

HOW DOES SOCIO-ECONOMIC STATUS AFFECT THE USE OF CRS AND SEAT BELTS? PRELIMINARY RESULTS FROM A STUDY IN ATHENS

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INTRODUCTION

Socioeconomic status (SES) seems to have a clear relation to several health issues, with traffic injury risk being one of them. The aim of this study is to examine the link between SES and the use of restraint systems for young children and the adults accompanying them, on their everyday commute, to the nursery school.

The study is based on a statistical analysis of data, from 734 children, collected from municipal nursery schools, in three suburbs of Athens: (i) Fyli (low SES area), (ii) Ilioupoli (medium SES area) and (iii) Kifissia (high SES area). In order to understand the effect of SES on traffic injury risk of young children, it is useful to examine the SES of the family both in relation to the SES of the area of residence as well as separately. This seems to be reasonable as there are environmental risk factors prevailing in areas of differentiated SES but also expressions of behaviour linked to individual's SES, as well as the SES of the area.

POSITIVE FACTORS FOR CHILD CAR SEAT USE

- young children
- driver seat belt use
- parent driver
- small families

NEGATIVE FACTORS FOR CHILD CAR SEAT USE

- parental false impression about safety equipment
- low SES
- 3 or more passengers in vehicle
- parental risk perception

METHODOLOGY

A questionnaire was developed and administered to a sample of pre-schoolers' parents living in three suburbs of Athens Greece. Three key elements are examined: (a) the child transport practices, the obstacles parents face and their preferences, (b) the child-parent interaction when commuting together, and (c) the parent's perceived danger compared to the actual level of exposure to danger of the child during their journey.

RESULTS

Demographic data of respondents and general population census data

Demographic characteristics		Current sample Fyli	Current sample Ilioupoli	Current sample Kifissia	Fyli (census* 2011)	Ilioupoli (census* 2011)	Kifissia (census* 2011)	Greece (census* 2011)
Gender	Female	77%	80%	73%	50%	53%	53%	49%
	Male	23%	20%	27%	50%	47%	47%	51%
Age group*	3% 18-25 years	2% 18-25 years	0% 18-25 years	14% 20-29 years	11% 20-29 years	10% 20-29 years	12% 20-29 years	12% 20-29 years
	48% 26-35 years	43% 26-35 years	35% 26-35 years	17% 30-39 years	16% 30-39 years	15% 30-39 years	15% 30-39 years	15% 30-39 years
	43% 36-45 years	49% 36-45 years	57% 36-45 years	15% 40-49 years	16% 40-49 years	16% 40-49 years	15% 40-49 years	15% 40-49 years
	2% 46-55 years	5% 46-55 years	5% 46-55 years	11% 50-59 years	13% 50-59 years	14% 50-59 years	13% 50-59 years	13% 50-59 years
	0% 56-65 years	1% 56-65 years	0% 56-65 years	8% 60-69 years	10% 60-69 years	12% 60-69 years	10% 60-69 years	10% 60-69 years
Marital status	Married	97%	93%	89%	48%	49%	51%	50%
	Single	1%	3%	1%	44%	40%	51%	39%
	Divorced	2%	3%	7%	2.8%	4%	4%	3%
Household income	<10,000 euro	20%	15%	12%	N/A	Average: 23,889 euro (2010)	N/A	Average: 20,202 euro (2010)
	10,000-15,000 Euro	20%	17%	13%				
	15,000-25,000 Euro	28%	36%	22%				
	25,000-50,000 Euro	15%	19%	30%				
	>50,000 Euro	1%	13%	12%				
Highest level of education	Tertiary education mother	30%	46%	67%	11% (of persons over 19)	29% (of persons over 19)	48% (of persons over 19)	21% (of persons over 19)
	Tertiary education father	16%	32%	66%				
Number of persons per household	2	2%	3%	4%	3,18 persons (average)	2,45 persons (average)	2,61 persons (average)	2,55 persons (average)
	3	23%	22%	26%				
	4	46%	53%	53%				
	5	25%	19%	14%				
	5+							

Demographic characteristics of respondents' children

	Fyli	Ilioupoli	Kifissia	
Gender	Female	51%	45%	44%
	Male	49%	54%	56%
Age group (years)	1-2	1%	4%	0%
	2-3	2%	12%	12%
	3-4	38%	27%	39%
	4-5	59%	38%	47%
	5+	0%	14%	0%
	5+			

Odds Ratios (OR) use of driver seat belt and CRS in relation to SES of area

(a) Use of driver seat belt in Fyli vs Ilioupoli vs Kifissia

	OR	95 th % CI	P
Ilioupoli vs Fyli	1.849	1.211 to 2.823	0.004
Kifissia vs Fyli	3.281	2.071 to 5.198	<0.0001
Kifissia vs Ilioupoli	1.785	1.151 to 2.767	0.010

(b) Use of CRS in Fyli vs Ilioupoli vs Kifissia

	OR	95 th % CI	P
Ilioupoli vs Fyli	1.849	1.211 to 2.823	0.004
Kifissia vs Fyli	3.281	2.071 to 5.198	<0.0001
Kifissia vs Ilioupoli	1.785	1.151 to 2.767	0.010

Odds Ratios (OR) use of driver seat belt and CRS in relation to SES of family

(a) Use of driver seat belt in relation to parent's tertiary education, all areas

	OR	95 th % CI	P
Mother Tertiary Education	1.503	0.841 to 2.687	0.169
Father Tertiary Education	1.843	0.926 to 3.665	0.081

(b) Use of CRS in relation to parent's tertiary education all areas

	OR	95 th % CI	P
Mother Tertiary Education	1.761	1.219 to 2.542	0.003
Father Tertiary Education	1.982	1.312 to 2.995	0.001

(c) Use of driver seat belt and CRS in relation to family's income<10000, all areas

	OR	95 th % CI	P
Driver seat belt	0.674	0.312 to 1.457	0.316
CRS	0.750	0.459 to 1.225	0.250

Odds Ratios (OR) use of driver seat belt and CRS in relation to each other and care giver

(a) Use of CRS in relation to use of driver seat belt all areas

	OR	95 th % CI	P
Use of driver seat belt vs no use	9.332	5.022 to 17.339	<0.0001

(b) Use of CRS in relation to person accompanying child all areas

	OR	95 th % CI	P
Exclusively parents	1.927	1.021 to 3.639	0.043
Exclusively woman driver vs exclusively man driver	1.839	0.942 to 3.589	0.074
Both gender driver vs exclusively man driver	1.109	0.543 to 2.264	0.777

(c) Use of driver seat belt in relation to person accompanying child, all areas

	OR	95 th % CI	P
Exclusively parents	1.861	1.213 to 2.856	0.004
Exclusively woman driver vs exclusively man driver	1.367	0.899 to 2.078	0.144
Both gender driver vs exclusively man driver	1.111	0.691 to 1.788	0.664

CONCLUSIONS

Findings of this study show a very low seat belt and child restraint system use for the everyday travel to nursery school. There are several reasons for these results.

Firstly, parents are not well informed about the correct use of the restraint systems and the lifesaving effects of their use. Children might sometimes experience discomfort in the car seat and parents prefer to let them unrestrained than argue with them. Besides most children in our study are over 3 years old and younger than 5 which is the age that children could (considering their size) graduate to booster seat. Instead, parents stop using CRS altogether. Parents might be using restraint systems for their child but not for nursery school travel. The child restraint use law is in place in Greece since 1997, but -due to the fact that there is no strict enforcement- it is quite common for parents not to use restraint systems, especially for short distances.