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BEYOND BOUNDARIES: UNDERSTANDING THE TOURISM MOBILITY OF FAMILIES WITH WHEELCHAIR-DEPENDENT CHILDREN

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Abstract: Individuals with disabilities encounter numerous challenges in the realm of tourism travel. Various constraints can affect their opportunities to engage in travel, influence their choice of destinations and modes of travel, and shape their overall tourism experiences. Research on tourism for individuals with disabilities has predominantly concentrated on identifying barriers to travel. This paper employs a time-geographical framework to extend beyond this focus, examining how various constraints are negotiated and the resultant outcomes for tourism trips. The study is based on interviews with Swedish parents whose children use wheelchairs. The findings indicate that these families face multiple constraints impacting their tourism opportunities and experiences, primarily related to rules, regulations, and inaccessible physical environments. Furthermore, the interviewed parents do not perceive their children's disabilities as constraints but rather highlight the challenges of using a wheelchair in inaccessible tourism contexts. While some constraints are negotiated to facilitate tourism, not all desired tourism activities can be fully realised. Consequently, the families in this study exhibit rather routinised travel behaviour. An important finding is that families who travel with a child with a disability should be considered part of the family tourism market, rather than the disability tourism market.
Keywords: Time geography; tourism constraints; pockets of local order; disability; family tourism.

1. Introduction

Tourism, as a form of mobility, has experienced significant global growth in recent decades, providing numerous benefits to individuals, including enhanced well-being. However, not all individuals can participate in tourism under equal conditions, for instance those with disabilities (e.g. Blichfeldt & Nicolaisen, 2011; McKercher & Darcy, 2018). Over the past two decades, there has been an increased research focus on accessible tourism for

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individuals with disabilities (Godtman Kling & Ioannides, 2019). Studies in this field indicate that individuals with disabilities share similar travel motivations with their non-disabled counterparts, such as the pursuit of novel experiences (Domínguez et al., 2015). Additionally, some individuals with disabilities seek respite from social exclusion through travel (Blichfeldt & Nicolaisen, 2011), yet inadequate accessibility can exacerbate feelings of exclusion. Therefore, it is essential to identify and actively address the barriers faced by individuals with disabilities in the context of tourism mobility, aiming to reduce or eliminate these obstacles whenever possible (Stumbo et al., 2011).

Research demonstrates that individuals with disabilities encounter various constraints throughout the entire travel process, from accessing sufficient information about tourism options (Eichhorn et al., 2008; McKercher et al., 2003) to navigating their journey to a destination (Darcy, 2012) and finding accessible accommodations (Blichfeldt & Nicolaisen, 2011; Nyman et al., 2018). Despite the increased attention on individuals with disabilities in tourism research and the growing interest in accessible tourism (Singh et al., 2023), the literature on families travelling with a child who has a disability remains limited (Morton & Vázquez-Maguirre, 2024). This is problematic, as families often travel together, and when travelling with a child with a disability, the entire family's travel experiences are likely to be affected by various barriers encountered throughout the tourism travel chain (Nyman et al., 2018).

Various constraint theories and frameworks have been utilised in disability-related tourism research, but the time-geographical framework remains unexplored in this context. Time geography examines the interplay between time and space (Hägerstrand, 1970), with a central focus on understanding how different constraints shape individuals' geographical patterns (Ellegård, 2018). Within time geography, constraints to travel are categorised into authority, capacity, and coupling constraints (Hägerstrand, 1970). Additionally, the time-geographical framework includes concepts that illuminate the consequences of these constraints. For instance, it explores how individuals' projects are impacted and how they negotiate constraints to create pockets of local order in which they can perform activities, albeit sometimes in an adapted manner (Ellegård, 2018). Compared to theories primarily concerned with constraint elucidation (e.g., Crawford & Godbey, 1987; Smith, 1987), time geography has the potential to deepen the understanding of tourism experiences and outcomes for tourists with disabilities and their families. However, time geography has only recently begun to attract attention in tourism studies (Hall, 2005a; Hannam, 2014), and there is a lack of time-geographical research examining constraints to travel and the outcomes these constraints have for tourism experiences. Focusing on a group of individuals who, according to previous research (e.g., Blichfeldt & Nicolaisen, 2011; Devile et al., 2024; Yates, 2007), face many constraints when travelling for tourism purposes can exemplify how time geography can be applied in a tourism context.

In this study, I employ time geography to examine tourism travel among Swedish families with children who use wheelchairs. The primary objective of this paper is to contribute to theoretical discussions and insights on how the time-geographical framework can be applied to understand individuals' tourism travel experiences. Additionally, the paper aims to provide a deeper understanding of the tourism experiences of families with a child who uses a wheelchair, thereby contributing to the research fields of family tourism and accessible tourism. Drawing on interviews with parents, I address the following research questions:

1. What authority, capacity, and coupling constraints do these families encounter during tourism travel?
2. Do these families establish pockets of local order in tourism contexts?
3. How do time-geographical constraints and pockets of local order impact the projects associated with tourism trips?

The paper is based on parents' perceptions of the constraints they experience in family tourism and how they navigate and negotiate these constraints with a family perspective in mind. The study is delimited to focus on parents whose children are permanent wheelchair users.

1.1. Literature review

In this literature review, I initially present research on travelling with a disability. This part of the subsection elaborates on the constraint theories of Crawford and Godbey (1987) and Smith (1987), providing examples of empirical studies that have utilised these theories. I then continue with findings from previous research on tourism travel for individuals with physical disabilities. The second part of the literature review introduces family tourism, including literature on tourism for families with a child who has a disability.

1.1.1. Travelling with a disability

Research has increasingly focused on tourism for individuals with disabilities, with the predominant theme in the literature being the barriers and constraints faced by these tourists (Singh et al., 2023). Studies on tourism for people with disabilities typically categorise travel constraints into internal (i.e., related to the individual) and external (e.g., related to physical and social environments) factors. A prominent theory in this field is that of Crawford and Godbey (1987), who divided leisure constraints into three categories: intrapersonal, interpersonal, and structural barriers. Similarly, Smith (1987) proposed a theory categorising constraints into intrinsic, interactive, and environmental barriers. These two theories share many similarities (Devile et al., 2024).

Intrapersonal or intrinsic barriers are connected to the individual, such as stress and anxiety (Crawford & Godbey, 1987), as well as physical and cognitive functionality (Smith, 1987). According to Crawford, Jackson, and Godbey (1991), intrapersonal barriers are the first to emerge, as they influence the decision to participate in tourism, which is fundamental before other constraints can be considered. Packer et al. (2007) found that tourists with disabilities must overcome some intrinsic or intrapersonal barriers before planning a tourism trip. Research has also shown that the level of intrapersonal or intrinsic barriers in the pre-travel phase are positively correlated with feelings of helplessness, which can impact whether individuals with disabilities choose to travel (Lee et al., 2012). If deciding to travel, intrinsic barriers affect the type of accommodation chosen for a tourism trip (Freund et al., 2019). Moreover, perceptions of intrapersonal or intrinsic barriers can be influenced by the opinions of others, such as family members or healthcare personnel, who may encourage or dissuade tourism trips (i.e., interactive barriers) (Packer et al., 2007).

Intrapersonal or interactive barriers are associated with other individuals and can arise when someone requires companionship to participate in tourism (Devile et al., 2024). These barriers are therefore significant considerations both before and during a tourism trip (Crawford et al., 1991). This category also includes the social attitudes of others, including tourism personnel (Bi et al., 2007; Devile et al., 2024), for instance, regarding information about accessibility during the planning phase of a leisure activity (Aguilar-Carrasco et al., 2023) or

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tourism trip (Eichhorn et al., 2008; McKercher et al., 2003). However, social barriers can also be classified as environmental barriers; Smith (1987) includes both social and physical barriers in this category. Environmental barriers encompass attitudes, discrimination, and social exclusion, as well as physical barriers in the natural and built environment. A study by Bi et al. (2007) examined this category, focusing on the accessibility and attitudinal barriers encountered by individuals with physical disabilities in a tourism context. They found that an individual's level of functionality had a greater impact on the experience of both accessibility and attitudinal barriers compared to the type of disability and the use of assistive devices such as wheelchairs or crutches. Finally, the category that Crawford and Godbey (1987) refer to as structural barriers includes financial resources, work hours, and other factors that can inhibit individuals' opportunities to participate in tourism. However, this category has been used similarly to environmental barriers in tourism studies. For instance, Card et al. (2006) use the concept of structural barriers to explain how obstacles arise between an individual and the built environment when physical access is limited.

Crawford and Godbey (1987) remind us that different barriers are not necessarily stable and constant but can change over time. McKercher and Darcy (2018) further highlight the importance of distinguishing between constraints that can affect everyone, regardless of disability, those constraints that are typical for people with various disabilities (e.g., lack of sufficient information, negative attitudes), and those that are specific to certain disability types (e.g., physical, visual, and auditory inaccessibility). By conceptualising constraints to tourism in these different tiers, they make it clear that people with disabilities should not be treated as a homogenous group, while also reminding us that all individuals have different needs and desires that affect their tourism experiences and perceptions of constraints (McKercher & Darcy, 2018).

Despite the fact that tourism experiences among individuals with disabilities are influenced by the type of disability (McKercher & Darcy, 2018), many tourism studies tend to include participants with a range of various disabilities (e.g., Devile et al., 2024; Lee et al., 2012; Lehto et al., 2018; Packer et al., 2007). Some studies focus specifically on tourism for individuals with physical disabilities, including (but not limited to) wheelchair users (e.g., Bi et al., 2007; Blichfeldt & Nicolaisen, 2011; Lovelock, 2010; Yates, 2007). To date, it is more common in studies on everyday travel to focus solely on people who use wheelchairs, for instance elucidating constraints of using public transport (e.g., Gaete-Reyes, 2015; Pyer & Tucker, 2017) and adaptation strategies to enable mobility (Landby, 2019).

However, among tourism studies that include wheelchair users, environmental barriers appear to be the primary constraint. These barriers can be physical obstacles that individuals encounter when the physical environment is not sufficiently accessible, such as challenges with wheelchair access (Blichfeldt & Nicolaisen, 2011; Yates, 2007). Examples include difficulties with transportation, at destinations, and with accommodations. Regarding transportation, many tourists use air travel for long-haul trips, which can be particularly challenging for wheelchair users. A major concern with air travel is that wheelchairs must be left at the airport, requiring individuals to either switch to an airport wheelchair or be carried onboard the plane (Darcy, 2012; Poria et al.,

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2010). Leaving one's wheelchair can limit personal mobility and create uncertainty, as there is a risk of the wheelchair being damaged during the flight, potentially ruining the entire trip (Yates, 2007).

In addition to physical accessibility barriers, the attitudes of airport and airline personnel can significantly impact the flight experience of wheelchair users negatively (Darcy, 2012; Poria et al., 2010). Research has also shown that unforeseen difficulties can arise at the destination, with inaccessible accommodation being a major concern for wheelchair users (Kim et al., 2012). Studies have indicated that destinations and accommodations are often less accessible for wheelchairs than expected (Blichfeldt & Nicolaisen, 2011; Yates, 2007). Using a wheelchair can also make it challenging to participate in tourist activities at the destination. Research has highlighted difficulties in accessing cultural activities (Poria et al., 2009), visiting natural environments (Aguilar-Carrasco et al., 2023; Lovelock, 2010), and using swimming pools (Yates, 2007).

Individuals with disabilities do not simply accept the existence of barriers and allow them to prevent travel (Devile et al., 2024). Some individuals proactively address barriers (Lee et al., 2012), for instance, by evaluating different options during the pre-travel phase (Nyman et al., 2018), while others learn from their own previous experiences (Blichfeldt & Nicolaisen, 2011; Yates, 2007). Various negotiation and adaptation strategies to enable tourism can lead to experiences that are not necessarily the optimal choice but a compromise to make tourism possible given prevailing constraints and barriers (Devile et al., 2023; Nyman et al., 2018). Actions to reduce travel constraints for tourists with disabilities have also been undertaken by actors in the tourism industry, such as providing fully accessible, specially adapted tourism trips targeting individuals with disabilities (Blichfeldt & Nicolaisen, 2011; Huh & Singh, 2007). While such offers can enable tourism for individuals with disabilities, there are also social risks associated with excluding them from other tourists, both in terms of spatial segregation of those with and without disabilities, and by limiting the choices of accessible tourism available. Researchers have instead emphasised the importance of making all tourism accessible (Darcy & Dickson, 2009; RubioEscuderos et al., 2021).

1.1.2. Family tourism

A review of family tourism research conducted by Qiao et al. (2022) indicates that family tourism has gradually garnered academic attention. Research demonstrates, for instance, that families frequently travel together on tourism trips and that such tourism can provide families with an opportunity to escape the stresses of everyday life (Durko & Petrick, 2013), while simultaneously enhancing the wellbeing of family members and strengthening family relationships (Miyakawa & Oguchi, 2022). Schänzel (2013) found that family tourism was appreciated by both parents and children within travelling families, particularly because it allowed them to spend extended periods together, compared to everyday life, and create shared memories.

One strand of research within family tourism that has recently gained more interest, according to the review by Qiao et al. (2022), concerns tourism for 'disadvantaged' families, in which they include families with a member who has a disability. However, despite the recognition of these families in tourism research, the literature predominantly focuses on families with adults with disabilities, while research on families travelling with a child with a disability remains scarce (Morton & VázquezMaguirre, 2024). A study by Lehto et al. (2018) focused on the shared tourism experiences of individuals with disabilities and their caregivers, primarily family members.

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They found that many everyday challenges associated with living with a disability persisted in tourism contexts. However, tourism also provided opportunities to challenge social attitudes, such as discrimination, and to test their own abilities through activities they typically do not undertake in their home environment.

Among the few studies that focus specifically on tourism for families travelling with a child with a disability, most have concentrated on families with children who have intellectual or neuropsychological disabilities. A study involving families with children with various disabilities (84% of whom had an intellectual disability) found that a primary motive for travelling was to facilitate the physical development of the child with a disability, mainly through outdoor activities. Another significant motive for travelling was to enhance family closeness by participating in tourism activities together (Kim & Lehto, 2013), which aligns with research on tourism for families with non-disabled children (Schänzel, 2013).

Moreover, a few studies have focused on travelling with a child with autism spectrum disorder (ASD), indicating that tourism can provide parents with an opportunity to escape the highly routinised everyday life while also offering the child with ASD the chance to see more of the world. However, tourism can cause significant stress for these families, necessitating detailed planning for every aspect of the trip (Sedgley et al., 2017). Research has also specifically examined experiences of air travel (Dempsey et al., 2021) and accommodations when travelling with a child with ASD (Freund et al., 2019). These studies found that air travel presents challenges related to long waiting times at airports, crowds, noise, and unfamiliar environments (Dempsey et al., 2021), while pre-travel concerns and the severity of the child's ASD significantly influenced whether families opted for accessible accommodation alternatives (Freund et al., 2019).

In a study focusing on tourism for families with children who use wheelchairs, Nyman et al. (2018) found that many destinations and accommodations were deemed too inaccessible when travelling with a wheelchair and were thus avoided. Consequently, families travelling with a child using a wheelchair had to adapt to accessibility measures and modify their tourism plans in ways that were not always appreciated by all family members. This study also highlights that disabling barriers throughout the entire tourism travel chain affect not only individuals but the whole family when a child has a disability (Nyman et al., 2018).

In a review paper summarising the literature on tourism for families with a child with a disability, Morton and Vázquez-Maguirre (2024) found that the most significant barriers identified in research concern the attitudes of tourism stakeholders and other tourists, physical barriers, and the lack of or insufficient information about travelling with a disability. Tecău et al. (2019) conclude that more education among tourism stakeholders and society at large is needed to improve tourism experiences for families with children who have disabilities.

1.2. The time-geographical framework

Time geography was initially developed by Hägerstrand (1970), with the fundamental idea being that time and space are inseparable. Everything takes time and happens in space. Over the past half-century, time geography has been further developed, providing a framework with useful concepts for studying how individuals' mobilities are affected by various constraints and how such constraints influence what activities people can undertake, as well as when and where these activities can take place (Ellegård, 2018). Dodge and Nelson (2023) emphasise the

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value of understanding mobilities at an individual level, including the constraints that impact mobility choices, as these can eventually shape collective mobility patterns at various geographical scales.

This sub-section begins with an introduction to the time-geographical concepts used in the paper, namely projects, constraints and pockets of local order, followed by a presentation of the current state of time geography in tourism research.

1.2.1. Time-geographical concepts

All human activities can be conceptualised as components of projects, undertaken to achieve specific objectives (Ellegård, 1999). Certain projects in daily life become routinised due to their repetitive nature, while others are performed less frequently (Hägerstrand, 1985). Numerous projects that individuals aspire to complete remain unfinished due to competition among various projects or due to diverse constraints. Consequently, individuals must prioritise between different projects (Hägerstrand, 1985; Lenntorp, 2004). Hägerstrand (1985) posits that failed projects are as significant as those that are successfully undertaken, as they reveal which projects are feasible within certain context-dependent constraints. The availability of accessible mobility alternatives can enhance the likelihood of project completion (Hägerstrand, 2009), whereas remaining at home due to travel constraints can be considered a 'failed' project (Lenntorp, 2004; McQuoid & Dijst, 2012).

One project that typically requires considerable time and involves traversing greater distances than is feasible in everyday life is tourism travel. A tourism project generally occurs infrequently compared to everyday projects. Similar to other projects, tourism travel incurs a cost in terms of time and other resources, which must be negotiated in competition with other projects (Hall, 2005a).

Opportunities for project completion can be influenced by various constraints, which, within the framework of time geography, are categorised into three types: authority, capacity, and coupling constraints (Hägerstrand, 1970). The time-geographical concepts of capacity, authority, and coupling constraints (Hägerstrand, 1970) have some similarities with categorisations used in other constraint theories that have been applied in studies on tourism for people with disabilities (i.e., those of Crawford & Godbey, 1987, and Smith, 1987), and attempts have been made to combine these (Dodge & Nelson, 2023).

Firstly, authority constraints encompass laws and regulations that impact individuals in diverse ways, such as by restricting who can be present in a particular location and the times during which they are permitted to be there. Authority constraints can affect everyone's travel patterns, for instance, through speed limits and public transport timetables (Hägerstrand, 1970). Authority constraints at a structural level are characterised by their resistance to individual change (Ellegård & Svedin, 2012). The ability to alter authority constraints also varies among individuals, as not all possess the same power to initiate change. Power relations themselves can constitute authority constraints, in terms of norms and sociocultural power structures that determine what is feasible for different individuals (Lenntorp, 2004). Authority constraints are thus similar to the environmental barrier category proposed by Smith (1987) and structural barriers proposed by Crawford and Godbey (1987).

Hägerstrand's (1970) second category, capacity constraints, refers to individuals' physical and mental limitations, such as physical strength and abilities. Certain groups, including children, older individuals, and

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people with disabilities, tend to experience more significant capacity constraints than others (Ellegård, 2018). For individuals with disabilities, the impairment can be considered a capacity constraint, as it can affect their ability to perform certain activities and projects (Åström, 2009). Capacity constraints can also involve a lack of necessary resources. If an individual does not have access to the items, tools, or money required in a particular situation, it can negatively impact their capacity to perform an activity (Ellegård, 2018). Capacity constraints mainly refer to what previously have been classified as intrinsic (Smith, 1987) or intrapersonal constraints (Crawford & Godbey, 1987). Recently, Dodge and Nelson (2023) have called for a broader perspective on capacity constraints, by combining these constraints with internal factors, in which they include, for instance, individuals' characteristics, motivations, and perceptions. They argue that it is important to understand individuals' differences, which can be affected by factors such as age, gender, and disability, but also other personal attributes (Dodge & Nelson, 2023). This aligns with the framework proposed by McKercher & Darcy (2018) on tourism for people with disabilities, where personal characteristics and motivations are crucial for understanding tourism behaviour and the constraints people with disabilities experience in tourism contexts.

Finally, coupling constraints arise when an individual needs to coordinate an activity with others, such as being at the same location as someone else to perform the activity (Hägerstrand, 1970). Coupling constraints thus exist in all groups of people, particularly among family members (Ellegård, 2018). For example, if young children do not have adults to take them to various places, their geographical range is highly limited (Hägerstrand, 1970). Therefore, coupling constraints share similarities with interactive (Smith, 1987) and interpersonal barriers (Crawford & Godbey, 1987). However, in addition to coupling constraints between individuals, time geography also recognises that people can be coupled to objects, such as a mode of transport (Ellegård, 2018). Another example is that individuals with disabilities might need to be coupled to certain aids, such as glasses (Åström, 2009) or a wheelchair (Landby, 2023).

Constraints can depend on the various social and geographical contexts in which different activities and projects occur (Ellegård, 1999), and these constraints are often interconnected. Individuals do not simply accept restrictions imposed by various constraints but negotiate them, exercising a certain level of agency that affects mobility outcomes (Ellegård & Vilhelmson, 2004). Through the negotiation of constraints and the acquisition of necessary resources, individuals can perform routinised activities within so-called pockets of local order. While there is some room for manoeuvre and adaptation within pockets of local order, they are characterised by a certain level of stability. Many projects are easier to perform in pockets of local order, as the circumstances have been arranged to facilitate the intended project realisations (Ellegård & Vilhelmson, 2004).

Pockets of local order can exist on different geographical scales, where individuals involved in the related, often routinised, activities and projects maintain a certain level of control (Ellegård, 2018). Examples of pockets of local order include the home, the workplace (Ellegård & Vilhelmson, 2004), or a city (Gadd, 2017), among other settings where social and spatial factors interact to create local preconditions that enable or restrict people's presence and possibilities (Wihlborg & Palm, 2008). While it is not always possible to change physical space, individuals can arrange social connections and adapt mental perceptions to create pockets of local order (Gadd, 2017), for instance, through routines (Ellegård & Vilhelmson, 2004). However, the ability to negotiate constraints

also depends on the type of constraints individuals encounter and their power to challenge them, as some constraints are more definite, while others are relative (Dodge & Nelson, 2023). The type of constraints and the ease of negotiating them are thus likely to affect opportunities for travel and the creation of pockets of local order.

1.2.2. Time geography in tourism research

Time geography has been applied in various ways to research on people's mobility in time and space (Ellegård, 2018). By acknowledging that individuals are affected by various constraints, time geography can highlight how different people have varying access to mobility and different possibilities to undertake activities that require transport (Neutens et al., 2011). In the context of mobilities for individuals with disabilities, Landby (2019; 2023) employed time geography to investigate the everyday travel of families with wheelchair-using children with cerebral palsy. The findings indicated that these families faced numerous challenges in their daily travel, often due to a combination of various constraints. For instance, authority constraints affected where the children had to travel (e.g., adapted schools) and how they could travel there, with public modes of transport being considered too inaccessible, resulting in car dependence among the families.

However, time geography is not as prevalent in tourism studies as it is in studies on everyday mobility and has, to date, not been applied to research on tourism travel for people with disabilities. The lack of time-geographical tourism studies may be due to time geography being perceived as a framework for routinised behaviour, while tourism has been considered to occur in a less routinised manner (Hall, 2005b). Nevertheless, tourism mobility has increasingly been recognised as interrelated with everyday life and daily mobilities (Hannam, 2014) and occurs on a more routinised basis among an increasing number of individuals (Hall, 2005a).

In a tourism study, Kang (2016) utilised time geography to investigate how different constraints can affect travel patterns. The study revealed, for instance, that travelling with children was associated with single-destination travel behaviour, but with day trips departing from this destination, whereas travelling without children more often involved visiting several different destinations during a trip. Being coupled with children could thus be a constraining factor for geographical freedom and flexibility in tourism contexts (Kang, 2016). Moreover, time geography has been applied to elucidate tourists' local mobility patterns at a destination, using cell phone data to show how tourists move between activities during their stay and how they allocate their time. Findings indicate that tourists spend a considerable amount of time in or close to the hotels where they stay during their visit, and generally participate in fewer activities far from the hotel than those nearby (Xu et al., 2021). This aligns with behaviour in everyday life, whereby most activities tend to be in close geographical proximity to one's residence (Ellegård & Vilhelmson, 2004). Another study using time geography in a destination context shows how tourists on packaged tours, or those reliant on public transport, experience more time-space constraints than others when engaging in tourist activities, due to authority constraints related to the timetables of the transport options (Gu et al., 2021).

1.3. Research gaps and contributions

The aforementioned constraint theories of Crawford and Godbey (1987) and Smith (1987) have been instrumental in elucidating the travel constraints experienced by people with disabilities in the context of tourism

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(Devile et al., 2024), aligning with the primary research focus of this field (Singh et al., 2023). However, recent research has underscored the necessity of not only focusing on constraints but also on how these constraints are negotiated within tourism contexts (Devile et al., 2024). The application of time geography in research on tourism for people with disabilities has the potential to deepen the understanding of how they negotiate constraints by creating pockets of local order and how their tourism projects, both envisioned and completed, are affected. Thus, the use of the time-geographical framework in this context is a significant contribution of this paper. To date, the scarce literature that uses time geography in tourism studies mainly focuses on constraints experienced at tourism destinations, and the use of pockets of local order in this paper can therefore add important insights to time-geographical tourism studies and to the understanding of travelling with a child who uses a wheelchair, including how and where they travel.

Furthermore, many studies on tourism for people with disabilities have concentrated on adults with disabilities (e.g., Blichfeldt & Nicolaisen, 2011; Devile et al., 2024; Lee et al., 2012; Packer et al., 2007), while only a few have considered children with disabilities and their families (e.g., Kim & Lehto, 2013; Nyman et al., 2018). The limited literature on the tourism experiences of families with children with disabilities primarily examines tourism for families with children who have intellectual or neuropsychological disabilities (e.g., Freund et al., 2019; Kim & Lehto, 2013), with a notable lack of research focusing on tourism for families travelling with a wheelchair-using child (although see Nyman et al., 2018). This paper contributes to the existing literature by examining tourism for families with children who use wheelchairs, thus adding to existing literature on family tourism as well as accessible tourism.

2. Methods

This study is based on interviews with Swedish parents whose children are permanent wheelchair users. The focus is on the parents' perspectives and experiences, including how they perceive tourism travel from a family perspective. The study specifically targets families residing in the same household, rather than extended families. Interviews were selected as a suitable method for data collection due to the sensitive nature of the topic. As a researcher, I assumed the role of a listener, aiming to learn from the parents' firsthand experiences. This approach was particularly crucial since I lack personal experience with family tourism involving children who use wheelchairs. My familiarity with children with disabilities is derived from my social networks and my previous work experience as a personal assistant to children and teenagers who are wheelchair users. While these experiences have informed my understanding of disability and have been useful throughout the research process, I acknowledge that my insights into tourism contexts are limited, and I approached this topic as an outsider.

The interviews were conducted using a semi-structured approach, allowing participants to express themselves freely while ensuring that all planned topics were covered (Brinkmann & Kvale, 2018). The interview guide began with general questions about parents' perceptions of tourism, their travel frequency, and preferred types of tourism trips. Subsequently, the interview questions followed the typical structure of a tourism journey, including the pre-travel phase, transportation phase, and destination phase. Although the interview guide was informed by the time-geographical framework, the questions were intentionally open-ended rather than focusing on specific constraint categories (e.g., "How do you experience travelling to a destination?") to avoid leading

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study participants in particular directions. Notably, pockets of local order were not specifically addressed as part of the interview.

Various sampling strategies and channels were employed to recruit study participants. Initially, I contacted teachers of disability-adapted school classes and heads of care attendant companies. They were requested to distribute an information letter about the study to parents in the target group (i.e., those with children using wheelchairs). The information letter provided details about the study's objectives, planned dissemination of results, and contact information. It explicitly stated that participation was voluntary, ensuring that parents did not feel coerced to participate. Additionally, the snowball technique was utilised. Existing participants informed others in their social networks about the study, sharing the same information letter. During the initial contact with study participants, I provided further explanations about the study. Participants were also given the choice between face-toface interviews or phone interviews.

The final sample comprised 13 parents. Four interviews were conducted face-to-face, while the remainder were phone interviews. Interestingly, there were no discernible differences in the openness of participants based on interview type. Both the shortest and longest interviews occurred in face-toface settings. Interviews were planned to last approximately 45-60 minutes, although some varied in duration. All interviews were recorded with participants' consent, and the recordings were transcribed verbatim. The interviews and transcripts were in Swedish and the quotes included in the paper are thus translated to English.

The participants' children who were wheelchair users were aged 4 to 16 years, with a majority being boys (see Table 1). Most parents had non-disabled children as well, with many having 1-2 additional children. A few parents had 3 non-disabled children, while one parent had none. All interviewed parents were in heteronormative relationships with the other parent of the child using a wheelchair. Some parents also had non-disabled children from previous relationships. While other socio-demographic details of the participants and their families remain confidential, it is worth noting that all study participants could be considered middle-class based on their education, occupations, and travel opportunities for tourism purposes. Economic constraints related to travel were not discussed during the interviews, and all families were actively engaged in travel, indicating that they can afford to travel for tourism purposes. By examining the perspectives of Swedish parents, the socio-geographical context can influence the results. For instance, it is common for both parents of a child with a disability to be in paid employment, facilitated by the state-funded welfare system, which includes support such as personal assistance for children with disabilities (Miettinen et al., 2013).

Geographically, participants lived in various parts of Sweden. The geographical settings varied from rural to metropolitan areas, but place of living was not discussed as enabling or constraining tourism mobility or access to certain destinations; all study participants had access to train stations and airports within reasonable distances from their homes.

Table 1: Characteristics of study participants

Interview	Sex of parent	Sex of child using wheelchair	Age of child using wheelchair	Number of non-disabled siblings
Interview 1	Woman	Boy	14 y/o	1

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Interview 2	Woman	Boy	9 y/o	2
Interview 3	Man	Boy	5 y/o	1
Interview 4	Woman	Boy	5 y/o	1
Interview 5	Woman	Boy	13 y/o	2
Interview 6	Woman	Boy	4 y/o	0
Interview 7	Woman	Girl	16 y/o	2
Interview 8	Woman	Girl	12 y/o	3
Interview 9	Woman	Boy	13 y/o	2
Interview 10	Woman	Boy	9 y/o	2
Interview 11	Woman	Girl	9 y/o	2
Interview 12	Woman	Girl	11 y/o	1
Interview 13	Woman	Boy	4 y/o	3

I conducted a thematic analysis on the transcripts by organising different words, sentences, and extracts into various codes, utilising the MAXQDA software for this process. Subsequently, I categorised the codes into different themes. Thematic analysis allows themes to either be predetermined or emerge during the coding process (Clarke & Braun, 2017). For this study, I had predefined themes based on the time-geographical framework, including authority, coupling, and capacity constraints, as well as pockets of local order. Rather than treating time-geographical projects as a separate theme, I considered the entire tourism trips as projects. Throughout the coding process, sub-themes emerged, such as social resources (including personal social networks and personal assistance) and the significance of time aspects in the experience of tourism mobilities (including factors like children's age, time-space distance to destinations, and changes over time). While most codes were associated with authority constraints (such as rules, regulations, attitudes, and physical barriers) and coupling constraints (e.g., being coupled to family members and aids), capacity constraints were indirectly intertwined with other themes.

3. Results and discussion

This section is organised into three sub-sections, each corresponding to the research questions. The first sub-section elucidates the findings pertaining to the time-geographical constraints encountered by families with children who use wheelchairs during tourism travel. The second sub-section examines the pockets of local order that facilitate tourism for these families. The final sub-section discusses the impact of these constraints and pockets of local order on the completion of tourism projects.

3.1. Time-geographical constraints to tourism mobility

While a disability can be considered a capacity constraint (Åström, 2009), the parents in this study did not emphasise their children's disabilities as constraints. Instead, the problematic issues raised were the combination of coupling constraints between the children and their aids (resulting from disability) and various authority constraints. Authority constraints encompass laws and regulations as well as social and physical barriers

(Hägerstrand, 1970). For these families, authority constraints were particularly evident in the physical environment, specifically concerning to the accessibility of transport modes, destinations, and accommodations for wheelchair users.

Regarding transportation to tourism destinations, there was a general consensus among the parents that trains and buses were too inaccessible when travelling with a wheelchair. This aligns with research on everyday travel for children using wheelchairs (see Landby, 2019; Pyer & Tucker, 2017). However, the challenges were particularly pronounced when travelling for tourism purposes, as overnight stays required the transportation of additional aids and equipment for the children, which were not easily accommodated on such transport modes:

We used to take the train to visit my mother [when my son with a disability was a baby], and he did not require as much equipment. Now, we have to travel by car because we need to bring numerous aids… lots of aids. (Interview 6)

Trains are exceedingly impractical for travel! They are incredibly impractical! We have travelled to [neighbouring cities], which works because the trips are short and she does not need to lie down. However, when we travelled with a [certain train operator] to another city, it was extremely crowded, and we had to use a very old train with a peculiar elevator that the staff didn't know how to operate. Even though we called and informed the train operator that we would have a powerchair, they were unaware of this when we were supposed to board. (Interview 7)

I have taken the train twice with [my son with a disability], but it is not something I would like to do again, as not all trains are accessible or equipped with an elevator, which prevents us from boarding. Therefore, I would not take the train with my son with a disability, at least not under the current circumstances. However, if in ten years all trains were guaranteed to have a ramp or an elevator, I would consider it, but as it stands today, I would not travel by train with my son with a disability.

(Interview 2)

The above quotes exemplify the challenges faced when travelling by train with children who use wheelchairs, leading to the avoidance of train travel for tourism purposes. Authority constraints appear to be the primary issue, particularly concerning the design of trains and the equipment required to board with a wheelchair, as well as social barriers where personnel are unfamiliar with the use of existing equipment. These quotes also highlight the temporal aspect. The first quote illustrates how the complexity of a disability can change over time, resulting in increased coupling constraints between the children and their aids, which in turn can heighten coupling constraints between the family and their car. The second quote indicates that some travel constraints can be negotiated during shorter trips but not for longer distances. The final quote demonstrates that while train travel is currently impractical due to physical inaccessibility, it might be considered in the future if such barriers are removed. Thus, the challenges of using train transportation to tourism destinations is not necessarily constant. However, as a result of current constraints related to train transportation, the families used their own cars for shorter trips within the country and, in some cases, for international travel:

The first longer trip we made was actually down to Stockholm when [my son with a disability] was about one year old. It turned out great, and I guess it was then we realised that he likes to travel by car, so we started to

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look for trips where we could go by car, even outside the Swedish borders. My son turns nine this year, but for the first six or seven years, we always travelled by car, wherever we were going. We travelled to [a small Swedish city], took the car to Denmark, and even to Belgium. So, there has been a lot of car travel during the first seven years. (Interview 2)

For long-haul travel, flying was the preferred mode of transport as it mitigates some constraints. Flying typically requires less time in comparison to car or train travel, allowing children to manage sitting in non-adapted flight seats, even if this is not optimal (authority constraints related to airplane design). Additionally, it allows for the check-in of aids and equipment, which is advantageous compared to ground public transport. However, flying still presents challenges with physical inaccessibility, particularly onboard the aircraft:

It must be possible to design an airplane a bit better. I mean, I understand that they want to have as many passenger seats as possible to make it economically sustainable, but there should be some part of the plane that has better accessibility. For instance, for those who have aids for walking but do not need a wheelchair, it is very narrow to get through. (Interview 9)

While physical barriers can make travelling challenging for these families, other authority constraints also significantly affect their travel experiences, including rules, regulations and social barriers related to travelling with a wheelchair and other aids:

And then it's the airline companies… if you fly within Europe, it's usually fine and… since he's still so small, he can't use those wheelchairs that the airports provide. They try to make us use them, but he can't, so he needs his wheelchair up to… well, until boarding the plane actually. […] Now, when we were flying to Mozambique, there was a stopover in Ethiopia, and they took the wheelchair, and we had to wait by the airplane for half an hour. When we finally got it back, it was broken. That happens way too often. (Interview 3)

I do not think there has been a single flight where it has not been, 'Oh, who are you? With a wheelchair? Then you will have to borrow this airport wheelchair!' 'No, that will not work.' 'But then you get this sulky.' 'But how would that work? Can you not see that he cannot hold his head upright?' 'But then you need assistance!' 'Yes, we do not want that; we just want to keep his wheelchair until we get to the plane.' This conversation can go on indefinitely. […] We have always been allowed to have his wheelchair and previously his stroller to the gate, but it is not always straightforward. Sometimes it is, 'Nice that you are here, of course you can take his wheelchair to the gate, no problem!' and other times it is, 'Ah… have you called and announced this in advance?' It is so unpredictable. It usually ends with us being allowed to bring the wheelchair, but when we arrive at the destination, we know by now that nine out of ten times the wheelchair will not be at the gate, and we will have to carry him. (Interview 13)

The above quotes illustrate how authority constraints related to airport regulations and social barriers associated with personnel treatment can be challenging, leading to unnecessary uncertainty among parents. While previous research on air travel for families with a disabled child has focused on children with autism and challenges mostly concerned long periods of waiting, noise and stress of being in unfamiliar environments (Dempsey et al., 2021), the challenges of families travelling with a child who uses a wheelchair appear to be more related to physical

barriers and regulations associated with wheelchair use. The interviewed parents frequently highlighted a lack of flexibility and individual solutions based on specific capacity and coupling constraints when travelling by airplane. Most accessibility adjustments, such as borrowing an airport wheelchair, were designed for adults rather than children and parents expressed a lack of understanding of disability diversity among airport and airline personnel. One parent pointed out: "Disabled children, they exist too!".

A combination of various constraints could also create challenges at destinations and accommodations. Similar to transportation, the primary focus here was on physical barriers encountered when using a wheelchair in an inaccessible environment:

I mean, we can't travel everywhere and… well, we need to plan it more. Otherwise, we would be able to choose any hotel, maybe a cheaper one, I don't know… Yeah, but that would work if we could use the stairs and so on, now we really have to make sure that it works for [my son with a disability]. (Interview 1)

In November-December, we travelled to Tenerife, and we had a combination trip, staying at one place for one week and another place for another week. The second week, we had a large apartment, but there were stairs… I mean, lots of stairs up to that apartment, and it was so narrow that the wheelchair almost didn't get through. So, the information from some places can be a bit poor. (Interview 10)

Consistent with previous research (e.g., Blichfeldt & Nicolaisen, 2011; Yates, 2007), parents reported difficulties in determining the accessibility of destinations and accommodations in advance, which could lead to negative experiences when physical obstacles were encountered upon arrival. Additionally, the financial aspect of being unable to select budget accommodation alternatives can be exclusionary for families lacking the financial resources for more expensive, yet more accessible, options. This was mentioned by a few study participants, but they meanwhile explained that travelling was worth some extra costs for their family.

As a result of the various constraints encountered by families during different stages of a tourism trip, new constraints emerged—specifically, coupling constraints within and outside the family. To manage physical barriers and transport luggage as well as aids, many parents indicated the necessity of travelling together with the other parent. Travelling alone with a child using a wheelchair was not considered feasible. This situation reinforces the coupling constraints among family members, implying that all family members are affected by travel constraints and must adapt their tourism mobilities accordingly. Some families opted to divide, with the child using a wheelchair remaining at home with one parent and/or personal assistants, while the other parent travelled with the non-disabled children to fulfil their needs and desires. Another option was to bring a personal assistant on tourism trips, which facilitated dealing with physical inaccessibility and allowed the family to spend more time together, as care activities were managed by the assistant. Having an assistant also created opportunities for other family members to engage in preferred activities, such as sunbathing or skiing:

Mm, the last two trips to Turkey, then we… yeah, then we had [an assistant]. But between those trips, we went to the Canary Islands when my mum turned 60, two years ago… then we didn't have any assistant, and that's… of course, it's easier when bringing an assistant, because it's not… well, it's not really a vacation or relaxing, but

we have to help him all the time, and he's not that happy with sunbathing, so… yeah. It's absolutely so much better to bring an assistant! (Interview 1)

We didn't have [any assistance] the first years… or the first year we didn't, but we had an assistant the second year, and then we had that until last year… I think we had two assistants for two years. […] Then our family had a cabin, and the assistants had their own. They came to us at 8 o'clock in the morning and took care of [girl with disability], and then they were out in the slope with the sledge, running back and forth, and [my daughter with a disability] had a lot of fun. (Interview 11)

These quotations illustrate how the involvement of personal assistants can create more opportunities for non-disabled family members to engage in activities that may be challenging when travelling with a wheelchair user. For instance, when assistants are able to take the child using a wheelchair in a sledge, the rest of the family can enjoy skiing. However, the feasibility of this solution is contingent upon eligibility for personal assistance. Although all the children of the parents in the sample faced similar challenges, not all had access to personal assistance.

3.2. Pockets of local order

Pockets of local order can be created in situations where individuals have negotiated constraints to facilitate project completion (Ellegård, 2018). Bringing a personal assistant on a tourism trip is one way to negotiate coupling constraints—while this strategy increases coupling constraints with individuals outside the family, it can decrease coupling constraints within the family during the trips. However, having access to personal assistance or not is dependent on authority constraints and not necessarily something that the families can affect themselves (see Landby, 2019).

In the context of tourism mobility for people with disabilities, specially adapted tourism trips could constitute a pocket of local order and enhance opportunities for tourism in a barrier-free environment (e.g. Blichfeldt & Nicolaisen, 2011). However, none of the participants in this study travelled on such trips with their families, and these pockets of local order was not as anticipated. Most parents in this study had never considered such trips and expressed a preference for travelling as a family rather than in a group with other tourists, regardless of disability adaptations:

Yeah, I heard about such trips, but it hasn't been something that I felt was relevant to us since we feel… well, we are not that interested in travelling as a group. When we travel, we want to be just us, just the family. We are not interested in travelling with friends or so either but want it to be us and the kids doing something together. We want to steer our own time and adapt to how our days look like and if travelling with others, there are other people to adjust to. (Interview 4)

The assistance company that organises his assistance has trips sometimes where they… yeah, they kind of travel several people together, people with disabilities. But I feel that that's not us. We want to decide by ourselves how we should do, where we should go and so on. We want to make our own trips and it doesn't give us anything to travel with others with disabilities. (Interview 1)

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The quotations above indicate that specially adapted tourism trips, which some adults with disabilities prefer (e.g., Blichfeldt & Nicolaisen, 2011), are not necessarily favoured when the individual with a disability is a child. Instead, these families seem to value spending time together and creating their own shared memories (e.g., Schänzel, 2013) rather than having their vacation planned by others. This underscores the importance of considering disability diversity alongside family characteristics when providing accessible tourism experiences (McKercher & Darcy, 2018). While the parents in this study expressed no interest in participating in specially adapted tourism trips as a family, some suggested that such trips might be suitable for their children when they are older and travel alone with personal assistants, again pointing out the difference between family tourism and tourism for adults with disabilities.

Nevertheless, many families made other adaptations in their tourism mobilities, which can be seen as ways of creating pockets of local order. For instance, some families consistently travelled with the same travel agency or to the same destination multiple times, as this allowed them to know in advance what to expect:

We choose to travel with [travel company A]. We travelled once with [travel company B], but that didn't work very well. […] So we always travel with [travel company A] and that works fine, so I go to their webpage to find trips, but now we've been to the same place in Rhodes twice. (Interview 10)

When travelling to Turkey, we have always travelled with [Travel Company] because they treat us well and they have large, nice hotels which are accessible. But it's also that we always need to be aware of things, and when travelling with a wheelchair, we need to measure it and so on and send in information about it so that they know we will bring it on the plane. But that works fine for us! (Interview 1)

We are actually travelling to Belgium in a few weeks, and it's not all airlines that want to accommodate us since [my son with a disability] cannot sit by himself. It's not that they can't take his wheelchair, that's not a problem, but we talked to one airline that said absolutely no. We were not allowed to bring any of [son with a disability's] chairs because we have a moulded shell for him, but we were not allowed to have that in the plane since it was not in accordance with the safety regulations of this company. So then we look for other companies that allow this chair. And it's a pity that… I mean, I understand that they have their regulations, but then we don't travel with that company. This is a rather big company, well-known, but they said absolutely no that we could absolutely not travel with them. So that's a bit tragic. […] Then we got in contact with a company which was very friendly and helpful, super helpful! All the aids that we needed in the plane, of course we could bring them. It was really no problem, but like 'we need this' and then it was like 'of course you should have that!' and then we continue to travel with them, since they were so friendly. (Interview 2)

These quotes underscore the significance of authority constraints in the creation of pockets of local order. Both social and physical barriers are crucial in this context, and flexibility appears to be key in attracting and retaining these families as recurring customers. The quotations illustrate how families tend to remain loyal to travel companies within their existing pockets of local order, but also how challenging it can be to extend these pockets and travel with other companies to broaden their opportunities for different tourism experiences.

Additionally, other strategies employed by these families include consistently travelling to destinations with accessible accommodation options, typically larger hotel complexes, and choosing places where they are familiar with the language to facilitate communication with tourism personnel (and healthcare, if needed) regarding their needs and requirements. Language barriers could thus limit the number of destinations within these families' pockets of local order. Furthermore, social networks can be utilised to create pockets of local order, for instance, by consulting with other parents of children with disabilities and learning from their experiences. Some families travelled to destinations where friends or relatives resided, allowing those social contacts to investigate accessibility at the destination beforehand.

3.3. Completed and failed tourism projects

The results indicate that a combination of various constraints can make tourism mobility challenging for families with children who use wheelchairs. However, the families in this study have negotiated these constraints and improved their travel possibilities through the creation of pockets of local order. In this way, many tourism projects are realised, and the families remain travel-active, albeit in an adapted manner. Constraints arising from the use of certain aids for personal mobility, combined with an environment not sufficiently adapted for people using such aids, necessitate adjustments in the families' tourism mobilities compared to their preferred travel methods. Consequently, certain types of tourism and destinations were excluded due to physical inaccessibility:

Going out in nature can be difficult. My husband would like… he's an orienteer and would like to go out in the woods, but that's difficult, so we avoid that unless we know there is some kind of vantage point we can reach. But we seldom know that, so that's… we avoid that. I think we would do more of that otherwise. Such things were also easier to do when he was smaller and easier to carry. We went to Njupeskär, which is the largest waterfall in Sweden, where there is a forest path and stairs. We managed to go there when he was young, but we wouldn't do that now. It wouldn't be possible.

(Interview 9)

This quote exemplifies how inaccessible natural environments can constrain nature tourism projects, while also highlighting the significance of how opportunities for such projects can change over time. Certain types of travel may be feasible when the children are small and physical barriers are more manageable, but these same types of travel may become impractical as the children grow older and heavier. This illustrates how a combination of authority constraints, in terms of physical inaccessibility, and the parents' capacity constraints, in terms of physical strength, can necessitate adaptations of imagined tourism projects. However, while some tourism projects can be considered 'failed' projects (Lenntorp, 2004), other projects are realised:

Because it's like… I mean, I would love to travel to the mountains and ski, but that's… that's not possible since I know that [my son with a disability] wouldn't be able to do anything but would just sit in the cabin and… well, not do anything. So then it's like 'no, we have to put that aside'. But when travelling to Turkey, for instance, then [my son with a disability] can go bathing in the swimming pool, which he loves, so it's better for him.

(Interview 2)

This quotation illustrates the limitations of mountain skiing as a tourism project due to various constraints. Conversely, it suggests that visiting a destination where the family can enjoy swimming pool activities is more feasible. Moreover, it demonstrates how families can modify their expectations regarding the types of tourism projects they can engage in, thereby facilitating their participation in tourism. This approach prevents the complete abandonment of tourism simply because their preferred mode of travel is deemed too challenging.

When the study participants were asked about what would be needed to open up more possibilities for tourism participation, the most common answer was sufficient information from tourism agencies and personnel. Many parents also provided specific suggestions on how information could be improved:

I would like some pictures of different bathrooms and… how wide the entrance is and if there is a doorstep to the balcony or terrace and so on, because if there is a doorstep in aluminium, a small threshold, and you drive there with the powerchair weighing 160 kilos plus her in it… then you'll break it! […] So taking pictures of critical things that can be challenging. What do they mean with disability accessibility? That could be… they could describe what they mean with pictures. (Interview 7)

There could be an app or something, like an own page for disability, with accessible beaches and so on. Because that actually exists in Sicily, and we didn't know! They have a disability accessible beach with ramps and guide-dogs that can swim with those who are blind and wheelchairs so that personnel working there can help to drive people into the water and help them back when they finished bathing and so on. I think it would be nice if the [travel company] you travel with could inform about this beach on their webpage because then I think you can get… get more people with disabilities to try travelling. […] We got to know [about the accessible beach] from the local inhabitants there. (Interview 5)

In addition to the role of information in facilitating tourism projects for families, another common theme in the interviews was the physical accessibility of transport modes, destinations, and accommodations. Examples of improvements included the possibility to have accessible seats at airplanes (e.g., more space), ease the access to beaches by having paths instead of merely sand, and the provision of certain aids at accommodations, which would also ease transportation to the destination since fewer the families would have fewer aids to bring along.

4. Conclusions and implications

In this paper, the time-geographical framework was employed to examine the tourism travel of Swedish families with children who use wheelchairs. Time geography offers the opportunity to identify various constraints that can affect travel, as well as concepts that are useful for transcending the focus on constraints. In this study, the concept of pockets of local order was utilised to understand how families navigate and negotiate constraints to tourism travel. The time-geographical concept of projects was applied to tourism trips. According to Hägerstrand (1985), the study of time-geographical projects provides opportunities to understand which projects are completed and which projects, due to various constraints, fail and are never realised.

The first research question of the paper was which authority, capacity, and coupling constraints families with children who use wheelchairs encounter during tourism travel. The results mostly align with previous research on tourism for people with disabilities (Singh et al., 2023) and their families (Morton & Vázquez-Maguirre, 2024). The findings indicate that the interviewed parents experienced authority constraints as the most impactful

on their tourism travel. Authority constraints were identified in the inflexible rules and regulations governing how one can travel with a wheelchair, particularly during the transportation phase of the tourism trip. A significant issue was the difficulty in knowing beforehand which rules applied, as these could vary between trips based on airports, airlines, and destinations. This is partly related to another dimension of authority constraints, namely social barriers. Previous studies have shown that discrimination and social attitudes towards people with disabilities constitute constraints to tourism travel (e.g., Darcy, 2012; Devile et al., 2024), but this was not considered a major issue among the parents included in this study. However, problems related to social barriers did occur, mostly due to a lack of sufficient information.

Furthermore, physical barriers are part of authority constraints (Hägerstrand, 1970). In this study, it became evident that tourism travel is associated with encountering numerous physical barriers when travelling with a child who uses a wheelchair. This finding differs from previous research on families travelling with children with other types of disabilities, such as autism, where issues related to planning and noisy environments came through as the main challenges (Freund et al., 2019; Dempsey et al., 2021; Sedgley et al., 2017). However, similar to studies on tourism for adult wheelchair users, physical barriers were apparent both in relation to transportation (Darcy, 2012; Poria et al., 2010) and accommodations (e.g., Blichfeldt & Nicolaisen, 2011; Yates, 2007). An interesting finding was that adaptations made to increase physical accessibility were considered suitable for adult wheelchair users, but not necessarily helpful for children with disabilities. This calls for a recognition of the diversity of people with disabilities, where a standardised solution is not always effective (see also McKercher & Darcy, 2018). The second constraint category, capacity constraints, did not emerge as strongly as expected. Previous time-geographical research has focused on disability as a capacity constraint (Ellegård, 2018; Åström, 2009), but the parents in this study did not frame their children's disabilities as constraints. Instead, they emphasised how the use of a wheelchair was problematic in physically inaccessible environments. The challenges are thus more connected to coupling constraints between the children and their wheelchairs (e.g., Landby, 2023) and authority constraints. This demonstrates that it is not necessarily one type of constraint that affects tourism mobilities for these families, but rather a combination of various constraints. Since the families typically travelled together (i.e., coupling constraints within the family), these constraints impacted the entire family's tourism activities.

A solution employed by some families to mitigate the effect of certain constraints was to bring a personal assistant on tourism trips. This increased coupling constraints with individuals outside the family context but decreased coupling constraints between the parents and the child using a wheelchair. Consequently, the parents could enjoy tourism activities that were too inaccessible for the wheelchairusing child (e.g., skiing) and also spend more time with their non-disabled children. However, this is not an option for all families. The use of personal assistance as a common strategy to navigate constraints among the families in this study reflects the focus on Swedish families and the state-funded support system available in the country (Miettinen et al., 2013).

The constraints to tourism identified in this study call for a recognition of a family perspective to understand how tourism constraints are experienced and the outcomes these constraints can have when a child has a disability. This was also evident in how the families created pockets of local order, leading to the second research question.

The findings show that pockets of local order in a tourism context may differ from what the tourism industry expects. Various tourism stakeholders provide accessible tourism, some specially adapted for people with disabilities (see e.g., Blichfeldt & Nicolaisen, 2011). However, these were not considered attractive by the families in this study. When travelling as a family, they valued family time and sought tourism activities suitable for the whole family. This meant they preferred negotiating some constraints rather than choosing the most accessible tourism alternatives available in the market.

The findings show examples of how the families created pockets of local order in tourism contexts. The clearest example was how several families chose to travel with the same travel companies or to the same destinations multiple times, as they had previous positive experiences and knew what to expect. This is something that various actors in the tourism industry could benefit from considering; families travelling with a child who uses a wheelchair tend to be loyal to companies and destinations that provide a sufficient level of social and physical accessibility. However, it is problematic that the families experience limitations in how and where they can travel and cannot enjoy tourism on equal terms with families with non-disabled children. This became evident to families who tried to challenge their pockets of local order by choosing to travel with another travel company or trying new destinations and types of accommodation, only to find that it was too inaccessible and challenging. This also reflects how some constraints to travel are more definite, while others are negotiable (Dodge & Nelson, 2023). Here, authority constraints in terms of rules, regulations, and physical inaccessibility were more definite compared to dealing with challenges such as extra time spent on planning a tourism trip.

The various constraints the families encountered and the pockets of local order they created in response to those constraints led to limitations in the kinds of tourism projects they could undertake. The third research question of the paper concerned how the families' tourism projects were affected, and the findings showed that various types of tourism, especially nature-based tourism activities, frequently were excluded and can thus be considered failed projects for families who had envisioned those kinds of tourism trips. Instead, the tourism projects that were realised were those within the families' pockets of local order. These trips typically involved air travel to warm-weather destinations with accessible accommodation alternatives.

4.1. Theoretical implications

The findings of this study demonstrate that time geography can provide significant insights into how and why people travel as they do, suggesting that tourism studies could benefit from applying the timegeographical framework. While time-geographical constraints share many similarities with the constraint theories proposed by Crawford and Godbey (1987) and Smith (1987), time geography offers additional perspectives and concepts that can deepen the understanding of travel behaviours. One example is how time geography's coupling constraints extend beyond the focus on interactive and intrapersonal barriers by including another important dimension: the couplings between individuals and physical objects (Ellegård, 2018). In this study, it became clear that the parents did not consider the disability itself as a constraint for tourism mobility, but rather the coupling between the child and the wheelchair, as well as other aids. This is one of the contributions of time geography – it highlights that couplings with physical things can be highly decisive in determining how and where to travel

(e.g., Landby, 2023). This perspective adds to contemporary views on disability, which see disability as context-dependent and influenced by social and physical surroundings, by shifting the focus to how tourism mobility can be challenging when coupled with certain aids. This shift in focus away from the actual disability can contribute to a more inclusive language within tourism research.

Another significant contribution of using the time-geographical framework is how the concept of pockets of local order offers opportunities to move beyond merely focusing on constraints. While a primary concern of studies on tourism for people with disabilities has been identifying constraints (Singh et al., 2023), recent research has called for greater recognition of how constraints are negotiated (e.g., Devile et al., 2024). The findings of this study have shown that pockets of local order are created in tourism contexts to enable tourism when travelling with a child who uses a wheelchair. The results also indicated that it can be very challenging to expand existing pockets of local order, meaning that some envisioned tourism projects are never realised. Focusing on pockets of local order can thus enhance the understanding of how tourism constraints are navigated and negotiated, and also explain why some people might exhibit a rather routinised tourism travel behaviour.

By focusing on the entire tourism trip as a time-geographical project, this paper contributes to existing research on tourism from a time-geographical perspective. The limited tourism literature using time geography has mainly focused on identifying how constraints affect individuals' spatial movements at a destination (Gu et al., 2021; Xu et al., 2021), thus overlooking how various constraints affect whether and how tourists can even travel to that destination. This is a fundamental point to consider, especially when studying the tourism experiences of people with disabilities (e.g., Lee et al., 2012; Packer et al., 2007) and their families (Kim & Lehto, 2013; Nyman et al., 2018). One important contribution of this paper is that it shows how constraints affect the creation of pockets of local order in tourism contexts, and how both constraints and pockets of local order, in turn, affect the opportunities for completing tourism projects. While pockets of local order here are created by individual families, understanding how and why these pockets are created can provide insights into broader accessible tourism and what is needed to attract tourists with disabilities. As argued by Dodge and Nelson (2023), focusing on individuals is crucial for understanding collective mobility behaviours as well.

Moreover, the results also highlight the importance of time, which is a fundamental aspect of time geography (Hägerstrand, 1970). For families travelling with children who use wheelchairs, some constraints may be easier to navigate when the children are young but become more disabling as the children grow older. Conversely, other constraints may decrease, primarily due to the travel experiences gained from previous trips. This can affect the types of tourism trips the families can enjoy and the destinations they visit. While such changes often involve long-term adjustments, shorter time perspectives were also highly evident, such as the limitation to travel to destinations within a few hours' distance. This underscores the inseparability of time and space (Hägerstrand, 1970). If the time families can spend travelling is limited due to constraints related to the child's disability and inaccessible transport modes (see also Dempsey et al., 2021, on similar challenges when travelling with a child with autism), it can significantly affect these families' geographical reach and freedom to choose destinations on equal terms with other families. Using time geography in tourism research could thus bring insights to which destinations that can be reached and how opportunities of project completion change over time.

Finally, while the use of time geography can provide significant insights into understanding how and why people travel, tourism studies can also contribute to further developing time geography. Tourism can offer an understanding of how people travel in contexts other than everyday life. For instance, constraints that people with disabilities face in daily travel (e.g., Landby, 2019) can expand (and sometimes increase) in tourism contexts. This became evident when the participants of this study discussed challenges with using the train for tourism trips; train travel was considered inaccessible in an everyday context, but even more so when travelling for tourism purposes due to the number of aids and equipment the families had to bring along for trips involving overnight stays. This finding suggests that the effect of authority constraints related to inaccessible transport modes can be experienced differently depending on the length and purpose of the trip. Another contribution that tourism studies can bring to time geography is the understanding of how pockets of local order can be created and exist in geographical contexts far from people's homes and everyday life, where pockets of local order have often been studied (e.g., Ellegård & Vilhelmson, 2004). This does not necessarily mean that pockets of local order are geographically larger, but rather that small pockets of local order can be geographically dispersed.

4.2. Practical implications

The findings of this paper do have some practical implications. The findings support the arguments of McKercher and Darcy (2018) that people with disabilities cannot be considered a homogenous group, but have various personal characteristics, needs, and desires. This paper contributes to an understanding of diversity in desires and experiences in relation to tourism travel, as the findings emphasise the need to adopt a family perspective in adaptations, where some family members (in this case, children) have disabilities while others are non-disabled. The interviewed parents pointed out that even if disability adaptations were made, these were often designed for adults with disabilities. Children with disabilities and their families need to be considered by the tourism industry. While McKercher and Darcy (2018) argued that people with disabilities can face similar challenges in terms of discrimination, this study shows that the age of the person with a disability, as well as their travel companions, can affect how and where they prefer to travel and how tourism is experienced.

Moreover, the avoidance of specially adapted tourism trips can be regarded as a resistance to limiting the family's travel to pockets of local order created by the tourism industry. Instead, the families wanted to travel like any other family, with similar travel motivations such as spending time together as a family (e.g., Schänzel, 2013). This result points to an important factor that the tourism industry should consider; rather than seeing families travelling with a disabled child as part of the disabled tourism market segment, they should be included in the family travel market segment. This could be achieved by adopting a more inclusive approach with improved social and physical accessibility. By doing so, families with children with disabilities will have better opportunities to expand their pockets of local order in tourism contexts by having the possibility to make active choices and explore various destinations, contributing to more equity in tourism-related decisions. Moreover, with more accessible tourism alternatives, these families would probably feel more included while simultaneously contributing to greater diversity at tourism destinations.

To enhance the realisation of tourism projects, this study highlights several improvements that actors in the tourism industry could implement. Firstly, there is a need for more information both before and during a tourism

trip. This could be addressed by encouraging training for tourism actors regarding the various constraints that individuals with disabilities encounter when travelling (see also Tecău et al., 2019). Clear definitions of 'wheelchair accessibility' could be beneficial for both tourism providers and tourists who use wheelchairs. Secondly, both physical and social barriers related to transportation could be reduced by offering more flexible solutions for individuals with various needs and disabilities. Such solutions could include having a few seats on airplanes with more space, as well as opportunities to bring the necessary aids onboard various transport modes. For families with children who use wheelchairs, the possibility of bringing adapted chairs onto an airplane could significantly improve their travel opportunities, enabling them to reach distant destinations by reducing the constraint of not being able to travel for many hours. This would geographically extend their pockets of local order. Moreover, there is an urgent need to improve the opportunities for train travel by making more vehicles wheelchair accessible and increasing the possibility of bringing the necessary aids. Such improvements would not only enhance social equity in available transport alternatives but also promote environmental sustainability. Finally, more destinations and accommodations should be accessible to all, regardless of disability. Suggested improvements for destinations are to improve wheelchair accessibility by reducing physical barriers, for instance to have paths to the sea at warm-weather destinations, since maneuvering a wheelchair in the sand constitute a major barrier for wheelchair users and their families. Physical barriers at accommodations should be reduced, for instance by ensuring that there is an elevator or ramp wherever there are stairs or high steps. This would open up opportunities to choose among more accommodation alternatives, including budget options. A recommendation is to hire an accessibility consultant to ensure that accessibility requirements are met.

4.3. Limitations and suggestions for future research

A limitation of this study is that all families included in the sample are travel active, and therefore, the perspectives of families who are not engaged in tourism travel are missing. For families who do not travel with the child using a wheelchair, internal constraints might be more profound. For these families, pockets of local order might have been created in the home environment, but perceived constraints make it difficult for them to challenge these pockets and extend them to tourism contexts. Future studies would benefit from including families with children with disabilities who are not travelactive to examine which kinds of adaptations and improvements would be required for them to engage in tourism. By including families who are not travel-active, economic constraints could also emerge as significant. The fact that all families in this study were travel-active reflects a sample biased towards those who can afford to travel. The Swedish support system that enables parents with children with disabilities to remain in paid employment (e.g., Miettinen et al., 2013) could also have an impact. Future studies would benefit from examining the tourism travel of families with children with disabilities from other socio-geographical contexts, where constraints to travel and the pockets of local order that can be created might differ.

A further limitation is that this study only covers the parents' perceptions of constraints and, thus, the interpretations of how time-geographical projects are affected and pockets of local order created when travelling with a child who uses a wheelchair reflect the parents' experiences. As argued by Shiraani and Carr (2022), it is important to also include children with disabilities in tourism research. Children's experiences might differ from

those of adults, which is important to consider, and future research would benefit from including this perspective to further understand how various time-geographical constraints affect project realization and pockets of local order in tourism contexts.

Finally, this paper focuses solely on families including a child who uses a wheelchair. While this focus provides important insights into how tourism travel is experienced by this particular group, it does not cover families with children with other kinds of disabilities. Many studies on tourism for people with disabilities have included individuals with a wide range of disabilities (e.g., Devile et al., 2024; Kim & Lehto, 2013; Lee et al., 2012; Lehto et al., 2018; Packer et al., 2007), thus lacking deeper insights into the experiences and requirements of individuals sharing the same accessibility challenges (e.g., McKercher & Darcy, 2018). Future studies would benefit from focusing on families with children with other disabilities to complement this study as well as the existing research on travelling with a child with autism (Freund et al., 2019; Dempsey et al., 2021; Sedgley et al., 2017). This would bring more clarity to the challenges experienced with tourism travel and the adaptations needed to improve tourism opportunities for all, ensuring more families feel included and tourism is more equitable, regardless of disability.

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