

CASPER

CHILD ADVANCED SAFETY PROJECT FOR EUROPEAN ROADS

Use and misuse, sociological approach of child safety

Cultural Comparison: France, Spain, Italy

***COVER Workshop November 29th/30th
Munich, Germany***

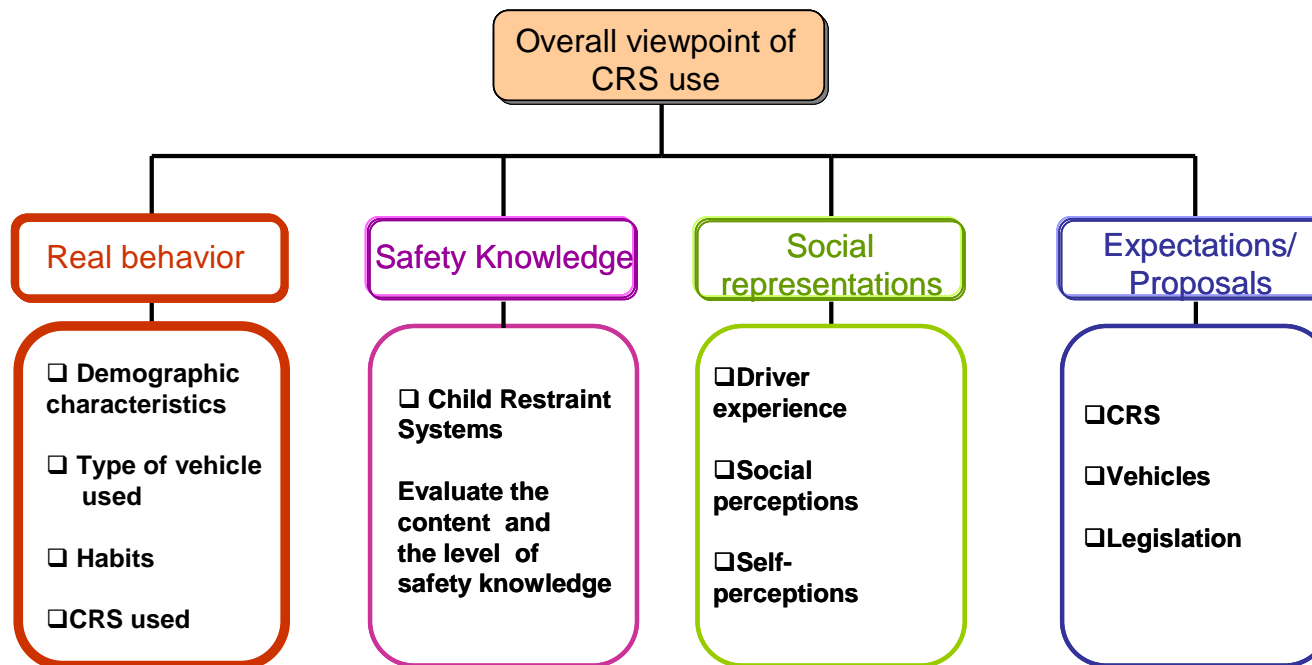
Anita Fiorentino - ELASIS





Overview

- ▶ The approach
- ▶ The main topics: the questionnaire structure



- ▶ First comments and evaluation



The Approach

- ▶ Using the **same questionnaire** a cultural comparison has been made between: **Italy, France and Spain**
- ▶ The questionnaires divulgation and data analysis were made by:



- ▶ The questionnaire was **totally anonymous**: the data collected was treated in the strictest confidence and will only be used in research that explores how child safety in vehicles can be improved.



The questionnaires

FRANCE



Distributed questionnaires	Filled in questionnaires
580	232 (Returns :38%)

ITALY

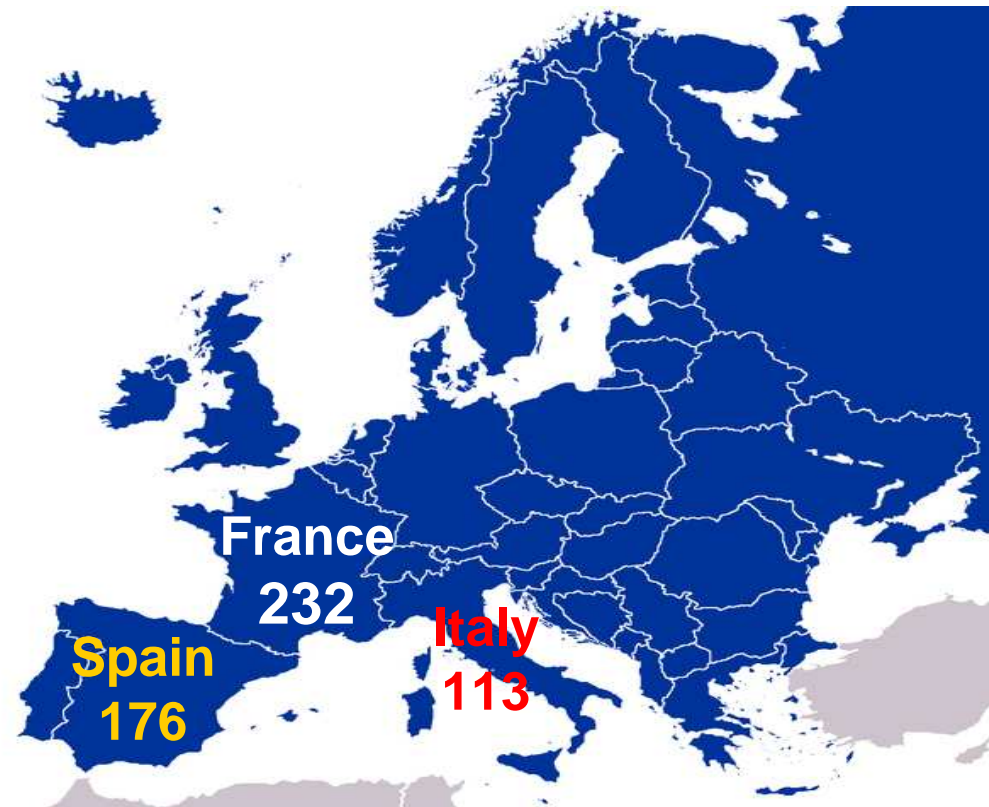


Distributed questionnaires	Filled in questionnaires
350	113 (Returns :32%)

SPAIN

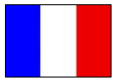




Distributed questionnaires	Filled in questionnaires
176 204 cases	176 (Returns :100%)



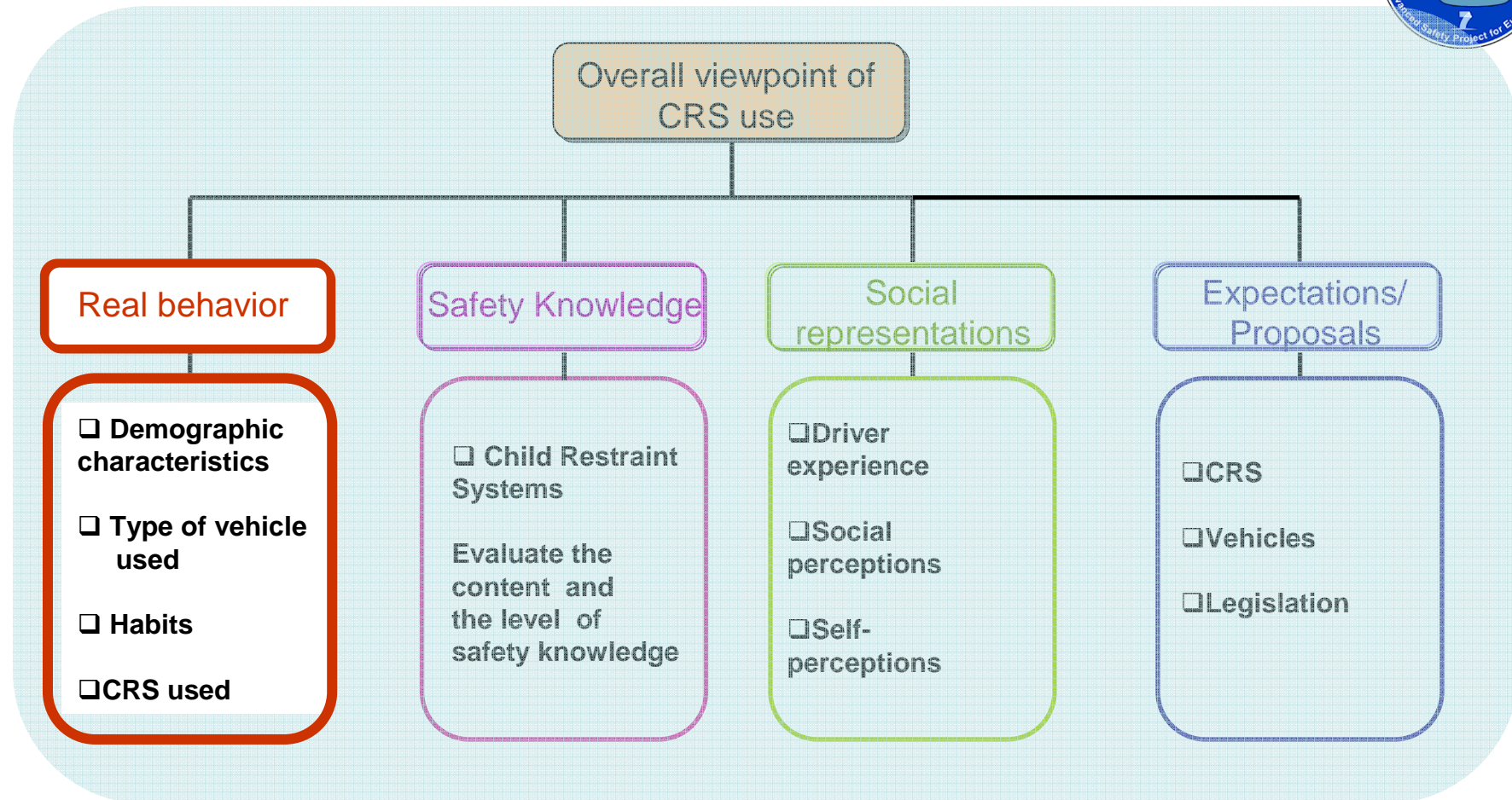


The questionnaires distribution: Where and when?

	Filled questionnaires	When	Where		Geographic context		
					Metropolitan area	Regional city	Town and rural area
FRANCE 	232	1st December 2009 1st April 2010	Nursery Schools	Primary Schools	19%	36.5%	44.5%
35%			65%				
ITALY 	113	February-September 2010	Child exhibition	E-mail	60.5%	19.1%	20.4%
40%			60%				
SPAIN 	176	February- May 2010	Sant Joan de Deu child Hospital		100%	-	-
100%							



Real behavior





Real Behaviour: the parent's demographic characteristics

Italy



Sample: 113 parents.
 65%= male, 35%= female
 97% living as couple

France

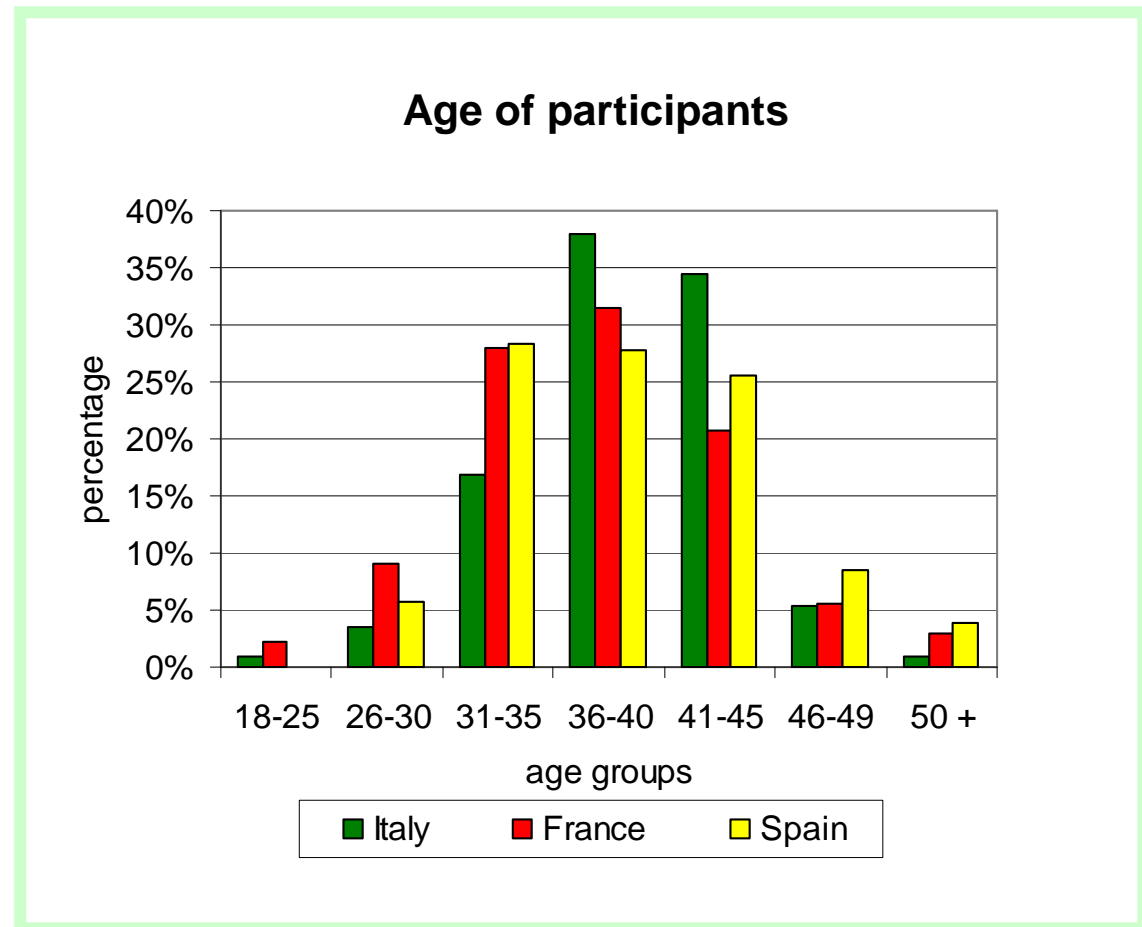


Sample: 232 parents.
 32%= male, 68%= female
 82% living as couple

Spain



Sample: 176 parents.
 39%= male, 61%= female
 98% living as couple



Social Safety Demand - Cultural compa

Real Behaviour: the parent's characteristics

Italy



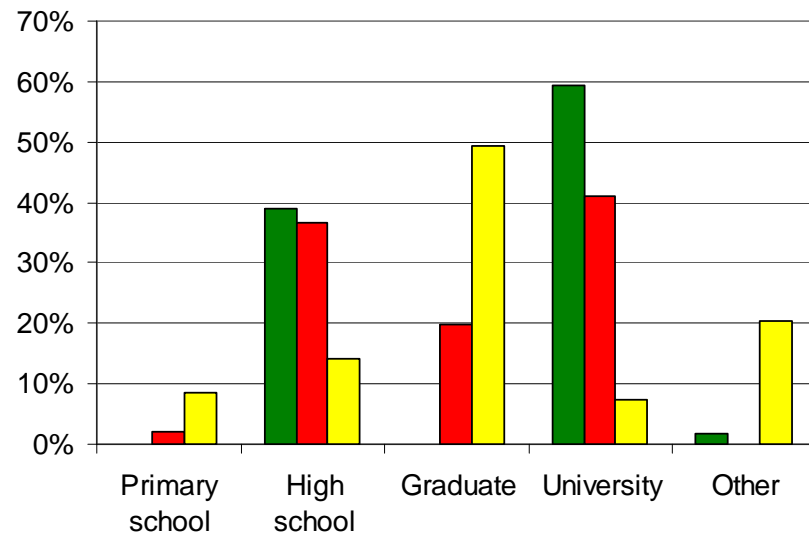
Sample: 113 parents.
65%= male
64% had a car accident

France



Sample: 232
68%= female
49% had a car accident

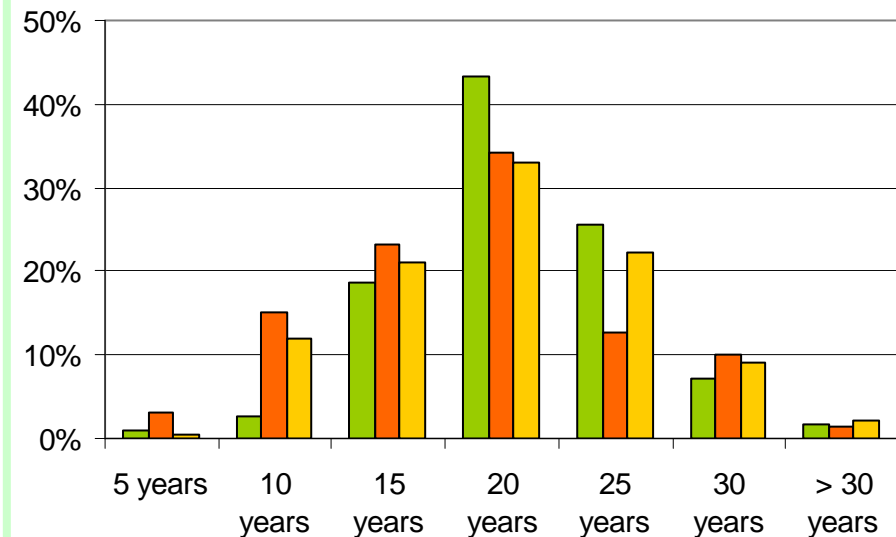
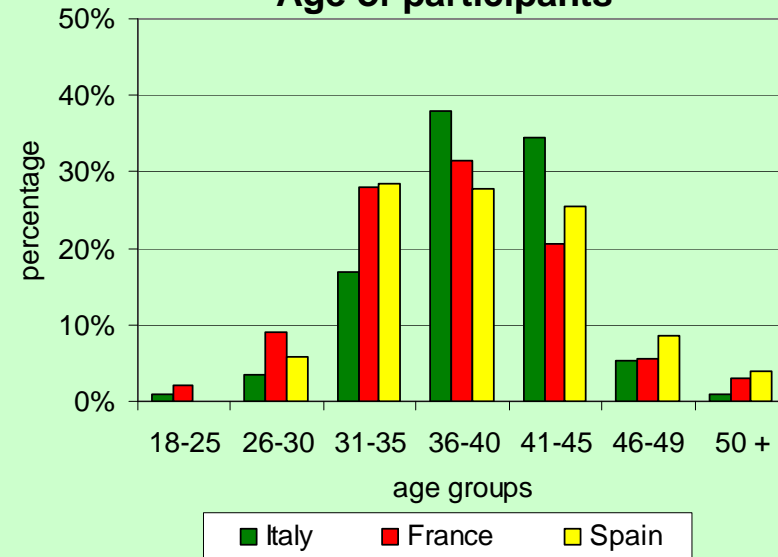
Educational level



Cultural level High



Age of participants





Real Behaviour: the parent's characteristics

Italy



Sample: 113 parents
188 children.
97% living as couple

France



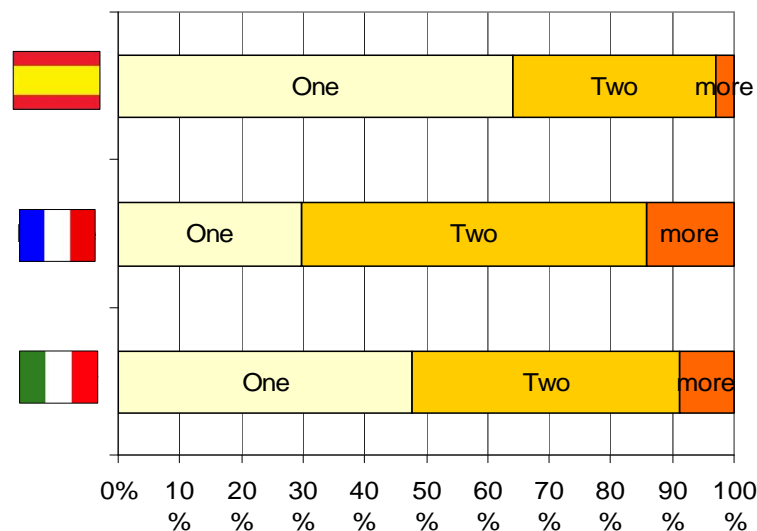
Sample: 232 parents.
454 children
82% living as couple

Spain

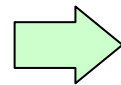


Sample: 176 parents.
245 children
98% living as couple

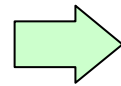
Number of children at home



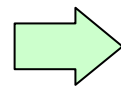
Average number of children per family



1,39



1,94



1,66

Demographic growth: national data

Spain 1.3 child per family

France 1.9 child per family

Italy 1.4 child per family
(South Italy 1,6)



Real Behaviour: the children characteristics

Italy



Sample: 188 children
50%= male, 50%= female

France

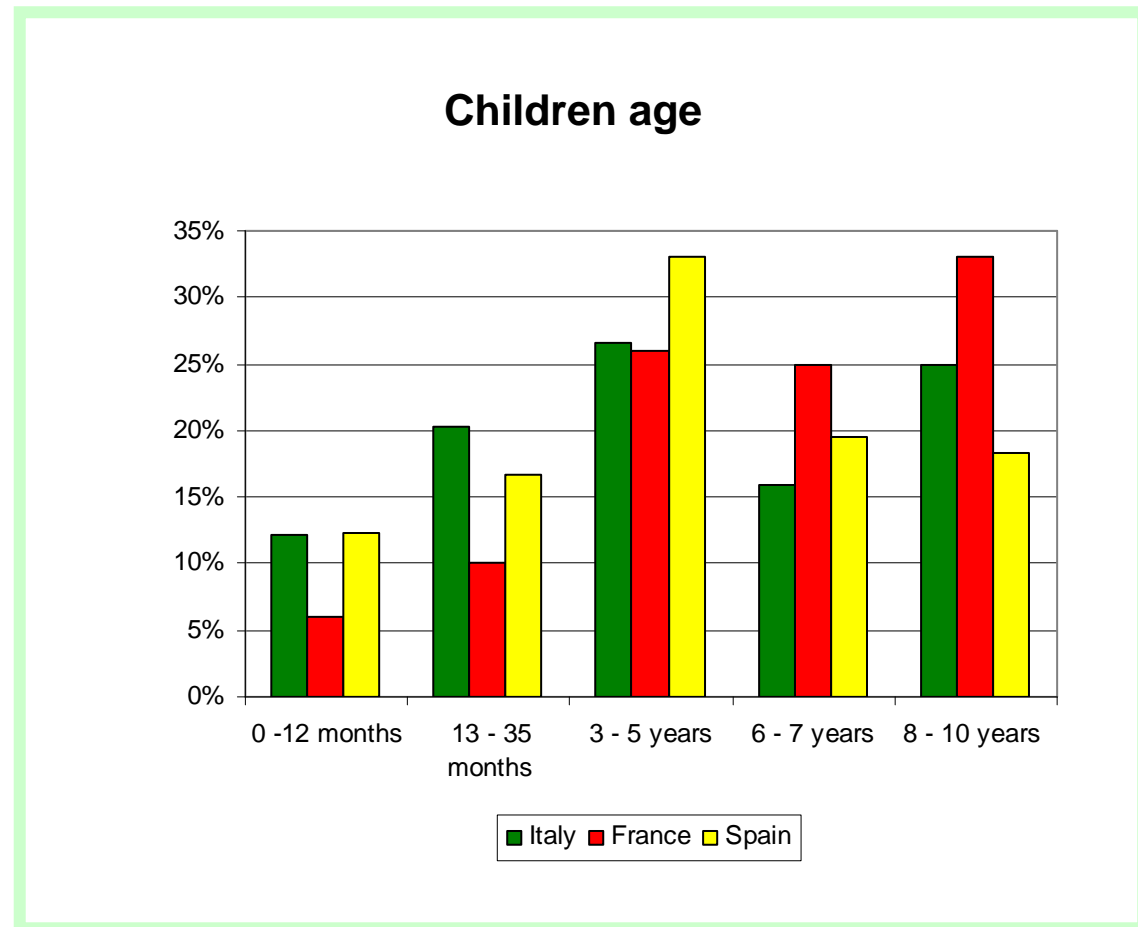


Sample: 454 children
54%= male, 46%= female

Spain



Sample: 245 children
56%= male, 44%= female





Real Behaviour: The vehicle and trips

Italy



Sample: 113 parents.
65%= male
79% child safety is priority

France



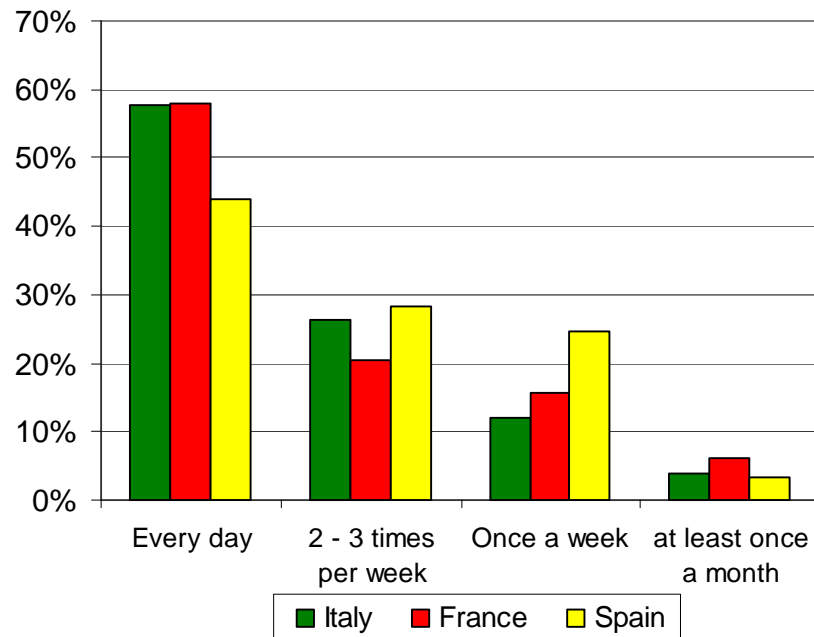
Sample: 232 parents.
68%= female
78% child safety is priority

Spain

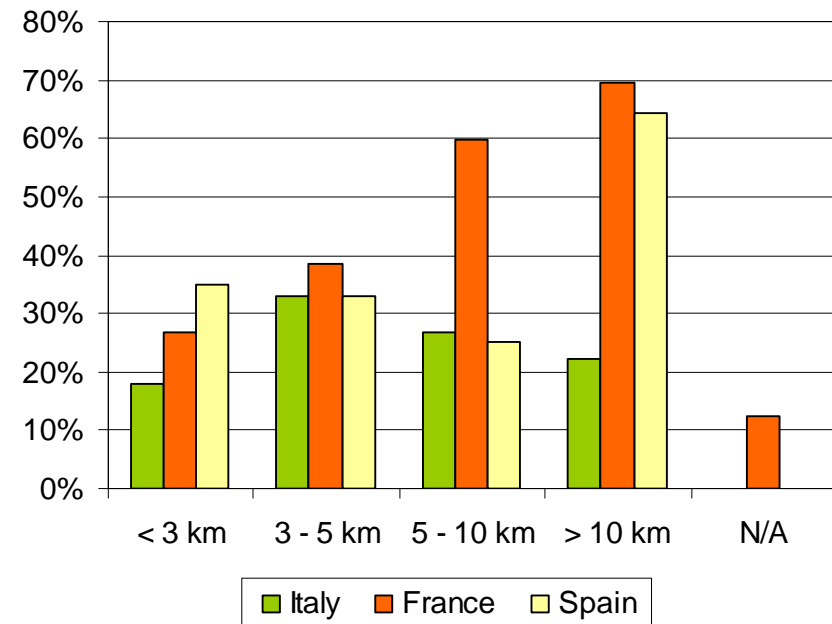


Sample: 176 parents.
61%= female
99% child safety is priority

Frequency of driving with children



Driving distance with children

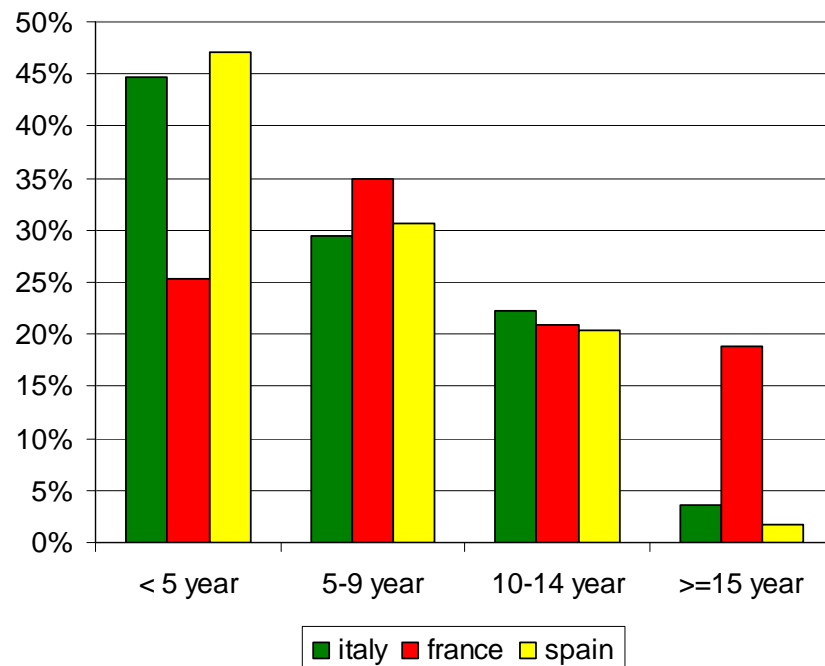


The driving distance respects the geographic area where there were done the surveys



Real Behaviour: The vehicle and trips

The age of car



Italy:

- average age of car = 6 years
- New cars (2009-2010) 22%

France

- average age of car = 8 years
- New cars (2009-2010) 4%

Spain

- average age of car = 6 years
- New cars (2009-2010) 13%

National data (2009)

Italy: average life of a car = 7,5 years

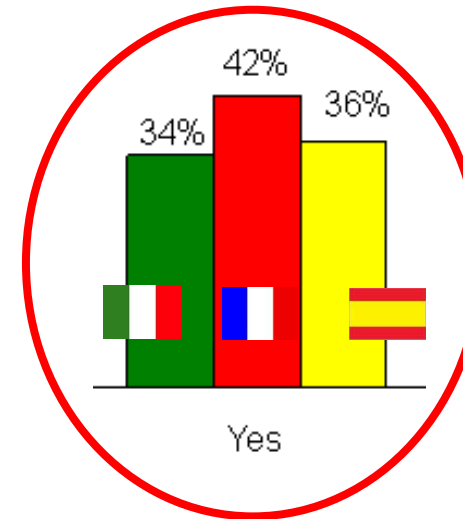
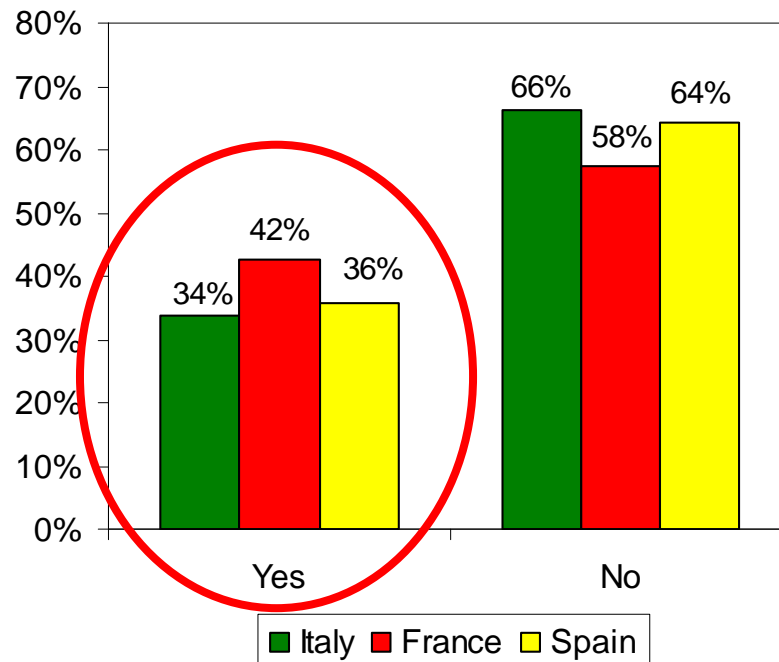
France: average life of a car = 8.2 years

Spain: average life of a car = 6,8 years



Real Behaviour: The vehicle and trips

Buying a new car at baby birth



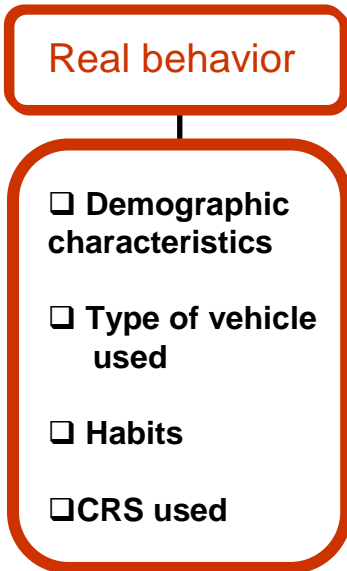
- ITALY** (34% answered “yes”)
 - ▶ 70% more space
 - ▶ 11% security

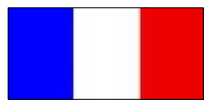


- FRANCE** (42% answered “yes”)
 - ▶ 78% more space
 - ▶ 7.5% security

- SPAIN** (36% answered “yes”)
 - ▶ 95% more space



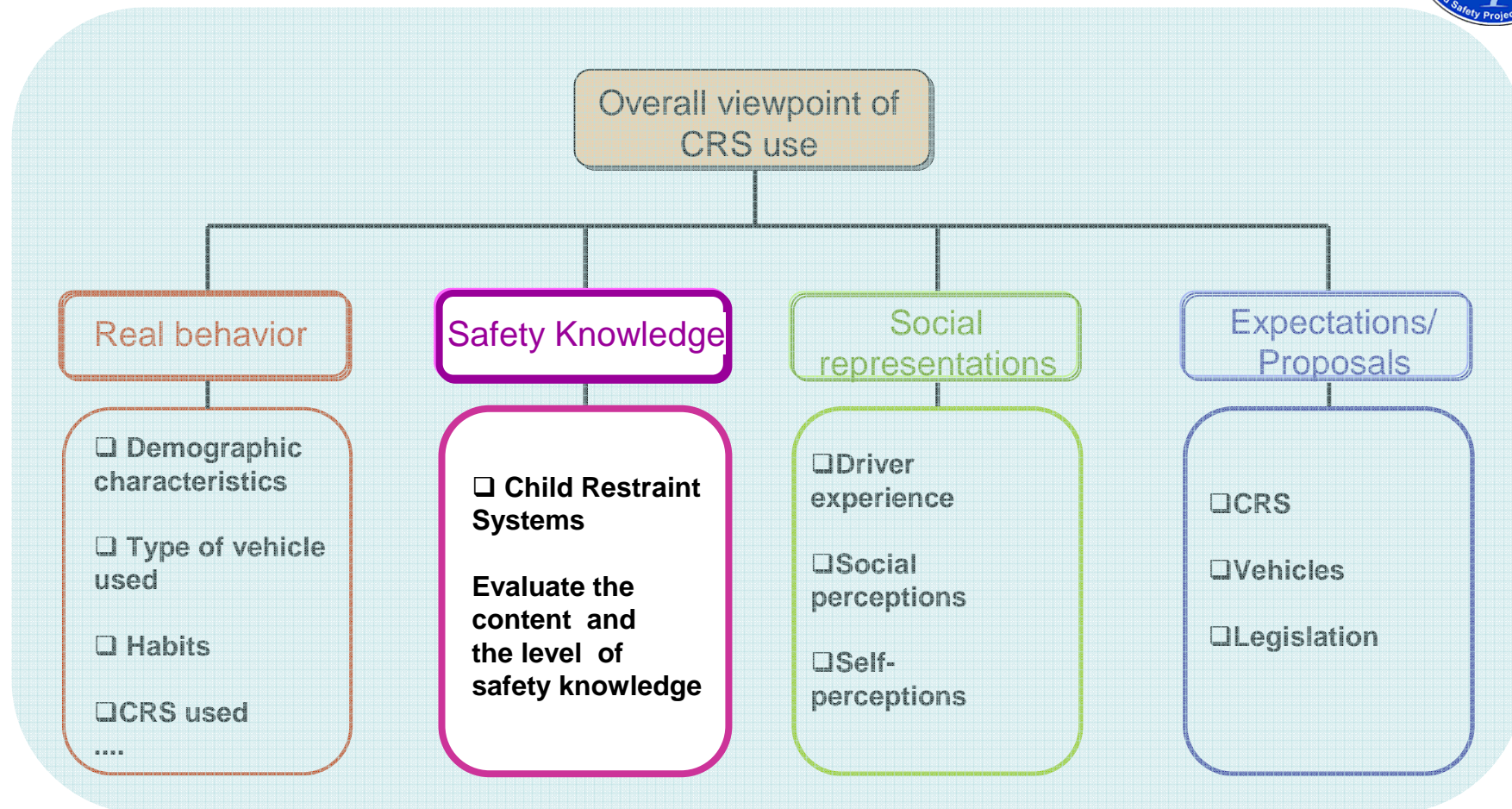
Real behavior



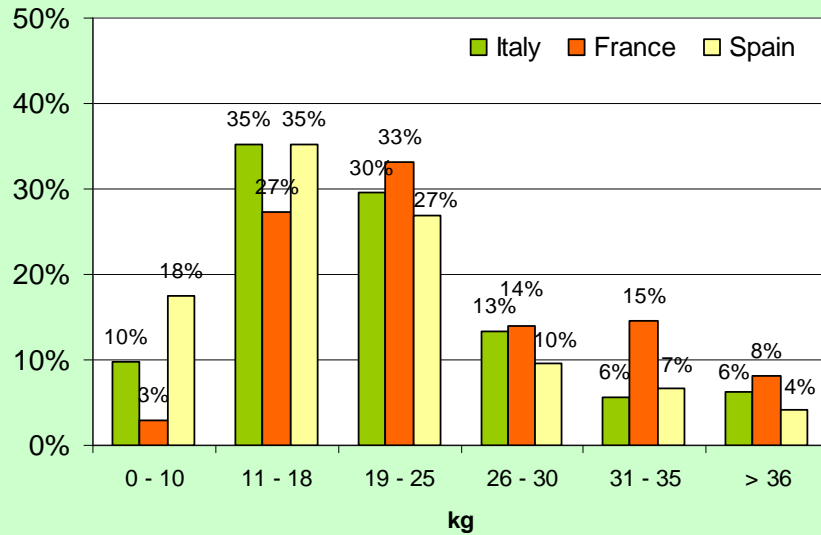
			
✓ Gender	Female	Female	Male
✓ Age;	38 years	37 years	41 years
✓ Family composition;	2 child	1 child	1-2 child
✓ Driving license years	18 years	17 years	20 years
✓ age car	8 years	6 years	6 years
✓ Involving in road accidents	No/yes	No	Yes
✓ Frequency of driving with children	Every day	Every day	Every day



Safety Knowledge

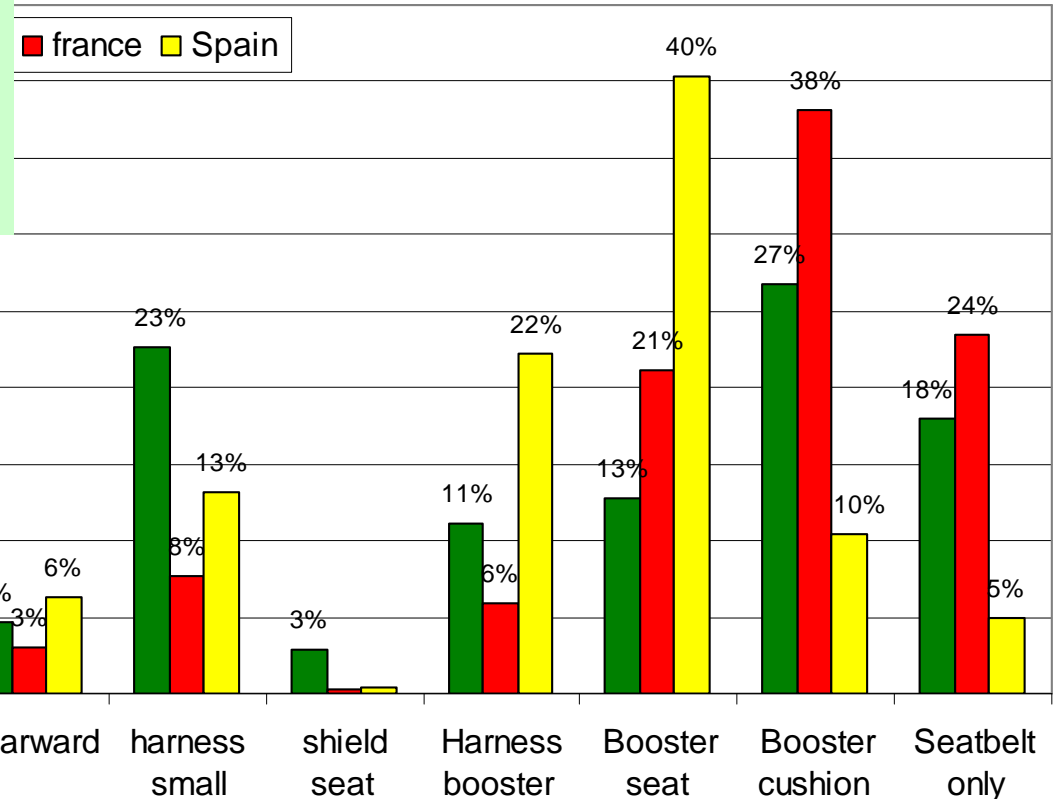


Children weight



Comparison

CASPER



France



Sample: 234 parents
68%= female

CRS use:

67% for safety
3% compulsory

Spain



Sample: 176 parents
61% female

CRS use:

74% for safety
26% compulsory

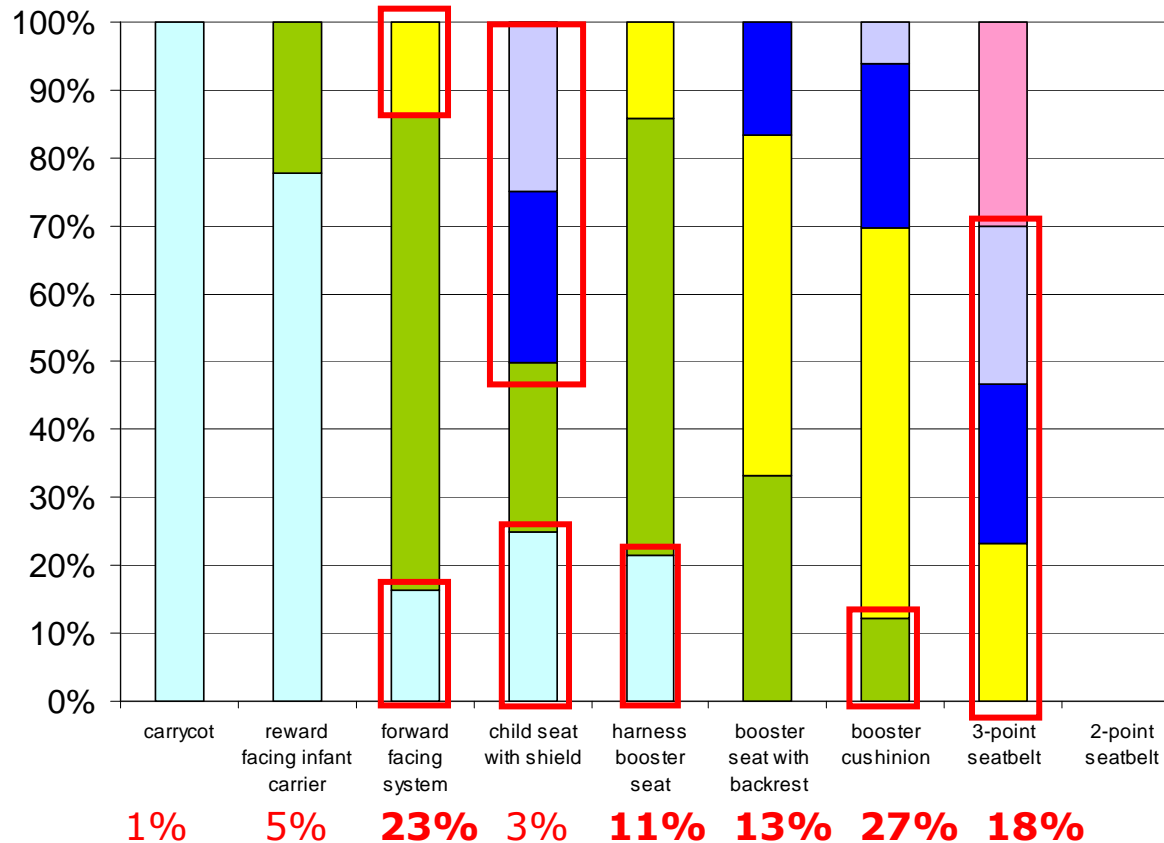
It seems there isn't good relationship with children weight and children CRS



Safety Knowledge: Child Restraint Systems: Children weight & CRS used



Legend for weight ranges:
 <10 kg (light blue) 10-18 kg (green) 19-25 kg (yellow) 26-30 kg (dark blue) 31-35 kg (light purple) >35 kg (pink)



Typical Misuse

Forward facing system

- ▶ 16% has weigh 0-9 kg
- ▶ 14% has weigh 19-25 kg

Child seat with shield

- ▶ 25% has weigh 0-10kg
- ▶ 25% has weigh 26-30 kg
- ▶ 25% has weigh 31-35 kg

Harness booster seat

- ▶ 21% has weigh 0-9 kg

Booster cushion

- ▶ 12% has weigh 10-18 kg

3 point seat-belt

- ▶ 23% has weigh 19-25 kg
- ▶ 23% has weigh 26-30 kg
- ▶ 23% has weigh 31-35 kg

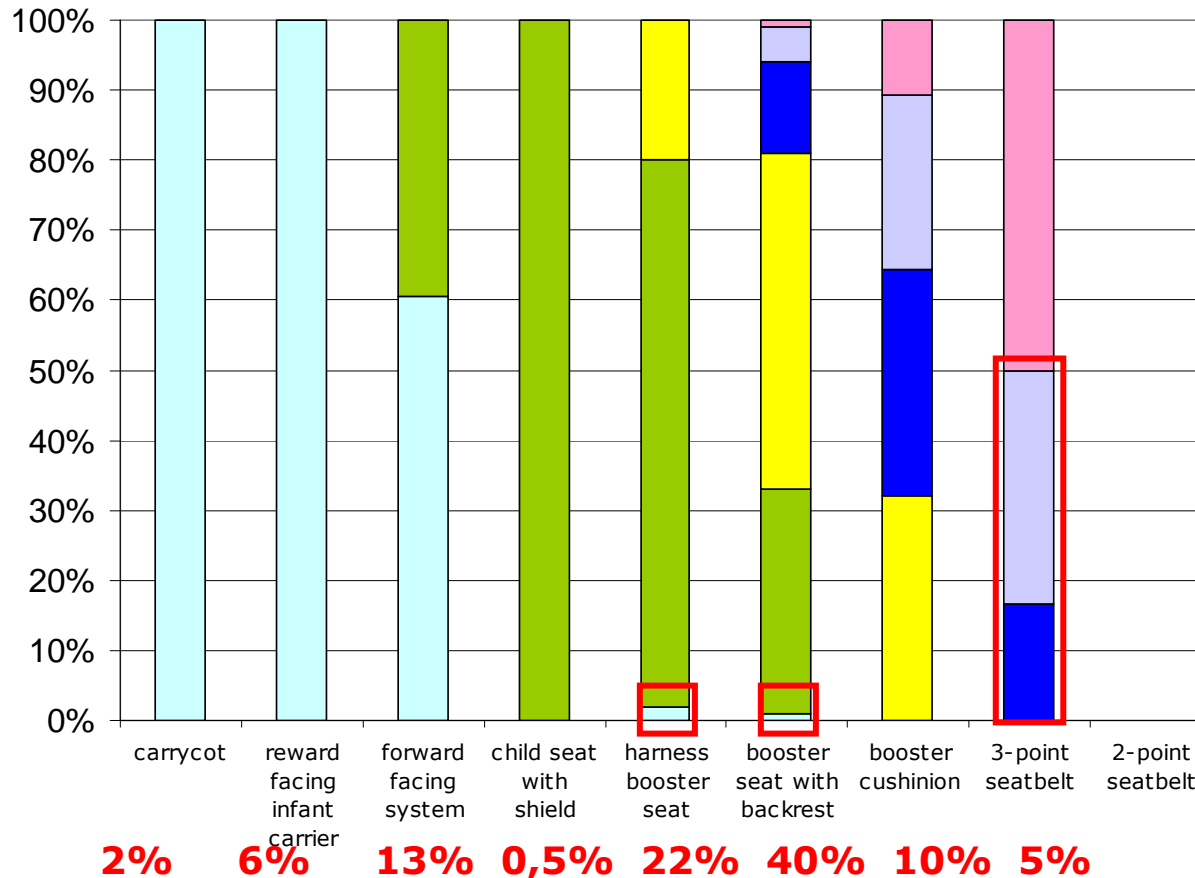
35% of children do not have the right CRS according to their weight in Italy



Safety Knowledge: Child Restraint Systems: Children weight & CRS used



■ <10 kg
 ■ 10-18 kg
 ■ 19-25 kg
 ■ 26-30 kg
 ■ 31-35 kg
 ■ >35



Typical Misuse



Harness booster seat

▶ 2% has weigh 0-9 kg



Booster seat with backrest

▶ 1% has weigh 0-9 kg



3 point seat-belt

▶ 17% has weigh 26-30 kg

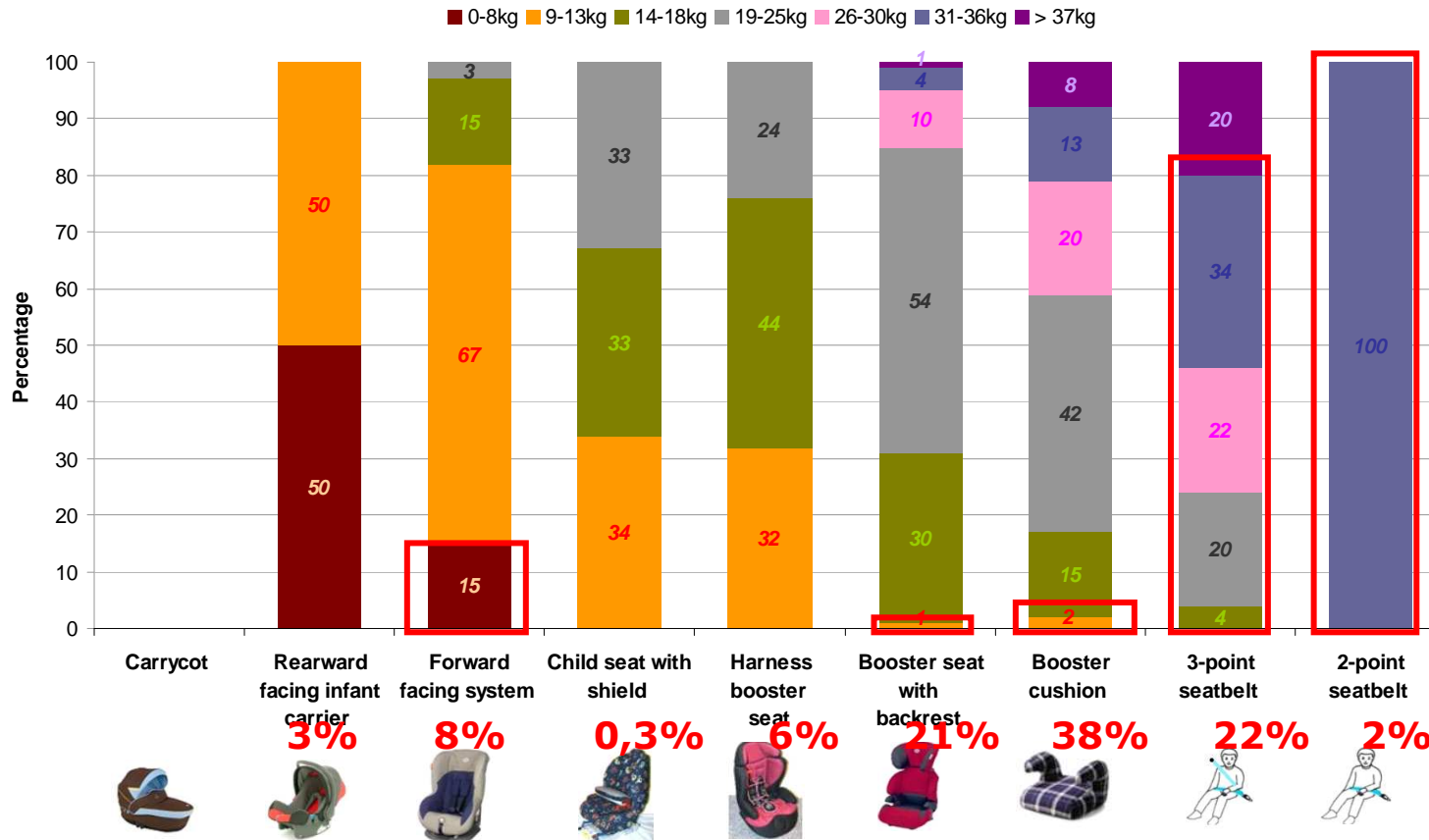
▶ 33% has weigh 31-35 kg



3% of children do not have the right CRS according to their weight in Spain



Safety Knowledge: Child Restraint Systems: Children weight & CRS used



Misuse

Forward facing System:

▶ 15% has weigh 0-9 kg

Booster seat with backrest:

▶ 1% has weigh 9-13 kg

Booster cushion:

▶ 2% has weigh 9-13 kg

3 point seat belt:

▶ 4% has weigh 14-18 kg

▶ 20% has weigh 19-25 kg

▶ 22% has weigh 26-30 kg

▶ 34% has weigh 31-35 kg

2 point seat belt:

▶ 100% has weigh 31-35 kg

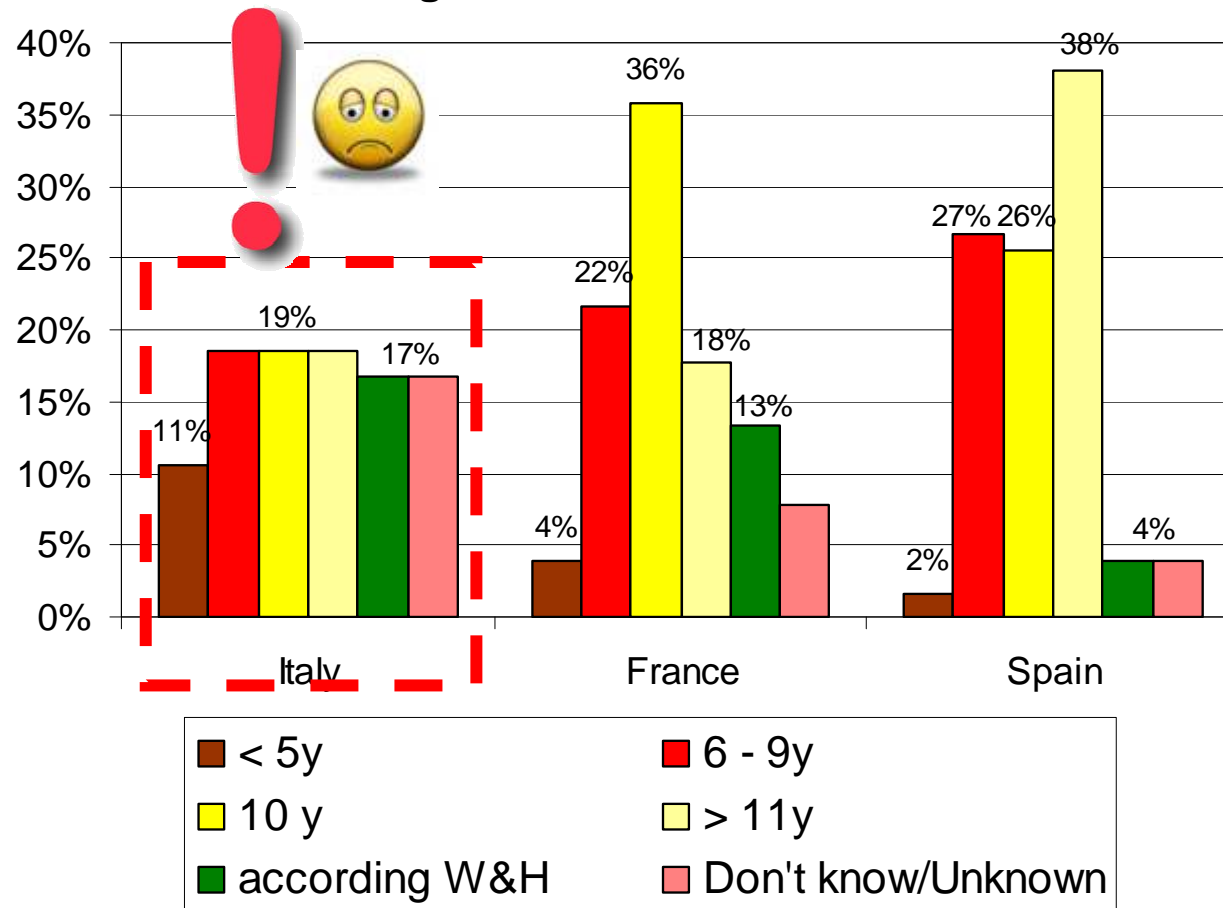
29% of children do not have the right CRS according to their weight in France





Safety Knowledge: Child Restraint Systems

Age of use the seatbelt

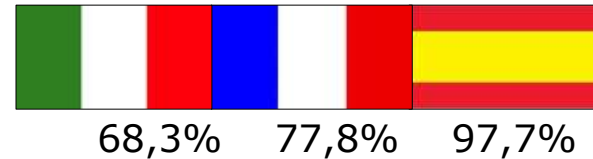




Safety Knowledge: Child Restraint Systems:

Circumstances under which participants would use the seat belt only (%)

Never:



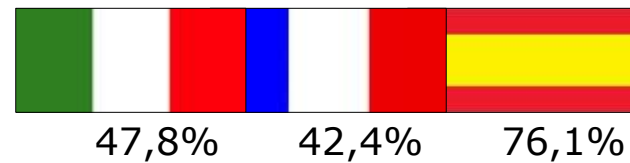
Yes:	Italy	France	Spain
When you drive during the night	10,6%	13,8%	0%
When your children sleep	15,9%	14,7%	0%
When your children don't want use the CRS	22,1%	12,9%	0%
When your children are with other children and play	11,5%	14,7%	0%
When the trip is short	33,6%	23,7%	4,5%
When your children travel in another car	26,5%	25,4%	15,3%
When there are enough restraint systems for all	37,2%	28,9%	0,6%
When children have an argument	10,6%	9,9%	0%
When there is traffic jam	13,3%	12,9%	0%
Other, ... please specify	0%	7%	0%



Safety Knowledge: Child Restraint Systems:

Mistakes in fixing the CRS to the car (%)

No mistakes:



	Italy	France	Spain
Not correctly fixed	15,0%	4,3%	2,8%
Infant seat in front of a air bag	6,2%	0,9%	0,0%
Wrong direction of CRS	0,0%	0,9%	0,0%
Not anchoring	2,7%	2,6%	0,0%
Incorrect path of thr CRS	11,5%	10,4%	0,0%
Don't know	13,3%	20,8%	0,0%
Other	3,5%	1,7%	21,0%
unknown	0%	16%	0%

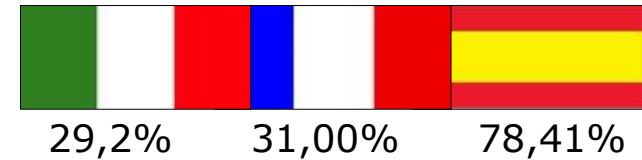
Difficulty to fix



Safety Knowledge: Child Restraint Systems

Mistakes in installing the child in the CRS(%)

No mistakes:



	Italy	France	Spain
The seat doesn't suit the weight and/or the height of the child	3,5%	4,8%	2,8%
→ Harness is not snug	19,5%	0,0%	4,0%
Routing the harness straps incorrectly	8,0%	0,0%	3,4%
The child is propped up on something you add for more comfort	8,0%	2,4%	0,0%
When the child fastens themselves, you don't check the installation	11,5%	10,5%	1,7%
Don't know	19,5%	25,7%	0,0%
→ Other	0,9%	9,0%	9,7%
unknown	0,0%	16,7%	0,0%

Space; difficulty to close the harness

Safety Knowledge: Child Restraint Systems

SAFETY KNOWLEDGE: French & Italy results

- ▶ A child cannot be in a forward-facing seat, no matter the age
- ▶ The choice of a child restraint system is made regarding the weight, the height and the age
- ▶ We cannot use a non European Union safety approved child seat
- ▶ A child under 10 years of age cannot be **considered as a half seat**
- ▶ **Transporting children under 10 years in the front of the car, except if they are in a rearward-facing seat, is forbidden**
- ▶ Routing the harness straps behind the child or under the arms is not secure
- ▶ **Isofix**
- ▶ A child can be in forward-facing seat if they weight more than 9Kg
- ▶ We have to deactivate the airbag when a rearward-facing infant seat is put in the front of cars



French Results	Italian Results
93% knew	80% knew
93% knew	91% knew
76% knew	69% knew
73% knew	51% did not know
70% knew	70% did not know
77% knew	80% knew
60% did not know	70% knew
66% did not know	51% knew
44% did not know	81% knew



Safety Knowledge

Safety Knowledge

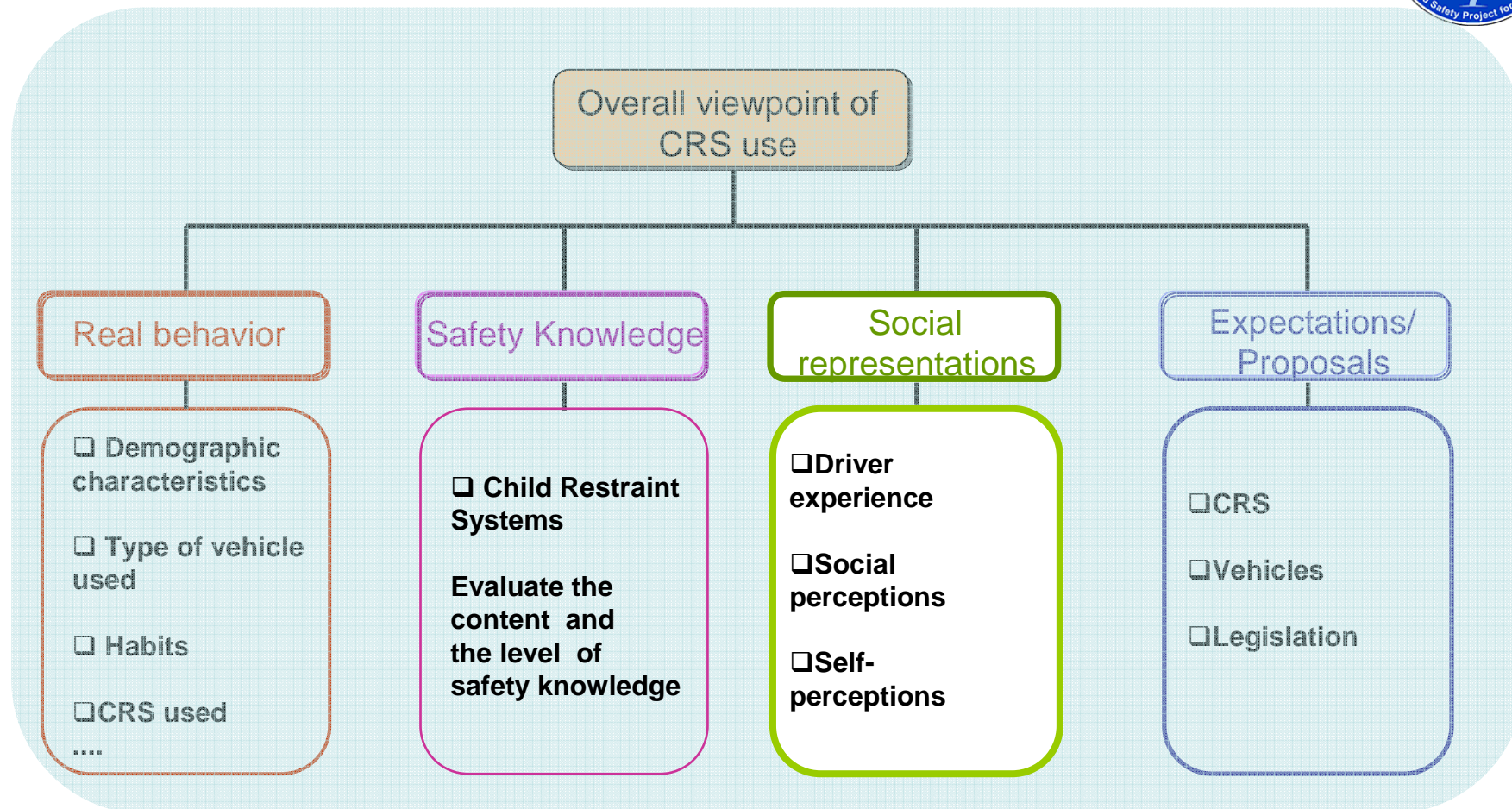
Child Restraint Systems

Evaluate the content and the level of safety knowledge

✓ CRS use	yes	yes	yes
✓ Mistakes in fixing CRS	yes	no	yes
✓ Mistakes in installing child	yes	no	yes
✓ Age for use seatbelt	10y	11 y	7y
✓ Level of safety knowledge			



Social representations





Social representations: Me as driver

Italy



Sample: 113 parents.
65%= male

82,3% use **ALWAYS** seat belt
83,2% feel able to avoid danger

France



Sample: 232 parents.
68%= female

91,1% use **ALWAYS** seat belt
76,7% feel able to avoid danger

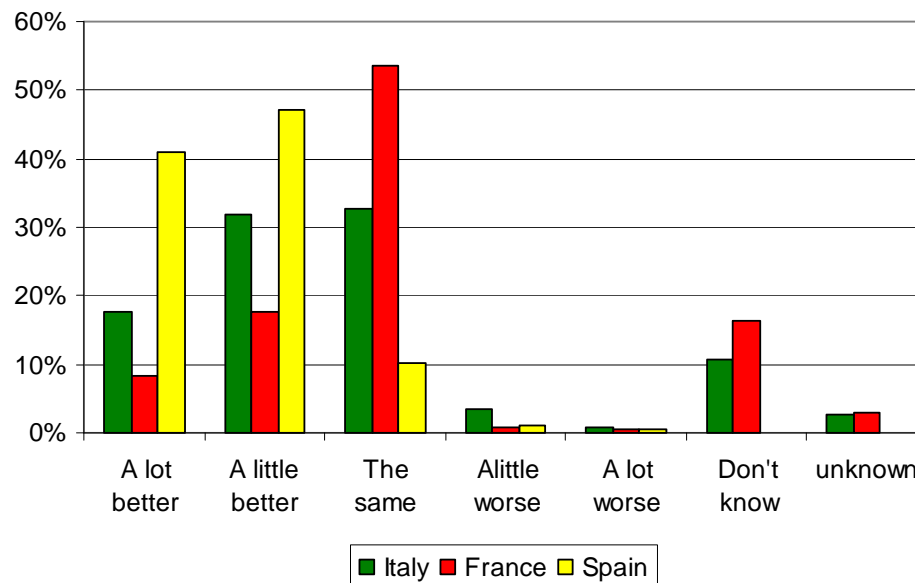
Spain



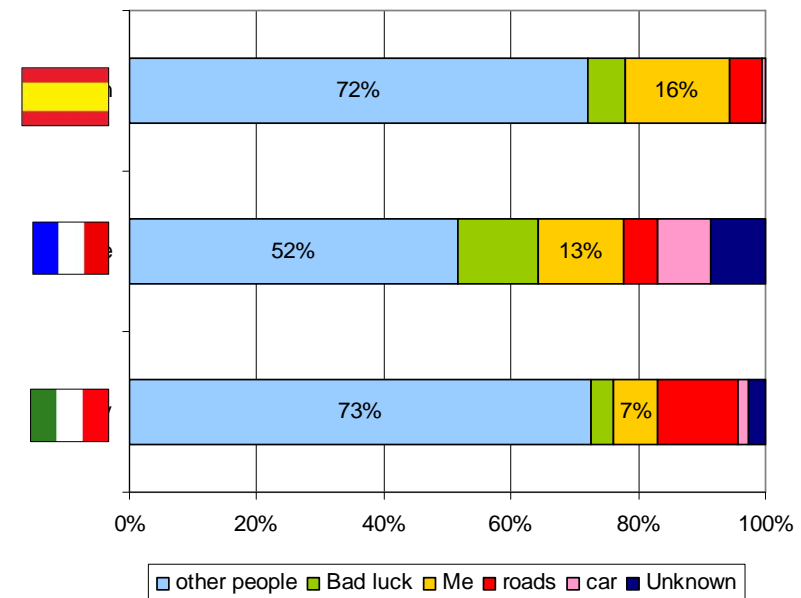
Sample: 176 parents.
61%= female

97,8% use **ALWAYS** seat belt
85,2% feel able to avoid danger

Driving quality in comparison with other drivers



Main cause of road accident





Social representations: Me as driver

Italy



Sample: 113 parents.
65%= male

France

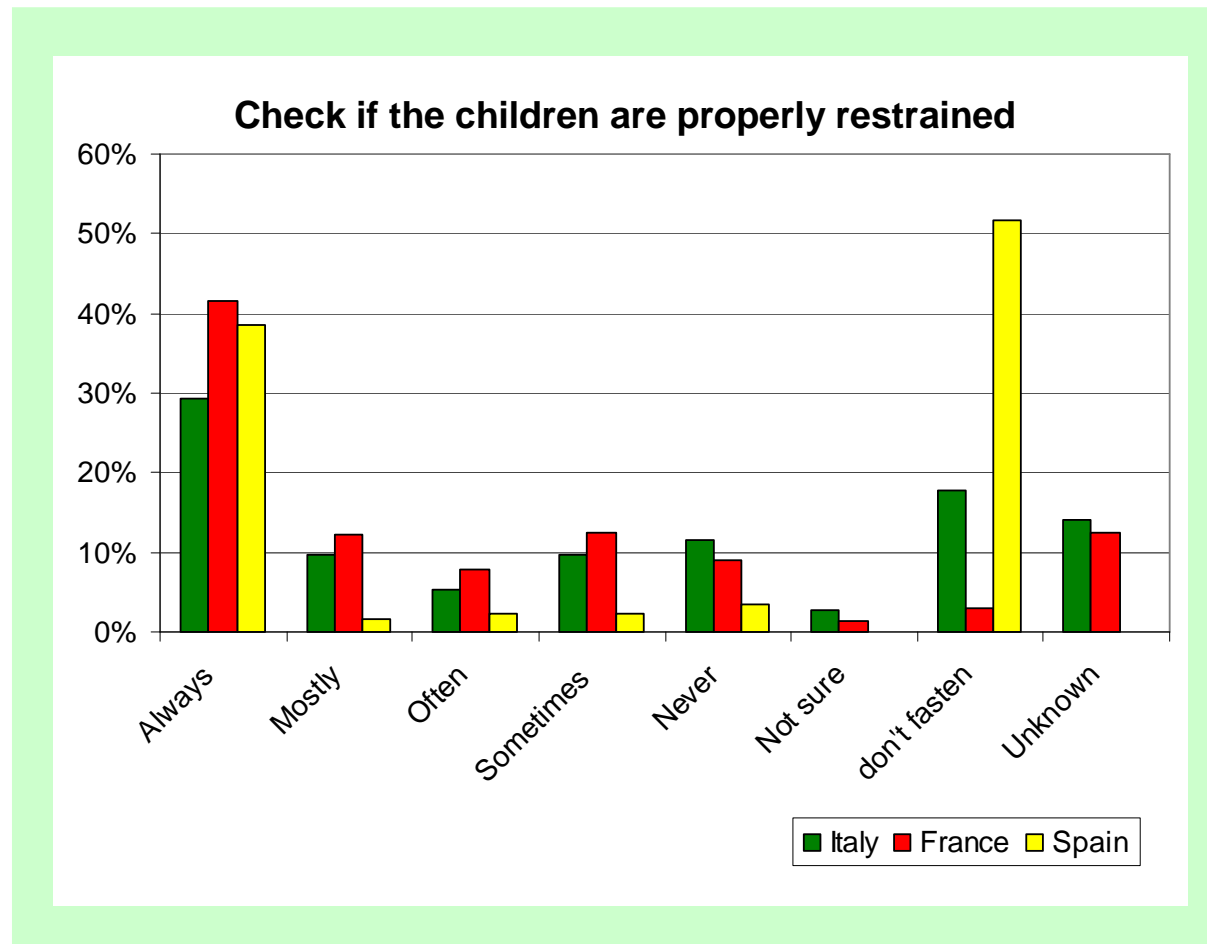


Sample: 232 parents.
68%= female

Spain



Sample: 176 parents.
61%= female





Social representations: Me as driver

Italy



Sample: 113 parents.
65%= male

France



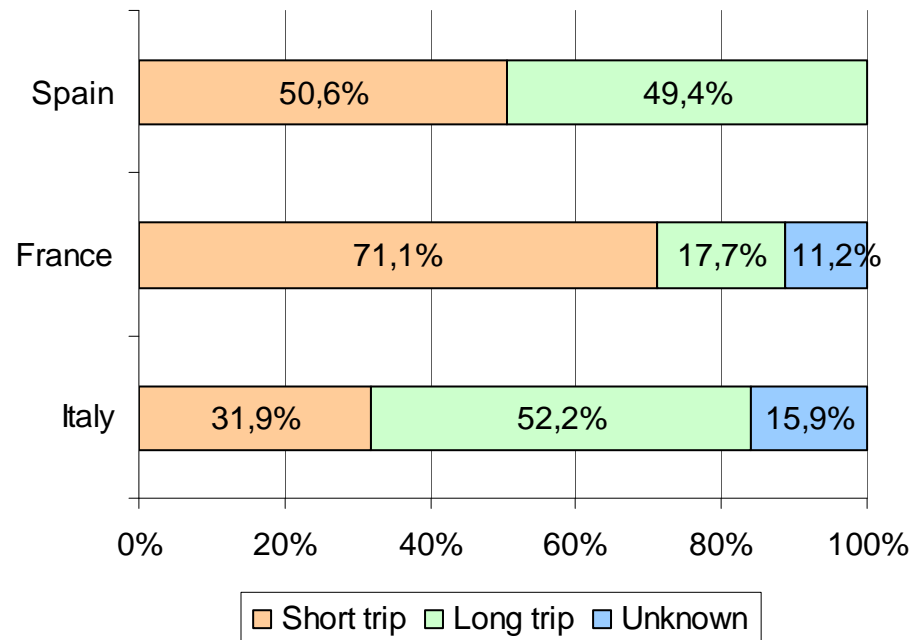
Sample: 232 parents.
68%= female

Spain

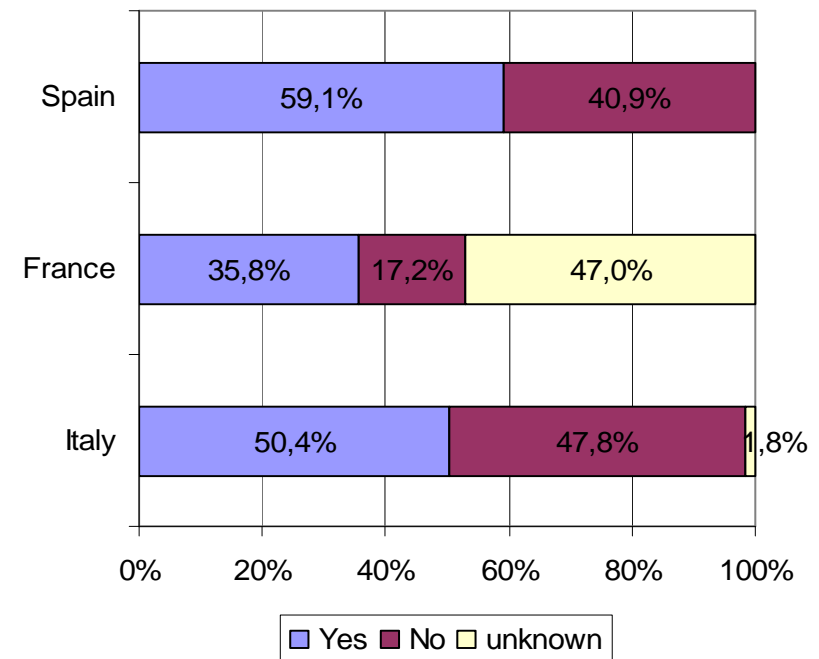


Sample: 176 parents.
61%= female

The risk of accident is greater.....






Children can be cause of an accident?



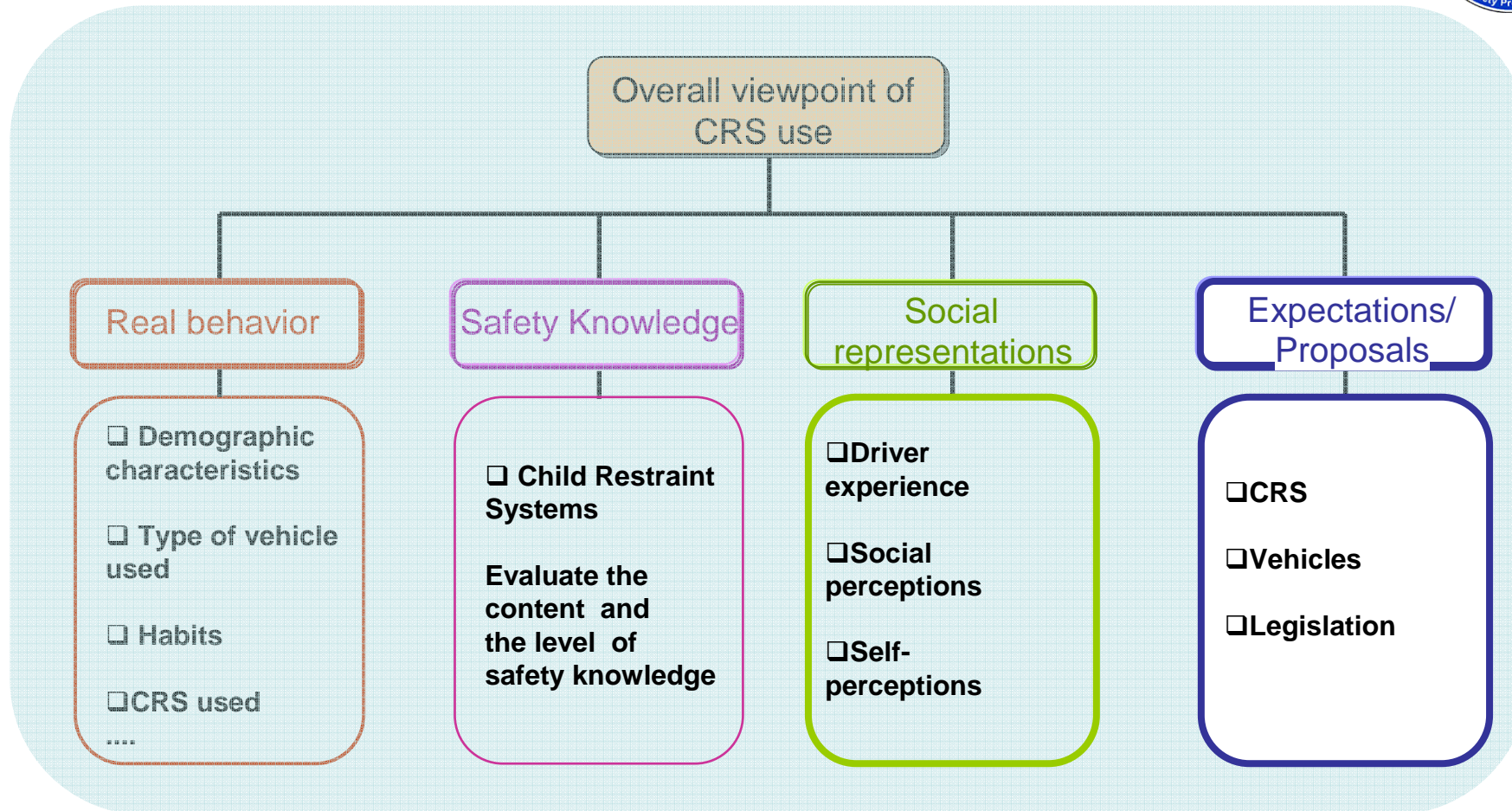


Social representations

				
<p>Social representations</p> <ul style="list-style-type: none"> <input type="checkbox"/> Driver experience <input type="checkbox"/> Social perceptions <input type="checkbox"/> Self-perceptions 	<ul style="list-style-type: none"> ✓ use seatbelt ✓ Able to avoid danger ✓ Driving quality ✓ Causes of accidents ✓ Are accidents avoidable? ✓ Risk accident and trip 	<p>yes</p> <p>yes</p> <p>the same</p> <p>other driving</p> <p>sometimes</p> <p>short trip</p>	<p>yes</p> <p>yes</p> <p>better</p> <p>other driving</p> <p>often</p> <p>The same</p>	<p>yes</p> <p>yes</p> <p>a little better</p> <p>other driving</p> <p>often</p> <p>long trip</p>






Expectations/proposal

















Child Restraint Systems, Choice and Expectations

Getting CRS, Testing CRS and getting information

			
People get CRS in:			
specialized-shop	35%	71%	49%
supermarket	44%	11%	8%
it was a gift	4%	2%	13%
People get information before the purchase	29%	65%	35%
People did not test the CRS before the purchase	73%	88%	80%
People tested the CRS for the first time:			
- at home	41%	79.5%	67%
- at Shop	28%	16.5%	10%



First evaluation

	FRANCE	SPAIN	ITALY
Real behaviour Parents wish the best for their children.			
Safety Knowledge Inappropriate CRS use is observed A sizeable part of the sample answered not knowing what mistakes they make			
Social Representation Compared to Road safety studies, parents overestimate their behaviour.			
Expectations/Proposal People proposals: systems less complicated, a way to misuse (alarm enforcement by police, child safety campaigns, training, instruction)			
Number of deaths per million inhabitants year 2001 year 2008	138 67	136 68	128 79





Thank you for your attention!

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