



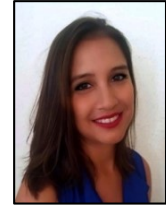
UNIVERSIDAD
DE GRANADA



Estudio sobre patrones de desplazamiento a la escuela en España en los últimos años

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Research group PROFITH “PROmoting FITness and Health through physical activity”



Study I

Active Commuting to School among Spanish preschool children between 2013 and 2017: A longitudinal study

(in process)



Study II









Active commuting to school among 36,781 Spanish children and adolescents: A temporal trend study



(first review)

ORIGINAL ARTICLE

Active commuting to school among 36,781 Spanish children and adolescents: A temporal trend study

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Cycle and Walk to School



DEP2016-75598-R





A minimum of 60 minutes of moderate-to-vigorous physical activity for young people per day.

(Physical Activity Guidelines Advisory Committee, 2008; 2018)



(Guthold et al., 2020)



(Henriques-Neto et al., 2020)



(Ruiz-Ariza et al., 2015)



(Wang et al., 2017)



(Wilson, Wilson, & Krizek, 2007)



(Mueller et al., 2017)



Study I

Study design and sample

- ✓ Cross-sectional data about the modes of commuting to school
- ✓ 5 databases from different researches
- ✓ Spanish preschool children (2-5.99 years old)
- ✓ Collected data: from 2013 to 2017.

Study II

Study design and sample

- ✓ Cross-sectional data about the modes of commuting to school
- ✓ 34 databases from different researches
- ✓ Spanish children and adolescents (6-18 years old)
- ✓ Collected data: from 2010 to 2017.



Procedure

Study I and II

Methods

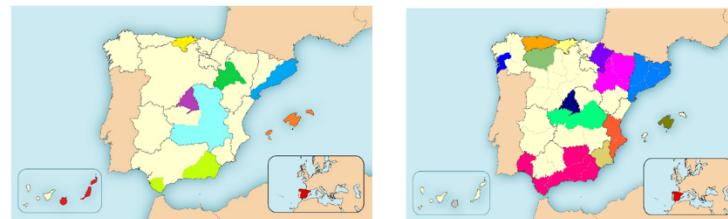
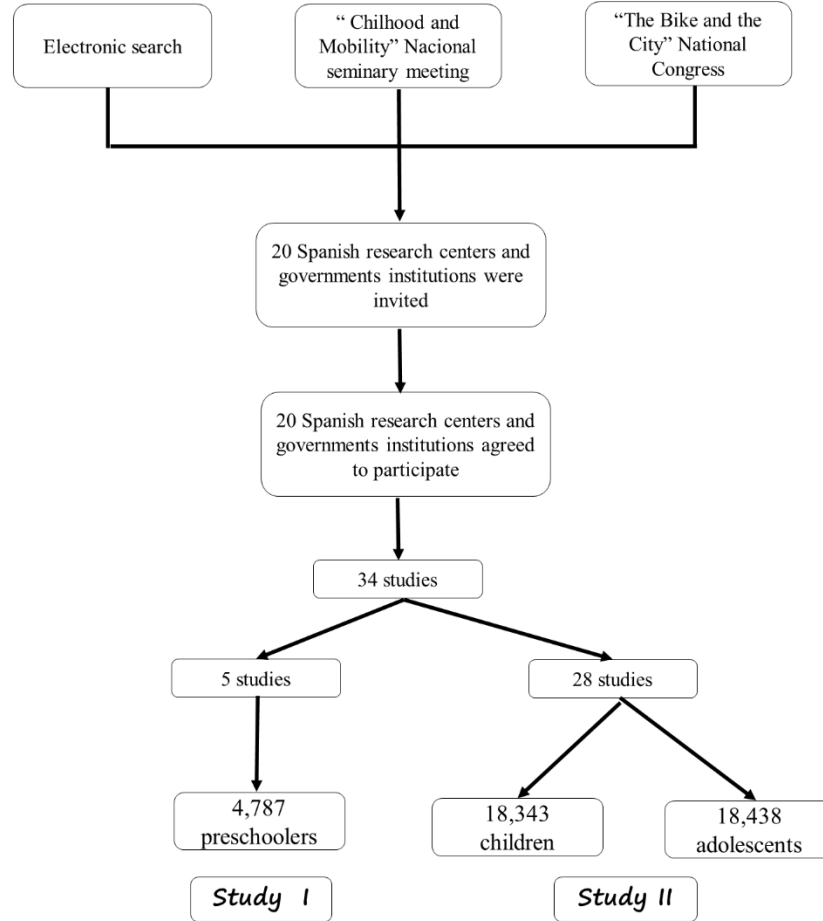


Figure 1. Flow chart of the studies participants



Procedure

Study I

Methods

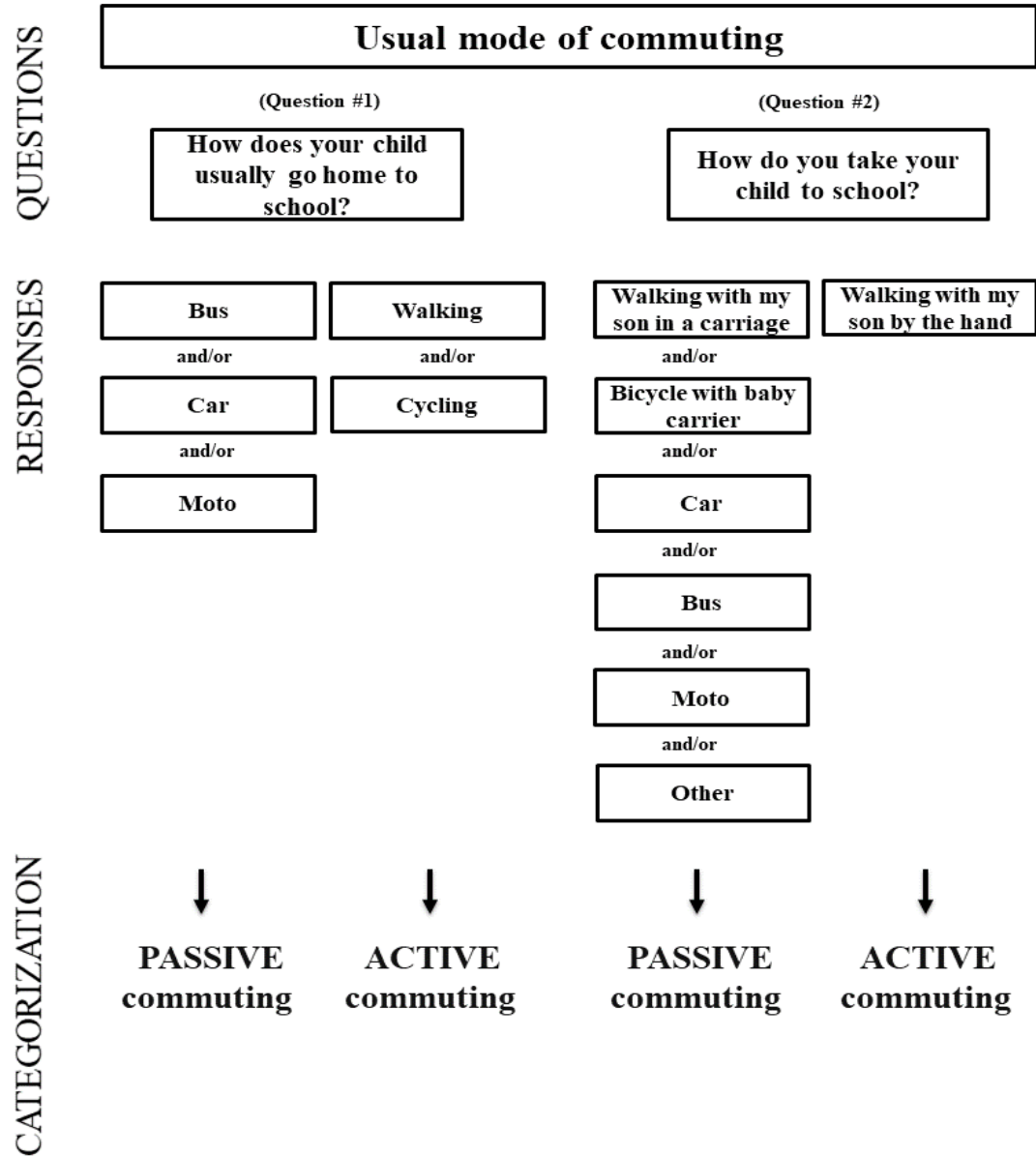


Figure 2. Categorization of the self-reported questions of modes of commuting to/from school, into active and passive commuting modes



Mode of commuting to and from school

Study II

QUESTIONS

Frequency of commuting

Usual mode of commuting

(Question #1)

(Question #2)

(Question #3)

(Question #4)

Each mode of commuting (days per week)

Active mode of commuting (days per week)

Each mode of commuting (travels per week)

RESPONSES

Walking and/or Cycling and/or Non-motorised scooter → Active commuting

School bus and/or Public bus and/or Train/metro and/or Taxi/ moto/ car → Passive commuting

CATEGORIZATION

< 4 out of 10 active travels/week
< 2 out of 5 active travel days/week
< 1 out of 2 active travels/day

≥ 4 out of 10 active travels/week
≥ 2 out of 5 active travel days/week
≥ 1 out of 2 active travels/day

PASSIVE

ACTIVE

Methods

Figure 3. Categorization of the self-reported questions of modes of commuting to/from school, into active and passive commuting modes



Statistical analysis

Study I and II

Multilevel logistic regressions

Level 1: Individual

Level 2: City

ACS

Survey years

Age

Density

Cities income

Methods

STATA[®]



Study 1

*Results,
Discussion and
conclusions*



Table 1. Odds ratio of ACS with survey years for preschool adjusting by age and gender.

Preschoolers	n=4,787	OR	95% CI	p value
Survey year				
2017	353	1	Reference	
2016	198	0.47	0.72 - 3.05	0.428
2015	634	0.58	0.92 - 3.63	0.559
2014	2867	0.53	0.83 - 3.36	0.498
2013	735	0.4	0.63 - 2.52	0.329
Age		1.1	1.02 - 1.20	0.019
Gender		1.07	0.95 - 1.21	0.249

OR= Odd Ratio

IC= Confidence Interval



Study 1

The rates of ACS in Spanish preschoolers did not change significantly during the 2013-2017 period.

It could be the influence and impact of educational programs on lifestyles.





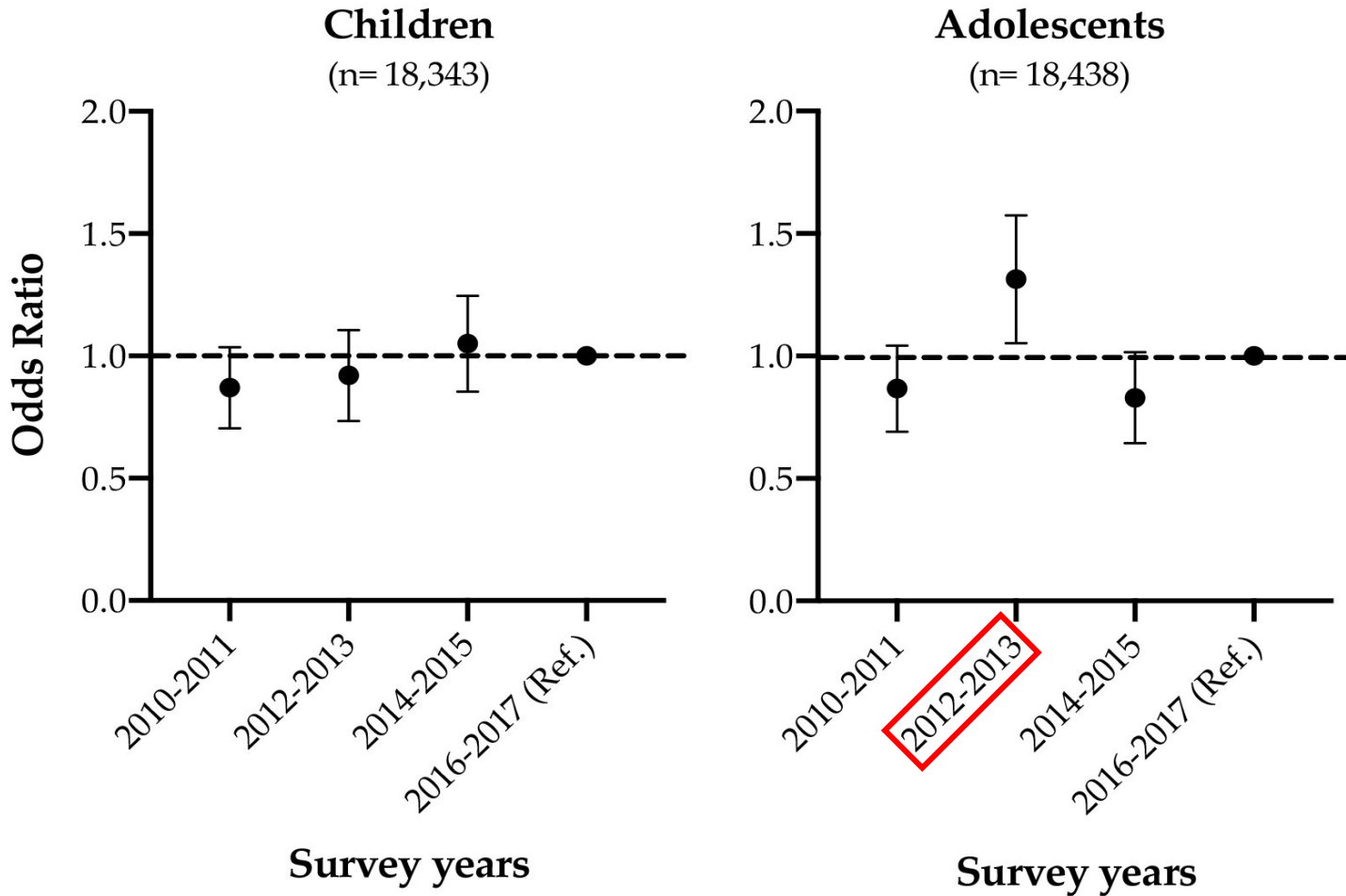
Study II

*Results,
Discussion and
conclusions*



Study II

Figure 4. Associations between ACS and time period for children and adolescents adjusted by age and gender.



All odds ratios were not significant, except the period 2012-2013 in adolescents (p=0.009)

Results



Discussion and conclusion

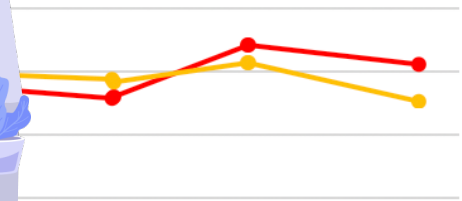
Study II

The rates of ACS in Spanish children and adolescents did not change significantly during the 2010-2017 period, except a sporadic increase in the rates of ACS in adolescents in 2012-2013. Additionally, the economic crisis did not affect ACS rates significantly in children and adolescents.



Granada

DIPUTACION DE GRANADA



Children
Adolescents



Limitations and strengths



The use of data from nationally **non-representative sample**, the lack home-to-school distance data, and the lack of independent analysis of each mode of travel.



A diversity of questions used to self-report modes of commuting to and/or from school, the lack of individual-level socioeconomic status, differences in sample size



The inclusion of a large sample of Spanish preschoolers, children and adolescents from different locations within a country



To examine in detail the associations between ACS and time period using multilevel analyses.

Acknowledgements



Up & Down Study



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granadaciclocivica.es
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