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'You can be outside a lot': independent mobility and agency among children in a suburban community in Sweden

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ABSTRACT

The global decline of children's independent mobility is well documented. Whilst the Nordic countries are no exception, a previous study discovered high levels of independent mobility in a suburban community in the south of Sweden (Johansson, M., A. Raustorp, F. Mårtensson, C. Boldemann, C. Sternudd, and M. Kylin. 2011. "Attitudal Antecedents of Children's Sustainable Everyday Mobility." *Transport and Health Issues: Studies on Mobility and Transport Research* 3: 55–68). The current study investigates the everyday outdoor lives of children in this community to shed light on the mechanisms contributing to the children's independent mobility. Sixteen children aged 10–11 years old participated in place mapping and child-led walks. The results describe how their independent mobility grows from their joint commitment to play and socialise in a collective process that builds on their experiences of the local environment to form a shared patchwork of people, places and practices that meets their mutual needs. In light of plans for new development in the area, relational arrangements supporting children's agency are uncovered and independent mobility is confirmed as an important indicator of child-friendliness in planning.

Introduction

Children's independent mobility refers to children's freedom to move around and play in their local environment without adult accompaniment. A decline in children's independent mobility during recent decades is well documented in developed countries (O'Brien et al. 2000; Carver, Timperio, and Crawford 2008; Shaw et al. 2013; Woolley and Griffin 2015), including the Nordic countries (Fyhri et al. 2011; Björklid and Gummesson 2013; Nordbakke 2018) albeit from higher levels when compared internationally (Horelli 2001; Kyttä et al. 2015; Shaw et al. 2015). In the Nordic countries children generally acquire licences to explore their local neighbourhood unaccompanied by adults by the time they are ten to eleven years old (Björklid and Gummesson 2013). As a result of the ongoing decline in children's independent mobility, there is an extensive body of research examining the physical and social environmental factors promoting or constraining children's independent mobility (Johansson et al. 2020). Physical environmental factors relating to the outdoor environment include the design, availability and proximity of outdoor spaces for play and socialising (Timperio et al. 2008; Veitch, Salmon, and Ball 2008), the provision of foot and cycle paths (Sallis

and Glanz 2006; Veitch et al. 2017), degree of street connectivity (Giles-Corti et al. 2011; Villanueva et al. 2014) and road safety (Trapp et al. 2012; Veitch et al. 2017).

Parents' perceptions of the physical and social environment (Johansson 2006; Carver et al. 2010; Pacilli et al. 2013; Veitch et al. 2017) and the degree to which they deem independent mobility important for their child's health and well-being (Prezza et al. 2005; Alparone and Pacilli 2012) are also associated with children's independent mobility. A number of studies also examine the role of parents' social lives and suggest a connection between parents' neighbourhood relations and children's independent mobility (Johansson 2003; Alparone and Pacilli 2012). In line with this, young adults in a study by Holt et al. (2015, 13) called for 'parents to create a sense of community in neighbourhoods – a sense of community that fosters play.'

The outdoor environment is an important arena for promoting healthy child development, with outdoor stay positively linked to a range of physical and psychological outcomes (Korpela, Kyttä, and Hartig 2002; Raustorp et al. 2012; Chawla 2015; Gray et al. 2015; Tremblay et al. 2015). Independent mobility, in particular, is identified as an important contributor to children's social health, by giving them opportunities to build and sustain their bonds with peers (Christensen 2003; Ross 2007; Pacilli et al. 2013) and develop their relationship with their neighbourhood and local community (Lee and Abbott 2009; Pacilli et al. 2013). After all, 'it is at a community level that children engage in mobility' (Malone and Rudner 2011, 254).

Children are increasingly recognised as social actors and agents of change at community level (Morrow 1999; Heft and Chawla 2006; Malone 2013) and have even been described as 'catalysts' in the creation and maintenance of social capital (Wood et al. 2011). Through their independent movement in the neighbourhood they build social cohesion (Ross 2007) and 'community social well-being' (Pacilli et al. 2013). Children's interactions with people other than peers are central to their notions of community (Morrow 2003; Lee and Abbott 2009) and we know that through their use of outdoor spaces they become visible and can nurture their sense of security and belonging (Ross 2007).

Christensen and O'Brien (2003) argue that an understanding of how children experience and develop a sense of place is the starting point for engaging children in local development. Through 'positive interactive cycles' (Chawla 2007) children learn about place over time and how it can meet their needs (Christensen 2003). It is through such processes that children develop a sense of stewardship towards place and can acquire the capacity and desire to contribute to their local community (Malone 2013). Children may take on a role as 'active change agents' in neighbourhoods as part of their participation in planning and other formal procedures (Malone 2013; Percy-Smith and Burns 2013; Nordström and Wales 2019), but the major part of this agency occurs in the informal interactions with people and places as part of everyday life (Malone 2013; Derr, Chawla, and van Vliet 2017). Malone and Rudner (2011) suggest that learning about this activity through the study of children's independent action and mobility could possibly contribute to the further disentanglement of complexities in the dialectics of place.

Indeed, the relational nature of children's independent mobility has led some researchers to question the usefulness of independent mobility as a concept (Mikkelsen and Christensen 2009; Kullman and Palludan 2011; Nansen et al. 2014; Ekman Ladru and Gustafson 2020). These researchers argue that the notion of children's *independent* mobility does not accurately capture the intricate web of collaborations between people, objects and environments which allow children to move around in their local environments (Nansen et al. 2014). Badland et al. (2015) suggest adopting a systems model of children's independent mobility to make visible the interdependencies and complexities involved. It reflects a move away from more dualistic approaches to children's agency as either individual or collective (Alderson and Yoshida 2016; Larkins 2019), towards a more hybrid and relational understanding (Prout 2011; Ryan 2012; Kraftl 2013; Larkins 2019). Research suggests independent mobility be placed in the context of the local circumstances in which children's agency is negotiated in order to reveal how it is performed, supported and constrained (Tisdall and Punch 2012; Agha, Thambiah, and Chakraborty 2019; Ekman Ladru and Gustafson 2020).

The rationale behind this study is to explore the everyday outdoor lives of a group of children at community level which go against the overall trend of declining independent mobility. In doing so we can help to untangle some of the interdependencies between children and the people, places and everyday practices which together form their everyday outdoor life, promoting their independent mobility and enabling their agency.

Method

The setting

The present study draws on a previous study, 'Children on Foot' (Johansson et al. 2011), which found high overall levels of physical activity among children aged ten to eleven years old (averaging 14,717 steps per day) in a suburban municipality in southern Sweden. The municipality's second largest settlement (a community of roughly 4000 inhabitants), which displayed particularly high levels of physical activity and play with friends during a week, was selected for the present study. The neighbourhood is dominated by single family homes with private and semi-private gardens. A central green area dissects the 170 hectares from north to south, comprising parks, the primary school the participating children attend, a preschool and a secondary school with its accompanying sports facilities. The central areas are largely car free and well connected with the rest of the community as part of a comprehensive network of managed green spaces, foot and cycle paths and ten playgrounds. A railway line connecting the community with two nearby cities frames its western edge and separates the community's central area from a housing estate of mainly rental apartments built in the late 1990s. Work is underway that will expand the railway from two to four tracks and the master plan for the municipality envisages 3000 new homes in the area by 2038.

Participants

Sixteen children aged 10–11 years old (11 girls and 5 boys) attending the same school participated in the study. All children in Year 4 were invited to participate and letters of consent were sent home with them. Following the first round of invitations 16 consents to participate were handed in from parents, accounting for around 15% of those invited and of those in this age-group living in the community. The length of residence in the community for the children ranged from one year up to their whole lives, with several of them having lived in a number of other places in the region and one child abroad.

Place mapping and child-led walks

In total, five groups containing three to four children participated in the study. Data collection took place during school time. Each session began with a short mapping exercise (15–30 min) in a group work room in the school and was followed by a child-led walk in the local neighbourhood (1.5–2 h). The combination of methods aimed to capture different dimensions in children's use and experience of their neighbourhood (Cele 2006; Lim and Barton 2010; Loebach and Gilliland 2010; Holt et al. 2015). The whole process was documented using digital audio recorders and photography.

Mapping is useful to explore children's perceptions and experiences of their environments (Travlou et al. 2008; Bourke 2014; Christensen, Mygind, and Bentsen 2014), their physical activity (Hume, Salmon, and Ball 2005; Lee and Abbott 2009) and the social and spatial elements of their everyday lives (Lee and Abbott 2009). On a large aerial photo of the area the children were asked to mark the homes of family and friends, places they liked or disliked and the experienced barriers to their independent mobility. 'What do you usually do there?' and 'How do you usually get there?' were some of the follow-up questions. Their discussions around the maps provided insights into their sense of place.

Child-led walks are a common method for investigating children's use and perceptions of their neighbourhoods (Christensen 2003; Cele 2006; Loebach and Gilliland 2010; Carroll et al. 2015). Christensen (2003, 18) found they allowed children to present 'a picture of the village, as they knew it' and Loebach and Gilliland (2010, 61) gained insights into their 'extensive social and familial networks within the community.' Each group agreed upon a preliminary route which often changed mid-walk as the children's movement through the community reminded them of other places. The walks functioned as a vehicle for discussions on the physical and social environment and provided space for their unstructured accounts of community life. During the walks, questions were posed concerning their activities and mobility in relation to the physical and social environment. The walks were audio-recorded and photographs were taken of places and objects as decided in dialogue with the children. As part of another study, the walks also included questions on how children perceive green spaces and their management (Jansson, Sundevall, and Wales 2016).

Data analysis

The maps and photographs were used as a backdrop to the analysis of the audio-recorded walks and provided an overview of the children's environmental use as well as support for the recollection of particular places and situations. The audio recordings were transcribed and became the object of an open-ended procedure for thematic analysis (Braun and Clarke 2006) focusing on the children's perceptions, doings and experiences related to their everyday outdoor lives. The passages of text were coded (scary, favourite places, feeling safe, appropriation, wayfinding, backstories, collective experiences, parents, the municipality, change, influence, a sense of belonging and routines for meeting up outside) and the transcripts were read and re-read in relation to the literature to uncover interdependencies between factors in the local community supporting independent mobility at neighbourhood level.

Methodological considerations and limitations

The mapping exercise was effective in providing the children with a common reference point for the upcoming dialogue during the walk. The child-led walk allowed us to observe their interactions with place and listen to the way they framed issues on social life in relation to their use of the neighbourhood. However, we acknowledge that the very intersections between children doing and thinking community require more thorough investigation to fully capture the intricacies of their outdoor lives and its dependence on characteristics in the urban form. The fact that data collection was combined with that of another study (Jansson, Sundevall, and Wales 2016), which explored the role of green spaces and their management for environmental child-friendliness, influenced the process and results. The focus on children's perspectives in relation to qualities in the physical environment in a community of highly active children provided us with additional insights into the role of children's independent mobility and agency in community development.

Findings

Unlocking the local environment

The children were able to travel to school and throughout the community without their parents. They described how they had developed 'a map in the brain of how everything looks.' They attributed this knowledge to earlier walking experiences together with older siblings or parents. Though they are no longer physically accompanied by their parents, at their parents' insistence, they 'always' have a mobile phone with them. The children explain that they don't mind as it allows them to 'just call' if they need help. The children's discussions shed light on the ongoing process of their developing sense of place and how their dependence on their parents has gradually been replaced by

Figure 1. Showing each other some favourite trees and how to climb them.

their reliance on each other. When lost they call a friend. They helped each other find their homes and places on the aerial photos and instinctively took turns to navigate through the community during the walks depending on who knew the area best. Whilst individually they didn't know how to get there, together they did. This sharing of knowledge also extended to the sharing of favourite places and it became clear that certain places during the walk were new to some of the children. Sharing this knowledge also included demonstrations of how to use and get the most out of a place, for example a climbing tree (see Figure 1).

During a discussion about barriers to being outside, length of residence came up with one participant explaining that because they hadn't lived in the area long they didn't know their way around yet and therefore hadn't ventured out much. When asked if it was their parents who had said they couldn't be outside, they replied 'it was partly me and partly my parents' and revealed how their process of getting to know the neighbourhood had begun after recently starting to jog with a friend. Because their friend knows the area well, it means 'we can jog pretty much anywhere we want.' Talking about visits to an old church on the outskirts of the community one child said 'I'm not allowed to go there,' but was quickly reminded by another child that 'yes, but if there are two of us you can. We've been there many times on our bikes.' Parental and personal concerns about being outside are overcome through seeking each other's company and sharing knowledge.

'There's everything you need'

The children guided us through a network of people and places spread throughout the community which met their needs for play and friendship with people and place. One child described how 'the best thing [about living here] is that there are quite a lot of friends, seeing as you get to know a lot and there are places for sports and food, there's everything you need.' They pointed out places for playing, socialising, being alone and having fun together, ranging from playgrounds to green spaces and more unmanaged places on the outskirts of the community. The multitude of affordances appeared to fuel the children's enthusiasm to be outside. As one child put it, 'there are lots of playgrounds, loads of green spaces, you can be outside a lot.' They described places affording particular activities for particular occasions: grassy hills for sledging during winter and 'chilling' on summer days. Elevated places with a view, such as tree houses, provided opportunities to talk and spy. Places with a more 'unprogrammed' nature were associated with opportunities to build dens, fantasise and take

Figure 2. The overgrown railway track allowed the children to determine what can be done there.

risks. 'I think this type of place is more fun … it is just to come up with things to do.' On the edge of this wooded area, which concealed an overgrown railway track (see Figure 2), one child took off running through the overgrown grass, exclaiming 'I'm taking the dangerous way!' while another child taking a gravel footpath responded 'I'm taking the easiest!'.

A number of the most talked about places were seemingly abandoned or forgotten about by adults and had elaborate backstories which seemed to add to their appeal. The 'Ghost Forest,' a small overgrown plot of land, contained gravestones and other remnants from a stonemasonry in its undergrowth and had a host of stories attached to it. During the mapping exercise one child described breathlessly how he and a friend 'were so curious that we tried to lift up a gravestone to see if there was a corpse, but changed our minds and ran away!' (see Figure 3). A shared experience of the physical, social and imagined environment combined into a peak experience.

The presence of other children played a key role for the children's use of the neighbourhood and their development of emotional bonds with place. Whilst the mapping exercise gave a spatial dimension to the community's people and places, the walks shed light on constellations of social practices

Figure 3. Visiting the 'Ghost Forest' the children spoke of during the mapping exercise.

and norms which helped them to actualise the neighbourhood's affordances. Of critical importance was a common understanding among the children of where and when to meet up at different times of the day and week. Many of the children agreed the local kiosk and the China Swing playground were key meeting places after school. As one child pointed out 'I only go there [to the China Swing playground] if there is something. You don't want to take a chance and go there and find nobody is there.' The presence of other children helped to unlock the potential of places by affording a larger variety of activities, such as tag, through their collective goal to have fun.

Their community

A recurring theme in discussions was the children's feeling of belonging and they compared 'their' community to other places to emphasise how much they liked it. One child spoke of a friend who is jealous of him because he lives in the community:

> He is really jealous of me, because we live in such a small community. He thought it was a really cosy village. Cars can't be heard, there isn't a lot of traffic and things like that.

When asked if they could imagine living somewhere else they cried out 'Noooo!' in unison and when one child stated 'I could imagine moving back to the USA' another child replied 'but then you'd leave all of your friends!' The child declared that if they moved back to America they 'wouldn't have much freedom' and the group went on to clarify that freedom means 'you can go where you want' and that where they live 'walking around on your own is a given.' The children associated their membership to the community with their friendship and their independent mobility and their movements during the walks seemed to confirm this sense of belonging. As we walked they took us on shortcuts through neighbours' gardens, balanced on walls and walked in the middle of the road. One child pointed out a worn path across a lawn, clarifying that he might have been the cause of it due to their habit of taking a shortcut:

> I cycle here. Right over here. It feels a little bit like it's me who's made it so nothing grows there.

The children said 'hello' and waved at people we passed. These mutual social acts, of recognising and being recognised by people, and the traces of their activity in the physical environment, came across as small celebrations of their belonging to the community:

> Child 1: You know a lot of people and a lot of people know who you are, because if you have children then everyone knows me.

> Child 2: You don't know everyone, but you recognise everyone.

The children's and community's agency appeared to be on display to them as they walked through the village. They pointed out how they or other children had appropriated and changed places to make the outdoor environment more fun for each other. This included chalk lines drawn on pavements, dens and treehouse built with or by other children and private football and basketball nets left standing in public areas. They also spoke of clean-up days in which locals 'sort out' local playgrounds and tidy gardens together, displaying a sense of pride in showing us how they or other children had contributed to making the place tidier, more attractive or just more fun. Together these collective actions suggest there are common norms regarding what is acceptable and desirable as well as a mutual trust which the children share with the rest of the community.

A community under the threat of planning

Some children were particularly wary about potential threats to their freedom and more particularly their independent mobility. One group demonstrated this through their shared concerns over ongoing development plans for densification and expansion in the area. They feared more houses

would mean more people and more cars and elaborated on the potential effects of this on their independent mobility and their opportunities to socialise:

> If you live in traffic then perhaps our parents wouldn't let us out as often as they do now because I can be outside all the time and walk on all the streets and stuff but if there's too much traffic I won't be able to and then I won't be able to meet my friends.

One child also feared that 'if [the community] became a small town then the politeness would disappear much more' and thought they wouldn't feel as safe or say hello to people anymore. They expected green space to disappear and with this the opportunities to 'run around and play and stuff.'

During discussions it was common for the children to speak on behalf of other children in the community. For example, one child explained that 'they're demolishing quite a lot and then they're not building anything for us.' In a statement of dismay one child said 'they might remove our kiosk and we don't want them to.' Another group highlighted how the kiosk functioned as an important meeting place as part of their after school routines. When speaking in terms of us (children) and them (authorities), the children's considerations for others indicated a level of joint commitment among the children themselves. In a visit to a playground one group discussed how this once popular playground had been demolished and replaced with a new one they didn't like. To further demonstrate this they added 'teenagers don't like it either … they once tipped [the playground equipment] over.' They also described how a playground had been built instead of a skatepark which had been in the pipeline after a vote on it in the municipality. Upon passing the playground they pointed out how although they found it boring, it was good for smaller children.

One of the groups discussed how the municipality could improve local planning practices:

> They're not thinking! The municipality we have thinks more like adults. In order for the municipality to be good, they need to go back and think 'if we were children how would we like it to be?'

On the other hand they seemed fairly confident that the plans to remove a BMX track had been stopped due to their 'protests' at a municipal meeting and they also mentioned a wasp's nest near a playground being removed after they had complained. Many of the upcoming plans for the area appeared to be experienced by the children as a threat to *their* everyday routines, *their* freedom of movement and *their* places. They mentioned a local community-based interest group founded in opposition to the proposed plans for development in the area. On the website of this group is stated that 'the municipality is planning changes which don't promote our children's best interests' and that their goal is to 'create information channels for residents, togetherness between residents, a good living environment and cultural identity.' This shared commitment between children and adults to come together for the common good seemed to contribute to the children's sense of community.

Discussion

Children's independent mobility is an important carrier of children's agency within a collective process interlacing the physical and social environment, including peers as well as adults and other people in a community. As children grow, the presence of a supportive parent is to some extent replaced by peers and modern technology, allowing for an extension of parental surveillance (Fotel and Thomsen 2003; Nansen et al. 2014). Our findings show how over time children develop their own support system of routines, practices and norms for outdoor life; with specific procedures for meeting up after school and for staying safe and secure while moving about and appropriating larger and larger areas of the neighbourhood. Central to this support system are their mutual needs for friendship and play and their joint commitment to meet these needs through collective action (Gilbert 2006). The presence of 'imagined dangers' can very well have a negative impact on children's neighbourhood explorations (Christensen, Mygind, and Bentsen 2014), but this study shows how places such as the 'Ghost Forest' can be made not only accessible, but turned into grand adventures through the support of friends. Such experiences of group glee in contact with nature (Mårtensson 2004) and peers can boost children's emotional connections to people

and places. Their everyday practices emphasise both the significance of children's 'own peer culture outside the domain of adults' (Malone 2013, 374), as well as the significance of relational arrangements between people, objects and environments for their development of a sense of place and independent mobility (Christensen and Cortés-Morales 2016).

Through studying children's independent mobility the complexities involved in their agency at community level were also revealed. The context in which children live provides particular opportunities and limitations for their agency, both as individuals and as a collective. The relative extent of the children's agency was exposed in their stories and confirmed 'the spatial limits on the "reach" of children's action spaces' (Tisdall and Punch 2012, 256). The children spoke about their neighbourhood as a place where 'walking around on your own is a given' and 'there's everything you need.' While their descriptions of local people and places were rich in detail and told about the fulfilment of their needs, they spoke more negatively about the municipality as thinking 'more like adults.' Their feelings of 'us' vs 'them' could very well strengthen their sense of belonging and commitment to the community, but also reveals their lack of agency in relation to the wider community and its future.

Somewhat unexpected was the children's acute awareness of the precarious nature of the relational processes involved in their independent mobility. Development plans for the area show how unprogrammed green space along the overgrown railway track will be converted into a park in conjunction with the development of new homes. Such green spaces contributed to the variety and richness of affordances, exerting an outward pull on the children into exploring their neighbourhood (Chatterjee 2005). Our findings confirm the role of these flexible green spaces in stimulating children's fantasy and desire to play outside (Jansson, Sundevall, and Wales 2016).

Upon a follow-up visit to the area, much of the vegetation surrounding the railway tracks had been cut back and a once concealed tree with wooden planks now stood exposed in the open. The value of the area for children's play had been documented in plans, but its forthcoming transformation into a park threatens to demolish its essence as a refuge for play and exploration. Our findings confirm how the sometimes informal nature of children's outdoor play can come into 'conflict with formal adult geographies' (Agha, Thambiah, and Chakraborty 2019, 692). An accidental meeting with the former owner of the 'Ghost Forest' revealed he had been actively managing this plot for children to play on and that he had recently sold it to developers. It highlights the complex, often informal arrangements between people and place which support children's outdoor play. As communities change, the delicate compositions that promote independent mobility are put to the test. It is essential to develop ways of safeguarding land with a play value for children and the very social arrangements which make them accessible to children. Whilst this study was in a small suburban community, the mechanisms of agency supporting children's independent mobility are universal. It is less about scale and more about having an insight into how child-friendliness can help shape sustainable communities for everyone (Mårtensson and Nordström 2017). Children's participation in planning processes is one way of feeding such tacit local knowledge into the planning process (Bishop and Corkery 2017; Derr, Chawla, and Mintzer 2018) and longitudinal studies can help us to understand how relational features of children's everyday outdoor lives interact over time.

Conclusion

The significance of children being able to open their door and go out to play and meet friends unaccompanied by adults should not be overlooked. This paper contributes to our understanding of the complex interplay between social and physical factors contributing to children's independent mobility, and highlights how mobility and agency are interconnected. It illustrates the power in children's joint commitment to play and socialise outdoors in fuelling their collective action and nurturing their sense of community and overall stewardship of a place. However, as this study has illustrated, the interdependencies between people, place and everyday practices are constantly in flux and seemingly small changes can have large consequences for children's outdoor play. The paper concludes

by calling for an urban planning which is sensitive to local collaborations promoting children's independent mobility and which asks for children's help to unveil them.

Disclosure statement

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