

## Understanding the barriers to children's active transport

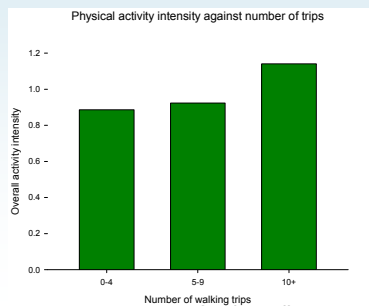
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### The CAPABLE study

- Children's Activities Perceptions And Behaviour in the Local Environment
- 2 year EPSRC funded project involving
  - Centre for Transport Studies
  - Centre for Advanced Spatial Analysis
  - Bartlett School of Planning
  - Psychology Department
  - Young Foundation
- The project is using a variety of methods to look at children's behaviour in the local environment

### Physical activity and active transport

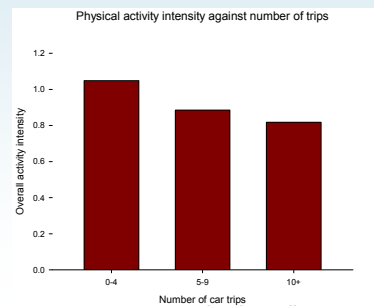
- Active transport, such as cycling and walking has the potential to increase a child's overall physical activity



Source: Activity monitoring study  
Significant effect ( $F_{(2,194)} = 3.26, p = 0.041$ )

### Physical activity and car travel

- In contrast, a higher number of car trips is associated with lower overall physical activity



Source: Activity monitoring study  
Significant effect ( $F_{(2,194)} = 4.45, p = 0.013$ )

### More details about children's physical activity

- The results covered in this presentation are taken from the CAPABLE parent questionnaire
- The results from the activity monitoring survey are explored in more depth in "The role of children's daily physical activity", presented yesterday.

### The parent questionnaire

- The main participants of the CAPABLE project are children in years 4, 5 and 6 (the last three years of primary school)
- In addition a questionnaire is being sent to all the parents of children in the primary schools that we are working in
- The parent questionnaire covers
  - Household factors
  - Journeys for school and other travel
  - Children's independence and play
  - The factors parents consider when choosing how a child travels for school

### Number of responses to the parent questionnaire

	Hertfordshire		Lewisham		Total
	Holy Family	Kilmorie	Perrymount		
Nursery	0	3	10		13
Reception	13	7	1		21
Year 1	21	6	16		43
Year 2	17	10	9		36
Year 3	13	9	7		29
Year 4	18	12	10		40
Year 5	18	8	10		36
Year 6	12	9	11		32
<b>Total</b>	<b>112</b>	<b>64</b>	<b>74</b>		<b>250</b>

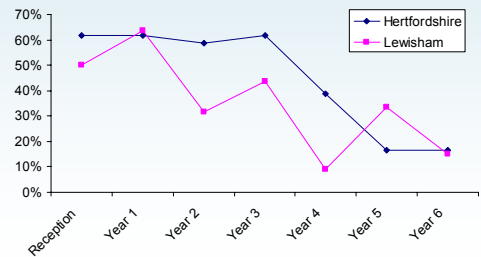
### Percentage of children who are usually accompanied on the journey to school

	Hertfordshire		Lewisham		Total
	Holy Family	Kilmorie	Perrymount		
Nursery	-	67	70		69
Reception	62	57	0		57
Year 1	62	33	75		63
Year 2	59	10	56		44
Year 3	62	56	29		52
Year 4	39	17	0		23
Year 5	17	25	40		25
Year 6	17	22	9		16
<b>Total</b>	<b>46</b>	<b>31</b>	<b>45</b>		<b>42</b>

### Percentage of children who are usually accompanied on the journey to school

	Hertfordshire	Lewisham	Total
Nursery	-	69	69
Reception	62	50	57
Year 1	62	64	63
Year 2	59	32	44
Year 3	62	44	52
Year 4	39	9	23
Year 5	17	33	25
Year 6	17	15	16
<b>Total</b>	<b>46</b>	<b>38</b>	<b>42</b>

### Percentage of children who are usually accompanied on the journey to school



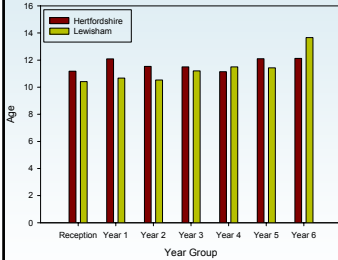
### Percentage of children who travel to school by car and by walking

	Walk			Car		
	Hertfordshire	Lewisham	Total	Hertfordshire	Lewisham	Total
Nursery	-	62%	62%	-	38%	38%
Reception	18%	86%	44%	82%	14%	56%
Year 1	15%	61%	37%	85%	39%	63%
Year 2	15%	75%	48%	85%	25%	52%
Year 3	33%	71%	57%	67%	29%	43%
Year 4	13%	69%	42%	87%	31%	58%
Year 5	17%	71%	46%	83%	29%	54%
Year 6	8%	82%	52%	92%	18%	48%
<b>Total</b>	<b>16%</b>	<b>72%</b>	<b>48%</b>	<b>84%</b>	<b>28%</b>	<b>52%</b>

### Mode and accompaniment on the journey to school

- The number of children who are accompanied to school drops as the children get older
- There is not a very large difference between Hertfordshire and Lewisham
- Mode to school is relatively stable across year group – within each location
- Location and school type plays a large role in determining children's mode of travel to school

### Age you would allow your child to travel to or from school alone



There is very little difference in the average age that parents predict they will allow their children travel to school alone

Average is around 11 years

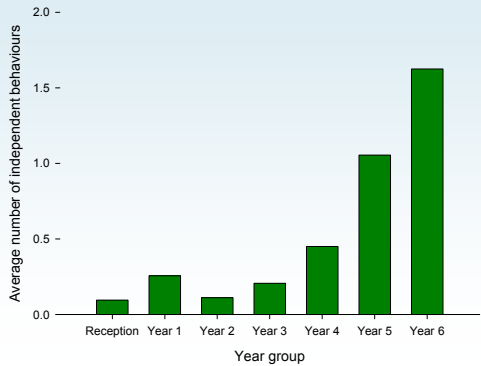
### Other independent behaviours

- Similar results are seen for
  - Travelling without an adult within a mile (11.4)
  - Travelling without an adult to friend’s houses (11.6)
  - Going out after dark without an adult (14)
  - Crossing main roads without an adult (11.2)
  - Travelling on the bus without an adult (11.9)
  - Cycling without an adult (12.6)
- All the average ages are above 11
- Many of the parents seem to see their child going to secondary school as an appropriate transition point

### Total independent behaviour score

- The independent behaviour score is how many of the following behaviours the child is allowed to do without an adult
  - Travelling to school
  - Travelling within a mile
  - Travelling to a friend’s houses
  - Going out after dark
  - Crossing main roads
  - Travelling on the bus
  - Cycling alone

### Average number of independent behaviours



### Which independent behaviours are children allowed to do?

- Children are most likely to be able to
  - Travel to a friend’s houses without an adult
  - Travel to school without an adult
  - Travel within a mile without an adult
  - Cross main roads without an adult
- Children are least likely to be able to
  - Go out after dark without an adult
  - Cycle on main roads without an adult
  - Use the bus without an adult

### Average number of independent behaviours

- Boys and girls show very similar independent behaviour scores
- Girls are slightly more independent overall

	Boys	Girls
Reception	0.3	0.0
Year 1	0.1	0.1
Year 2	0.1	0.1
Year 3	0.2	0.3
Year 4	0.5	0.5
Year 5	1.1	1.1
Year 6	1.5	1.6
Total	0.5	0.6

## Independent behaviours

- The average number of independent behaviours is low
- Around 70% of children do not take part in any of these independent behaviours
- Overall girls are more likely to be able to, or want to, travel alone to visit their friends than boys

## Parental concerns

- Parents were asked if they had considered any of the following factors when deciding on how their child should travel to school (and which they thought were critical)
  - Convenience
  - The distance that your child has to travel
  - Someone available to accompany your child
  - Your child's road safety skills
  - Spending time with your child
  - Your child's health and fitness
  - Concerns about road traffic danger
  - Concerns about stranger danger
  - Encouraging your child's independence
  - Possibility that your child will get lost
  - The amount your child has to travel
  - The risk of bullying by other children

## Parental concerns

Factor	Considered	Critical
Convenience	83%	48%
The distance that your child has to travel	75%	68%
Someone available to accompany your child	47%	27%
Your child's road safety skills	47%	28%
Spending time with your child	44%	19%
Your child's health and fitness	42%	21%
Concerns about road traffic danger	41%	28%
Concerns about stranger danger	32%	24%
Encouraging your child's independence	32%	15%
Possibility that your child will get lost	21%	19%
The amount your child has to carry	17%	6%
The risk of bullying by other children	16%	10%

## Parental concerns

- Concerns about the danger from strangers and road traffic come further down the list than might be expected
- The level of concern for most factors does not vary much with child's year group
- Concerns about stranger danger and bullying by other children do increase slightly as the children get older

## Parental concern by mode of travel to school

- The question specifically relates to the mode chosen for the school journey
- For parents who choose car **and** for parents who choose walk, distance and convenience are the most mentioned factors
- The rest of the top five most mentioned reasons are different depending on the mode chosen

## Parental concern by mode of travel to school

- When choosing the car - The next most important factors are
  - road safety skills
  - traffic danger
  - stranger danger
- When choosing walk - the next most important factors are
  - health and fitness
  - time spent with the child
  - someone to accompany the child

## Parental concerns and children's independent behaviour

It might be expected that a parent's concerns will reduce their children's independent behaviour

But

For nearly every factor

- parents who had considered it
- or who considered it as critical

had children with higher independent behaviour scores

## Average independent behaviour score

	Critical	Not critical
Convenience	0.60	0.47
The distance that your child has to travel	0.56	0.46
Someone available to accompany your child	0.63	0.48
Your child's road safety skills	0.79	0.44
Spending time with your child	1.03	0.43
Your child's health and fitness	0.85	0.45
Concerns about road traffic danger	0.80	0.44
Concerns about stranger danger	0.56	0.50
Encouraging your child's independence	1.03	0.44
Possibility that your child will get lost	0.60	0.50
The amount your child has to carry	0.55	0.51
The risk of bullying by other children	0.59	0.51

## Conclusions

- More walking and fewer car trips leads to higher overall physical activity
- Few parents allow their children out to travel unaccompanied
- If a child is not allowed to do a particular behaviour already, it is likely they will have to wait until secondary school
- There is a link between a parent's concerns and a child's independence

## Further information:

- CAPABLE website  
[www.casa.ucl.ac.uk/capableproject/](http://www.casa.ucl.ac.uk/capableproject/)
- E-mail: [james@transport.ucl.ac.uk](mailto:james@transport.ucl.ac.uk)
- Phone: 020 7679 7872