

RESEARCH ARTICLE

Bike Schools' Impact on Disabled People and Cycling Inclusion

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This paper explores how bike schools can enhance mobility options for disabled people and their role in promoting active travel, cycling inclusion, and ultimately supporting the green transition. Drawing on the concept of mobility commoning, the study contrasts three Swedish bike schools, focussing on groups that experience marginalisation within the current automobility regime, including seniors, women with immigrant backgrounds, and disabled people (n = 25 interviews). The concepts of access, competence, and cognitive appropriation are used to analyse and contrast the participants' different potentials for appropriating cycling into their everyday lives. While the bike schools for women with immigrant backgrounds showed a significant impact on potential cycling participation, this was less evident among disabled cyclists, who faced considerable barriers to independent cycling. Although they express a desire to continue cycling, disabled people remain *potential* independent cyclists because the transport system fails to support their participation in cycling outside the initiatives studied. The findings highlight several challenges that participants negotiate. These include barriers related to infrastructure, feeling vulnerable in traffic, managing their bodily (dis)abilities, and care dependencies. The paper highlights the importance of integrating grassroots initiatives into policy and planning, alongside targeted support to address barriers related to infrastructure and perceived safety. The findings contribute to debates on inclusive mobility transitions by emphasising the agency of grassroots initiatives in expanding mobility options for people with disabilities, and their role in encouraging active travel, cycling inclusion, and the green transition.

Keywords: disability; cycling; cycling inclusion; bike schools; mobility commons; Sweden

Introduction

The benefits of cycling for the climate, environment, accessibility, wellbeing, and public health are well recognised and emphasised in policy documents at both international and national levels. In Sweden, promoting cycling is a key part of the government's long-term strategy for sustainable transport. Many Swedish municipalities have also adopted specific goals and strategies to increase the share of bicycle trips (Nyberg and Levin, 2023). Furthermore, the

Swedish government's disability policy strategy, based on the UN Convention on the Rights of Persons with Disabilities, emphasises the importance of unrestricted travel for people with disabilities – with implications for cycling. At the EU level, the 2024 EU Declaration on Cycling commits to supporting cycling among vulnerable groups, including facilitating improved access to cycling for persons with disabilities. In this context, mobility transitions must increasingly address not only environmental objectives but also issues of equity, bringing sustainability into closer alignment with mobility justice and cycling inclusion (Fonseca and Esteves, 2026; Golub et al., 2016).

People with disabilities often face greater challenges accessing transportation and tend to travel less frequently than those without disabilities (Cox and Bartle, 2020). Swedish statistics demonstrate that individuals without disabilities make twice as many bicycle trips as those with disabilities – a trend also seen in other countries (Andrews et al., 2018; Cox and Bartle, 2020; Nyberg and Levin, 2023). This disparity highlights significant barriers preventing people with disabilities from cycling and enjoying the associated benefits. In response to these obstacles, grassroots cycling initiatives, created by concerned citizens, NGOs, and local communities, have become key actors in promoting equitable mobility. Building on Sheller (2020), I refer to these cycling initiatives as a means of commoning mobility, fostering more just, inclusive, and environmentally sustainable movement within the constraints of a dominant automobility system (Fonseca and Esteves, 2026; Nikolaeva et al., 2018; Sheller, 2020; Pucci et al., 2026; Verlinghieri, 2020).

The paper explores the role of bike schools in expanding mobility options for people with disabilities and their impact on encouraging active travel, cycling inclusion, and the green transition. The study contrasts three Swedish bike schools, focussing on marginalised groups within the current automobility regime, including seniors, women with immigrant backgrounds, and disabled people ($n = 25$ narrative interviews). Bike schools and training can support disabled people to improve their cycling skills by building their cycling competence. By disability, I refer to both chronic and temporary activity limitations (Andrews et al., 2018; Cox and Bartle, 2020). There are a limited number of studies focussing on grassroots efforts to support cycling among disadvantaged populations, including groups that may face disadvantages in the current transport system due to gender, ethnicity, age, poverty, or disability (Jahanshahi et al., 2024; Nixon and Schwanen, 2019, Nixon and Schwanen, 2024; Sheller, 2020; Schwanen and Nixon, 2020; van der Kloof, 2022). However, very few studies have specifically focussed on bike schools aimed at disabled people (see Berent, Fujiyama and Yoshida, 2021). Against this background, there is a need for more knowledge about bike schools and training initiatives for disabled people, including how grassroots efforts support cycling and the potential for these initiatives to be transformative by providing access to bicycles, training, and the community support necessary for mobility transitions.

The aim of this paper is to explore what grassroots initiatives can achieve in mitigating barriers to cycling faced by disadvantaged groups such as disabled people, seniors and women with immigrant background, and based on these insights, to suggest how their efforts could be better supported through policy and planning. The research is part of a larger pan-European project called ACCTING (AdvanCing behavioural Change Through an INclusive Green deal) that explores how local cycling initiatives challenge systemic barriers to cycling inclusion and their role in promoting more sustainable mobility in car-dense societies (Balkmar et al., 2026; Fonseca and Esteves, 2026). Specifically, the paper addresses the following research questions: What are the main barriers to independent cycling mobility expressed by the research participants? How do grassroots initiatives address these barriers and enhance cycling opportunities for people with disabilities?

Responding to calls for more intersectional analysis of the enablers and barriers to cycling identities across age, disability, ethnicity, and gender (Martens, et al., 2021; Lam, 2022), this study contributes to research on the understudied area of how bike schools support active travel for disabled people, including the barriers experienced by disabled cyclists (Nyberg and Levin, 2023). It also examines how (trike) bike schools have unexpected impacts beyond cycling, such as building communities and reducing social isolation for participants, thereby addressing wellbeing issues. The analytical approach seeks to explore pathways towards more inclusive mobility futures proposed by these initiatives. To do so, the paper draws on the concepts of *access* (to suitable bicycles, infrastructure, and resources such as time and money), *competence* (skills needed to use the bicycle and navigate traffic), and *cognitive appropriation* – how individuals, families, or groups utilise perceived or actual access and competence to engage with cycling in their everyday lives (Flamm and Kaufman, 2006; van der Kloof, 2022). Drawing on Schwanen and Nixon's (2020, p. 85) conceptualisation of appropriation – which includes not only cognitive processes but also non-conscious sensations and embodied perceptions. I incorporate these insights into the analytical framework to examine the specific barriers related to access, competence, and cognitive appropriation that the initiatives address. Together, these concepts enable analysis of the identified barriers and enabling conditions, as well as the impacts associated with the cycling initiatives studied (Balkmar et al., 2026).

The paper is structured as follows. After reviewing relevant research on disability and cycling, I introduce the methods, methodology, and analytical procedures used. The results section then details how the bike schools recruit participants, facilitate access, build competence, and how participants negotiate barriers. The concluding discussion situates the findings within a broader context, including policy implications.

Transport disadvantages, mobility justice, and disability

Transport disadvantages are commonly linked to precarious living conditions, limited transport options, and insufficient infrastructure for active travel (Lucas et al., 2016; Verlinghieri and Schwanen, 2020). Disadvantage often correlates with low income, as low-income groups frequently struggle to meet their time–space requirements due to limited transport resources (Henriksson, et al., 2024). While transport disadvantages are typically framed in terms of limited access to transport resources, it is also necessary to consider how access to mobility is shaped by broader power dynamics, including voice and visibility in transport decision-making and planning (Fonseca and Esteves, 2026; Verlinghieri, 2020). Cyclists with disabilities are underrepresented in transport systems, rarely addressed in policy documents, research, or cycling discussions (Clayton and Parkin, 2016; Wheels for Wellbeing, 2019). Consequently, the needs of this group are often ignored, which may affect the capacity of disabled people to appropriate cycling in everyday life (Wheels for Wellbeing, 2019).

In response to these broader dynamics, Sheller (2018) introduces mobility justice as a framework for scrutinising both the distribution of mobility resources and the symbolic and procedural dynamics that shape inclusion and exclusion. Mobility transitions towards more sustainable mobility concern these elements of justice, emphasising that transitions are never neutral; they influence opportunities, access, and power differently for various social groups (Fonseca and Esteves, 2026). Studies have shown that in transport policy and planning, people with disabilities are rarely regarded as cyclists. It is more common for disabled people to be seen as walkers and users of public transport, or as car drivers (Andrews et al., 2018; Andrews and Clement, 2021; Nyberg and Levin, 2023; Wheels for Wellbeing, 2019). As noted in several studies, this reflects a broader perception that disabled people do not know

how to cycle, both in the British context and in other countries (Andrews et al., 2018; Cox and Bartle, 2020; Inckle, 2019; Nyberg and Levin, 2023).

Ultimately, the theory of mobility justice shifts the focus to mobility as multi-layered and political, with disability intersecting with other inequalities to produce unequal capabilities and mobilities (Sheller, 2018, p. 43). While gender, poverty, age, race, and disability may restrict movement in many ways, Sheller argues that “the least “able bodied” face major hurdles in accessing and moving through urban space, being “disabled” by built environments that prevent assisted mobility” (Sheller, 2018, p. 26). Theorists of disability argue that the focus should shift from seeing disabilities as solely located in the body to paying attention to the inaccessible designs of transport systems and infrastructure (Gleeson, 2006). Ways forward towards more sustainable and inclusive mobility futures may involve people coming together in communal self-mobilisation, which Sheller (2018) refers to as mobility commons. After addressing disability and barriers to cycling in more detail below, I will revisit how grassroots cycling initiatives can be understood as a way of “commoning” mobility to promote more just, inclusive, and greener mobilities.

Disability and barriers to cycling

While cycling is theoretically an accessible mode of transport for everyone, the cycling mobility system does not provide equal access for disabled people (Inckle, 2019; Nyberg and Levin, 2023; van der Kloof, 2022; Larrington-Spencer, 2024; Sheller, 2018). Prevailing transport planning approaches often design infrastructure based on the assumption of a solitary, individual, able-bodied mobile person using a two-wheeled “safety bicycle” (Nixon and Schwanen, 2019). This, in turn, influences who can and cannot become cyclists (Davidson 2021) and ultimately determines who can benefit from the many positive aspects cycling can offer (Clayton and Parkin, 2016; Cox and Bartle, 2020).

As discussed by Hagemeister et al. (2018), the use of tricycles suggests improved stability and traffic safety, thereby enabling independent mobility for disabled people or those with balance problems. However, users of adapted bikes may face difficulties using existing cycling infrastructure due to physical obstructions or safety concerns (Cox and Bartle, 2020). Infrastructural barriers, such as poor access to suitable cycling facilities, present a significant obstacle for cyclists with disabilities, as bicycle infrastructure, parking facilities, and other related design features may not be suitable for cyclists with adapted cycles (Fabriek, De Waard and Schepers, 2012; Nyberg and Levin, 2023; Wheels for Wellbeing, 2018). A study by Jelijs et al. (2018) examined factors influencing independent cycling for individuals with visual impairments. The study found that inadequate infrastructure, such as poorly maintained roads and intersections without traffic lights, was among the most significant barriers to their mobility. To better facilitate inclusive cycling, accessible infrastructure is especially important for enabling groups such as disabled people and women to become cyclists (Bonham and Jungnickel, 2022; Wheels for Wellbeing, 2021; Larrington-Spencer, 2024).

Previous research on disability and cycling highlights several barriers faced by people with disabilities. They have identified cost as a major obstacle, since adapted bicycles tend to be more expensive than standard ones (Corriveau, 2019; Cox and Bartle, 2020; Goodman and Aldred, 2018; Wheels for Wellbeing, 2018; Wheels for Wellbeing, 2019). Other studies suggest a connection between reluctance to use tricycles and concerns about image and social stigma, indicating a possible barrier rooted in the symbolic link between tricycles, old age, and disability (Hagemeister et al., 2018). Additional barriers relate to cycling competence; some disabled individuals may not have learnt to cycle, and even when training is available, it may not enable them to cycle independently in traffic (Clayton et al., 2017). Given this context, further research is needed on grassroots cycling initiatives and how they might expand mobility options for people with disabilities.

Grassroots initiatives and commoning cycling

Previous studies note that disabled people may not have had the opportunity to learn how to cycle and emphasise that learning to bike is particularly important for this group (Clayton et al., 2017). There are many ways that cycling initiatives can support cycling for people with different forms of disability (Ringenbach et al., 2020; van der Kloof, 2022). Grassroots initiatives encourage the learning of new skills, build capacity for individuals to overcome mental barriers to take up cycling, and facilitate communities and social infrastructures that support independent mobility (van der Kloof, 2022; Bradely, 2018; Verlinghieri, 2020). Typically, grassroots initiatives prioritise addressing social needs for their participants, and their work tends to be based on volunteerism, collective efforts, and project-based funding (Seyfang and Longhurst, 2016, in Nixon and Schwanen, 2024). In short, they empower participants to overcome barriers to cycling by providing access to safe spaces and hands-on support for building cycling competence (Balkmar et al., 2026).

The initiatives analysed for this study can be described as *velomobile commons* that share resources, spaces, and knowledge to develop cycling competences among specific target groups (Silonsaari, 2025; Sheller, 2020). Emphasising the collective aspect of cycling shows how grassroots initiatives and the “commoners” involved mobilise to promote a bottom-up ambition of making cycling more just and inclusive (Sheller, 2018; Silonsaari, 2025). By being present and helping participants access velomobiles, their volunteers become what Dokumaci (2019) refers to as “people as affordances,” meaning that people can become affordances for each other to overcome mobility barriers. In this context, volunteers in cycling initiatives can serve as micro-activist affordances to bike school participants by providing access to cycling through DIY solutions or other creative inventions. While this approach to commoning focuses on community initiatives, other approaches draw more on governance perspectives and on how to organise mobility in more sustainable, just, and equal ways through communal decision-making processes (Nikolaeva et al., 2019; Silonsaari, 2025; Verlinghieri, 2020). While acknowledging that both approaches (community initiatives and polity) are complementary and necessary to achieve more “inclusive” cycling, this paper will focus primarily on cycling education programmes.

Studies have highlighted specific challenges related to cycling education programmes for disabled people. One example is the gap between learning to cycle and becoming an independent cyclist (Cox and Bartle, 2020). Other research indicates that parents of children with disabilities may feel uncertain about allowing their children to cycle independently after completing the programmes. This was revealed in an evaluation of various cycling training programmes for individuals with disabilities in the UK, in which the authors found that traffic safety was rarely addressed and that most instructors believed traffic safety training should not be part of this type of education (Berent et al., 2021). The findings suggested that the UK cycling training programmes for disabled people could benefit from being better structured and more similar to everyday cycling situations rather than formal training. Building on these insights, the present study will focus on grassroots initiatives as mobility commons, aiming to contribute to the understudied field of cycling education programmes, in general, and for adult disabled people, in particular (Nyberg and Levin, 2023).

Methods and methodology

A qualitative research design is used to studying the initiatives promotion of cycling inclusion. The research is designed to develop an in-depth understanding of the initiatives (what they do), the participants' backgrounds, their reasons for taking part, and any changes in mobility (if any). The fieldwork consisted primarily of semi-structured narrative interviews with participants, facilitators, and other relevant informants (see Appendix A). Extensive fieldwork observations and participation during fieldwork also contributed to the study. The primary

selection criteria for cases were that the initiatives should aim to encourage cycling among their target groups. They should either target vulnerable groups and/or areas, and involve practical interventions that result in, or have the potential to result in, increased cycling as a mobility option for participants. These cases should be ongoing and not single events. The three cases selected for this paper are bike schools that focus on the intersections of disabilities, gender, and cycling. To overcome recruitment challenges, I approached the organisers of the initiatives and asked them to mediate with participants. This approach helped me build trust with hard-to-reach research participants and groups (Boström et al., 2025).

While the study's qualitative design provided nuanced insights into grassroots cycling promotion among different participant groups, it also had certain methodological limitations. The sampling relied on self-selected participants who took part in the initiatives under study and was not intended to represent wider populations. Another limitation is that reliance on self-reported narratives about the initiative's impact on cycling uptake introduces the possibility of social desirability bias. However, as outlined above, the narrative interviews were supplemented with onsite observations, which contributed to a deeper understanding of each case.

In total, 25 interviews constitute the study material. The interviews have been collected in two cycles; the first group of interviewees comprises four disabled women who were interviewed about their everyday mobilities in general and cycling in particular (see Appendix A). The sample reflects how cycling intersects with gender and disabilities such as deaf blindness, visual impairment, and intellectual disability. In the second cycle, a total of 21 individuals were interviewed – 15 participants and 6 facilitators – who took part in any of the three cycling initiatives (see Appendix A). The first and second cases involve a trike initiative aimed at people with disabilities and seniors. This initiative conducts training and try-on cycling sessions in an athletics arena located in a medium-sized town in Sweden. The third case is a bike school for women with an immigrant background, situated in a disadvantaged neighbourhood in a medium-sized city in Sweden. The different cases enable a contrasting analysis of the impacts across intersections of age, gender, and disability, and explore how participants perceive their ability to incorporate cycling into their daily lives (Balkmar et al., 2025, Balkmar, Henriksson and Joelsson, 2025). All research participants received information about the project and consented to participate.

The Swedish case study sites feature well-developed cycling infrastructure. The bike schools are situated in two middle-sized cities, each with approximately 160,000 inhabitants. These cities are often referred to as “cycling cities,” a term emphasising the suitability of their geography and infrastructure for cycling. Cycling is regarded as “normal” in these areas, with a broad range of cyclists of different ages, genders, and ethnicities. However, this inclusiveness is less evident for disabled people, including seniors who use tricycles (Balkmar et al., 2025).

The data collection process was identical across all three case studies and was conducted by the author. Information on the research participants was documented, including enabling and hindering factors for adopting cycling, related to individual resources (such as time and money), social dynamics (community and family support), and structural conditions (infrastructure). Interviews with facilitators were used to analyse how the cycling initiatives managed staff diversity, recruitment strategies, and approaches to promoting cycling inclusion. Participants were asked to describe their current transport situation, their motivations for joining the initiative, their experiences during the initiative, and the expected outcomes regarding increased cycling.

Analytical procedures

Interviews were transcribed into reporting grids, including important quotes, and were analysed thematically (Braun and Clarke, 2019). In the grid, the informant's demographic background was documented, and barriers and enablers to cycling identified in the

interview were noted. These factors were categorised into individual resources (such as time and finances), social dynamics (including community and family support), and structural conditions (for example, infrastructure). The grid presents a summary of the cycling initiative under study, followed by a description of the participants' current transport situation, their motivations for joining, their experiences during participation, and any outcomes related to their cycling uptake. In subsequent data coding, relevant accounts of cycling inclusion, enablers, and barriers to cycling were identified and further analysed in the context of previous research, as well as how the initiatives facilitate cycling inclusion through their activities and outreach efforts (see Balkmar et al., 2026). Some of the interview questions directed to the informants and facilitators (see Appendix B, C) were used to guide the analysis, including: how recruitment and marketing were conducted, if participants themselves were involved in designing and facilitating their own cycling training, and the extent to which participants intended to continue cycling independently after completing the training.

Negotiating everyday cycling barriers

From previous research on disability and cycling, we know that people with disabilities encounter a range of barriers, from systemic, infrastructural, and spatial challenges to those related to costs for accessing bikes, and barriers connected to cultures of mobility that prevent people with disabilities from identifying as or being recognised as cyclists (Cox and Bartle, 2020; Incle, 2019; Nyberg and Levin, 2023; Larrington-Spencer, 2024; Sheller, 2018). I will begin this empirical section by introducing some of the barriers that emerged in the narrative interviews and that are then confronted by the bike schools, including the ambivalence of assistance and care relations present in the research participants' lives. This section includes both research participants from the bike schools studied and those who did not participate but had cycling experiences as disabled persons.

Linda and Malin have an intellectual disability; both used to bike before the pandemic. Linda, a 45-year-old living in assisted housing, says she used to cycle, "but it is like I have lost the desire to cycle, when there was a pandemic, you wouldn't be out too much and then you have lost control." By losing control, Linda refers to being unable to practise her cycling regularly because of the pandemic.

I used to cycle to do my groceries, but now the bike is kept in my storage. My assistant used to help with directions; she cycled at the front and I at the back, allowing me to concentrate on cycling.

COVID became a major barrier to maintaining her competence to use the bicycle and navigate traffic, as she was dependent on her assistant to guide her. Linda's friend Malin, 35, has her own apartment but needs assistance from a mobile support team that checks on her twice a week. She walks a lot, uses transport services for specific occasions, but stopped cycling because of surgery.

Before [the pandemic], I used to cycle everywhere, including to work and into the city – but after the surgery, I don't like having things [like a helmet] on my head. Since then, my bike has been in the basement for nearly six years. I always used to wear a helmet then. (Malin, 35 years old, intellectual disability)

Both Malin's and Linda's narratives highlight the importance of continuity in maintaining their cycling abilities, which, if they choose to participate, could potentially be restored through para-cycling practice organised by a bike school.

While most of the seniors hesitated to cycle outside the bike school, other research participants found ways to overcome barriers related to discomfort cycling in traffic. Sonja was born with a visual impairment that means she cannot drive a car. She thinks the bus is too time-consuming and inflexible; she prefers to ride her bike as her daily mode of transport. Her visual impairment makes her hesitate, saying, "Maybe that's at the verge of what I'm capable of, but I'll do it anyway." For her, a motivator is how cycling affords independence from her husband: "I want to be an independent woman who lives my own life; asking for help is a bit complicated. I don't want to be a nuisance; I want to fend for myself." Sonja managed to overcome barriers to active travel, maintaining her independence, while other narratives reflected more complex dependencies. Bike school participant Hehna's narrative reflects how her now deceased husband depended on her caring for him at home. Hehna says: "When my husband was alive, I used to ride a two-wheeled bicycle, but he didn't want me to because of the risk of injury, and if I got hurt, I couldn't take care of him, he thought." Her story highlights how cycling mobility and (patriarchal) care relations intersect. Her husband's care dependency became a barrier for her to take up cycling, which increased her reliance on a car. After he died, her daughter supported her in taking up cycling again, this time on a tricycle, which she learnt to ride at the bike school.

Like Hehna's care relationship, which inhibited her cycling, other narratives illustrate how different forms of care relationships can create barriers to active mobility. Barbro, 48, who has deafblindness, prefers to walk or cycle to her workplace in the city centre. She is accustomed to travelling around the world as part of her work; when at home, she enjoys active travel and finds it more convenient than using public transport. Barbro rides a side-by-side bike, which requires two people pedalling. She says that most people who assist her do not complain about walking or biking with her, but she expresses a persistent worry "that the other person thinks it's boring, and that affects me, and then my experience is not as fun as I feel that I'm forcing someone to ride a bike or walk with me."

The narratives from Sonja, Hehna, and Barbro all illustrate different forms of relationships in which research participants negotiate care relations that pose potential barriers to their access to cycling. As Lotta maintains access to cycling by remaining independent from her husband's care, Hehna's husband's care needs become a barrier to her accessing cycling. As Karin and Jessica discussed above, Barbro's narrative illustrates that disabled persons must not only access suitable bikes but also receive assistance from care workers to become cyclists. Barbro's narrative also exemplifies the fluidity of "care intimacy," as assistants can also become barriers to participation if they fail to understand her access needs (Dokumaci, 2019), as shown in Barbro's worry about "forcing" someone to support her cycling. These narratives illustrate what Pucci et al. (2026, p. 571) refer to as "the multidimensionality of accessibility" and how diverse accessibility-related challenges may arise that may not be adequately addressed, in this case, by the municipality home care service. Volunteers of bike schools, like those studied here, may play an important role in enabling velomobile access for marginalised groups, as they act as micro-activist affordances who open cycling opportunities through commoning accessibility to cycling.

Recruitment and outreach strategies

Bike schools support accessibility to cycling by providing suitable bicycles, guidance on their use, and a safe environment for practice, thereby fostering cycling competence. To understand cycling inclusion and the ways that the initiatives common cycling, facilitators were asked to outline their recruitment strategies. Their responses included more than outreach efforts; they also discussed target groups and ways to negotiate social stigmas as potential

barriers to participation. Eskil, a facilitator at the trike bike school, says that initially the organisation mainly focussed on rehab and paracycling, but it aimed to broaden its target group to include seniors. According to Eskil, while the practice of tricycling was mainly aimed at enabling disabled people to compete in cycling competitions, including seniors would shift the focus from competition to supporting their continued cycling.

It involved shifting the focus from competition to the social aspect, aiming to secure funding for a new group of trike cyclists. The social element is highly important. Many seniors were isolated due to COVID, and they managed to partly overcome their isolation through their activities. (Eskil, facilitator)

Like other examples of community-based transport initiatives for seniors, this initiative not only addresses mobility needs but also aims to support the social networks of the participants (Pucci et al., 2026). Recruitment of participants is mainly conducted through advertisements in local news media and attempts to recruit through organisations for seniors have had limited success. For Eskil, an important aspect of recruitment has been linking seniors with the disability community, but the organisations that coordinate seniors did not want to be associated with "disability," he says. To address this potential barrier, instead of using the word "disability" when recruiting seniors, they wrote: "when the two-wheeler doesn't work." This allowed them to promote their platform as an opportunity to engage with tricycles – not engage with disabilities per se. Eskil refers to age and disability as a "grey zone," not implying that cyclists are "grey" as they age, but because participants in the senior group would not identify as "disabled," despite having Parkinson's, stroke experiences, and severe balance issues. He states that the trike bike school is both about social activities for seniors and about facilitating training in parasports. "Seniors are impaired in various ways, which can prevent cycling, and we can help them overcome these barriers."

Most seniors join the initiative because they can no longer ride a two-wheeled bike. For Eskil, the goal is to get more people to cycle and support their quest to "never stop cycling." They have a strategy that participants can try, and the bike school staff will do their best to facilitate their participation by addressing body-bike relations that prevent participants from accessing cycling.

It is not so easy to just buy a tricycle and start; many people find it difficult and stop. Here they can try, practice and understand how these bikes work. But there are other obstacles, such as the shame of being seen in town with a tricycle. We can help here; it is easier in a group, and the obstacle becomes less important. (Eskil, facilitator)

The quote exemplifies how the facilitator Eskil understands accessibility not as an individual concern but as a collective one, which demands opportunities for learning activities and skill-building, solutions that the initiative can provide through collective action (Pucci et al., 2026). Also, in their efforts to support trike bike cycling, the organisers had to consider social stigma as a potential concern. Eskil's quote speaks to previous studies that identified negative attitudes and associated stigma towards tricycles, linking trikes to old age and disability (Hagemeister et al., 2018). However, despite Eskil's concerns, none of the seniors interviewed expressed any hesitation to use tricycles due to worries about image and social stigma, quite the opposite. Johannes states that "if it wasn't for the initiative, I wouldn't have tried these bikes, nor would my wife." Hehna, who has been recovering from knee surgery for several years, says she did not feel embarrassed using her trike in public: "People just watch and think

it's fun. I never cared if it would be embarrassing; I care about myself." Eskil highlights the importance of community in overcoming barriers, a point supported by earlier research on bike schools, which found that social communities were significant enablers of cycling and of building cycling capacity among disadvantaged populations (Balkmar et al., 2026; Fonseca and Esteves, 2026; Silonsaari, 2025).

The paracycling section of the trike bike school struggled to recruit participants. Bengt, who oversees this part of the initiative, stated he aimed to recruit through schools and demonstrate to young people in wheelchairs that tricycles are accessible to them. However, limited time and challenges in accessing schools hindered efforts to reach new members. Instead, they are dependent on websites and Facebook to promote their programme to potential participants. Conversely, the bike school for women with immigrant backgrounds employed different recruitment strategies. Henrietta, the facilitator, emphasised the importance of taking the time to build trust with potential participants, who often have very low confidence in official bodies such as local authorities and the government. There are also strategic partnerships with organisations serving the target group, such as language schools, churches, or other significant meeting places, to help direct women towards the programme. Alongside building trust and advertising the bike school through these organisations and online communities, the presence of women organisers and segregated bike schools also helped attract women participants. In addition, Swedish cycling culture had a positive impact on women signing up for the bike school. For example, Sabine, who wants to use cycling as a mobility option for exercise and work, says that moving to Sweden made her realise how common cycling was, also for women, and that she therefore "had to learn to bike." For a mother like Amy, her children's cycling abilities were a strong reason why she joined the bike school – learning to bike would enable her to accompany her child to school by bike.

None of the bike schools demonstrated much diversity among staff. While the bike school for women attempted to recruit instructors from the participant group, they failed. The situation was somewhat different for the trike bike school, where male instructors had disabilities and ranged in age from younger to older. The facilitator, Tomas, emphasises that staff diversity is important, primarily to "normalise the presence of people with disabilities in the role as instructors." However, none of the interviewed participants mentioned perceiving a lack of diversity among instructors as a problem or a hindrance to their participation.

Facilitating access

Adequate levels of accessibility enable a person to take part in needed and desired activities, including active modes such as cycling (Pucci et al., 2026). The bike schools studied provided bikes that suited the needs of their participants to reduce access-related barriers. For example, the women's bike school lowered the saddles on ordinary two-wheeled bikes to allow participants to practise balance. The trike bike school provided trikes in several forms, including hand-pedalled versions and various wheel configurations, allowing participants to try different types of trikes to determine which were suitable for their needs (Clayton and Parkin, 2016).

While the seniors expressed a desire to develop their capacity to sustain their often lifelong commitment to cycling by using a trike, the disabled individuals primarily seek access to bikes and a safe space to practice cycling. For Jessica, a 36-year-old woman with Down syndrome, cycling with her father during practice is part of her weekly routine. She uses the bike school mainly for exercise and fitness, and she has no intention of cycling independently outside the initiative. To participate, she relies on her father's support, but she hopes that her "assistant will come along too" to support her cycling practice. Her previous assistant was a keen cyclist, and they often rode a tandem bike with rear-seat steering, which provides adaptive cycling

for riders with Down syndrome, autism, and balance issues. The design allowed Jessica to sit at the front, with her assistant behind her, steering. With the trike bike providing balance, she can cycle alone, but she still feels the need for someone to cycle alongside her. Jessica's case thus exemplifies several instances of "people as affordances" (Dokumaci, 2019) that facilitate access to cycling, including her father, who supports her cycling; the (potential) affordances of her assistant; and the facilitators at the cycling organisation, who provide access through adapted bikes and safe training facilities.

63-year-old Karin, who uses a wheelchair and a hand-pedalled bicycle, mainly cycles for exercise. "I would like to cycle more if I had the time. I have a mobility scooter, but you don't get any exercise from that. Cycling is fun, and it gives exercise." By participating in the bike school, she can benefit from the health advantages cycling offers to people with disabilities (Clayton and Parkin, 2016). Like Jessica, Karin requires an assistant to cycle with her, which limits how often she can train. At cycling practice, she told me that: "For me, it's the last time today because I can't come here on Thursdays, which is the new practice time. I don't have many assistant hours." For Karin, access to cycling is more than just a matter of distributing mobility resources; it depends on the allocation of social services within the Swedish social care system.

For participants who do not require assistance to use a trike, like 25-year-old Sofia, access to cycling is more manageable than in Jessica's and Karin's situations. During the summer months, when there are no scheduled activities at the trike bike school, Sofia can borrow a trike for private use. This allows her to continue exercising by bike without having to buy one herself. As Cox and Bartle (2020) discuss, the financial costs of acquiring an adapted bicycle can be a significant challenge. Sofia says, "I would like to cycle more in everyday life, my biggest obstacle for this is the cost, I can't afford to buy a bike that costs 4000 Euro just like that, so it is the financial part that is the biggest obstacle." Sofia has a job but does not see herself financially able to buy a trike, even though it could potentially make her less dependent on a car.

The participants in the bike school for women also had difficulty affording their own bikes. The instructors were often asked where to get cheap second-hand bikes once participants had learnt to cycle. Some participants had already bought their own second-hand bike. Other access-related challenges the bike school addressed concerned participants' time to take part in the training due to care responsibilities. Here, the main strategy from the bike school was to maintain a low participation threshold (drop-in), which made it easier for women with care responsibilities to participate. To conclude, access to bikes was facilitated for all groups during practice, but significant cost-related barriers to accessing bikes remained for participants in the trike bike school. This was less the case for the bike school for women with immigrant backgrounds, who could access second-hand bikes at reasonable prices. For both groups, care dependencies remained a challenge to participating in the bike schools.

Building competence

The strategies for building competence in cycling are organised in different ways. For example, the bike school for immigrant women supported progression through a simple "step-by-step" programme – with the final step being to cycle in traffic and practise traffic rules. A similar approach was not considered feasible at the trike bike school, even though the organisers encouraged participants to practise turning techniques on slalom courses and in other ways that mimicked "real-world" cycling. For most participants, trike bikes were a new experience and a form of cycling that required considerable practice. For the senior participants, learning to use a trike bike can be quite overwhelming. Hanna experiences balance problems

due to several accidents involving her two-wheeled bike. Hanna says that when she bought the trike bike, she understood it would require a different technique, but not that it would be as difficult as it turned out to be.

I cried; it was so terrible! I thought, 'How will I get over this fear?' The same thing happened when I came here and was about to try trike bikes; I cried when I got on the bike. The organisers said, 'It's not dangerous, nothing will happen, I'm holding on to the bike, I am walking with you around the track.' [...] He accompanied me the first and second times I was here, then on the third time I cycled by myself, so I am gaining confidence. (Hanna, balance problems)

This quote illustrates how participants can build competence through their own practice. The volunteers' verbal and hands-on physical support exemplify how people can become affordances for participants, helping Hanna to overcome mobility barriers (Dokumaci, 2019). If needed, the bikes are customised to better suit the individual's physical needs. The cycling trainers, Eskil, Tomas, and Bengt, build participants' competence with the trike by helping beginners around the running track and offering support. Despite the challenges participants face when learning to use the trike bikes, these challenges also serve as motivation. Britta has cycled all her life but cannot use a two-wheeled bike due to osteoporosis and poor balance. She exemplifies a common theme in the interviews with the seniors: "When you get this old, you think it's the last time you swam in the sea, the last time I've danced, it's the last time I ride a bike, but I refuse that, I'd love to ride a bike." The seniors' lifelong cycling appropriation was therefore primarily maintained by the initiative, as for most participants, cycling occurred mainly within the safe confines of the programme.

The results show that seniors and disabled participants experienced barriers to cycling independently, often due to cost-related barriers to accessing suitable bikes and the assistance needed to become cyclists. Important motivators for participating in practice sessions are socialising and exercise; being part of the cycling initiative and its social context was a key reason why the participants remained active cyclists (Berent et al., 2021). Even though the initiatives managed to lower barriers for seniors and disabled people to access and develop cycling competence with trike bikes, these groups rarely appropriated cycling into their everyday lives. While none of the disabled participants and two of the seven senior participants expected to continue cycling beyond the protected environment of the trike bike school, all women with immigrant backgrounds anticipated continuing to cycle and expressed an ambition to incorporate it into their daily lives after completing the course.

The narratives further suggest that many of the participating women articulated compelling and multifaceted reasons for incorporating cycling into their everyday lives. These motivations included enhancing employability, facilitating social participation, enabling mobility with their children, reducing transport expenditure, improving health, and contributing to environmental sustainability (see Balkmar et al., 2026) – findings that have also been emphasised in previous studies (van der Kloof, 2022; Sersli et al., 2022). While women with immigrant backgrounds might encounter barriers related to racial and gendered power relations in public space (Davidson, 2021), their able-bodiedness suggests they have a greater capacity to adapt to the presumed norm of the confident, able-bodied, and individualised mobile subject (Doughty and Murray, 2016). Although cycling mainly remained an opportunity for exercise and socialising for the participants in the trike bike school, it is likely that their motility has improved – that is, the way in which the participants appropriate their access and competence in cycling – if the transport system better facilitates conditions suitable for differently

aged and (dis)abled bodies (Flamm and Kaufmann, 2006; Middleton and Samanani, 2021; Sheller, 2018).

Conclusion

The study has analysed various ways in which bike schools contribute to expanding velomobility options for disabled people, seniors, and women with immigrant backgrounds as a form of commoning mobility. With the aim of exploring what grassroots initiatives can achieve in mitigating barriers to cycling faced by these groups, the study has identified various ways that bike schools can (and fail to) contribute to making cycling inclusive and achievable for disabled people. The approaches taken by the bike schools for commoning cycling offer important pathways towards lowering barriers to cycling for their target groups while also contributing to other, less expected, outcomes such as breaking social isolation and fostering a sense of community.

This research contributes to the limited literature on cycling and disability, including barriers experienced by disabled cyclists and knowledge that can inform policy (Berent, Fujiyama and Yoshida, 2021; Nyberg and Levin, 2023). The qualitative approach employed in this study allowed for a deeper exploration of the range of barriers disabled cyclists face daily, including the role of care dependencies as both an enabler and a barrier to cycling and participation in the initiatives studied. This paper contributes novel insights into how care dependencies influence cycling in older age and how assistants' reluctance to engage in active travel can create social barriers for disabled cyclists. Furthermore, it shows that assistants can act as both enablers and barriers, and these relationships need to be understood within broader political contexts of social welfare systems. This provides a comprehensive understanding of the everyday conditions that shape individuals' capacity to cycle (or not) (Davidson, 2021). On a similar note, care dependencies were also important for women with immigrant backgrounds. For this group, children's cycling ability could both motivate mothers to join the bike school and hinder women's continued participation (see Balkmar et al., 2026).

The study also contributes to the growing literature on mobility commons and mobility justice, including the role of community initiatives such as bike schools and their capacity to form social infrastructures that support just mobility transitions (Nikolaeva et al., 2018; Pucci et al., 2026; Sheller, 2018; Silonsaari, 2025). As velomobile commons, they promote cycling inclusion by sharing resources, spaces, and knowledge to develop cycling competencies among target groups facing various forms of disadvantage and marginalisation within the dominant system of automobility (Balkmar et al., 2026; Fonseca and Esteves, 2026; Sheller, 2020; Silonsaari, 2025). While the studied bike schools provide the necessary hands-on cycling support for their target groups, the research shows that although disabled and senior participants emphasised health benefits and overcoming social isolation as key reasons for participation, they often hesitated to cycle outside the bike school due to a lack of confidence, feeling unsafe in traffic, or facing various barriers related to assistance or access to specialised bikes. These findings align with previous studies showing that experiences of vulnerability may lead disabled cyclists to refrain from cycling or adjust their cycling to avoid "being in the way" of traffic (Clayton and Parkin, 2016; Cox and Bartle, 2020). From a justice perspective, these embodied aspects of cycling, including cognitive and non-conscious elements, show how mobility can become a key factor in exclusion and displacement, pointing to the need for more critical perspectives on the power relations that produce unequal conditions for mobility and the right to the city (Nikolaeva et al., 2019, p. 355). As this paper has shown, by seeing and attending to their needs, cycling initiatives can lay the groundwork for the more human-scale transport planning needed to normalise cycling for groups that

traditionally face barriers to taking up cycling, such as disabled people (Ravensbergen et al., 2022; Oliveira Soares and Glaser, 2025). As such, the bike schools for disabled people offer important but partial pathways towards more inclusive urban mobility futures by recognising and supporting their cycling potential (Balkmar et al., 2026).

In conclusion, the paper has contributed with new qualitative evidence on the significance of thinking about accessibility and competence as “multidimensional,” with bike schools playing an important role in commoning accessibility to cycling through their collective engagement in skill-building efforts (Pucci et al., 2026). Yet, for the disabled people, their care dependencies stood out as ambivalent accessibility, which could either enable or hinder their participation and capacity to appropriate cycling as independent cyclists. In this sense, the conceptual framework access/competence/cognitive appropriation can be further developed by considering the multidimensional care dependencies that the research participants gave voice to, emphasising the role that volunteers, caregivers, and relatives can play (or fail to play) as affordances for one another in overcoming mobility barriers (Documasi, 2019). As Pucci et al. (2026, p. 568) argue, accessibility needs to be conceived as a complex assemblage that emerges from relational, spatial and other forms of interaction between individuals and their surrounding environments, including transport planning.

More concretely, given the specific goals of increasing the share of bicycle trips and supporting cycling inclusion among disabled people, planners and transport decision-makers would need to “see” disabled people as cyclists and better account for their views as (potential) cyclists when planning in ways that support their cycling participation. In addition, municipalities need to support grassroots cycling initiatives and their efforts through coordinated, long-term (financial) support. In addition to these initiatives' efforts to make cycling achievable for people with disabilities, bike libraries where adapted bikes can be loaned out could further reduce some of the barriers to independent cycling that this study has identified. Resources in the form of assistance hours would further support disabled people in participating in bike schools and building the capacity to cycle with confidence.

Based on these results, policymakers, municipalities and cycling promotion actors are recommended to situate their efforts within broader social justice perspectives to better support disabled cyclists. Such efforts require acknowledging how mobility needs vary between differently (dis)abled and able-bodied people, ensuring a fair distribution of mobility-related resources and opportunities, and strengthening individuals' capacity to access and utilise those opportunities (Hamidi, 2023; Sheller, 2018). As such, the research findings highlight the need to address these conditions and barriers holistically, with a focus on accessible active-travel infrastructure combined with mobility training for potential independent cyclists (Larrington-Spencer, 2024, p. 249; van der Kloof, 2022). This also requires institutionalised mechanisms for listening to grassroots initiatives and responding to their identified needs, including giving voice and visibility to marginalised groups in transport decision-making and planning, such as disabled people (Fonseca and Esteves, 2026; Verlinghieri, 2020). Such support must be integrated with broader, systemic reforms in infrastructure and mobility planning to ensure that disabled cyclists – and other marginalised groups – can fully participate in cycling as part of wider transitions towards sustainable and just mobility futures.

Additional File

The additional file for this article can be found as follows:

- **Appendices.** Appendix A to C. DOI: <https://doi.org/10.16997/ats.1926.s1>

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Competing Interests

The author has no competing interests to declare.

References

- Andrews, N.** and **Clement, I.** (2021) Invisible cyclists? Acknowledging the needs and rights of disabled cyclists. In D. Zuev, K. Psarikidou, and C. Popan (ed.), *Cycling Society: Innovations, Inequalities and Governance*, pp. 156–162.
- Andrews, N., Clement, I.** and **Aldred, R.** (2018) 'Invisible cyclists? Disabled people and cycle planning: A case study of London', *Journal of Transport & Health*, 8, pp. 146–156.
- Balkmar, D., Henriksson, M.** and **Joelsson, T.** (2025) 'Cycling motilities: Conditions, weights and reliefs for cycling in disadvantaged neighbourhoods in Sweden', *Active Travel Studies*, 5(1), pp. 1–16. Available at: <https://doi.org/10.16997/ats.1590>
- Balkmar, D., Sandström, L., Esteves, A., Fonseca, M. L., Holman, A., Popusoi, S.** and **Pugliese, F.** (2026) 'Commoning cycling: Grass-root initiatives for inclusive mobility transitions among people facing barriers to cycling', *Transportation Research Record*, pp. 1–17. Available at: <https://doi.org/10.1177/03611981261429871>
- Balkmar, D., Sandström, L., Pugliese, F., Cacace, M., Aglietti, C., Fonseca, M. L., Esteves, A., Ferreira, D., Kerremans, A., Vogelzang, M., Denis, D., Stergiadis, C., Chatzibirros, V., Vivas, A. B., Popusoi, S.** and **Holman, A.** (2025) *ACCTING report on research line 7: Cycling initiatives for an inclusive mobility transition*. Zenodo. Available at: <https://doi.org/10.5281/zenodo.15525597>
- Berent, P., Fujiyama, T.** and **Yoshida, N.** (2021) 'Evaluating delivery of cycling activity and training programmes for disabled people in the UK', *IATSS Research*, 45(3), pp. 371–381.
- Bonham, J.** and **Jungnickel, K.** (2022) 'Cycling and gender. Past, present and path ahead', in G. Norcliffe, et al., (eds) *Routledge Companion to Cycling*. Routledge.
- Boström M., Strid, S., Zorell C.** and **Balkmar D.** (2025) 'Developing action capacity for sufficient consumption among Europeans facing unequal conditions', *Frontiers in Sustainability*, 6. Available at: <https://doi.org/10.3389/frsus.2025.1629257>
- Bradley, K.** (2018) 'Bike kitchens – Spaces for convivial tools', *Journal of Cleaner Production*, 197(2), pp. 1676–1683. Available at: <https://doi.org/10.1016/j.jclepro.2016.09.208>
- Braun, V.** and **Clarke, V.** (2019) 'Reflecting on reflexive thematic analysis', *Qualitative Research in Sport, Exercise and Health*, 11(4), pp. 589–597. Available at: <https://doi.org/10.1080/2159676X.2019.1628806>
- Clayton, W.** and **Parkin, J.** (2016) 'Cycling and disability: A review. Paper presented at Universities', Transport Study Group 48th Annual Conference. Available at: <https://uwe-repository.worktribe.com/output/915468/cycling-and-disability-a-review>.
- Clayton, W., Parkin, J.** and **Billington, C.** (2017) 'Cycling and disability: A call for further research', *Journal of Transport and Health*, 6, pp. 452–562.

- Corriveau, L.** (2019) *Barriers to disabled and family cycling*. Spokesmama. Available at: <https://www.spokesmama.com/2019/06/barriers-to-disabled-family-cycling.html>. (Accessed: 25 April 2026).
- Cox, B. and Bartle, C.** (2020) 'A qualitative study of the accessibility of a typical UK town cycle network to disabled cyclists', *Journal of Transport & Health*, 19, pp. 100954.
- Davidson, A.C.** (2021) 'Cycling lungs: Understanding mobile subjectivity as enfolded', *Antipode*, 54, pp. 218–239. Available at: <https://doi.org/10.1111/anti.12767>
- Dokumaci, A.** (2019) 'People as affordances: Building disability worlds through care intimacy', *Current Anthropology*, 61(S21), pp. 99–108. Available at: <https://doi.org/10.1086/705783>
- Doughty, K. and Murray, L.** (2016) 'Discourses of mobility: Institutions, everyday lives, and embodiment', *Mobilities*, 11(2), pp. 303–322.
- European Union.** (2024) 'European Declaration on Cycling C/2024/2377', *Official Journal of the European Union*. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202402377.
- Fabrick, E., De Waard, D. and Schepers, J.P.** (2012) 'Improving the visibility of bicycle infrastructure', *International Journal of Human Factors and Ergonomics*, 1, pp. 98–115.
- Flamm, M. and Kaufmann, V.** (2006) 'Operationalising the concept of motility: A qualitative study', *Mobilities*, 1(10), pp. 167–189.
- Fonseca, M.L. and Esteves, A.** (2026) 'Pathways to inclusive cycling: Overcoming barriers and promoting equitable mobility in Lisbon's vulnerable neighbourhoods', *Cities*, 170, pp. 1–11.
- Gleeson, B.** (2006) *Geographies of Disability*. London: Routledge.
- Golub, A., Hoffman, M.L., Lugo, A. and Sandoval, G.F.** (eds.) (2016) *Bicycle justice and urban transformation. Biking for all?* London: Routledge.
- Goodman, A. and Aldred, R.** (2018) 'Inequalities in utility and leisure cycling in England, and variation by local cycling prevalence', *Transportation Research Part F*, 56, pp. 381–391.
- Hagemeister, C., Krause, J. and Bunte, H.** (2018) "'I wouldn't even sit on one." Relevant attitudes towards tricycles for adults', *Transport Research Part F: Traffic Psychology and Behaviour*, 55, pp. 484–491.
- Hamidi, Z.** (2023) *Examining inequalities in cycling motility – A Pathway towards cycling justice*. dissertation, Malmö University.
- Henriksson, M., Joelsson, T. and Balkmar D.** (2024) 'Familjers vardagsmobilitet I "socialt utsatta områden": Konsekvenser för välfärd, rättvisa och hållbarhet', *VTI, Statens väg- och transportforskningsinstitut*. Available at: <https://urn.kb.se/resolve?urn=urn:nbn:se:oru:diva-110693>.
- Inckle, K.** (2019) 'Disabled cyclists and the deficit model of disability', *Disability Studies Quarterly*, 39(4).
- Jahanshahi, D., Costello, S.B., Natasha Dirks, K., and van Wee, B.** (2024) 'Toward an equitable transport strategy by assessing cycling initiatives and identifying barriers to implementing cycling equity policies', *Transportation Research Record*, 0(0). Available at: <https://doi.org/10.1177/03611981241275559>
- Jelijs, B., Heutink, J., De Waard, D., Brookhuis, K.A. and Melis-Dankers, B.J.M.** (2018) 'Key factors for the bicycle use of visually impaired people: A Delphi study', *Disability and Rehabilitation*, 41, pp. 2758–2765.
- Lam, T.** (2022) 'Towards an intersectional perspective in cycling', *Active Travel Studies*, 1(1), pp. 1–11. Available at: <https://doi.org/10.16997/ats.1264>
- Larrington-Spencer, H.** (2024) 'Disabled people's access needs in transport decarbonisation', *IPPR Progressive Review*, 31, pp. 243–249. Available at: <https://doi.org/10.1111/newe.12414>

- Lucas, K., Mattioli, G., Verlinghieri, E. and Guzman A.** (2016) 'Transport poverty and its adverse social consequences', *Proceedings of the Institution of Civil Engineers-Transport* 169(6), pp. 353–365. Available at: <https://doi.org/10.1680/jtran.15.00073>
- Martens, K., Golub, A. and Hamre, A.** (2021) 'Social justice and cycling', in Buehler, R. and Pucher, J. (eds.) *Cycling for Sustainable Cities*, pp. 257–280.
- Middleton, J. and Samanani, F.** (2021) 'Accounting for care within human geography', *Transactions of the Institute of British Geographers*, 46(1), pp. 29–43. Available at: <https://doi.org/10.1111/tran.12403>
- Nikolaeva, A., Adey, P., Cresswell, T., Lee, JY., Nóvoa, A. and Temenos, C.** (2019) 'Commoning mobility: Towards a new politics of mobility transitions', *Trans Inst Br Geogr.* 44(2), pp. 346–360. Available at: <https://doi.org/10.1111/tran.12287>
- Nixon, D.V. and Schwanen, T.** (2019) 'Bike sharing beyond the norm', *Journal of transport geography*, 80, pp. 102492.
- Nixon, D. and Schwanen, T.** (2024) 'Community smarts in grassroots initiatives to support cycling and walking in large urban areas', *Journal of Urban Technology*, 31(1), pp. 9–28, Available at: <https://doi.org/10.1080/10630732.2024.2324851>
- Nyberg, J. and Levin, L.** (2023) 'Cykeln som möjliggörare – En kunskapsöversikt kring förutsättningar för personer med funktionsnedsättning att cykla./The bicycle as an enabler – A literature review of the conditions for people with disabilities to cycle', *VTI Rapport*, pp. 1179.
- Oliveira Soares, B. and Glaser, M.** (2025) 'Beyond infrastructure: Unpacking the complexity of exclusion and implications for just mobility transitions', *Journal of Transport Geography*, 126. Available at: <https://doi.org/10.1016/j.jtrangeo.2025.104202>
- Pucci, P., Lanza, G., Verlinghieri, E., Bertolini, L., Nikolaeva, A., Papa, E. and Prins, A.** (2026) 'Accessibility through commoning. New perspectives for inclusive cities and beyond', *European Planning Studies*, 34(3), pp. 566–583. Available at: <https://doi.org/10.1080/09654313.2025.2589819>
- Ravensbergen, L., Buliung, R. and El-Geneidy A.** (2022) 'Cycling safety as mobility justice', in *Routledge Companion to Cycling*. Routledge, pp. 272–281. Available at: <https://doi.org/10.4324/9781003142041-35>
- Ringebach, S.D.R., et al.** (2020) 'Assisted cycling therapy (ACT) improves adaptive behaviors in adolescents with Down syndrome', *Journal of Developmental and Physical Disabilities*, 32, pp. 535–552.
- Schwanen, T. and Nixon, D.V.** (2020) 'Understanding the relationships between wellbeing and mobility in the unequal city: the case of community initiatives promoting cycling and walking in São Paulo and London', In *Urban transformations and public health in the emergent city*. Manchester University Press, pp. 79–101.
- Seyfang, G. and Longhurst, N.** (2016) 'What influences the diffusion of grassroots innovations for sustainability? investigating community currency niches,' *Technology Analysis & Strategic Management*, 28(1), pp. 1–23.
- Sheller, M.** (2018) 'Theorizing mobility justice', in: Cook, N and Butz, D, *Mobilities, Mobility justice and social justice*. London/New York Routledge.
- Sheller, M.** (2020) 'Mobility justice and the velomobile commons in Urban America', in Emanuel, M. Shipper, F & Oldenziel, R. (Eds.) *A U-turn to the future: Sustainable urban mobility since 1850*. New York: Berghahn, pp. 285–304.
- Silonsaari, J.** (2025) 'Assembling velomobile commons for young people in a marginalised Amsterdam neighborhood', *Cities*, (159), pp. 1–12, Available at: <https://doi.org/10.1016/j.cities.2025.105763>
- van der Kloof, A.** (2022) 'Programs for cycling inclusion', in Norcliffe, G., et al. (eds) *Routledge Companion to Cycling*. Routledge.

- Verlinghieri, E.** (2020) 'Learning from the grassroots: A resourcefulness-based worldview for transport planning, *Transportation Research Part A: Policy and Practice*', 133, pp. 364–377. Available at: <https://doi.org/10.1016/j.tra.2019.07.001>
- Verlinghieri, E.** and **Schwanen, T.** (2020) 'Transport and mobility justice: Evolving discussions.' *Journal of Transport Geography*, 87, pp. 102798. Available at: <https://doi.org/10.1016/j.jtrangeo.2020.102798>
- Wheels for Wellbeing** (2018) *Experiences of disabled cyclists – 2018 survey [online]*. Wheels for Wellbeing. Available at: <https://wheelsforwellbeing.org.uk/wp-content/uploads/2017/06/Report.pdf> (Accessed: 13 June 2025).
- Wheels for Wellbeing** (2019) *A Guide to Inclusive Cycling 2019* (2nd edition). London: Wheels for Wellbeing.

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