Social Dangers as Constraints for Pro-Environmental Travel Modes - the Perception of Parents in England and Sweden.

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Abstract

The paper explores parental perception of social dangers in the urban environment as a constraint for children to walk and cycle. Group discussions with 37 Swedish and 35 English parents of 7 to 12 year old children revealed that social dangers related to strangers, criminality and drugs concerned parents in both countries. These concerns also influenced travel mode choices for their children's journeys. To protect their children from the perceived dangers, parents chose to chauffeur and accompany them as well as employ various strategies related to fear of crime. The level of protection was generally higher among the English than the Swedish parents. Further more, the perception of social dangers was discussed in relation to media, design of the physical environment and sense of community in the neighbourhood, as well as the child's capability and preferences. It is concluded that traffic dangers and social dangers must be considered in parallel if we are to prevent new barriers against children's pro-environmental travel modes when designing traffic safe routes.

Key-words: Social dangers, Travel, Perception, Intercultural Study

Introduction

A person's motivation to relinquish the car for walking and cycling is low compared to other pro-environmental behaviour (DEFRA, 2001; Widegren, 1998). A change of travel mode seems especially hard for children's journeys (Tillberg, 2001). Simultaneously a child's allowance to travel alone has decreased during the last decades (Hillman, 1993; Tranter & Pawson, 2001; Sandqvist & Kriström, 2001). This development results in negative effects to the children's physical and psychological well being as well as to the environment (for overviews see Collins & Kearns, 2001; European Commission, 2002).

European children are regularly chauffeured to school and leisure activities (European Commission, 2002). In the UK the school journeys significantly add to morning rush-hour traffic (DETR, 2001). In a study of

549 children (age 9 to 12 years) in Hertfordshire 38% of the children were chauffeured to school (Mackett, Lucas, Paskins & Turbin 2002). A study of 378 children of the same age in Oxfordshire showed similar results (Sissons Joshi & MacLean, 1995). In Sweden on average 14% of the children in Stockholm and 17% of the children in Lund usually travel by car to school (Heurlin-Norinder, 1997; Trivector Information, 1999). Even more children are chauffeured to leisure activities. In the Hertfordshire study every second child taking part in extra-curricular activities was chauffeured (Mackett et al., 2002). In Lund only 16% were chauffeured to leisure activities on a daily basis, but 84% were sometimes taken by car (Trivector Information, 1999).

Tanner (1999) suggested that if we are to understand personal car usage, constraints for pro-environmental travel mode choices must also be taken into account. Exploring the link between social and ecological sustainability suggested by the Agenda 21 (UNCED, 1993), the present paper focuses on parental perception of social dangers in the urban environment as a constraint for children to walk and cycle. The paper is based on a qualitative pilot-study carried out within a cross-cultural project of parents' reasons for driving the children by car to leisure time activities in Sweden and England.

Social dangers and travel mode choice

The social environment influences travel mode choice for adults, especially women, the elderly and immigrants. These groups occasionally choose to stay home or drive instead of walking, cycling, or using public transport due to their fear of being a victim of crime (Alm & Lindberg, 2002; Andersson, 2001; DETR, 1999; Keane, 1998). In Borlänge, a mid-sized Swedish town, 15% of the inhabitants reported that they had stayed home due to fear of going out in their own neighbourhood (BRÅ, 1999). The British Department of the Environment, Transport and the Regions (DETR, 1999) investigated fear of walking alone in seven socially and environmentally different areas. In most of them, a third of the population felt unsafe due to fear of crime, but the figures varied between 8% in a rural village in East Anglia and 62% in a deprived inner city area in the West Midlands. To many, their personal security was of greater concern than traffic safety issues. The respondents felt particularly unsafe around people who were loitering, those showing erratic behaviour, and drunks.

Places with poor lighting where strangers could hide, and lonely places such as empty subways and alley-ways were especially feared. In a study by The Swedish National Council for Crime Prevention (SDS, 2002) the public listed 118 unsafe places in the city of Lund. Walking and cycling paths with tunnels surrounded by bushes were perceived as especially unsafe. In a qualitative study, women in Malmö chose to cycle on the busy road instead of cycle paths after dark for fear of crime (Andersson, 2001).

When children travel, traffic safety issues are stressed as a major constraint for pro-environmental travel modes (e.g. Collins & Kearns, 2001; European Commission, 2002). However, there is reason to consider the social dangers in England as well as in Sweden. In Hillman's (1993) comparison of children's (age 7-11 years) allowance to travel on their own in 1971 and 1990, the amount of children getting unaccompanied to school had decreased from about 80% to less than 20% among the youngest. The main reasons being that parents worry about traffic safety and fear of molestation. In a smaller study in Guildford, south of London, 176 parents who usually drove their child to primary school said the strongest reasons for doing so were that the child was dropped-off on their way to work, followed by the desire to protect the child from strangers, inclement weather, and for convenience (Gatersleben, Leach & Uzzell, 2001). In Sisson Joshi and MacLean's (1995) study in Oxfordshire, stranger danger was the most important reason for accompanying children to and from school (mentioned by 58%) as compared to *child not yet able to cross roads* cited by 46%. Parental concern with stranger danger was also predictive of the general freedom they granted their children (Sissons Joshi, MacLean & Carter, 1999).

In Sweden, parental perception of social dangers has received less attention. Björklid (2001) concluded from a study in the Stockholm area of parents with children ages 7 to 9 years, that stranger dangers might be less of a problem in Sweden than in many other countries. Sandqvist and Kriström (2001) touched the relation between social dangers and the physical environment when asking parents in central Stockholm if they would allow their 13-14 year old adolescents to walk along a lighted city street or an empty park in the evening. Parents felt fairly happy about the lighted city street but most of them would not allow their child to walk in the park. Tranter and Pawson's work (2001) on children ages 9 to 11

years should also be mentioned, although this study was carried out in New Zealand. Their results showed that fear of assault and molestation, concerned parents of girls more than boys, whereas traffic dangers were more of a concern for parents of boys.

Most studies on accompanying or chauffeuring children present and prioritise various constraints for children to travel alone. One of these constraints are parental fears that their child might be hurt by strangers, but less is known about what thoughts and feelings could be found behind the survey results. A first objective of this paper is to give voice to parents' perceptions of danger posed by the urban social environment. A second aim is to investigate to what extent these dangers are sustained by urban design and how they may influence the travel mode choices for their children's leisure journeys. A further aim is to compare the perception of English and Swedish parents.

Theoretical background

The theoretical departure is Küller's (1991) model of human and environment interaction and the concepts of interpersonal and environmental trust. Interpersonal trust-mistrust has been defined as the tendency to view other persons as reliable contra eager to do harm (Omodei & McLennan, 2000; Ross & Joon Jang, 2000). Environmental trust has been described as a sense of confidence and trust in all types of environments, both human made and natural (Bunting & Cousins, 1985; McKehnie, 1977).

According to Küller's model, the individual's reaction to the environment can be seen as a response to the physical and social environment with consideration for the activity and personal resources. The model is based on a four step emotional process including activation, orientation, evaluation, and control (Figure 1).

In the present context, the parents' travel mode choice is defined as the individual's reaction, and the perception of the physical and social environment relates to the urban areas where the families live. This perception is mediated by the parent's personal resources, such as their level of trust. The journey that must be carried out constitutes the activity. The basic emotional process is *activated* when there is a need to make a journey. This need will result in an *orientation* response towards what travel modes are available. Based on the actual physical and social

environment as well as one's personal resources, the available travel modes are *evaluated*. Since *control* is preferred, alternatives where this will be achieved are prioritised. On the other hand, if the travel situation is perceived as unsatisfactory, the individual will try to change the travel mode choice the next time the journey should be made. It is likely that emotional process is conscious the first time a particularly journey is made, but when control has been established, the choice is likely to be based on habits.
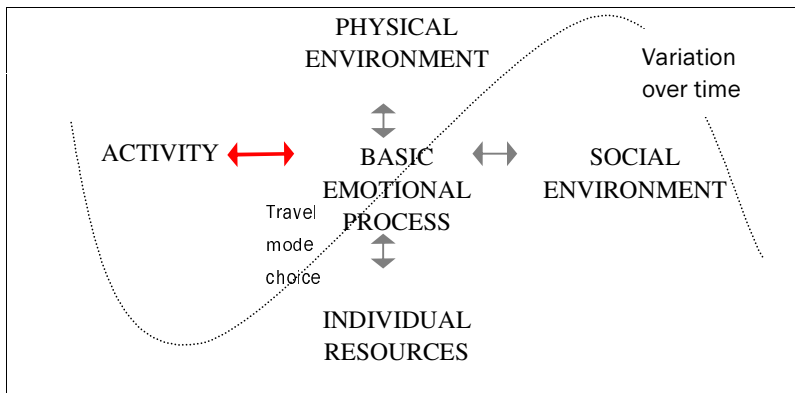

Figure 1. Küller's (1991) model of human-environment interaction adapted for travel mode choice

Method

Participants

Parents of children aged 7-12 years were approached through local schools in eight different neighbourhoods selected for the main project (see below). In Sweden a representative sample were phoned after address lists provided by head teachers. The parents were asked to participate in a group discussion about children's journeys. Thirty-seven parents agreed to participate (response rate 32%). The response rate may be explained by the time of year the discussions were held, e.g. a busy period in May and June before school finished. In England, direct access to the parents was not granted instead head teachers recruited the parents (N=35). The Swedish group included 27% fathers, whereas

the English group completely consisted of mothers with one reason being that interviews had to be held at daytime in England and more mothers than fathers were available during daytime (Table 1).

Table 1. The children represented, how long time the parent had lived in their neighbourhood and the households' access to a private car. The higher number of cars in the English household is due to the high level of car usage in Guildford.

	Swedish households	English households
Children represented (N)	86	97
Children 7-12 years (N)	57	55
Girls	35%	58%
Boys	65%	42%
Mean age of children 7-12 years	9 years 3 months	9 years 2 months
Years in neighbourhood (m)	10 years	11 years
Cars in household: 0	11%	14%
1	73%	31%
2	16%	54%

Neighbourhoods

The choice of urban areas was guided by the aims of the main project. In Sweden the study included four neighbourhoods with a fairly average population in terms of socio-economic standards in the south of Sweden, Gunnesbo and Järnåkra-Nilstorp in Lund (100 000 inhabitants) and Söderkulla and Dammfri in Malmö (262 000 inhabitants) (Lunds Kommun, 2002; Malmö Kommun, 2001). In England, Burpham and Stoughton were selected as two neighbourhoods within an affluent area with high car usage but relatively safe from crimes. These areas are within Guildford, a city of 127 000 inhabitants south of London. Also two deprived areas, Barton and Littlemore, in the city of Oxford (144 000 inhabitants) were included (UK National Statistics, 2001; Oxford City Council, 1998). On the national level the UK faces heavier traffic as well as a higher level of violent crimes than Sweden (BRÅ, 1999).

Conduct of the interview

The interviews were carried out as semi-structured focus group discussions where the interviewer's role was to guide the discussion. In a focus group interview, the discussion is less dependent on the interviewers' perspective than on the traditional interview since one participant's view may give other participants' associations to new issues

for discussion (Krueger, 1998; Wibeck, 2000). In total, 15 discussions were held with groups of three to seven parents from the same neighbourhood. The parents met either at the university department or at one of the participating schools for a discussion of 45 minutes to 1.5 hours, depending on the size of the group. All parents received a £5 gift voucher after the interview.

Interview guide

An interview guide was developed and piloted in a group of six parents. The original guide was kept with some smaller adjustments in wording of questions. The guide listed the themes to be covered but with enough flexibility to allow variation in when and how a question was asked. Therefore, the order of the discussions and the focus of the themes varied according to the interests of the groups. The guide covered the following themes:

- Perception of the neighbourhood
- Aims of their children's journeys
- Travel mode choice for their children's journeys
- Reasons for accompanying and chauffeuring their own children
- Thoughts about the general tendency of chauffeuring children
- An urban environment, where it would be safe for children to travel alone

Analysis

The interviews were transcribed verbatim. A thematic analysis was carried out where the interview texts were coded by means of keywords which have been categorised and organised around themes (Krueger, 1998; Patton, 1990). The themes mirror those topics the parents introduced on the basis of the interviewer's questions and comments. The results presented below are based only on those themes that relate to the understanding of parents' perception of social dangers. Citations from the Swedish parents have been translated into English by the author.

Results

Parents' concerns about social dangers

The parents were concerned about strangers in England as well as in Sweden. They worried that their children (both boys and girls) would meet mistrusted persons if they walked or cycled on their own. The theme came up in each one of the 15 interviews without being mentioned by the interviewer. When the theme was presented, the discussions intensified.

It is all about society, it is a safety thing, strangers more than anything else, so even if there was no traffic I still wouldn't let a nine-year old out. Mother in Guildford

The social dangers were perceived to be particularly difficult to handle since they were regarded as subtle and hard to anticipate for children. Even if the parents trusted their child to be sensible in other matters, in this regard children were described as innocent and unable to understand the social dangers. In England a common opinion was that you could not trust any strangers. The mothers stated that as a parent you became continuously aware because there are so many people out there that you don't know. A mother in Oxford expressed it as *You can never drop your guard*. The parents were unhappy that things were this way but they had become used to it and accepted it as a fact of life.

You wouldn't let them go from A to B by themselves. It is just the fact of life nowadays. Even if the children have to look after themselves, you never know who else is out there. Mother in Guildford

But now if someone came up to a child and started to talk to him, your first reaction is suspicion. You know that it is really not how it should be, but it is the way it is, when you think about it. Mother in Guildford

In Sweden the parents' trust in strangers varied more than in England and the full range from mistrust to trust was represented. Mistrust was exemplified with one mother in Malmö who stated *You can not trust anyone*. She said, in the same way as the English mothers, that she trusted her own child 100%, but *It is the people around I don't trust. There are people around who look healthy but who aren't. They are everywhere, you can't trust anybody.*

Some Swedish parents' thought however, that you should be able to trust persons you do not know. They referred, for example, to situations

where they had lost their child in a shopping centre and strangers had taken care of the child until he or she was found.

The dangerous strangers

Although many parents, particularly in England, directed their mistrust towards unknown people in general, there were some groups that seemed to be feared more than others in both countries. The strongest threat, although not perceived to be the most likely, came from paedophiles and *other psychologically unhealthy* persons. The parents feared these persons could molest, assault, or even snatch their child.

Alcoholics and drug addicts were perceived as less threatening, but still as a potential danger. Drunken people and those high on drugs were, for example, regarded as unpredictable and unreliable, *You never know what they can be up to*. But these groups were also mentioned because of devious appearance and behaviour, which might scare the children. In Malmö, homeless people were also mentioned in this context, but not in Oxford even though it is a common sight there.

8-9 year-olds are too young to be confronted with the down side of society such as violence, drug abuse and homeless. Mother in Malmö.

Groups of youngsters were feared because they were perceived to have *No respect for younger children* and may intimidate them. Youngsters were discussed in the contexts of bullying, violence, drugs, and muggings.

The parents' mistrust is partly founded in real experiences in either their own neighbourhood or city. In seven of the eight neighbourhoods, parents mentioned that there had been incidences with paedophiles or *Males acting strange towards children* often around the schools. The parents also referred to places in the neighbourhood where alcoholics and drug addicts gathered and their children's reactions towards them. In the Swedish neighbourhoods groups of drunken youngsters were a problem during summer. In Oxford troubles with weapons were referred to in one of the neighbourhoods. In both Oxford and Malmö there had recently been sprays of youngsters mugging children for money and mobile phones.

Media reinforce the social dangers

The parents' perception of social dangers was influenced and reinforced by media reports on violence and crime, particularly towards children. Incidences where children have been snatched and murdered and that received much media attention were frequently referred to. But also local reports on criminality, such as thefts, make parents' react and limit their children's freedom to travel alone.

We base our feelings on what we read in the newspaper. We are thinking things are happening, they could happen to our kids, you know being careful Mother in Oxford

We hear all information about everything that happens for several days and that for sure influence us Mother in Malmö

You know we have had horrified murders in little villages that are now televised and that make you more frightened, it kind of magnified the problem really. Although statistically the chances are very, very small, they just make you know that the chance is there and you don't want to take that risk. Mother in Guildford

At the same time as the parents admitted they were influenced by media, they thought media exaggerated and reports were biased towards bad news. Violence and crime were perceived to be reported too frequently and in too much detail.

Social dangers and sense of community

The urban environment would be perceived as safer for the children if there were more people out on streets. Most of the parents anticipated that their child then would be noticed and helped if he or she were approached by youngsters or strangers. A couple of parents however doubted that someone actually would intervene and help.

What I feel uneasy about is that if something would happen, if someone would attack a 10-year old, what adult would help, what adult would intervene? Mother in Malmö

Ideally, the people out on the streets should also be familiar with their children. This was however not the case in most of the areas. As a mother in Malmö expressed it: *There are not a lot of friends that you know where they live and who their parents are.*

Rural villages were described as safer. One mother, who had moved from a small village to Oxford, thought her children would have had more

freedom if they have stayed in the village because everyone knew each other. Similarly parents in Lund described how they felt safer with their children travelling alone around their summerhouses located in villages or small towns. It might be enough if the parents know there are people around along their child's route. A mother in Malmö explained that she let her son walk alone to football training because she knew that there would be other parents around who would keep an eye on him. Parents in one of the neighbourhoods in Lund with a strong sense of community, mentioned that dog owners in the area had a very important social function because they learned to recognise people while walking their dogs. From the safety point of view the parents wished for a stronger social control between neighbours, and they referred to how things were when they were children themselves.

You would have felt safer to let your child travel on his own if you had lived in a small town were everybody knew each other, where there is a social network. Mother in Malmö

It was safer before because a lot more adults would walk to the bus stop and you knew if your child got into trouble it would only be a matter of shouting and come and help, but now everybody is in their car. Mother in Guildford

Social dangers and urban design

The urban environment was frequently described as unsafe for children and the social dangers were sometimes hard to attach to a specific place, even when parents were prompted about it.

But to be honest, it doesn't matter where you are or where you go, you have to have your wits about. There isn't really a proper safe area, is there, anywhere? Mother in Guildford

The general feeling of urban environments as unsafe for their children was in some cases limited to certain areas such as the city centre or neighbourhoods with a reputation of social problems and criminality. This was particularly the case among parents in Oxford and Malmö, which are socio-economically segregated cities (Malmö Kommun, 2001; Oxford City Council, 1998). The perception of problem areas as more dangerous was based on reputation as well as parents' personal experience from living in or travelling through the area.

Several specific design features related to the perception of an environment as unsafe in terms of social dangers, could also be identified in the discussions. These features were pointed out directly by the parents as well as indirectly as in their description of travel mode choices. The design features referred to are located within the neighbourhoods or along routes from one of the neighbourhoods to the children's activities.

In general darker environments were perceived as less safe than well lit. A certain path could be perceived as perfectly safe in daylight but not after dark. This also meant that a child could be allowed to walk alone to one and the same place on a summer evening but not on a dark winter afternoon and secluded places were also perceived as unsafe. In England, the parents did not like their children to walk along alley-ways or in subways because these were perceived as lonely and without possibilities for the child to attract attention or escape if something would happen. Of the same reasons, the Swedish parents mentioned traffic separated walking and cycling paths without overview from streets or houses.

There is absolutely no way that I am going to allow her to walk in the alley in the day light or in the dark so it is all about working out routes as well isn't it? We have sort of discussed the fact that she has to go the longer safest way. Mother in Guildford.

They have blocked the road now so there is no traffic there is very creepy, because you don't see anybody especially in the mornings. That is quite creepy. Mother in Oxford.

Bushes and trees may increase the feeling that alley-ways as well as walking and cycling paths are secluded. Badly maintained greenery was also disliked because it could hide potential offenders. Parks were therefore not regarded as a safe travel way for children. Some of the English parents were not even happy about letting their children walk or cycle along narrow pavements squeezed in between the road and thick bushes.

You think someone is hiding behind the bushes, I wouldn't let mine go (there). Even I am scared and I am an adult, you know. Mother in Oxford

It is creepy when on a cold and rainy November evening you go through the part from Gunnesbo to (another neighbourhood). It is a part with allotments and old trees and it is dark. You may not think about it as an adult, but if I know my child will go that way, I imagine. Father in Lund

Places where drunks, drug addicts and youngsters gathered were also perceived as unsafe for children. In all of the four cities, the city centre was pointed out in this respect and in some of the neighbourhoods also the area around local shops or shopping centres. Traces of the feared groups such as empty bottles and beer cans or signs of graffiti and vandalism might be enough to make a particular place seem unsafe. The parents' described local playgrounds and green areas where their children were not allowed for such reasons and particularly if they were secluded. It is however often the combination of features that make the environment unsafe...

It is not particularly nice in the dark, especially to walk, it is not that far but I usually drive her there because I wouldn't want to walk around there in the dark. It is around the back of the gym and it is not particularly nice, with broken glass everywhere and people hanging about, so we drive. Mother in Oxford

Parents' strategies to protect children from social dangers

The parents employed a range of strategies in order to prevent their children from encountering dangerous strangers and to make sure that someone would notice in case something happened. Above all, the parents tried to keep their child from being approached by a stranger by accompanying and chauffeuring the child. The car is believed to give the strongest protection. A mother in Guildford described cars as *Our little security boxes*. If the child is allowed to travel on his/her own the parent tried to avoid social dangers by restricting the route or the time of the day the child could travel. The child may for example be allowed to walk alone during daylight hours when there are many people around, but no other time. Some of the parents thought it would be safer if the child walked with siblings or friends than if alone since together they would better be able to handle the situation.

If the child was allowed to travel alone or with friends, the parent tried to educate the child by repeatedly telling his or her child not to talk to strangers, not to follow strangers, and not to accept sweets or the like offered by a stranger. The parents were however very careful about how much they told their children regarding the dangers. In England the parents also thought that education about stranger dangers should be part of the school curriculum.

I try to teach them a few things to make it as safe as possible for them, and these are the practical things. If there is a person that you don't know, who starts talking to you and wants to give you sweets, or asks them to come and see my dog or something similar then you don't follow any unknown person. These are the practical things that you can tell them to help them on their way and to avoid anything unpleasant happening. Mother in Malmö

Sometimes the parents indirectly supervised their children by means of the telephone. For example the children were given instructions to call when arriving to and leaving after school clubs and friends houses etc. If the child did not call as expected the parent would react e.g. go out and look for the child. Some parents with older children, who are almost teenagers, had given their child a personal mobile phone so they could call the parent in case something happened.

What I usually do with (her 13-year old son) who is little older, he calls when he leaves from a friend and is on his way home, so that I know. I can do the same with (9-year old daughter) too. If she is going to a friend that is far away, I will call and ask if she has arrived so I may have some control this way. Mother in Lund

It was rare if parents tried to decrease the risks of social danger by contacting the authorities, but a couple of parents forwarded their ideas in the group discussions. In both cases it related to the importance of people on the streets. In Oxford the parents suggested that local policemen could walk around in a friendly way and supervise their neighbourhood. In one neighbourhood in Lund the parents asked for local meeting places for adults such as a café, hoping this would attract more adults to the streets and consequently increase the social control.

Which of the mentioned strategies the parents employed to protect their children form social dangers, were influenced by the child's experience of and preferences for a certain travel mode. But also how sensible, reliable and streetwise the child was thought to be. These aspects of course vary with the child's age, gender and personality.

Yes we also accompany all of them (her three children). Sometimes our oldest son (9-years old) walk alone ---. He is like that, he began to ask when he was four if he could go by himself, he has such a strong urge. It maybe depends on what kid you have as well. But he has always had that urge. Otherwise we still accompany them. It also goes for (the public

swimming baths). We live right there, but we follow them inside and get them changed, we are a bit worried about that place. We have had some bad experiences there. Mother in Malmö.

I mean she knows the dangers of strangers but if someone stops and asks her for, I say you didn't know them and she says they didn't look strange to me. She is just not aware of who is being on the streets. Mother in Oxford

In general, the English parents both in Oxford and Guildford more often seemed to opt for strategies that gave stronger protection e.g. accompanying and chauffeuring their children than parents in Sweden.

Discussion

This study explored the link between a sustainable social environment and pro-environmental travel mode choice for children's journeys. It addressed Swedish and English parents' view on dangers posed by the social environment in urban areas and to what extent these dangers were perceived to be sustained by the physical environment and how they influenced travel mode choice for children's journeys. It is confirmed that protection from social dangers is an important aspect of the emotional process emerging within the parent when their child has to make a journey. The social dangers have relevancy to English as well as Swedish parents. According to the theoretical model introduced (Küller, 1991), the parent will choose the travel mode most likely to give a feeling of control. How important the protective aspect of the travel mode is for the parent to achieve control for a particular journey will depend on the perception of the physical and social environment along the route and the parents' personal level of trust. In addition to these aspects, the discussions revealed the importance of the parents' perception of the child's capabilities and preferences.

If parents expect social dangers, they will try to avoid them by choosing a travel mode that gives their child protection, e.g. accompanying or chauffeuring the child. If the parent finds it necessary to accompany the child and has a car available then the parent is likely to choose the car, e.g. a less sustainable travel mode, because of busy schedules and a need to combine journeys (Gatersleben et al., 2001; Trivector Information AB, 1999). The travel mode choice is however only one of several strategies employed by parents to protect their children

from social dangers. Parents also relied on the security of the group and protective strategies, such as educating the child about stranger dangers and monitoring the child by means of the telephone. The groups of strategies identified are similar to those methods used by adults when they feel fear of crime (Andersson, 2001). Parents in England seemed to find a stronger need of protection and resorted to avoidance strategies, e.g. accompanied or chauffeured their children 7-12 year olds, whereas the Swedish parents often relied on protective strategies.

The activity

Most research focuses on children's journeys to school. In terms of social dangers, journeys to leisure activities differ in several respects. Leisure time journeys are usually made in the afternoon or evening. In the south of Sweden and England it is already dark around 4 pm during the winter season. Since dark environments are perceived as less safe, these journeys elicit more protective behaviours from the parents. There may not necessarily be other children from the neighbourhood who participate in the extra curricular activities and protection of the group could therefore not be relied on. Several of the places children go in their leisure time e.g. play grounds, parks and local shops are perceived to be dangerous because they also attract mistrusted groups, and consequently the parents will be more likely to accompany their children.

Perception of the social environment

The discussions revealed that parents' perception of threats posed by the social environment goes far beyond assault and molestation. Perceived risks of bullying, muggings, and unpleasant encounters with older children, youngsters, drunks, drug addicts, and homeless people also need to be considered in relation to the travel mode choice. The parents' perceptions of the threats posed by the social environment were formed by personal experiences as well as media reports. Research from the US shows that fear about children has become a more common theme in media (Altheide & Michalowski, 1999). If there is a strong sense of community or social network in the neighbourhood, the social environment may on the other hand increase the perceived safety and thereby promote pro-environmental travel mode choice. Previous research on fear of crime among adults as well as children's freedom to

play in the neighbourhood shows similar results (Prezza, Pilloni, Morabito, Sersante, Alparone & Giulani, 2001; Ross & Joon Jang, 2000; Valentine & McKendrick, 1997).

Perception of the physical environment

The parents did not trust the physical environment to protect their children from social dangers. Parents' general perception of the city and/or whole areas as unsafe for children requires efforts at several levels. Still there are physical features that urban designers could address to make parents' feel safer. These aspects are similar to those identified in studies of adults' fear of crime (DETR, 1999; Koskela, 1996; SDS, 2002). In the perspective of children's journeys, careful design of walk and cycle paths, pedestrian tunnels, local green spaces and playgrounds are particularly important. Further, the trade-off between traffic dangers and social dangers need special attention. Traffic-separated routes are preferred, but from a social danger perspective they must have supervision. It is therefore unsatisfactory to locate traffic-separated walkways and cycle paths to the outskirts of a neighbourhood or to use secluded roads that are closed for traffic as walkways and cycle paths. Alley-ways may be problematic since they may be difficult to exit and surrounding greenery increases the feeling of being alone because it allows places where strangers may hide. Another example of the trade-off between traffic dangers and social dangers is pedestrian tunnels. These may be perceived as unsafe if dark, lonely, and subject to litter and graffiti.

The presence of dense trees and bushes is also a safety issue for local green areas and playgrounds. Appropriate maintenance of greenery is critical, since people show strong preference for urban environments with greenery, and the presence of nature is important for the environmental and aesthetic qualities in cities as well as for children's play (Grahn, Mårtensson, Lindblad, Nilsson & Ekman, 1997; Kaplan & Kaplan, 1989; Küller & Küller, 1994).

Finally, daylight and the presence of people are crucial to the perceived safety. Children's routes should therefore be located so they attract adult pedestrians and cyclists from the neighbourhood.

The personal level of interpersonal and environmental trust

As a group, the parents expressed a low trust in strangers and urban environment, but there was an individual as well as national variation. At the individual level, the parents represented the whole range from mistrust to trust. Although the perception of *what* social dangers exist was almost identical among parents in the two countries, the English parents seemed to mistrust strangers more than the Swedes did. Even in the safer areas in Guildford. This difference may be explained by the higher crime level and the attention given to the social dangers related to children's journeys in England (BRÅ, 1999; DETR, 1999). Still the social dangers were a source of worry among the Swedish parents and should not be neglected. The parents' low trust may not only be relevant to the travel mode choice, but also to children's future trust in other people (Rotenberg, 1995; Terrell, 2000).

The child

The present study focused on the parental view of social dangers. This view is influenced by the perception of their child's capabilities and preferences. In a planning perspective it therefore seems necessary to add the child perspective (Davis, 2001). Research from the United States indicates for example that children themselves take measures to avoid social dangers (Blakely, 1994; Spilsbury, 2002). In Sissons Joshi et al. (1999) study in Oxfordshire, UK the children as a group were however less concerned about stranger dangers than their parents were. The likely reason was that the parents mentioned traffic dangers in everyday discussions with their children, but not stranger dangers.

Concluding remarks

The qualitative approach limits the possibilities for generalisations of the findings. The neighbourhoods selected represent however a wide range of environments and several of the parents' concerns were brought up in more than one neighbourhood. This suggests that perceptions in the same direction are likely to be found among parents in other English and Swedish cities of the same size. The low response rate in the Swedish sample and the selection process in the English sample imply that the findings are likely to be based on the group of parents most concerned about their children's journeys. Still, if as in the Swedish case a third of

parents in various urban neighbourhoods with children aged 7-12 years perceive that social dangers in one way or the other may hinder children as they walk and cycle, it is an issue that needs to be attended to.

The social dangers are *one* of several constraints for pro-environmental travel modes for children's journeys. At present heavy traffic in the neighbourhood seems to be the main reason for accompanying or driving children short distances. An important finding from this study is that the traffic dangers and the social dangers must be considered in parallel if we are to avoid creating new barriers for pro-environmental travel modes for children's journeys. The forthcoming main study will quantitatively show *how* important the social dangers are to pro-environmental travel mode choice for the children's journeys in comparison with other constraints for example children's age and sensibility, traffic volume, time aspects, and convenience.

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