

**“With us, we, like, physically can’t”: Transport, Mobility and the Leisure Experiences of Teenage Wheelchair Users.**

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### **Abstract**

This paper reflects upon the experiences of 69 British teenage wheelchair users in their attempts to access leisure environments. Heiser’s (1995) notion of *transport disability* is developed, and the concepts of *transport anxiety* and *mobility dependency* are explored. The challenges that young people in general experience when attempting to access public and private forms of transport (namely buses, trains, taxis and private cars) are discussed, and the additional ‘layers’ of disadvantage experienced by teenage wheelchair users explored. The ramifications of barriers to transport for young wheelchair users in particular are shown.

**Key words:** Mobility, Transport, Young people, Disability, Wheelchair user

## **Introduction**

During the past two decades there has been a growing recognition that poor access to suitable transport can contribute to social exclusion (Lyons 2003; Pacilli et al. 2013). A substantial body of research has explored mobility deprivation experienced by children and young people in the UK (Barker 2003, 2006, 2009; Barker et al. 2009; Barnes 2007; Carver et al. 2013; Witten et al. 2013). This paper explores how teenage wheelchair users experience particular – and additional - challenges in this context. Building upon existing research about transport difficulties faced by adults with disabilities (Heiser 1995; Porter 2000; Preston and Raje 2007; Taylor and Józefowicz 2012), we signal a range of challenges that young wheelchair users face when using buses, trains, taxis and private cars to access leisure spaces. Drawing upon data collected with 69 teenage wheelchair users<sup>1</sup> living in the Midlands and South East England, we discuss these young people's experiences of *transport disability* (in the context of public transport) and *mobility dependency* (in the context of private transport). We argue that whilst many young people experience forms of mobility dependency in these contexts, young wheelchair users experience additional challenges – or layers of disadvantage – in addition to those of their peers.

This paper begins with a review of existing research and an introduction to the research methods used in the study. Detailed consideration is then given to three issues: the inaccessibility of public transport, where provision often fails to meet the diverse needs of young wheelchair users (*transport disability*); the importance of emotion in experiences of transport, and the anxieties produced by inaccessible transport; and the centrality of private forms of transport in accessing leisure (*mobility dependency*).

## **Leisure, transport and mobility**

It is important to first signal the distinction between the terms *mobility* and *transport*. In this paper, the term 'mobility' is used to denote the ability of a person to move within and between spaces, and includes the opportunities or abilities that they have to travel (Urry 2000). The term 'transport' - rather than referring to the entire potential for movement - relates 'to the infrastructure or system which enables travel...' (Barker 2006, 16). The significance of transport (and transport exclusion) to the mobility of young people, in the

context of leisure opportunities, is the primary focus of this paper. In particular, the discussion highlights the importance of transport in the everyday lives and (leisure) experiences of teenage wheelchair users.

A large body of work by transport geographers has signalled spatial and social inequalities in access to transport for particular social groups (Kenyon et al. 2002; Law 1999; Preston and Raje 2007; Weber 2006). Evidence from such research indicates that access to transport is linked to levels of spatial freedom, 'home range' and independence in decision-making (Porter 2000; Romero 2010; Sager 2006). Studies have also shown that people may have unequal access to transport - and therefore limited mobility - because of factors such as income (Blumenberg 2004), gender (Hamilton and Jenkins 2000; Sager 2006) and location (Preston and Raje 2007), as well as disability (Casas 2007; Knowles 2006; Lucas 2004) and age (Storey and Brannen 2000). However, these factors are often considered in isolation. This paper provides a focus on how the latter two factors intersect.

The mode of transport used by young people in their free time has been linked to their age, gender, social class, residential location and the context of parental norms (Alparone and Pacilli 2012; Hillman and Adams 1992; Mackett et al. 2007; Storey and Brannen 2000). In Western Europe children's independent mobility has seemingly declined during the past thirty years, with trends of increased car usage and accompaniment by adults (Barker 2006, 2009). The heterogeneous nature of childhood experiences means that particular issues may impact more upon some young people than others. A number of authors have, for example, commented on the difficulties that children in rural areas have in accessing suitable public transport (Matthews et al. 2000; Storey and Brannen 2000; Tucker 2002). These studies highlight the importance of place in relation to the opportunities young people have to access transport (and public transport in particular), and signal the importance of considering diversity in the transport experiences of young people.

One of the most widely cited explanations for increased dependency upon parental chauffeuring is parents' concerns for their children's safety (Barker 2003, 2006; Hillman 1997; Hillman and Adams 1992). Research from the sub-discipline of Children's Geographies has explored how children are increasingly dependent upon their parents in relation to transport (Fyhri and Hjorthol 2009; Romero 2010), highlighting

the apparently increasing dependence of many children and young people upon their parents' transport preferences (Alparone and Pacilli 2012).

For adults, increased ownership and use of private cars is 'a barometer of personal freedom' (Hillman 1997, 11) and may also reflect the ability of an individual to fully participate in society (Kenyon et al. 2002). This point, alongside Holt's (2010, 35) assertion that the networks that young people find themselves in can relate to a '(de)valuing' of their identity, clearly shows the impact that access to transport can have on young lives. For children and young people parental chauffeuring can signal significant reliance and dependence (Mattson 2001). We argue that the more young people are dependent upon the car, the more restricted they become in relation to *transport*, *mobility* and *mobility in relation to leisure*. Where there is a lack of suitable public transport, parental chauffeuring can place restrictions on opportunities to meet with friends, push boundaries and develop independence (Hillman 1997; Ross 2007; Romero 2010).

Although there has been a growth in studies considering the transport experiences of young people in general (see, for example the special section of *Mobilities* published in January 2012; Barker 2006, 2011; Barnes 2007; Department for Transport 2006, 2007b; Lang et al. 2011; National Youth Agency 2007), the transport experiences of disabled young people, especially in relation to leisure spaces, are often overlooked. Existing studies have largely focussed on specialist transport provisions, community schemes or school transport services (Forsman and Falkmer 2006). These often represent disabled young people as dependent; their needs are set apart from the majority ('able') population.

The experiences of disabled people in general have been explored in relation to material infrastructure and the design of vehicles (Church et al. 2000; Gillingwater 1995; Sutton 1995). Bromley (2007) suggests that UK society is currently failing to provide public services and spaces which do not restrict disabled people (Rosenkvist et al. 2010). Lavery et al. (1996) provide examples of the barriers faced by older and disabled people when attempting to make journeys away from their homes, for example the height of vehicles and a lack of suitable seating. In addition, information about accessible services is not always available (Matthews et al. 2003; Wilson 2003).

Where disabled people have fewer opportunities in accessing transport than the rest of the population, they can be deemed '*transport excluded*' (Casas 2007, 464). Estimates suggest that disabled people in England and Wales undertake one-third fewer journeys than 'non-disabled' members of the population (Wilson 2003, see also Aldred and Woodcock 2008). Church et al. (2000) explain that, in relation to the majority of the UK population, disabled people travel shorter distances on foot or with assistance, meaning that where transport infrastructure does not meet their needs, they are doubly disadvantaged. Heiser (1995) outlines the concept of *transport disability*, where (inaccessible) public transport fails to meet the diverse needs of particular groups and places added restrictions upon their use of (public) transport. This research builds on this contention in considering the layers of disadvantage experienced by teenage wheelchair users in their attempts to use public and private transport to access leisure spaces.

Studies which have considered the significance of transport in relation to disabled young people's free time have suggested that problems with mobility can make it hard to access social activities (Butler 1998; Murray 2002). Like others of their age, they may have to depend on lifts from parents or carers. There are added complications, however, for those disabled young people who can only travel in adapted vehicles (such as many young wheelchair users), limiting options of sharing lifts with the parents of friends or travelling by public transport. Having to rely on others for lifts can cause embarrassment and the feeling of being a burden, so affecting the frequency of visits to certain spaces for socialisation (Butler 1998). Further, reliance on adults can create a tension between dependence and independence for all teenagers. Yet because of their added dependence, disabled young people might find it especially hard to push adult-defined boundaries. They are more likely than their able-bodied peers to be transported by their parents and so are unable to lie to them about where they have been or who they have been with (Murray 2002).

There seems to be a growing awareness in the UK of the needs of the 'generic' wheelchair user in relation to particular types of transport. A guide published by the Department for Transport (2007a), for example, details common-sense information deemed useful for wheelchair users during the use of public transport. However, whilst 'how to' guides of this nature have value, they do not represent the experiences of disabled people – or teenage wheelchair users – in using such services. Tyler (2002) signals the importance of consulting wheelchair users about their needs, rather than relying merely on 'dimensional standards' of

accessibility, an argument that we have considered elsewhere in relation to disabled young people (Pyer et al. 2010).

Although there is a wealth of geographical literature about emotion (Davidson et al. 2007; Jayne et al. 2010; Smith et al. 2011; Thien 2005), relatively few studies consider the emotional and experiential aspects of transport use for disabled (young) people. This suggests that understandings of transport exclusion and transport disability are at present partial. In this context we argue that listening to the views of teenage wheelchair users can provide insights into their complex everyday transport experiences and highlight their diverse and changing transport needs.

## **Methods**

The paper draws upon research with 69 teenage wheelchair users in the Midlands and South East England. The project sought to understand of the diversity of teenage wheelchair users' experiences of leisure spaces. A paucity of studies exist which have worked specifically with wheelchair users of this age in relation to their experiences of leisure spaces, although research has considered the experiences of younger disabled children (Aitken and Wingate 1993; McKendrick et al. 2000). Participants aged 13-17 years were recruited through schools in a variety of urban and rural settings<sup>2</sup>.

A multi-method approach has been shown to be appropriate for uncovering diversity in the lived experiences of children and young people (see Davis et al. 2000; Hill et al. 2004; Punch 2002). Previous research has indicated that 'traditional' research methods (such as questionnaire surveys) may limit the participation of disabled young people in research projects (Holt 2003; Valentine 2003). A range of methods were therefore used to allow participants to share their thoughts and experiences in ways that did not rely solely on the written or spoken word. These included semi-structured interviews, video-tours and self-directed photography (see Pyer 2009). In this paper we mainly draw upon the interview data. Parents or carers assisted in the data collection process if requested by participants. At times, this proved difficult to negotiate (see Mitchell and Sloper 2011). The role of parents in the research process was discussed at the

outset and their contributions were taken independently to – rather than as proxy for - the opinions of the young people themselves. (For an account of some of the ethical issues encountered, see Pyer 2008.)

Participants were asked to describe their experiences of accessing a variety of spaces encountered in their free time. Diverse accounts were given of the accessibility of indoor spaces (such as the homes of family or friends), outdoor spaces (such as the park or recreation ground) and commercial leisure spaces (such as cinemas, bowling alleys and shopping centres) (see Pyer 2009). Here we focus upon participants' experiences of accessing commercial leisure spaces, including bowling alleys, cinemas and fast food restaurants<sup>3</sup>. Rather than considering accessibility within these spaces, this discussion focuses on *journeys* to these leisure environments. The responses presented here focus on travel by transport modes most frequently cited by respondents: bus, rail, taxi and private car.

## **Multiple layers of mobility dependency**

### ***Transport disability***

Drawing on Heiser's (1995) notion of transport disability, our aim here is to show the ways in which the teenage wheelchair users in this research can be considered *transport disabled* when using public transport to access leisure. In examining the range of factors which can lead to unequal access to transport, and which may therefore restrict the leisure opportunities of young people, we explore contributions from teenage wheelchair users to show that, even with the introduction of the Disability Discrimination Act (1995) and its subsequent revisions, a significant number of barriers remain within public transport systems which close down opportunities for leisure. Our discussions begin with a consideration of the barriers that the teenagers in this research faced, in particular the physical inaccessibility of many of the public transport options available to them. We argue that the presence of these barriers creates a form of *transport disability*. Transport-related anxieties can exacerbate this, leading to *mobility dependency*.

The teenagers discussed a number of ways in which they were *transport disabled*. The most significant limitations to their use of public transport resulted from the inaccessibility of the vehicles



concerned. When asked about their use of public transport in accessing leisure spaces, a majority of the teenagers cited problems relating to access into, and within, public service vehicles (few mentioned the availability of lifts or ramps to assist with access). The teenagers focussed on the (in)accessibility of these vehicles; it should be noted that public transport provides transport to/from station or bus stop and therefore additional challenges may be faced in accessing these locations. For the teenagers, entry to these vehicles often proved difficult or impossible, which had repercussions for the leisure opportunities for these teenagers:

Interviewer: What do you find the buses are like?

Participant: Some are hard, some are easy ... Lots of them have steps.

(Male, aged 16, manual wheelchair)

I find it really hard to go to the museum because we don't have a car, and the buses on that route I can't get on.

(Female, aged 15, manual wheelchair)

We do have difficulties [on the buses] ... It's looking at things and saying 'oh, well, can we access that? Can we take her on it?' ... Because she had a special back on her wheelchair, we have to shut it down [wheelchair collapses for transportation], and then the [driver] took it and put it to one side. It's the same when you go on a train here. You have to drop it down ... and if we can't get her on it, well we can't do the days out that we would otherwise.

(Mother of 15 year old female, multiple wheelchairs)

The issues cited here are not dissimilar to those presented in research with adult wheelchair users (Gleeson 1999; Imrie 2004; Oliver 1983). These barriers, however, signal marked differences in the teenagers' day-to-day lives in relation to their 'non-disabled' peers. In general, 'non-disabled' young people's use of public bus services in the UK increases around the age of thirteen; the age at which many begin to use the services to travel to school with their friends (National Youth Agency 2007). In contrast, for the teenage wheelchair users in this research, the use of public transport with peers was rarely an option

available to them; instead they generally relied on modes of private transport. Issues such as this were often noticed and discussed by the teenagers themselves, highlighting the difference that this made between the leisure opportunities afforded to them and those afforded to their non-wheelchair using peers:

It can be the same for able-bodied young people who want to go to the cinema with their friends or whatever, because they rely on their parents. But if they really wanted to, they could just jump on a bus, and get to the cinema - it's not because they can't, whereas with us, we, like, physically *can't*.

(Female, aged 17, electric wheelchair)

The need for an accessible vehicle, therefore, often limited the spontaneity of outings to leisure spaces, where only an inaccessible vehicle was provided. Autonomous visits to such leisure spaces were also rarely reported by the participants.

Whilst the use of public transport signals increased mobility for many adults, research with (non-wheelchair using) young people has suggested that it can represent just the opposite for them. For example, if the timetabling of buses does not meet their leisure needs around school times (Hillman 1997). The experiences of the teenage wheelchair users in this study show that they often face more transport restrictions than have been reported for their non-wheelchair using peers. For some, the experiences of transport disability had developed over time, as their access to public transport had decreased when parents or other accompanying adults became unable to lift them. This restricted leisure opportunities. Others had a limited degree of mobility without the use of a wheelchair and could use public transport only with the help of an adult carer. These instances, however, were rarely free from difficulty:

Participant [male, 17, electric wheelchair] has had no access to public transport since he was about ten and his parents were able to lift him into seats.

(Research diary extract)

We've used the bus twice, I think, and the [town] ones weren't accessible. I had to bump his wheelchair up and ... I put him on the bus first, because he can get to the bus, then he stepped up,

then I had to fold his [wheel]chair, bump it up. When he had a smaller chair that was no problem but *now* ... and by the time I was in with the [wheel]chair in the driver was ready to roll. So we've only done it, like, twice and that was just when my car was like, in the workshop or something...

(Mother of 17 year old male, manual wheelchair)

As a result of these difficulties, the families rarely used public transport for travelling to leisure spaces, preferring instead to make use of private transport where possible. For example, some participants made use of 'accessible' taxi services, which incurred extra costs, both in relation to time and money. Prior booking of taxis was often essential, necessitating extended waiting times, and in turn limiting opportunities for participants to visit leisure spaces spontaneously:

Because of there being such a limited number of, say, cab firms that do disabled-friendly vehicles, it can mean that that can be the only one you can use. But because they're in such demand, because they can tend to be the only ones, you have to wait...

(Female, aged 17, electric wheelchair)

I think that really, we shouldn't have to [book in advance]. I think we should just be able to turn up, like everyone else our age without 'ooh, should we book this? book that?' ... because a day out is so much hassle.

(Male, aged 17, electric wheelchair)

Interviewer: How far in advance do you have to book that [taxi]?

Participant: We usually have to book it a couple of days in advance.

Interviewer: Do you ever have problems getting it?

Participant: Sometimes.

(Female, aged 15, electric wheelchair)

Reliance on taxis meant extra cost implications which had to be taken into account when planning leisure activities. The teenagers and their families often felt that the costs of transport provided by taxis were too high to warrant access of leisure facilities:

Interviewer: Are there any other types of transport that you use?

Participant: When I'm at my carer's [house] for a couple of days, sometimes we go to [city] for a little treat because I don't normally get to go there, because it's like £70 to get there and back again.

(Male, aged 13, multiple wheelchairs)

Interviewer: Is there anything that you would like to do in your free time, but that you can't at the moment?

Participant: Travel more.

Interviewer: Travel to...?

Participant: [city], to get to [city] more. Err, go to [town].

Interviewer: Why there?

Participant: Major shopping... And seeing my family.

Interviewer: Why can't you at the moment?

Participant: Because of the money. I'd have to get a taxi and it costs too much.

(Female, aged 15, multiple wheelchairs)

I can't use the bus because they aren't accessible. Then I have to use a cab, which means all the fares, and it can just be a lot harder.

(Female, aged 17, electric wheelchair)

The experiences recounted here highlight the central issues related to the experience of transport disability for this sample of teenage wheelchair users. Many of the teenagers in this research experienced a largely inaccessible transport system, one which failed to meet their needs in relation to travelling to leisure spaces. The implications of this inaccessibility include those relating to extra costs in terms of time and money. The examples presented here, therefore, illustrate some of the ways in which the teenagers may be

regarded as *transport disabled* in relation to leisure. Whilst their non-wheelchair using peers may experience a form of transport disability in relation to the barriers presented through the timetabling of services, the young people that we consulted drew on experiences of experiencing physical access issues which impeded their use of transport, further increasing their reliance on private vehicles and the adults in their lives.

### ***Transport anxiety***

The participants of this study described the importance and impact of emotion – and specifically anxiety. This appeared to be a result of their experience of *transport disability*, and forms an additional layer of disadvantage for young people in accessing transport. Whilst for many notions of transport and mobility incorporate ideals of agency, autonomy and activity (Barnes 2007; Sager 2006), the stories of these teenage wheelchair users feature reliance, dependence, immobility and, in some cases, *transport anxiety*. Rather than representing mobility and a means of accessing leisure spaces, public transport was often viewed in a negative way by the teenagers, (re)presenting instead their bodies as dependent and frustrated. In this research both parents and young people could be identified as experiencing *transport anxiety*. (It should be noted here that the young participants of the study did not focus on the impact of interactions with other passengers of public transport.)

Geographical studies of emotion have tended to neglect the use of transport, although some studies have begun to consider day-to-day aspects of car journeys (see, for example, Ashton 2008; Barker 2006; Laurier et al. 2008). Studies of children's use of transport have made a contribution to this area, considering the concerns of parents (of non-wheelchair using children and young people) over children's use of public transport, and the subsequent impacts of this in restricting use (Department for Transport 2006, 2007b). 'Fear-based exclusion' (Church et al. 2000) means parents may restrict their children's use of bus services to particular times of day, for example (Department for Transport 2006).

In this research, some parents voiced emotionally-charged reservations about their children's use of public transport in travelling to leisure spaces. In contrast to those (social) concerns reported in previous research with non-wheelchair using young people, the anxieties of these parents often arose from the

problems which they anticipated that their children would encounter. These anxieties were based on an expected inaccessibility of such services and the potentially unsafe situations which could follow:

All I'd be doing if he was out on his own is thinking about whether he was getting on OK, or if he was having problems. I might just as well take him [to the cinema] myself.

(Father of 17 year old male, electric wheelchair)

Participant: I can't go [to the cinema] on the bus.

Interviewer: Why?

Participant: If it isn't adapted, Mum says I might get stuck somewhere.

(Female, aged 15, multiple wheelchairs)

I'd be worried in case there was a problem getting on the train [to the shopping centre] or something.

I wouldn't want him doing that on his own.

(Mother of 15 year old male, manual wheelchair)

Transport anxieties and concerns for safety were not only felt by the parents of the teenagers, but also featured in the stories told by the young wheelchair users themselves. The use of public transport often signified worry and fear. This is in contrast to previous research with 'able-bodied' young people which has shown that their concerns often arise from external social factors, such as bullying (National Youth Agency 2007; Osborne 2005; Storey and Brannen 2000). Indeed, a report by the Department for Transport (2007b) outlines fears expressed by many young people in relation to using public transport, anxieties which are related to the presence of gangs of young people, or altercations involving intimidation or rudeness from adults.

For the teenage wheelchair users in this research, transport anxieties in relation to public service provisions resulted from the inaccessibility of the services themselves. These anxieties were often related to their personal safety. A number of participants voiced concerns about becoming stuck and having no control over reaching their (leisure) destination:

Participant: Trains can be difficult if you don't know the kind of train. I got stuck once.

Interviewer: You got stuck?

Participant: Yeah, it was a bit scary, until they said they'd pay for me – a taxi home. Took them three taxis until they finally said that we can book one. Because they were like there [gestures height with her hand], and I couldn't get my head in them. I need one like there [gestures again, higher].

(Female, aged 15, electric wheelchair)

Participant (male, aged 17, electric wheelchair) does not risk using public transport in case of getting stranded ... At certain railway stations there is only one lift. If it is not working then it is impossible to get off at certain platforms. When [participant] was nine a train ended the journey on a different platform and [participant] had to cross the tracks to get back to the ground floor. Although he was accompanied by his mother and a member of staff he was 'scared' for his safety in this situation.

(Research diary extract)

The anxieties related here meant that for these young people, buses or trains were used to get to leisure spaces only when it was clear that such situations would not be repeated. For some young wheelchairs users, such anxiety-rich experiences had restricted their use of public transport systems, as a result of both their own fears and those of their parents/carers. These instances portray forms of *transport anxiety*, where concerns over using public transport impeded teenagers' access to leisure spaces. One participant reported being completely dependent upon his mother's car for his transportation needs in relation to leisure. Whilst the local authority provided transport to his school, there was no such provision available during his free time. The implication of experiencing transport disability and associated transport anxieties rendered him (and others) *mobility dependent* when accessing leisure opportunities in public places. This was a common experience for the teenagers.

The experience of *transport disability* and its resultant impacts and anxieties led to an increased dependence upon private transport for accessing leisure spaces. Where public vehicles provided barriers to access, parents or other accompanying adults were often called upon to facilitate travel of the teenagers,

extending the teenagers' mobility but in ways which restricted autonomy. In essence, the inaccessible nature of public service provision rendered the teenagers *mobility dependent* upon the willingness of adults to provide transport.

### ***Mobility dependency***

An increasing amount of travel within the UK is by private car (Matthews 2004). Members of the population without their own access to a car are amongst the most transport deprived, with young and disabled people being over-represented in this category (Church et al. 2000). Teenage wheelchair users fall into both of these groups and here we argue that they experience particular disadvantage in this context.

96% of the teenagers who responded to questions about car ownership reported that at least one car was owned by a member of their household (see Table 1). This figure is well above the national average (85%) for families with dependent children (Department for Transport 2005).

#### **[Table 1]**

For an overwhelming majority of participants, the family car was the primary method of journeying to commercial leisure spaces. Table 2 shows that use of private cars was by far the most favoured method of transport utilised by the teenagers when visiting leisure spaces, and similar trends were apparent when the teenagers were asked to comment on the transport modes used to visit friends and relatives.

#### **[Table 2]**

In his doctoral research considering auto-mobility in children's lives, Barker (2006, 100) indicates that for his participants (aged between four and 11 years), 58% of non-school journeys were made by car. Whilst these data not directly comparable because of the different times and locations studied, it can be tentatively suggested that teenage wheelchair users are more reliant on private transport than their younger 'non-disabled' peers. Where the barriers inherent in the public transport system presented limited opportunities for the teenagers to travel to leisure spaces, use of a private car seemingly increased access to



these environments because - with few exceptions - these vehicles were adapted to the individual needs of the participants:

Because I use my electric [wheel]chair all the time, I only can use my mum's car when I want to go places because [the wheelchair] won't fit in any others.

(Female, aged 14, electric wheelchair)

The adaptations made to family vehicles opened up transport opportunities to leisure spaces through private means. Some families purchased two vehicles for use at particular times, for example one family owned both a van and a car which had been adapted to the specific needs of the young wheelchair user. Greater levels of dependency, however, were felt where only one parent/carer could drive the accessible vehicle. The teenage wheelchair users' access to leisure spaces was then restricted, introducing a further element of dependency - the availability of a particular adult to transport them.

Mobility dependency meant that the teenagers' visits to leisure spaces were often restricted to the timeframes of their parents/carers (or other adults who accompanied them), and these did not always meet the wishes of the teenagers themselves. On occasion they cited instances where the priorities of parents restricted their opportunities for spontaneous leisure:

Dad had the car at the gym, so [when friend phoned and asked me to go to town], I couldn't go [un]til later.

(Male, aged 17, electric wheelchair)

If I wanted to go to town on Saturdays I would have to get the bus, because Dad's normally got the car at work. Most buses I can't get on so it's really hard.

(Male, aged 17, manual wheelchair)

There were also instances where the responsibilities of parents limited opportunities for the young people. For example, one teenager noted that she was unable to visit the same youth club as her friends because her mother worked during the time that it was in operation:

Mum didn't used to work then, so it would be OK to go after school. But now she works on Thursdays and you can't get my [wheel]chair in Dad's car so I don't go anymore.

(Female, aged 16, multiple wheelchairs)

The reflections included here begin to highlight the diverse impact that *mobility dependency* had upon the teenagers' journeys to leisure spaces. Teenage wheelchair users in this research were dependent on their parents and other accompanying adults for transportation. This, combined with the limited availability of suitable public transport, had various implications. In some instances, it limited the amount of time that they could spend taking part in particular leisure activities, and in some cases the ability of the teenagers to travel - to be actively mobile outside their homes - was non-existent.

## **Discussion**

Transport is crucial to a person's freedom of mobility, the central tenets of which are the ability of an individual to travel where and when they choose, and the opportunity to express the choice of when not to travel (Sager 2006). For the teenagers in this research project, previous experiences often shed a negative light on future excursions, impacting upon their use of buses and trains. The extent to which the inaccessibility of public transport can cause discontent, frustration and concern for personal safety has been shown via their comments and observations. The resultant lack of confidence in public transport services felt by the teenagers may result in reduced use of public transport services in the future; many preferred not to risk a recurrence of negative experiences. This distrust of public transport meant that the teenagers were highly *mobility dependent* upon private cars, limiting spontaneous, autonomous leisure opportunities. As a result, the ideal of transport as opening up mobility, activity, and freedom of movement was often not a realised one for these young people, having a direct impact on their leisure experiences.

The examples presented throughout this paper have begun to show the positive and negative outcomes of the teenagers' experience of mobility dependency. In a positive light, the availability of private cars enabled access to a range of leisure spaces which would otherwise have been closed-down to many if they had been solely reliant on public transport. The willingness of parents or other adults to drive these young people to leisure spaces, and the option of making use of (private) adapted vehicles, extended their leisure geographies and experiences. Whilst the use of private modes of transport extended mobility in relation to leisure, they often simultaneously produced barriers and restrictions to particular kinds of leisure experiences. These in turn limited the journeying capabilities of the teenagers, or closed-down these spaces completely. Whilst other 'non-disabled' young people may also experience difficulties in accessing leisure spaces because of limited public transport services, lack of disposal income, or restrictions placed upon them by parents, this research has shown that teenager wheelchair users are in addition restricted by the inaccessibility of public service vehicles.

Whilst the use of private transportation generally afforded the teenagers comfort and safety, we argue that continual dependence upon adults can impinge upon the opportunities that these young people have for leisure. It is not our intention, within this paper, to suggest that it is only young people who use wheelchairs that experience challenges in accessing transport. Indeed, we have signalled that young people from a range of backgrounds/with a range of needs experience forms of mobility dependency. Unsuitable timetabling of public services or parents' concerns for their children's safety mean that young people in general are increasingly reliant on parent chauffeurs. In this sense the gap between the *mobility dependency* experienced by non-wheelchair using young people and young wheelchair users may be closing. It is not possible within the remit of our study to draw direct comparisons between the experiences of young people who do, and do not, use wheelchairs. We have, however, sought to draw out some general themes. Figure 1 summaries the range of issues that we have discussed throughout this paper and outlines various issues which contribute to the mobility dependency of young people.

**[Figure 1]**

In presenting these discussion points we do not seek to overly generalise the experiences of young people as a homogeneous group: indeed we recognise that the challenges of accessing transport are diverse and may vary from individual to individual. Instead, in raising these issues, it is our intention to signal (some of) the challenges – or layers of disadvantage - that young wheelchair users may experience in addition to those of their non-wheelchair using peers. Whilst the gap between the opportunities to access public transport may be closing, young wheelchair users experience particular issues in relation to accessing private transport which render them less able to exercise mobility in this way.

Whilst a range of literature exists which reports the decreasing independent mobility of young people, a paucity of research focuses on the experiences of disabled young people. An awareness of the presence of these ‘layers’ of disadvantage in relation to transport use and experience for different ‘groups’ of young people is essential in the development of transport policies and interventions. Further, research which seeks to develop an understanding of the transport experiences of particular ‘groups’ should not treat this topic in isolation. We argue that studies of transport experience should be grounded in the context in which they occur, the challenges and frustrations that accompany those experiences, and the resultant impact on people’s lives.

## **Conclusion**

Building upon Heiser’s (1995) notion of *transport disability*, this paper has argued that teenage wheelchair users experience *mobility dependency*. The challenges, anxieties and dependences which they encountered in their attempts to access transport culminated – for most – in limited access to transport, resulted in restricted use of particular leisure spaces. The examples presented here show that different and diverse transport needs are not currently met through public transport provision, causing anxiety and stress in young wheelchair users’ efforts to become actively mobile in relation to leisure. In drawing attention to the wider remit of leisure, we have attempted to initiate discussions on the importance of a contextual consideration of transport, drawing out the significance of barriers and impacts in the everyday lives of young people with particular needs.

## Notes

1. The study which underpins this work draws on the social model of disability. We therefore use the words 'disability' and 'disabled' to refer to those situations where individuals with impairments meet barriers arising from inaccessible environments and assumptions (Crow 2010). The participants of this research include young people diagnosed with a range of impairments, for example Cerebral Palsy, Epilepsy, Neurofibromatosis and Spina Bifida. All participants in the study were wheelchair users. We recognise diversity in the lives and experiences of these young people; the aim of this paper is to explore some shared experiences of this diverse group.

2. Participants were recruited through schools attended by young people who have special educational needs arising from physical impairments and/or learning difficulties. The possibility of recruiting participants through leisure facilities was considered, however it was felt that consulting teenagers who were already known to actively use such leisure provisions may not give a fair representation of the space use of a diverse group of young wheelchairs.

3. The participants of this study communicated in a range of ways. To ensure that as many young people as possible were able to share their views, the questions asked were focused on particular environments.

## References

Alparone, F. and Pacilli, M. 2012. On Children's Independent Mobility: The Interplay of Demographic, Environmental, and Psychosocial Factors. *Children's Geographies*, 10 (1), 109-122. doi: 10.1080/14733285.2011.638173

Aldred, R. and Woodcock, J., 2008. Transport: Challenging Disabling Environments. *Local Environment*, 13 (6), 485-496. doi: 10.1080/13549830802259847

Ashton, M., 2008. *'We're kids - we sit in the back': Exploring Socio-spatial Roles and Relations Within the Family Car*. Paper presented at: Royal Geographical Society with IBG Annual Conference, London, August 2008.

Barker, J., 2003. Passengers or Political Actors? Children's Participation in Transport Policy and the Micro Political Geographies of the Family. *Space and Polity*, 7 (2), 135-151. doi: 10.1080/1356257032000133900

Barker, J., 2006. *'Are we there yet?' Exploring Aspects of Automobility in Children's Lives*. Thesis (PhD). Brunel University.

Barker, J., 2009. 'Driven to distraction?' Children's Experiences of Car Travel. *Mobilities*, 4 (1), 59-76. doi: 10.1080/17450100802657962

Barker, J., 2011. 'Manic mums' and 'distant dads'? Gendered Carescapes and the Journey to School. *Health and Place*, 17, 413-421. doi: 10.1016/j.healthplace.2010.04.001

Barker, J., Kraftl, P., Horton, J. and Tucker, F., 2009. The Road Less Travelled: New Directions in Children and Young People's Mobility. *Mobilities*, 4 (1), 1-10. doi: 10.1080/17450100802657939

Barnes, R., 2007. *Places to Go: Promoting Better Mobility, Transport and Travel for Children and Young People*. London: Play England/National Children's Bureau.

Blumenberg, E., 2004. En-gendering Effective Planning: Spatial Mismatch, Low-Income Women and Transportation Policy. *Journal of the American Planning Association*, 70 (3), 269-281. doi: 10.1080/01944360408976378

Bromley, D.F., 2007. City Centre Accessibility for Wheelchair Users: The Consumer Perspective and the Planning Implications. *Cities*, 24 (3), 229-241. doi: 10.1016/j.cities.2007.01.009

Buliung, R., Sultana, S. and Faulkner, G., 2012. Guest Editorial: Special Section on Child and Youth Mobility – Current Research and Nascent Themes. *Journal of Transport Geography*, 20 (1), 31-33. doi: 10.1016/j.jtrangeo.2011.08.007

Butler, R., 1998. Rehabilitating the Images of Disabled Youths. In: T. Skelton and G. Valentine, eds. *Cool Places: Geographies of Youth Cultures*. London: Routledge, 83-100.

Carver, A., Watson, B., Shaw, B. and Hillman, M. 2013. A Comparison Study of Children's Independent Mobility in England and Australia. *Children's Geographies*, 11 (4), 461-475. doi: 10.1080/14733285.2013.812303

Casas, I., 2007. Social Exclusion and the Disabled: An Accessibility Approach. *The Professional Geographer*, 59 (4), 463-477. doi: 10.1111/j.1467-9272.2007.00635.x

Church, A., Frost, M. and Sullivan, K., 2000. *Transport and Social Exclusion in London: Report Summary*. London: London Transport Planning.

Commons Select Committee, 2013. MPs Warn Access to Transport for Disabled People still Unacceptably Poor. Transport Committee news article. Published 17<sup>th</sup> September 2013. Available at: <http://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/news/disabled-report--substantive/>

Crow, L., 2010. Including all of Our Lives: Renewing the Social Model of Disability. In: Rix, J., Nind, M., Sheehy, K., Simmons, K. and Walsh, C. (eds.) *Equality, Participation and Inclusion 1: Diverse Perspectives*. Abingdon: Routledge.

Davidson, D., Bondi, L. and Smith, M., 1997. *Emotional Geographies*. London: Ashgate.

Davis, J., Watson, N. and Cunningham-Burley, S., 2000. Learning the Lives of Disabled Children: Developing a Reflexive Approach. *In: P. Christensen and A. James, eds. Research with Children: Perspectives and Practices*. London: Routledge Falmer, 201-224.

Department for Transport, 2005. *Focus on Personal Travel*. London: The Stationery Office.

Department for Transport, 2006. *Young People and Transport: Their Needs and Requirements*. London: Department for Transport.

Department for Transport, 2007a. *Get Wheelchair Wise: A Wheelchair User's Guide to Public Transport*. London: Department for Transport.

Department for Transport, 2007b. *Young People and Crime on Public Transport*. London: Department for Transport.

Forsman, A. and Falkmer, T., 2006. Handbook Guidance Promoting a Safe Journey for Children with Disabilities: An Evaluation. *Transportation Research Part A*, 40, 712-724.

Fyhri, A. and Hjorthol, R., 2009. Children's Independent Mobility to School, Friends and Leisure Activities. *Journal of Transport Geography*, 17, 377-384. doi: 10.1016/j.jtrangeo.2008.10.010

Gillingwater, D., 1995. Resourcing Accessible and Non-Conventional Public Transport. *In: D. Gillingwater and J. Sutton, eds. Community Transport: Policy, Planning, Practice*. Luxembourg: Gordon and Breach Publishers, 65-98.

Gleeson, B., 1999. Can Technology Overcome the Disabling City? *In: R. Butler and H. Parr, Eds. Mind and Body Spaces: Geographies of Illness, Impairment and Disability*. London: Routledge, 98-118.



Hamilton, K. and Jenkins, L., 2000. A Gender Audit For Public Transport: A New Policy Tool in the Tackling Of Social Exclusion. *Urban Studies*, 37 (10), 1793-1800. doi: 10.1080/00420980020080411

Heiser, B., 1995. The Nature and Causes of Transport Disability in Britain, and how to Remove it. In G. Zarb, ed. *Removing Disability Barriers*. London: Policy Studies Institute, 49-64.

Hill, M., Davis, J., Prout, A. and Tisdall, K., 2004. Moving the Participation Agenda Forward. *Children and Society*, 18, 77-96. doi: 10.1002/chi.819

Hillman, M., 1997. Children, Transport, and the Quality of Urban Life. In: R. Camstra, ed. *Growing Up in a Changing Urban Landscape*. Assen: Van Gorcum and Company, 11-23.

Hillman, M. and Adams, J., 1992. Children's Freedom and Safety. *Children's Environments*, 9 (2), 10-18.

Holt, L., 2003. The 'Voices' of Children: De-Centring Empowering Research Relations. *Children's Geographies*, 2 (1), 13-27. doi: 10.1080/1473328032000168732

Holt, L., 2010. Young People's Embodied Social Capital and Performing Disability. *Children's Geographies*, 8 (1), 25-37. doi: 10.1080/14733280903500158

Imrie, R., 2004. Can the Planning System Meet the Needs of Disabled People? *Town and Country Planning*, 73 (9), 252-254.

Jayne, M., Valentine, G. and Holloway, S., 2010. Emotional, Embodied and Affective Geographies of Alcohol, Drinking and Drunkenness. *Transactions of the Institute of British Geographers*, 35 (4), 540-554. doi: 10.1111/j.1475-5661.2010.00401.x

Kenyon, S., Lyons, G. and Rafferty, J., 2002. Transport and Social Exclusion: Investigating the Possibility of Promoting Inclusion through Virtual Mobility. *Journal of Transport Geography*, 10, 207-219. doi: 10.1016/S0966-6923(02)00012-1

Knowles, R. D., 2006. Transport Shaping Space: Differential Collapse in Time-Space. *Journal of Transport Geography*, 14, 407-425. doi: 10.1016/j.jtrangeo.2006.07.001

Lang, D., Collins, D., and Kearns, R., 2011. Understanding Modal Choice for the Trip to School. *Journal of Transport Geography*, 19, 509-514. doi: 10.1016/j.jtrangeo.2010.05.005

Laurier, E., Lorimer, H., Brown, B., Jones, O., Juhlin, O., Noble, A., Perry, M., Pica, D., Sormani, P., Strebel, I., Swan, L., Taylor, A., Watts, L. and Weilenmann, A., 2008. Driving and 'Passenger-ing': Notes of the Ordinary Organisation of Car Travel. *Mobilities*, 3 (1), 1-23. doi: 10.1080/17450100701797273

Lavery, I., Davey, S., Woodside, A. and Ewart, K., 1996. The Vital Role of Street Design and Management in Reducing Barriers to Older People's Mobility. *Landscape and Urban Planning*, 35, 181-192. doi: 10.1016/0169-2046(96)00309-X

Law, R., 1999. Beyond 'Women and Transport': Towards New Geographies of Gender and Daily Mobility. *Progress in Human Geography*, 23 (4), 567-588. doi: 10.1191/030913299666161864

Lucas, K., 2004. Transport and social exclusion. In: K. Lucas, ed. *Running on Empty: Transport, Social Exclusion and Environmental Justice*. Bristol: Policy Press, 39-53.

Lyons, G., 2003. The Introduction of Social Exclusion into the Field of Travel Behaviour. *Transport Policy*, 10, 339-342. doi: 10.1016/j.tranpol.2003.09.001

Mackett, R., Banister, D., Batty, M., Einoon, D., Brown, B., Gong, Y., Kitazawa, K., Marshall, S. and Paskins, J., 2007. *Final Report on 'Children's Activities, Perceptions and Behaviour in the Local Environment (CAPABLE)*. London: University College London.

Matthews, D.L., 2004. *Food Shopping and the Mobility Impaired Customer*. Thesis (Phd). University of Wales.

Matthews, H., Beale, L., Picton, P. and Briggs, D., 2003. Modelling Access with GIS in Urban Systems (MAGUS): Capturing the Experiences of Wheelchair Users. *Area*, 35 (1), 34-45. doi: 10.1111/1475-4762.00108

Matthews, H., Taylor, M., Sherwood, K., Tucker, F. and Limb, M., 2000. Growing-Up in the Countryside: Children and the Rural Idyll. *Journal of Rural Studies*, 16, 141-153. doi: 10.1016/S0743-0167(99)00059-5

Mattson, K.T., 2001. Children's (In)dependent Mobility and Parents' Chauffeuring in the Town and the Countryside. *Royal Dutch Geographical Society*, 93 (4), 443-453. doi: 10.1111/1467-9663.00215

Mitchell, W. and Sloper, P., 2011. Making Choices in My Life: Listening to the Ideas and Experiences of Young People in the UK Who Communicate Non-Verbally. *Children and Youth Services Review*, 33 (4), 521-527. doi: 10.1016/j.chilyouth.2010.05.016

Murray, P., 2002. *Disabled Teenagers' Experiences of Access to Inclusive Leisure*. York: Joseph Rowntree Foundation/YPS.

National Youth Agency, 2007. *Young People and Public Transport: Briefing Paper*. London: National Youth Agency.

Oliver, M., 1983. *Social Work with Disabled People*. London: MacMillan.

- Osborne, P., 2005. Safe Routes for Children: What They Want and What Works. *Children, Youth and Environments*, 15 (1), 234-239. Available at: [http://www.colorado.edu/journals/cye/15\\_1/fl\\_SafeRoutes.pdf](http://www.colorado.edu/journals/cye/15_1/fl_SafeRoutes.pdf)
- Pacilli, M., Giovannelli, I., Prezza, M. and Augimeri, M. 2013. Children and the Public Realm: Antecedents and Consequences of Independent Mobility in a Group of 11-13-Year-Old Italian Children. *Children's Geographies*, 11 (4), 377-393. doi: 10.1080/14733285.2013.812277
- Porter, A., 2000. Playing the 'Disabled Role' in Local Travel. *Area*, 32 (1), 41-48. doi: 10.1111/j.1475-4762.2000.tb00113.x
- Preston, J. and Raje, F., 2007. Accessibility, Mobility and Transport-Related Social Exclusion. *Journal of Transport Geography*, 15, 151-160. doi: 10.1016/j.jtrangeo.2006.05.002
- Punch, S., 2002. Research with Children: The Same or Different from Research With Adults? *Childhood*, 9 (3), 321-341. doi: 10.1177/0907568202009003005
- Pyer, M., 2008. Unintended Consequences? Exploring the Un(fore)seen Effects and Outcomes of Research. *Children's Geographies*, 6 (2), 213-218. doi: 10.1080/14733280801963227
- Pyer, M., 2009. The Difference that Difference Makes: Leisure, Space and Teenage Wheelchair Users. Unpublished PhD thesis. Northampton: The University of Northampton.
- Pyer, M., Horton, P., Tucker, F., Ryan, S. and Kraftl, P. 2010. Children, Young People and 'Disability': Challenging Children's Geographies. *Children's Geographies*, 8 (1), 1-8. doi: 10.1080/14733280903500059
- Romero, V., 2010. Children's Views of Independent Mobility During their School Travels. *Children, Youth and Environments*, 20 (2), 46-66. Available at: <http://www.jstor.org/discover/10.7721/chilyoutenvi.20.2.0046?uid=31177&uid=3738032&uid=2129&uid=2134&uid=2&uid=70&uid=3&uid=5910784&uid=67&uid=62&uid=31173&sid=21104676924273>

Rosenkvist, J., Risser, R., Iwarsson, S. and Ståhl, A., 2010. Exploring Mobility in Public Environments Among People with Cognitive Functional Limitations: Challenges and Implications for Planning. *Mobilities*, 5 (1), 131-145. doi: 10.1080/17450100903435011

Ross, N.J., 2007. 'My Journey to School...': Foregrounding the Meaning of School Journeys and Children's Engagements and Interactions in their Everyday Localities. *Children's Geographies*, 5 (4), 373-391. doi: 10.1080/14733280701631833

Sager, T., 2006. Freedom as Mobility: Implications of the Distinction Between Actual and Potential Travelling. *Mobilities*, 1 (3), 465-488. doi: 10.1080/17450100600902420

Smith, S., 2000. Children at play. In: J. Mills and R. Mills, eds. *Childhood Studies: A Reader in Perspectives of Childhood*. London: Routledge, 79-96.

Smith, M., Davidson, J. and Henderson, V., 2011. Spiders, Sartre and 'Magical Geographies': The Emotional Transformation of Space. *Transactions of the Institute of British Geographers*, 36 (4), 1-15. doi: 10.1111/j.1475-5661.2011.00459.x

Storey, P. and Brannen, J., 2000. *Young People and Transport in Rural Areas*. Leicester: Joseph Rowntree Foundation/Youth Work Press.

Sutton, J., 1995. Travel Choice and the Mobility Handicapped. In: D. Gillingwater and J. Sutton, eds. *Community Transport: Policy, Planning, Practice*. Luxembourg: Gordon and Breach, 45-64.

Taylor, Z. and Józefowicz, I. 2012. Intra-urban Daily Mobility of Disabled People for Recreational and Leisure Purposes. *Journal of Transport Geography*, 24, 155-172. doi: 10.1016/j.jtrangeo.2011.12.008

Thien, D., 2005. After or Beyond Feeling? A Consideration of Affect and Emotion in Geography. *Area*, 37 (4), 450-456. doi: 10.1111/j.1475-4762.2005.00643a.x

Tucker, F., 2002. *Young Girls in the Countryside: Growing Up in Rural South Northamptonshire*. Thesis (PhD). University of Leicester.

Tyler, N., 2002. *Accessibility and the Bus System: From Concepts to Practice*. London: Thomas Telford Publishing.

Urry, J., 2000. *Sociology Beyond Societies: Mobilities for the 21st Century*. London: Routledge.

Valentine, G., 2003. Geography and Ethics. In Pursuit of Social Justice: Ethics and Emotions in Geographies of Health and Disability. *Progress in Human Geography*, 27 (3), 375-380. doi: 10.1191/0309132503ph438pr

Weber, J., 2006. Reflections on the Future of Accessibility. *Journal of Transport Geography*, 14, 399-400. doi: 10.1016/j.jtrangeo.2006.06.005

Wilson, L., 2003. *An Overview of the Literature on Disability and Transport*. London: Disability Rights Commission.

Witten, K., Kearns, R., Carroll, P., Asiasiga, L. and Tavae, N. (2013) New Zealand Parents' Understandings of the Intergenerational Decline in Children's Independent Outdoor Play and Active Travel. *Children's Geographies*, 11 (2), 215-229. doi: 10.1080/14733285.2013.779839

**Table 1.** Car Ownership by Household as Reported by Teenage Wheelchair Users (frequency and %).

<b>Number of cars in household</b>	<b>Frequency</b>	<b>%</b>
0	2	4
1	21	38
2	23	41
3	6	11
4+	4	7

*Note:* Not all respondents answered this question.

**Table 2.** Use of the Private Car to Access Leisure Spaces as Reported by Teenage Wheelchair Users (frequency and %).

<b>Destination</b>	<b>Frequency</b>	<b>%</b>
Travel to fast food restaurants	27	73
Travel to cinemas	28	80
Travel to shopping centres	24	65

*Note:* Not all respondents answered this question.



**Figure 1.** The Challenges Associated with Mobility Dependency

