumption into their daily lives – not only in terms of what and how much they purchase but also in terms of the significance and symbolic meaning they attach to consumption, the difficulties they encounter in acquiring necessary items and how they position themselves within a larger societal discourse on consumption. We also focus on the materiality of these practices. These considerations shape what we identify below as *characteristics* of the low-income groups' consumption and their relation to sufficiency.

We have aimed to focus on exploring low-income groups as carriers of practices and on the distributed agency involved in initiating change through practice re-arrangements or mobilising coping strategies to handle undesired situations. By doing this, we highlight the diverse ways sufficiency can be enacted and aim to help advance the thinking on sufficiency

by linking it to a necessary discussion about everyday practices, just consumption and global and national resource distribution. Approaching sufficiency as a relational and situated concept, we intentionally want to bring forward the perspectives of low-income groups to show how *doing* sufficiency depends on the embeddedness of consumption in societal institutions and the value it is ascribed through social discourses.

Low-income groups enacting sufficiency

We now present our findings according to three main characteristics observed in the low-income groups' consumption relating to sufficiency. We call them 1) Sufficiency as a necessity, 2) Sufficiency as opposition, and 3) Sufficiency as a reframing of sustainability.

Sufficiency as a necessity

The first characteristic we observed concerns the relation between engaging in reduced consumption by choice or necessity. As discussed above, sufficiency is about defining limits for consumption by critically exploring the construction of needs and the assumptions about well-being that dominate present-day consumption patterns. Given that consumption slowly escalates without any extensive public debate around what could and should be considered enough, being able to define limits collectively could help make sufficiency practices viable. In short, people should have the right not only to consume enough but to co-define what is enough. As demonstrated in this section, when frugality is not a result of a collective decision but rather serves as a coping mechanism for a disadvantaged minority, it can become a burdensome responsibility to bear.

While most of the participants in our study had an overall low level of consumption, a common theme in the accounts of their everyday lives was that they found themselves locked into situations outside of their control. For example, many were involuntarily outside of the labour market, either because of health conditions or having difficulties finding a job because of immigrant backgrounds, lacking language skills or qualifications, and consequently had minimal economic resources. When discussing the underlying procedures of their consumption, they repeatedly referred to the necessity of being restricted in their spending. This included a general effort to consume as little as possible regarding food, energy, and other products, buying cheap products or buying products when they were on sale. Many were also living in low-cost apartments, and most interviewees did not own a car but were

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using public transport, walking, or biking as their primary mode of transportation. Enacting this frugality also involved considerable practical understanding of making the most out of their money. When talking about food purchasing habits, one interviewee explained how constant attention towards moderation was present, leading her never to buy large quanta. As the risk of throwing food away had become an integrated part of her thinking, she had developed specific planning and calculative skills to be able to balance her needs and costs:

> I have gone around to shops to investigate and look into prices and stuff like that, and now I buy the cheapest possible products that can deliver a decent quality, and then I am always thinking about what I can buy for dinner […] I cannot buy groceries for the whole week; I have to think and plan and consider my daily usage, and when it is empty, I can buy new stuff, and I have to think about how much I am going to spend for the next time I am out shopping. […] I have all these types of thoughts all the time (IW 1A-I)

We thus observed that a substantial load of extra mental and physical work was needed to maintain a low level of consumption. The everyday practices sketched out by the interviewees thus evolved around procedures of frugality and moderation as they were consciously trying to avoid unnecessary costs linked to overconsumption.

As these actions were motivated by economic considerations, the imposition of moderation and the constant need to prioritise costs and worry about financial stability instilled significant stress levels into their daily lives. As such, their consumption was also marked by strong normative engagements. For some, having this extra mental load was overwhelming, and being unable to participate in activities because of a lack of economic resources affected their sense of worth.

> It is a massive mental pressure. You know, just the feeling of being unable to do stuff because you cannot afford it. It makes you feel like you are worth less than other people in society (IW 1A-I)

Many also restricted themselves in terms of not allowing themselves to buy new clothes or shoes, and the majority never conducted any long-distance travel, e.g., by plane, for holidays. This also caused stress because they did not feel like they were offering their children the same opportunities as more wealthy families.

Having to look for new savings constantly, some lived under conditions characterised as energy poverty, where they had to compromise their comfort and well-being to cut energy costs, such as keeping indoor temperatures low (Sovacool, 2012). One interviewee explained how he had stopped heating the bathroom, kept the apartment at 16 degrees Celsius, and used wool blankets to keep warm (IW 3A-III).

Moreover, the lack of economic resources meant they were extra vulnerable to price increases and unexpected expenses since they already lived with minimal consumption and had low potential for further savings. When some expenses rose, they had to cut down on others, sometimes compromising basic needs. One interviewee, for example, had a progressive dental disease but needed to stop going to the dentist to afford to pay the energy bill.

Notably, another backside to these economically driven sufficiency enactments involved choosing cheap products with poor quality. One respondent mentioned that he and his partner sometimes considered the price per kilogram, making frozen pizza the cheapest option. Another pointed out that:

> I live unhealthily. Healthy and nutritious food is too expensive […] When I buy clothes and food, I shop everywhere, look for sales and offers, and then go there. I buy clothes at H&M because they offer free shipping, which is often cheaper than second-hand clothes (GIW 4A-I).

To summarise, while all the interviewees engaged in everyday practices characterised by low consumption levels, we observed the negative impacts of these practices driven by economic considerations. Strategies were devised to ensure that consumption never went higher than economically possible but also not below what was considered enough in the given context, whether it was about social stigma or pure physical needs such as not freezing, starving, or

eating too unhealthily. The lack of economic capacity meant many experienced a lack of agency in controlling their lives. Much mental strain and calculative work went into maintaining decent ways of living. Essentially, while such consumption moments would typically go unnoticed by most people, they became more prominent in the daily practices of low-income groups.

Sufficiency as opposition

The second characteristic concerned the relation between mainstream consumption patterns and engaging in sufficiency as an oppositional way of living. While the aspect of necessity was prevalent in our material, as described above, we also observed how some were using sufficiency arguments and low consumption to distance themselves from what they described as unsustainable overconsumption and what they referred to as a "use-and-dispose" mentality. In these instances, enacting low consumption and sufficiency drew on the participants' normative engagements and identity-making and were presented as efforts to adhere to non-consumerist values. One elderly interviewee, for instance, reflected on her own life choices and on what brought her happiness:

> I am so old now. I have lived and seen so much that I know that getting new and bigger things does not make you happier. If you have what you need, it is good enough. My bathroom is very old-fashioned, but I can pull the string and get a lovely warm shower, and there is a small heater there, so everything works fine. The kitchen works for the little amount of cooking that I do myself. So yes, I am satisfied because I know that getting and wishing for something bigger, better, and nicer does not make your life any better actually (IW 4A-I)

Another participant said he had "chosen to live a simpler life" (IW 4A-II). For him, this implied living in a boat, avoiding the high costs of owning a house, and keeping the flexibility of moving around.

Following up on these expressions of non-consumerist values, the participants demonstrated practical understanding and procedures important in cultivating relations to their belongings that were not oriented towards consumption but based on preserving, repairing, sharing,

caring and circulating goods. For example, one interviewee explained how she was taking care of a jacket she had bought second-hand. Even though it was worn out, she still saw its beauty and could not find a good reason to throw it away. Instead, she emphasised the advantages of having long-lasting, high-quality items.

 "I have owned this jacket for three years now, and I use it every day. It is a quality jacket, do you understand? Instead of getting a jacket that lasts for three months (GIW 3A-III)

Interviewees also noticed resources that could be used that were not recognised by others. For instance, one elderly participant explained that she would take her bicycle every autumn and cycle to a few gardens where she knew people did not harvest their plums. If the plums were still there, she could pick them.

One interviewee explained how she was volunteering in a 'free' store where everyone could come and get second-hand items for free or donate their old stuff to the store. She explained how she used the store to get necessary things and to donate things she was not using anymore. In this way, stuff was not thrown away but circulated and repurposed within the local community. Principles of volunteering, sharing and circulating things within the close network of friends and family was widespread among our informants, as illustrated by one participant explaining her meticulous process of sorting, organising, and sharing used clothes and belongings:

I have inherited almost everything we use. I have a basement full of clothes that I have inherited, and I have spent much time organising and tidying things up. And then I pass things on to others. I never throw anything, you know. I am taking it a bit too far, really, but what I am planning to do now is to organise everything and then only give away clothes that are made with good, sustainable fabrics (IW 7A-I)

Enacting sufficiency and low consumption as an alternative lifestyle could also involve normative engagements that represented a form of positioning and opposition against consumption-oriented behaviour, which in some instances was expressed through criticism and antagonism against innovation and technology-oriented sustainability policies. One

interviewee explained the lack of belonging he felt to the current sustainability transition initiatives supported by the Norwegian government that were based on substituting existing technologies and, in his opinion, only aimed towards the rich:

> You create this clear divide. This vision we have of this group of people who will have electric cars and ground-source heat pumps. Who are these people? I am not able to identify with this group. Then, I would need a top job, a family, and kids. Perhaps two electric cars would be even better, one for the wife and one for me. But I think it is pretty capitalistic – what about the rest [of us]? (GIW 3A-III)

Thus, on the one hand, the belief that the financial support schemes intended to facilitate the market adaption of new green technologies mainly benefited the wealthy created opposition amongst our interviewees. The electric car scheme in Norway was the most prominent example, with one interviewee exclaiming, "I think electric cars are just bonkers because it is only the rich that can afford them" (IW 1A-I). The opposition also related to interviewees questioning the sustainability of so-called green technologies, e.g., pointing to how electric cars often were heavy, had excessively powerful engines ("…an EV today has 400 HP. My car has 70. It is absurd", GIW 2A-III), and big batteries that had a substantial environmental footprint on the production side. Another central issue was whether people buying such vehicles were motivated by sustainability concerns or living sustainable lives, minimising their total carbon footprints. One interviewee made this critical remark when discussing the financial support for electric cars:

> I am sorry for interrupting, but people who own a Tesla… I refuse to believe they drive a Tesla because it is good for the environment. I refuse to believe it. The only reason they buy it is that it is economically wise. It is a bit of hypocrisy, and it pisses me off actually" (GIW 1A-I)

Lastly, we observed how the positioning of low-income groups included more general reflections on societal tendencies and the centrality of wealth and high consumption levels. Many pointed to how it was difficult to pursue alternative pathways within a society that, according to the interviewees, was based on high income and consumption. One interviewee

explained how she did not want to compare herself to what she described as the "average" Norwegian:

> I don't need to compare myself to this "average Norwegian" regarding consumption and income. I think it is pretty monstrous… I grew up with ideals of frugality, like not using too much water or producing too much trash. But it is also obvious that we have a society built on entirely different ideals – and it is hard to have a low income and buy ecological and healthy food. It is like they have set it up so that the people with high incomes are the only ones who can be healthy and live sustainably. (IW 3A-I).

This sentiment was often directly associated with a critique of how society constructed needs and the idea that high consumption was about fulfilling people's needs. One of the interviewees, who had lived abroad in Sri Lanka for 20 years, elaborated on this:

> It is simply insane that Norway has become so materially centred. I noticed this particularly as I returned from Sri Lanka on holiday what kind of new silly needs were created, even down to the smallest thing. This year, they needed expensive kitchen knives; another year, something else. Every time I came home, a new need had been created (GIW 4A-II)

In this sense, many interviewees expressed that they felt like they represented a counterculture but that the conditions for upholding an alternative lifestyle outside the mainstream culture were difficult. In many ways, they justified their way of organising life as opposition to the mainstream, and they critiqued the direction of society towards always prioritising technological solutions, economic activity, and the middle-upper classes, which led to high and unnecessary consumption levels. These interviewees saw beyond the deeply rooted logic of efficiency and the incessant pursuit of improving one's life through excessive consumption. In other words, our participants provided an 'outside view' with sobering reflections on societal development towards consumerism. They experienced anger and frustration towards those who did not understand their perspective.

Sufficiency as reframing sustainability

The final characteristic suggests that activities focused on sufficiency could serve as a means of empowerment and a resource for the participants. By reframing sustainability and attributing value to everyday practices, participants could redefine consumption and find new meaning in their situations, even when trapped.

As an example, when talking about the importance of taking good care of belongings, repairing instead of disposing and the pride of managing to get through life without being dependent on unnecessary material possessions, these activities were not only linked to economic motivations. Instead, they could also represent new types of consumption engagements and interpretations of what sustainability could mean in everyday practice, which did not include typical 'green' actions like buying a new electric car. Importantly, this also involved reframing dominant understandings and procedures of consumption. One interviewee re-interpreted the fossil fuel car he had inherited from his father as sustainable, as he was able to keep using the same car for decades: "They live long. My car got to be 28 years old. That is what I call sustainable, and not a use-and-dispose system" (GIW 3A-III). In a similar vein, another interviewee was reflecting on the 'hidden' environmental costs of electric vehicles and argued that there was a need for holistic approaches that focused on reducing mobility needs and on supporting public transport instead of supporting sustainability through individual incentives:

> There is a lot of extraction when you produce new e-bikes or electric cars. There is a lot of mining, and many things go into making these batteries. So, these are not the type of incentives that will make the world better. I would rather see my government supporting public transport […] Instead of focusing on personal consumption and that everyone should take responsibility. These individualistic instruments make people feel like they are being environmentally friendly but have minimal impact in the grand scheme of things. (IW 3A-I)

Based on these alternative interpretations of sustainability, the interviewees were thus able to give value to several practices and relations in everyday life:

I would claim that we poor people are more sustainable than many others. You know, consider my shopping; or my car that has been on the road for many years. I buy most of my stuff and clothes second-hand. By eating at the community house, we eat food that would have been thrown away otherwise. This has become trendy now. It was very shameful to do these things before, not many years ago, to look for food on the expired food shelf. It was much shame associated with it (GIW 3-III)

As the quote illustrates, not only did the interviewee provide accounts of how reduced consumption should be interpreted as sustainable, but he also pointed to the importance of being recognised as sustainable and adapted by others. In this sense, he described how the re-interpretation of low consumption could give new meaning to his actions and remove social stigma. While some of the interviewees engaged in these types of re-interpretations and re-valuations themselves, we also observed how some interviewees, during the interview situation, through reflecting on their habits and the meaning of sustainability, gained new understandings and started to interpret their routines within a sustainability frame. Following this recognition, sufficiency and low consumption became valued resources in the context of sustainability. One interviewee reflected on the massive effort she was already putting in in terms of consuming as little as possible and that she could be seen as the ideal 'sustainable citizen':

Yes, what should I reduce? I do not even own a car […] I am exactly who they [the politicians] want! But I get nothing in return for it. I do not see how I can reduce anything when I am not even using the bus that much. What should I reduce? I bike, and I walk (IW 1A-I).

Not only was the new framing of their behaviour as sustainability engagements contributing to giving value to their everyday practices, but also, recognising their contribution as something that had value in a sustainability context was empowering because it justified the participants' claim to be better acknowledged by sustainability policies.

Discussion: Enacting sufficiency, questioning normality

As the above findings demonstrate, low-income groups embedded sufficiency strategies into their everyday lives, for instance, through reduced overall resource use, picking unused plums, fixing clothes instead of buying new, cycling, walking, or using public transport instead of driving. The point that becomes clear from our examples is that employing such strategies only make sense when seen from a perspective of already having enough. From the perspectives of the low-income groups, not having enough resources and being forced to adopt sufficiency strategies and consume less caused stress and was associated with a social stigma. Our analysis thus highlights the relationship between sufficiency and relative poverty and demonstrates that sufficiency activities are best supported in a collective and shared setting. Sufficiency policies are often controversial and hard to implement (Sandberg 2019). Given that present-day consumption levels have been constructed over time (i.e., we want what we have gotten used to) and desired levels are relative (i.e., we want what other people have), it will likely take time to facilitate a setting where reduced consumption is socially acceptable.

In our data, stress and social stigma experienced by low-income groups resulted not only from the additional physical and mental work required to cover basic services but also from the perception that they had less than others and could not afford to travel internationally, buy healthy food, or drive low-emission cars. Some of our elderly participants were able to confront societal conventions by using sufficiency as opposition and a resource, such as the lady who asked to pick plums, but others found it challenging. Our findings resonate well with Gorge et al.'s (2014) research indicating that those who experience mandatory sufficiency find restrictions frustrating due to a perceived lack of genuine living choices. Also, the characteristics of hidden and repressive practices identified by Leipämaa-Leskinen et al. (2016) can be seen clearly in our material. However, we can discuss whether these practices can be considered 'innovative'. For something to be 'innovative', it must also catch on in wider society. On the one hand, we understand the situation of our informants to be largely unwanted, which makes it uncertain whether it would be desirable to simply 'extend' or 'scale up' these practices. Instead, a collective discussion would be needed, where the ideal level of comfort and constraint is identified, which would lead to good lives for all.

On the other hand, in line with Leipämaa-Leskinen et al. (2016), we observed an active agency among the low-income groups, often overlooked when characterising the practices of marginalised groups. Low-income groups cannot be solely defined by their vulnerability. They demonstrated skills for living with few material resources that had been honed over a substantial period. Significantly, they ascribed meaning to reduced consumption, showing how it was possible to stand in opposition to overconsumption. Many of our informants also volunteered in organisations and found meaning in helping others. Studying sufficiency within low-income groups from a practice perspective helps underscore that breaking persistent patterns of energy and resource-intensive everyday practices not only demands restrictions but calls for deliberate efforts to allow for new understandings, engagements, procedures, and materials to be developed and re-arranged. In this way, we see opportunities to learn from groups with low consumption levels if a focus on social justice is maintained.

In contrast to sufficiency discourses of voluntary limit-setting (e.g., Kallis, 2019) or voluntary simplicity (Alexander, 2013), we suggest that reducing consumption is inappropriate in a society that does not promote, value or cater for everyday practices that allow lower energy and resource use. For instance, the case of the government giving subsidies to only certain types of energy-saving and ostensibly sustainability-oriented initiatives, such as electric vehicles, heat pumps, or solar panels, shows that a predefined public renders only a particular group of economically strong people eligible for funding (Korsnes and Throndsen, 2021). Low-income groups are socially excluded, as they are not within the customer segment with purchasing power. Rather, what would be needed is regulation not only of consumption but also of the various systems of provision that cater for and actively promote overconsumption (e.g., Bayliss and Fine, 2020). Moreover, our analysis implies that covering basic services, such as dental care, sufficient food, shelter, heating, and mobility—as is suggested in the literature on universal basic services (Büchs, 2021), could significantly reduce the stress experienced by low-income groups.

By aligning various interests and actors in present-day consumption-oriented society, policy suggestions for sustainability solutions become self-perpetuating, and sufficiency suggestions that involve lower consumption levels will hardly fit in. The low-income groups studied here provide an outsider's perspective with sobering implications for the resource-intense

practices of the well-off. For instance, our informants stated they could not perceive the sustainability inherent in purchasing a 400-hp electric vehicle when a standard 70-hp vehicle would suffice. Several of our interviewees questioned the preference for economic and technology-focused initiatives, mainly about upgrading and upscaling technological arrangements, which appeared unsustainable and unfair to them. Setting limits should also include the social freedom of having "the right not to live at others' expense" (Brand et al., 2021, p. 264). The more work that goes into rendering a particular way of life normal, the harder it will be to suggest otherwise, and the harder it is to fall outside the norm.

Besides directly causing many global sustainability challenges, high-income groups' energy and resource-intense lifestyles make it harder to live frugal lives. Thus, to move towards sufficiency, low-income groups could benefit from taking part in efficiency initiatives, whilst those that already have enough could benefit from constraints and mechanisms that reward lower consumption. This could be achieved by challenging the normality of conventions and practices associated with elevated resource and energy consumption. By doing so, it could establish a sense of normalcy for low-income groups, potentially positioning them as pioneers in sustainability transitions, capable of helping others lead the way.

Conclusions

Our findings indicate that promoting sufficiency-oriented practices is challenging and cannot be achieved solely through efficiency-oriented economic incentives, particularly within the context of existing market economies and a consumption-oriented public discourse. Even Nordic policymakers agree they are locked into a consumption-centric sustainability policy discourse (see Mont et al., 2013). While pursuing sufficiency policies could be daunting, our analysis also identifies opportunities for learning that can suggest ways to move towards the goal of promoting consumption reduction. Addressing our first research question, the three characteristics of 'Sufficiency as necessity', 'Sufficiency as opposition' and 'Sufficiency as reframing sustainability' showed the multiple ways sufficiency concerns impact low-income groups' consumption. Thus, while struggles to make ends meet marked the consumption patterns of the low-income groups in this study, they also demonstrated what we see as the *power of doing.* Through living with fewer material resources, our interviewees developed procedures, understandings and engagements that supported lower consumption levels, like

sharing, volunteering, repairing, negotiating needs, and calculating costs. Living with limited resources enabled them to adopt an oppositional stance towards overconsumption while valuing and taking care of things they owned. This highlights the significance of *doing* low consumption and *enacting* sufficiency as paths towards enduring changes and suggests that policies should aim towards supporting experiments where people can gain first-hand experiences with reducing consumption levels.

Addressing the second research question, the paper discussed the ways in which sufficiency-oriented policies have the potential to support social equity goals in sustainability transitions. By embracing sufficiency principles, policies have the potential to recognise and promote sustainable practices that are currently undervalued but prevalent among low-income groups, such as walking and biking, limited air travel, and frugal consumption of goods and energy. However, the challenge lies in developing policy recommendations that reduce consumption and maintain overall welfare, particularly among the low-income population. To achieve this, this paper concludes that we must learn from the coping strategies of low-income groups and incentivise them for their low consumption while encouraging and legally requiring middle and high-income groups to reduce their consumption. Recognising the multiple ways supply-side initiatives drive consumer-centric norms and conventions implies a need to examine production and consumption simultaneously. Ultimately, we believe the best way to achieve these goals is through collective efforts and critical public discussions about consumption needs and wants, including what should be actively promoted as sustainable consumption levels across different socio-economic groups.

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Conflict of interest

The authors declare that there is no conflict of interest.

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