



**A REVIEW OF
CHILD RESTRAINT INSTRUCTIONS**

MARCH 2001

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1 INTRODUCTION

- 1.1 The aim of this project was to examine the role of instructions in the fitting of a selection of child restraints and involved a review of :
- the range of different makes and types of child restraints available in the UK
 - the manufacturer's instructions for fitting and using the selected restraints
 - the ease with which volunteers were able to understand the instructions and fit the child restraints.
- 1.2 Child restraints are generally used by children up to the age of 11 years, beyond which adult seat belts are normally used. During 1999, 38 children between the ages of 0 and 11 were killed, 577 seriously injured and just under 7,000 slightly injured as car passengers.¹
- 1.3 The proper use of child car restraints would have prevented many of these casualties. However, to be effective, child restraints must be fitted and used correctly. Surveys conducted by various organisations over many years have consistently shown that a high proportion of child restraints are incorrectly fitted:
- A recent survey of over 1,000 child car seats found that 37% were incorrectly fitted or incompatible with the car they were in, 38% needed minor adjustments and 25% were fitted correctly.²
 - A 1995 survey³ found that two-thirds of child seats were unsafe.
 - A 1995 report in 1995 showed that over 70% of child restraints were badly fitted and could put children in danger.⁴
 - A magazine survey revealed that 80% of child car seats were incorrectly fitted.⁵
 - In a 2001 survey conducted for Mother & Baby magazine only 6% of parents surveyed said they were offered proper fitting advice from the shop where they bought the seat.
 - A newspaper article stated that 90% of parents had trouble fitting a child car seat.⁶
 - A 1991 report⁷ found that 11 out of 12 car seats were fitted so badly that they could cause serious injuries to a child.
- 1.4 The problem of poorly fitted child restraints is recognised in the Government's Road Safety Strategy⁸ which states that many people "find the fitting instruction puzzling". In February 2001, the DETR launched the first government campaign to promote the importance of fitting child car seats properly.

2 THE LAW AND CHILD RESTRAINTS

- 2.1 The law in Great Britain requires children travelling in cars to use an appropriate child restraint or adult seat belt, but only if they are available.

Child under 3 years old

If carried in the front seat, an appropriate child restraint **MUST** be used.

If carried in the rear seat, an appropriate child restraint **MUST** be used, **IF AVAILABLE**.

Child Aged 3 to 11 years and under 1.5 metres tall

If carried in the front seat, an appropriate child restraint **MUST** be worn **IF AVAILABLE**. If not, an adult seat belt **MUST** be worn.

If carried in the rear seat, an appropriate child restraint **MUST** be worn **IF AVAILABLE**. If not, an adult seat belt **MUST** be worn **IF AVAILABLE**.

Child Aged 12 or 13 years or younger children 1.5 metres or more in height

If carried in the front or rear seat, an adult seat belt **MUST** be worn **IF AVAILABLE**.

Passenger Over 14 years old

If carried in the front or rear seat, an adult seat belt **MUST** be worn **IF AVAILABLE**.

It is the driver's responsibility to ensure that children under the age of 14 years are either using an appropriate child restraint or an adult seat belt if available.

2.3 ***Consumer Protection Act 1987***

Legislation also requires child restraints to be safe and fit for their purpose. Child restraints are subject to the General Product Safety Regulations 1994⁹ which state that they must, under foreseeable conditions of use, present only the minimum risks compatible with the product's use, taking into account the characteristics of the product, including such matters as the instructions for assembly and maintenance. Standards (i.e., ECE R.44.03¹⁰ and BS 3254¹¹) provide the best interpretation of good practice.

2.4 Appropriate Child Restraints

An appropriate child restraint is one which conforms to the relevant British or European standard, is suitable for the child's weight and size and which can be correctly fitted into the car. Child restraints are divided into categories, according to the weight of the children for whom they are suitable. These correspond broadly to different age groups, but it is the weight of the child that is most important when deciding what type of child restraint to use.

2.5 All child restraints must conform to either a European or a British Standard.

Table 1 Types and Standards of Appropriate Child Restraints

TYPE OF RESTRAINT	WEIGHT/AGE OF CHILD	STANDARD
Group 0		
Rearward-facing Baby Seats	From birth to 6-9 months Up to 10kg (22 lbs)	ECE R44.03 or BS AU 202 or BS AU 202a
Group 0+		
Carrycot with Restraining Straps*	From birth to 6-9 months Up to 10kg (22 lbs)	ECE R44.03 or BS AU 186 or BS AU 186a
Group 0+		
Rearward-facing Baby Seats	From Birth to 12-15 months Up to 13kg (29lbs)	ECE R44.03 or BS AU 186 or BS AU 186a
Group 1		
Forward-facing child seat	From 9 months - 4 years 9 - 18 kgs (20 - 40 lbs)	ECE R44.03 or BS 3254
Group 2		
Forward-facing child seat/ booster seat	From 4 - 6 years 15 - 25 kgs (33 - 55 lbs)	ECE R44.03 or BS 3254
Group 3		
Booster Cushions	From 6 - 11 years 22 - 36 kgs (48 - 79 lbs)	ECE R44.03 or BS AU 185

*Carrycots provide much less protection than rearward-facing baby seats as they are not designed to withstand impact forces. They can only be used in the rear of a car.

2.6 Retailers often describe child restraints in terms of 'Stages':

Stage 1 = Groups 0 and 0+

Stage 2 = Group 1

Stage 3 = Group 2

Stage 4 = Group 3

2.7 Some child restraints are capable of being converted as the child grows and therefore fit into more than one group or stage. For example the Klippan Suprema used in our survey is suitable for Groups 1, 2 and 3.

2.8 **ISOFIX**

Development has been underway for a number of years to produce an easier way of fitting child restraints into cars. Known as ISOFIX (International Organisation for Standardisation FIX), this basically involves fixed points being manufactured into a car's structure into which a child restraint, with the appropriate fitting attachments, can simply be plugged.

2.9 Cars with ISOFIX points should begin to be produced by 2002. The system may lead to improved performance and reduced misuse of child car seats.¹²

2.10 **Range of Child Restraints Available in the UK**

There is an enormous range of different child restraints available in the UK. A brief survey by RoSPA in 2000 of the major manufacturers, suppliers and retailers of child restraints identified well over one hundred different models (see Appendix 2).

3 METHODOLOGY

- 3.1 The project aimed to assess how useful child restraint instructions are in helping people to fit the restraints correctly and to indicate any common difficulties associated with their installation.
- 3.2 A survey was conducted to identify the range of child restraints available. The survey included contacting the major suppliers and retailers of child restraints and searching relevant websites. It was decided to purchase restraints from Halfords and Mothercare, two of the largest retailers of these products. The following restraints were used:

Britax Rock-a-Tot Deluxe

Group 0+ for babies up to 13kg (birth to 9 -12 months)
£79.99 from Halfords

Mamas & Papas Portable Child Seat

Group 0+ for babies up to 13kg (birth to 12 -15 months)
£79.99 from Mothercare

Maxi Cosi Priori

Group 1 for weight range 9 - 18kg (9 months to 4 years)
£119.00 from Mothercare

Britax Eclipse

Group 1 for weight range 9 - 18kg (9 months to 4 years)
£99.00.

Klippan Suprema

Groups 1, 2 and 3 for weight range 9 - 36kg (9 months to 11 years)
£79.99 from Halfords

Concord Lift

Groups 2 and 3 for weight range 15 - 36kg (4 - 12 years)
£69.99 from Halfords

- 3.3 The instruction booklets were reviewed and compared against each other, against the relevant British Standard for that restraint and against the Department of Trade and Industry Guidelines instructions for consumer products¹³.
- 3.4 Trials were held at four different venues in the West Midlands:
- RoSPA Head Office car park, Birmingham
 - The Arcadian Centre public car park, Birmingham;
 - University of Birmingham
 - Manor Hospital NHS Trust, Walsall.

3.5 Volunteers were sought through letters of invitation to local day nurseries, staff memos, posters and flyers distributed at each venue.

3.6 Three vehicles were used for the trials:

- 1994 Ford Fiesta
- 1994 Fiat Tipo
- 1996 Peugeot 306.

A small number of volunteers fitted the restraints into their own vehicles.

3.7 Before the trials began, each child restraint was fitted into the three cars to ensure that they were compatible.

3.8 Volunteers were shown the restraints, given basic information about them and asked to choose which one they would like to fit. They were invited to read the instructions for as long as they felt necessary before attempting to install the restraint.

3.9 Each volunteer was observed by a RoSPA staff member as they fitted the restraint, although no advice or comment was made. When the volunteer indicated that they had finished, or occasionally when a volunteer could not fit the seat satisfactorily and gave up, the observer checked the restraint to ascertain whether or not it had been correctly fitted. If it was incorrectly fitted, the reason was recorded.

3.10 A short report form was completed, noting the time taken to fit the restraint, and recording the volunteer's comments on the instructions and about any particular difficulties they had experienced.

4 REVIEW OF THE INSTRUCTION BOOKLETS

4.1 In order to comply with the British and/or European Standards, child restraints must meet the requirements in the Standards for the instructions and information which must accompany each restraint system. The Standards vary somewhat in their requirements for marking, information and warnings, but generally they require the following:

- the number of the British Standard
- the name, trade mark or other means of identification of the manufacturer
- the mass range of child for which it is intended
- the method of placing and securing the child within the restraint
- the correct method of installing the restraint
- positions for which it is intended within the vehicle
- the correct routing of the webbing or other means used to secure the device to the vehicle
- method of adjustment
- method of operating the emergency release
- a general warning of the danger of making any alterations to the restraint system
- a warning that the restraint should not be used if it is damaged or if it has been subjected to accident loads even if damage is not obvious.

4.2 All of the instruction booklets complied with these requirements. However, they varied enormously in style, language, format, layout, use of illustrations, level of detail and number of languages. Therefore, it is clear that the requirements of the Standards do not result in a uniform, good quality standard of instructions.

Table 2 Comparison of Instruction booklets used in the trial.

Name of Restraint	Group	Total pages	No. pages of illustrations	No. of languages
Britax Rock-a-Tot	0+	16	6	1
Mamas & Papas Portabile Car seat	0+	8	5	1
Maxi-Cosi Priori	1	36	16	7 (GB, F, D, E, I, NL, P)
Britax Eclipse	1	6	2	1
Klippan Suprema	1, 2 & 3	16	8 pages - in all 3 languages.	3 (GB, F, D)
Concord Lift	2 & 3	48 (8 in English)	4	6 (GB, F, D, NL, DK, CZ)

4.3 The six instruction booklets were compared against the most relevant sections of the Department of Trade and Industry Guidelines for instructions for consumer products¹³.

4.3.1 **Wording and Language**

The Guidelines state that *'the wording and language should be precise, clear and unambiguous. Language and sentence structure must be easily understood by all users, including those with little education or training. Sentence length, the amount of information in each sentence, wording and terminology should be considered, including key words, avoiding negatives, and translations'*

Britax Rock-a-Tot

These instructions were generally clear and well written.

Mamas and Papas Portable Car Seat

These were the most concise instructions.

Maxi-Cosi Priori

The booklet uses very simple instructions next to photographs. Less common words include *stringent, constitutes, integral, abrasive*.

Britax Eclipse

Used many standard sentences as in the Rock-a-Tot booklet.

Klippan Suprema

In the sections dealing with installation and fitting the booklet has a relatively small amount of text, relying more on illustration.

Concord Lift

The language in this booklet shows that it is an obvious translation - it refers to an 'airbab'. It is the most wordy booklet, even though the fitting of the restraint is actually the easiest. There is a 51 word sentence. Volunteers complained that there was too much information and that the print size was too small.

4.3.2 **Placing of Safety Information**

The Guidelines state that *'general information should be at the beginning, and specific information and instructions on avoiding hazard immediately before the instruction or piece of text to which they relate. They should be placed before the point at which the user will actually need them.'*

All of the booklets followed the same general format:

- Introduction, general information and warnings
- Preparation, installing and using the restraint
- Maintenance of the restraint
- Checklist and fault fixing
- Where to get further information

However, in the Maxi-Cosi booklet there were several pages of foreign language between the general information in English and the English fitting instructions. The Mamas and Papas booklet did not contain a final checklist or fault fixing section. Volunteers complained about having to cross-refer between pages in all of the booklets.

4.3.3 On-product Safety Information

The Guidelines state that *'on-product safety information should be durable and legible throughout the life of the product. The size of print should make them prominent'*.

All the restraints except the **Mamas and Papas Portable Car Seat** had on-product stickers. The stickers gave help with belt routing, or warnings e.g. re airbags. The **Britax Rock-a-Tot** had stickers on the handle, as well as on the side of the seat. The remainder only had stickers on the side. The stickers on the **Klippan Suprema** were peeling after just 9 fittings.

4.3.4 Multi-lingual Instructions

The Guidelines state that *'instructions should ideally have a separate sheet/booklet for each language, especially when the instructions cover more than 4/5 sides. Otherwise, different typeface or type weight should be used. The order of languages should reflect the estimated number of users of each language'*.

Britax instructions are printed only in the languages of countries to which the seats are exported. The booklets assessed in this project were written in English only.

Mamas & Papas instructions are printed in English only.

Maxi-Cosi Priori instructions combine seven languages in one booklet. The illustrations give the English word at the top of a list of seven, as do the fitting instructions. English is the first language used first for general instructions and warranty details.

The **Klippan Suprema** booklet combines three languages, with English at the top of illustration labels and as the first section of warnings and notes. Some volunteers felt that the different languages should be separated into their own sections.

Concord Lift instructions are in six languages. The main fold-out diagram is labelled in German, and German fitting instructions come first in the booklet. It is difficult for English readers to read the instructions and study the diagram simultaneously.

4.3.5 Illustrations

The Guidelines state that '*Illustrations, whether photographs or line drawings, need to be well-positioned and clear in their level of detail, angle of view, ease of understanding, labelling and use of colour*'.

Britax instructions use line drawings, apart from the front covers which feature a crash test dummy. The **Rock-a-Tot** and **Eclipse** both have 45 illustrations which are clearly numbered with the relevant text underneath.

Mamas & Papas use line drawings, sometimes with arrows which guide the eye to the next instruction. However, the text for each illustration is not placed next to it. There are 38 illustrations.

Maxi-Cosi Priori instructions uses predominantly blue tinted photographs. These make some essential components difficult to distinguish. Important details are circled in with a red line, but are not expanded. The illustrations are numbered, and the text is placed underneath. There are 51 illustrations

Klippan Suprema instructions use line illustrations with arrows indicating the order of the steps - they are not numbered. Although some illustrations are labelled, there is very little text, and the instructions are not placed next to specific illustrations. The booklet has 42 illustrations.

The pages of the **Concord Lift** booklet are A6 size. The front cover folds out to show three A6 pages of diagrams of seat components labelled in German. The English fitting instructions begin on Page 9, and there are no further diagrams or illustrations to accompany them.

5 THE TRIAL RESULTS

5.1 Volunteers

Fifty-eight volunteers participated, including expectant mothers, parents, grandparents and people without children. Approximately a quarter of the volunteers had English as a second language. A significant proportion had never previously fitted a child restraint of any type. All volunteers attempted to install a seat which they had never fitted before.

5.2 Most volunteers appeared to approach the task with some apprehension, expecting it to be difficult. The variety of different types of seat, the differences in the method of fixing and the feeling that they would not know whether or not they had fitted the restraint correctly led to people having very little confidence in their own ability. Indeed, some potential volunteers indicated that they would rather not take part.

5.3 Choosing Which Seat to Fit

Volunteers were allowed to choose which seat they wanted to fit. Some chose the restraint which they thought looked the easiest to fit, others chose the one they found most stylish, a few choose ones similar to ones they owned or were considering purchasing.

5.4 Studying the Instructions

The majority of volunteers studied the instructions quite thoroughly, although most admitted that they had not read every single piece of information. Very few volunteers spent more than 15 minutes scrutinising the booklet. Most volunteers also referred to the instructions as they fitted the seat.

5.5 Fitting the Restraints

A report form was completed when the volunteer felt the restraint had been correctly installed to the best of his or her ability, or sometimes when the volunteer could not fit the seat satisfactorily and gave up. The time taken was recorded.

5.6 The restraint was checked to ascertain whether or not it had been correctly fitted. If it was incorrectly fitted, the reason was recorded.

Table 3 Number of volunteers who fitted each type of seat.

Name of Restraint	No. of volunteers	No. fitted correctly in 10 mins	% of total
Britax Rock-a-Tot	10	5	50
Mamas & Papas	11	3	30
Maxi Cosi	8	5	62
Britax Eclipse	13	12	92
Klippan Suprema	9	5	55
Concord Lift	7	6	85
Total	58	36	62

5.7 Volunteers' Responses

Volunteers were asked to grade certain aspects of the instructions on scale from 1 (poor) to 5 (good), and to make any further specific comments they wished. These were recorded and averaged below:

1 How helpful were the instructions?

Restraint	Average (out of 5)
Britax Rock-a-Tot	3.9
Britax Eclipse	3.5
Klippan Suprema	3.5
Mamas & Papas Portabile	3.3
Concord Lift	3.3
Maxi-Cosi Priori	3.2

2 Were they easy to understand?

Restraint	Average (out of 5)
Britax Rock-a-Tot	4.1
Britax Eclipse	3.7
Mamas & Papas Portabile	3.4
Concord Lift	3.4
Klippan Suprema	3.2
Maxi-Cosi Priori	3.0

3 Were the diagrams clear?

Restraint	Average (out of 5)
Britax Rock-a-Tot	3.9
Britax Eclipse	3.8
Concord Lift	3.4
Klippan Suprema	3.3
Mamas & Papas Portabile	3.1
Maxi-Cosi Priori	2.7

4 How about the text?

Restraint	Average (out of 5)
Britax Rock-a-Tot	3.7
Britax Eclipse	3.4
Mamas & Papas Portabile	3.0
Maxi-Cosi Priori	2.7
Klippan Suprema	2.7
Concord Lift	2.6

5 Were the foreign languages off-putting?

Restraint	Average (out of 5)
Concord Lift	3.1
Maxi-Cosi Priori	2.5
Klippan Suprema	2.3
Britax Rock-a-Tot	not applicable
Mamas & Papas Portabile	not applicable
Britax Eclipse	not applicable

5.8 Overall Scoring

An overall score for each seat was obtained by adding the scores of the first four categories and averaging them. (The fifth category is excluded because three of the instruction booklets were in English only). The results were as follows:

Britax Rock-a-Tot	78
Britax Eclipse	72
Klippan Suprema	64
Mamas & Papas Portabile	64
Concord Lift	63
Maxi-Cosi Priori	61

5.9 Volunteers' Comments

Volunteers were encouraged to voice any other comments they had on the usefulness of the instructions.

1 Britax Rock-A-Tot

- The instructions had to be studied for a long time to be fully understood.
- The instructions needed to be clearer.
- The fitting instructions were the last item in the book.
- Having to cross reference to other pages was not helpful.
- The diagrams could be simpler, broken down into steps.
- The text could be simpler.
- The position of the handle for installation was not clearly explained.

2 Mamas and Papas Portable Car Seat

- The diagrams were not clear about the positioning of the seat in the car.
- The position of the handle for installation was not clearly explained.
- There were too many warnings at the beginning of the booklet and not enough focus on essential fitting instructions.
- Some of the pictures were confusing left/right.
- The text should be with the diagrams.
- The diagrams were too small.
- If the seat had to be fitted in a rush, it would be a struggle.
- There were no instructions to explain how to check the fitting.
- It would be better to be shown by an expert - or by video on the Internet
- The fitting was fiddly.

3 Maxi Cosi Priori

- There was too much information.
- The text was too small.
- The colour diagrams were not clear.
- The diagrams didn't have enough colour variation. Sharper contrast is needed.
- The diagrams on the seat were better than those in the book.
- The diagrams kept changing view so it was not clear which way they were looking from.
- The belt catch was not explained properly.
- There should be one page per operation.
- English text only would be preferred - cross-referencing was difficult.

4 Britax Eclipse

- The seat itself is heavy and it would be much easier to fit with two people.
- There was a lot of text to read.
- The booklet was daunting, off-putting, suggesting that fitting will be difficult.
- There was good information in the text.
- The text was too small and very unclear.
- The diagrams on the side of the seat were useful.
- The instructions for tightening the webbing were not clear.
- The instructions should be in a larger font.

5 Klippan Suprema

- There wasn't enough text. Some people may need more.
- The text was not relevant.
- The 'fitting diagram' page was the one looked at most.
- The text and the diagrams should be together.
- The fitting instructions should be at the front of the booklet.
- There are no instructions about making sure the seatbelts are long enough.
- The different languages should be separated.

6 Concord Lift

- There was too much information to go through.
- The text was too small. Bigger print was needed.
- The booklet was badly laid out.
- There was too much detail, not enough focusing on the essential bits.
- You have to jump from section to section.
- There were too many instructions, not enough diagrams.
- The text should be underneath the diagrams.
- The fitting was easier than the instructions suggested.
- The front picture was the most useful.
- The booklet could easily be lost.

5.10 Fitting Problems

- 5.10.1 Although the purpose of the project was primarily to assess how easily people were able to understand and use child restraint instructions, observers did note a number of common fitting problems.
- 5.10.2 When the restraint was incorrectly fitted, this was most often because it was far too loose. Usually, the restraint looked securely fitted, but it was easy to move or even up-end with just one hand.
- 5.10.3 The most common mistake was not pulling the seat belt through the restraint as tightly as possible, leaving it too loose.
- 5.10.4 A related problem was that many volunteers failed to check that the restraint was secure, but relied on a visual inspection to check the seat belt was routed through the restraint correctly.
- 5.10.5 With the two baby seats, many volunteers failed to put the handle into its lowest position, which is necessary to obtain a secure fitting.
- 5.10.6 Some volunteers found routing the seatbelts difficult, especially at the back of the restraint.

6 CONCLUSION

- 6.1 Child restraints are an essential safety measure. Every child should be carried in an appropriate child restraint. However, the law currently allows children to travel unrestrained if child restraints or seat belts are not available in the vehicle (with the exception of children under three years old sitting in the front seat who must use a child restraint).
- 6.2 Even when child restraints are available, surveys have consistently found that a high proportion are fitted insecurely and, therefore, unable to be fully effective. In some cases, they are fitted so poorly that they actually present a danger themselves.
- 6.3 Many people find fitting child restraints difficult. Some of the major retailers have trained staff who are able to help, and many of the manufacturers operate helpline and websites to provide help. However, problems persist.
- 6.4 This project was not an attempt to assess which child restraints were easier to fit than others, but to judge the usefulness of the instructions that are provided with the restraints.
- 6.5 There is wide variety in the quality of the instruction provided with child restraints, despite the presence of Standards. Some of the instruction booklets, notably the Britax and Maxi-Cosi ones, are well-written and presented with good, clear illustrations. However, some of the others, notably the Mamas & Papas and Concord are very poor in these respects.
- 6.6 Generally, the volunteers found the booklets daunting because of the amount of information they contained, and so expected to find fitting the restraints a difficult task.
- 6.7 Small print size and the need to cross refer between pages within the booklets caused particular problems and complaints. The volunteers also felt that placing diagrams and supporting text together was the most helpful layout.
- 6.8 Of the fifty-eight volunteers, only five gave the instructions for the restraint they fitted top marks for helpfulness, despite the fact that almost everyone studied them for as long as they thought necessary. Two volunteers gave their seat only 1 out of 5, and four gave 2 out of 5. Most gave 3 or 4 out of 5.
- 6.9 Although many volunteers gave average or above average ratings for ease of understanding, this was not always reflected in their ability to fit the restraint correctly.

- 6.10 From observation of volunteers studying instructions, it is clear that most people focus mainly on the diagrams. However, the quality of illustrations in the instruction booklets was very variable.
- 6.11 Volunteers generally gave lower scores for the text than the diagrams. Many commented that there was too much text, sometimes in print that was too small, and sometimes they felt much of it was irrelevant or even unnecessary. A frequent comment was that it was difficult to isolate the essential information from the non-essential.
- 6.12 Where instructions were provided in more than one language, volunteers generally did not find this to be a problem, except in four cases where volunteers gave scores of 1 out of 5. It was noted that the other languages used besides English were all European (French, German, Spanish, Italian, Dutch and Portuguese), none were Asian.
- 6.13 Some instruction booklets were printed on flimsy paper and quickly became crumpled, suggesting that they would not last very long. On-product instructions were often not seen, and in some cases had already begun to peel off.
- 6.14 The project also identified a number of common fitting problems, especially failures to ensure the restraint was tightly secured, which are worthy of further research.

7 RECOMMENDATIONS

- 7.1 The quality of instruction booklets needs to be standardised to bring the poorest examples in line with the good examples.
- 7.2 Print size should be as large and prominent as possible (it is too small in several of the booklets examined).
- 7.3 There should be as little cross referencing between pages as possible.
- 7.4 Clearer advice to check the security of the fitting should be provided, with guidance on what is regarded as 'secure' and 'insecure' (e.g 'If the seat will move forward more than 1 centimetre it is too loose').
- 7.5 Manufacturers should consider providing booklets for the significant numbers of people in Britain for whom English is their second language, for example Hindi, Punjabi, Urdu, Chinese.
- 7.6 Instruction booklets should be more durable.
- 7.7 Manufacturers should consider issuing instruction videos with child car restraints, similar to those provided with other equipment such as gardening and fitness products (some manufacturers do produce videos).
- 7.8 Even with clear instructions, many people will still find it difficult to fit child restraints. Greater availability of trained fitters at retail outlets is required.
- 7.9 Further research is needed to investigate which type of instructions are preferred by car seat users, but are also the most effective.
- 7.10 The ISOFIX system should be introduced as soon as possible.

APPENDIX 1: SAMPLE REPORT FORM

Participant **MALE / FEMALE**

Observer's Initials

NAME OF RESTRAINT

MAKE/MODEL OF CAR USED/.....

FITTING THE RESTRAINT

Was the restraint correctly installed? **YES / NO**

If NO, what was the problem?

.....

If YES, was it fitted

in under 10 minutes

in about 10 minutes

in more than 10 minutes

The instructions were
discarded

studied

glanced at

COMMENTS ABOUT THE INSTRUCTIONS

	Poor			Good	
How helpful were the instructions?	1	2	3	4	5
Were they easy to understand?	1	2	3	4	5
Were the diagrams clear?	1	2	3	4	5
How about the text?	1	2	3	4	5
Were the foreign languages off-putting?	1	2	3	4	5

Any other comments

.....

.....

APPENDIX 2 : RANGE OF CHILD RESTRAINTS IN THE UK

Manufacturer	Group 0/0+	Group 1	Group 2	Group 3
Jeenay	Nest 'n' rest Deluxe	Tourer Deluxe		
Mamas & Papas	Primo Viaggio Portabile Sicuro	Fuori strada Piatto Sontuoso Asante Sicuro Pratico	Piatto Sicuro Pratico Sontuoso Asante Passagio	Pratico Sontuoso Asante Passagio
Chicco	Synthesis Synthesis Lux Shuttle Transit Jet	Shuttle	Quasar	Quasar
Silvercross	Babyroom car seat Standard car seat			
Bettacare	Cygnet			
Cosatto	Go Safe Evolution Go Safe Start Global Grand Prix Rally Sport Magnum Le Mans	Go Safe Evolution Grand Prix Rally Sport Magnum Le Mans		
Britax	Rock-a-tot Rock-a-tot deluxe Club Class Extra	Club Class Extra Eclipse Renaissance Freeway Excel Elite Supercruiser Javelin Ranger Junior Traveller	Elite Supercruiser Javelin Ranger Junior Traveller Traveller Plus	Javelin Ranger Traveller Plus
Klippan	Prima Futura	Futura Playa Suprema Dreama	Futura Dreama Boosta	Suprema Dreama Boosta

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Manufacturer	Group 0/0+	Group 1	Group 2	Group 3
Maxi Cosi	Citi	Priori	Rodi	Rodi
Bebe Confort	Cosmos light Elios	Cosmos light Absorber	Absorber	Absorber
Mothercare	Endeavour Orbit Deluxe	Endeavour Daytona Animal Fun Marino Animal Fun	Marino Animal Fun	
Monbebe	Turbo Up Mascotte	Turbo Up		
Safety First		Euroseat	Euroseat	Euroseat
Bebecar	Bebecar A4 Car seat			
Brevi	Grand Prix	Grand Prix		
Concord	Baboo	Maxus Fixmax Primax Lift	Maxux Fixmax Primax Lift Comfort Set	Maxux Fixmax Primax Lift Comfort Set
Euroseat		Euroseat	Euroseat	
Recaro		Recaro	Recaro	Recaro
The Babini Collection	Baby Lite			
Graco	Autobaby	Next Step Contour	Next Step Contour	Next Step Contour
Jane	Rebel			
Chambray	Challenger	Challenger		
Oregon	Victor	Victor		
Easybob	Maxi car seat			
Eclipse		Milano		
Fairmont	Infant car seat			

APPENDIX 3

SUMMARY OF DTI SURVEY OF CONSUMER VIEWS ABOUT INSTRUCTION LEAFLETS

4.3 Guidelines for Good Instructions

A 1988 the DTI¹⁴ survey of consumers views about instruction leaflets found:

Front cover

The front cover should be as interesting as possible.

Safety instructions

Safety instructions should be one of the first sections. Key instructions should be presented all together and, if possible on a single page. Technical specifications can be confusing and irrelevant to consumers' needs, and should be in their own self-contained section.

Titles

Words such as Safety, Warning, or Important alert consumers, as opposed to 'Please Note'.

Organisation of Information

Consumers consider some instructions unrealistic, and tend not to comply with them as they feel they have reached the 'silly stuff' and cease reading. Such instructions should be put towards the end.

Explaining why

Consumers can decide to ignore certain instructions where they cannot see a reason for them.

Language

Instructions should be expressed as concisely as possible, while not compromising information content in order to encourage reading.

Presentation

Use of contrasting colour, use of reversed out text, well-spaced bullet points, larger bolder type-face, print size, clear visual path, use of pictures can all help.

Inclusion of several languages

Consumers strongly prefer English only. However, in a multi-cultural society such as the UK, there is a strong moral and practical argument for including other languages.

Consumer market research

It is strongly recommended that usage and safety instructions are included in any market research for a product and supplemented by plain English experts.

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- ⁸ DETR Tomorrow's roads: safer for everyone March 2000
- ⁹ General Product Safety Regulations 1994, SI 1994/2328
- ¹⁰ UN ECE 44.03 standard for car restraints.
- ¹¹ BS 3254 Seat belt assemblies for road vehicles - Specification for restraining devices for children
- ¹² TRL Newsletter July 2000
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- ¹⁴ CROFT J, HARRIS F Writing Safety Instructions for Consumer Products, DTI November 1998