



Do Your Manuals Put Children in Danger?

A survey of juvenile products consumers



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Executive Summary:

A variety of studies indicate that there is a serious problem with the readability of manuals that accompany juvenile products. Safety seats are installed incorrectly, children's toys are mis-assembled, and often, these things place children in danger. The federal government is considering legislation to require better product manuals. Consumers are voting with their dollars for the manufacturers who provide good information. What can manufacturers do to capture these dollars? The answer is simple: improve their manuals.

Are Manuals Too Hard to Read?

A study published in the March 2003 issue of *Pediatrics Magazine* examined the installation manuals provided by child safety seat manufacturers. Their conclusions were striking: “CSS [child safety seat] instruction manuals are written at a reading level that exceeds the reading skills of most American consumers.”¹

This problem contributes to between 79% and 94% of child safety seats being installed incorrectly². This renders them at best less effective, and at worst more dangerous than not using a seat at all.

The study acknowledges the great strides made in design and legislation to make these critical pieces of safety equipment easier to install. But the authors noted that manufacturers are still missing an important piece: an understandable installation and usage manual.

According to the US Department of Education's National Center for Education Statistics, as many as 46% of Americans 16 years of age and older read at about a 5th – 8th grade level. Yet the authors' research indicates that the text in manuals tests out at a median of 10th grade—up to twice as difficult as the lowest literacy level.

¹ Wegner, Mark V., MD, MPH, and Girasek, Deborah C., PhD, MPH.
“How Readable Are Child Safety Seat Installation Instructions?”
Pediatrics Magazine, Vol. 111 No. 3 March 2003

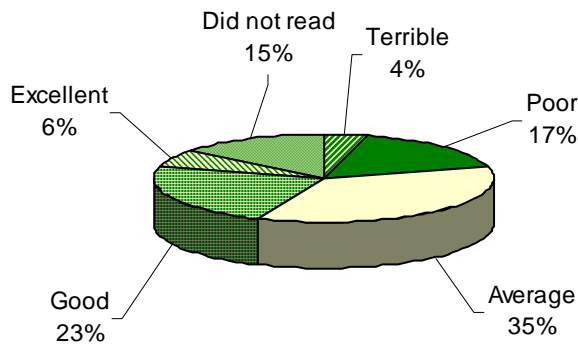
² National Highway Traffic Safety Administration. *Observed Patterns of Misuse of Child Safety Seats*. Traffic Tech, Sept 1996. Washington, DC: NHTSA; 1996

Manual Labour Inc., a technical documentation developer, surveyed a random selection of Internet users and confirmed this problem in the child product industry: **consumers are frustrated by the manuals they receive with products they buy**. That frustration makes it even harder for them to install critical safety equipment properly. Because of this, children are placed in situations where the very equipment installed to protect them places them in more danger.

How Do People Rate Manuals They Receive?

The first question we asked in our survey was, “How good was the manual that came with the last children's product you bought?” We wanted to investigate how parents perceived the quality and usefulness of the manuals that come with products they purchase for their children:

How Good Was the Manual that Came with the Last Children's Product You Bought?



56% of those surveyed rated the manuals as “average” or poorer, with only a little over a quarter rating them “good” or “excellent”. Even more significant than the statistics themselves, however, are the reasons respondents gave for their ratings.

Respondents who rated the manuals as “poor” or worse were sharply critical of the information they received:

- “Difficult to follow. Left steps out.”
- “...not easy to install...directions unclear as to anchors and straps...very confusing...”

- “The manual made a lot of assumptions and some steps were missing. It relied on illustrations but the illustrations were hard to decipher.”
- “The instructions were hard to understand. The sentences were too long and too confusing. Also, they used black and white photographs instead of drawings to show how to install the seat.”
- “I still haven't installed it because it is so confusing.”

Respondents who rated the manuals as “average” had the following to say:

- “The instructions got me in the neighborhood of showing what needed to be done, but it took some experimentation to get it right.”
- “The instructions were complete, and they worked. But they did require more thought and ‘spatial translation’ that I would have liked.”
- “Instructions were confusing.”
- “The illustrations were not helpful and in many cases, the written instructions were vague or poorly worded. In some instances the phrases ‘seat belt,’ ‘lap belt,’ and ‘shoulder belt’ were used interchangeably, which could be confusing to someone who never installed a car seat before.”
- “...I had to re-read it several times for complete understanding.”

What Do Consumers Want?

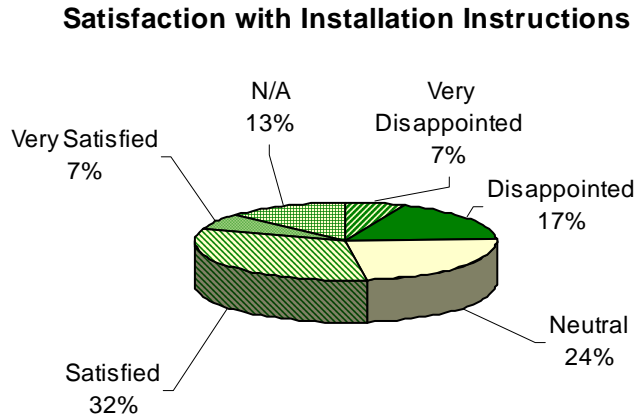
By contrast, those who rated the manuals as “good” or higher said:

- “It was well written and complete.”
- “It was easy to read.”
- “I only had to read one thing. The rest had illustrations that told me everything I needed to know. It also had written instructions to accompany the pictures, so if someone didn't have as much experience as I have, the written instructions were very easy to follow too.”

Most of the concerns noted are simple and inexpensive to fix. Readers are not looking for the “perfect” manual—they just want one they can understand.

Installation

Overall, almost half of those surveyed were dissatisfied with the installation instructions:

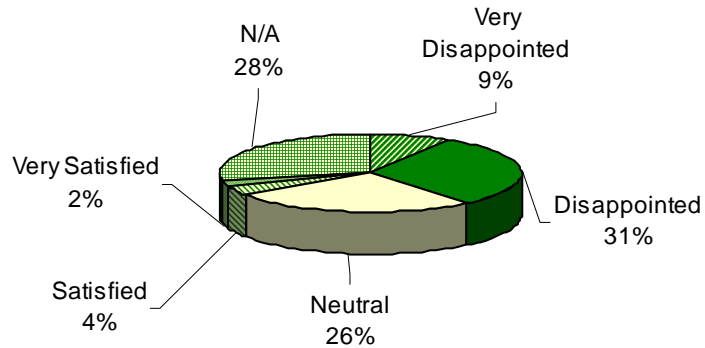


While our survey shows that many respondents were satisfied with the information, manufacturers should remember that a high percentage of safety seats are installed incorrectly. In this case, satisfaction may not be enough. Instructions can be apparently clear and understandable, and still lead to incorrect installation.

Troubleshooting

When we looked at troubleshooting instructions—the very items that help ensure readers feel confident they have installed products correctly and safely, the dissatisfaction increased:

Satisfaction with Troubleshooting Instructions



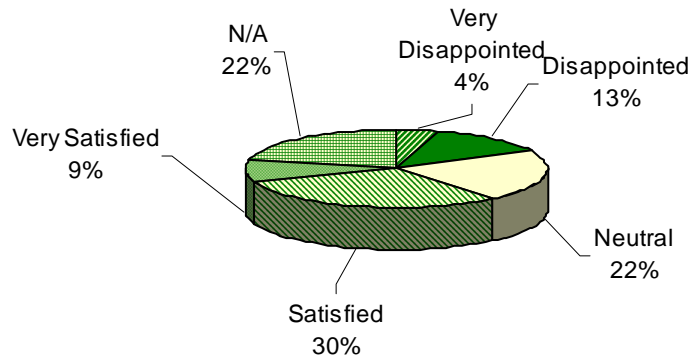
Only 6% of those surveyed expressed satisfaction with the troubleshooting information they received. 28% of respondents marked this question “not applicable”, indicating that either they had no difficulties with installation and use *or* that there were no troubleshooting instructions available. The majority of respondents (66%) were less than satisfied with this information.

There are significant business costs associated with poor troubleshooting instructions. If consumers have trouble and cannot resolve a problem themselves, they call manufacturer hotlines or return the product. Both drive manufacturing costs up, often exceeding the costs of providing better troubleshooting in the manual.

Daily Product Use

Results for satisfaction with daily use instructions were more mixed:

Satisfaction with Instructions for Daily Use

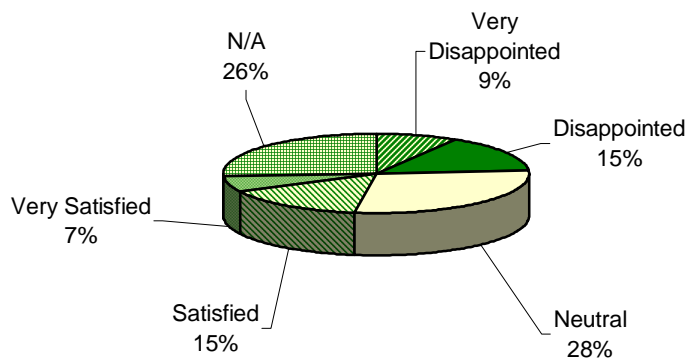


Respondents were evenly split about their satisfaction: 39% were “satisfied” or higher and 39% were “neutral” or lower. This shows that manufacturers have room for improvement, but that this area is not as critical a target as installation and troubleshooting information.

Additional Help

We asked respondents to rate the additional help the manual referenced, such as product hotlines and websites:

Satisfaction with Availability of Additional Help



Few respondents were satisfied with the additional help available. Only 22% expressed satisfaction, with a majority (52%) expressing neutrality or disappointment. This indicates that consumers are willing to explore other means of accessing information; manufacturers don't need rely

exclusively on in-box manuals to improve the information they provide. That information can also be distributed via websites, but it still must be useful *in the eyes of the consumers* to be of value.

Suggestions for Improvement

Respondents were vocal and specific in their requested improvements, even those who expressed satisfaction with the information they received. Most respondents requested better graphics (47%) and clearer language (also 47%) in the instructions—the very points that the *Pediatrics Magazine* study recommended as well.

The rating in parentheses after the quote links the quote to the respondents' expressed satisfaction level with the most recent purchase.

- “Needs to be written without the ‘legalese.’ Needs to be written at a sixth grade level. Needs to contain more graphics.” (Average)
- “Better illustrations that actually matched the product they came with; less need to guess what was going on.” (Average)
- “If they are for use in the US, they should be written by someone whose native tongue is English.” (Poor)
- “Better illustrations. Clear, concise instructions.” (Terrible)
- “Information on why most car seats aren't installed properly. Would help understand what is being done incorrectly.” (Average)
- “There needs to be better assembly instructions when there are multiple parts and steps that are similar.” (Good)
- “Specify age appropriateness. Clearer language—some seem to be written before product was developed—illustrations should match verbal descriptions—product should match illustrations exactly.” (Poor)
- “The last product I got didn't have a guide. It had a video to watch. Now that's intimidating!” (Did not read)

- “Better illustrations, simple information-mapping formats, evidence that the writer tested the materials with an end-user before publishing.” (Did not read)
- “Clearer language. It seems that everything is written to cover the company from lawsuits which doesn't mean that it is easy to read for understanding.” (Average)
- “Fewer warnings: I would like warnings only regarding TRUE threats to my child's welfare. In general, because it is obvious that the majority of warnings are to protect the manufacturer and not my child, I do not read any of them and thus may miss the one legitimate concern. It is insulting that the manufacturer thinks that I do not know the true purpose of these warnings.” (Excellent)

How do Parents Use Manuals?

We wanted to gather some information about how parents use product manuals, as that can have a significant effect on how the manual should be structured.

Many manuals assume that readers examine the entire manual before beginning a task. In fact, most readers take a more targeted approach. From a survey of American users of all technology products (not just children's products)³:

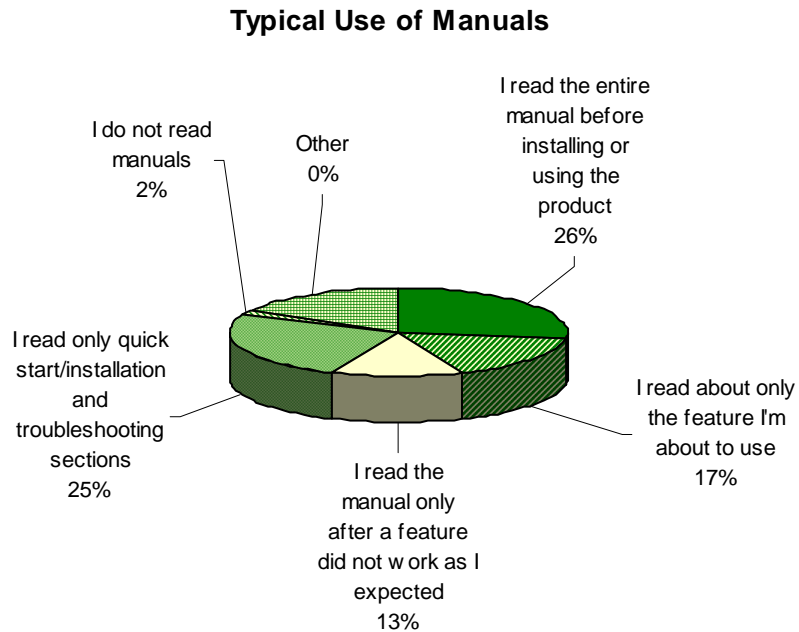
- 12% don't read the manual at all
- 12% read it cover to cover before doing anything
- 76 % (the majority) read it only if something goes wrong (or seems to) or before trying a new feature

Most manuals are structured with the assumption that people read them cover-to-cover before doing anything. Based on these results, this means manuals are structured in such a way as to make important information hard to find—or worse, easy to skip.

³ Dynamics in Document Design, Karen Schriver, John Wiley & Sons, 1996

How Parents Read Manuals for Their Children's Products

Our survey wanted to verify these general results against a specific application (that of reading children's product manuals):

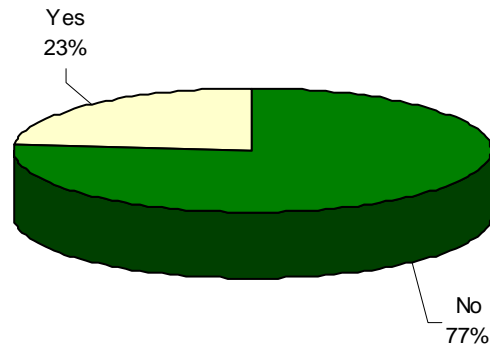


Overall, the general statistics prove consistent. The majority of respondents (55%) read only selected portions of the manual. A structure that reflects an understanding of this goal-oriented approach, using clear cross-references, an index, and a good Table of Contents, can satisfy these readers.

How Parents Read Manuals for Themselves

It would be natural to assume that parents read the instructions for their children's products with more care than they read those for products they buy from themselves. Many manuals for juvenile products are written with just this assumption. However, our results showed that readers' patterns are typically not affected:

Does This Differ from How You Read Manuals for Your Products?



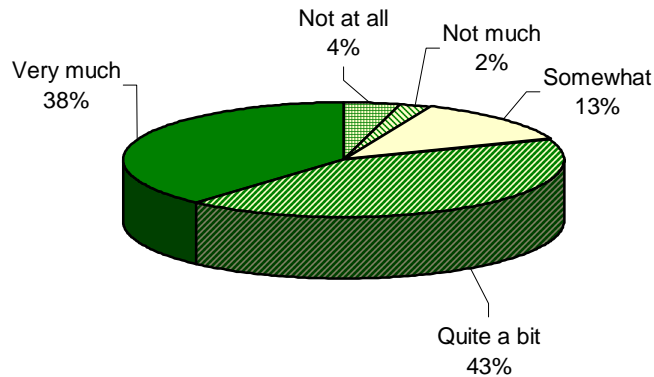
A clear majority of parents reads manuals for their children's products and those for themselves in the same way.

How Do the Manuals Make Parents Feel About the Manufacturer?

But all of the previous statistics simply illustrate specific problems with the manuals themselves. The real problem for the industry lies in what those problems say to consumers about the company and the company's products.

Manuals do matter to consumers:

How Much Do Good Manuals Matter?



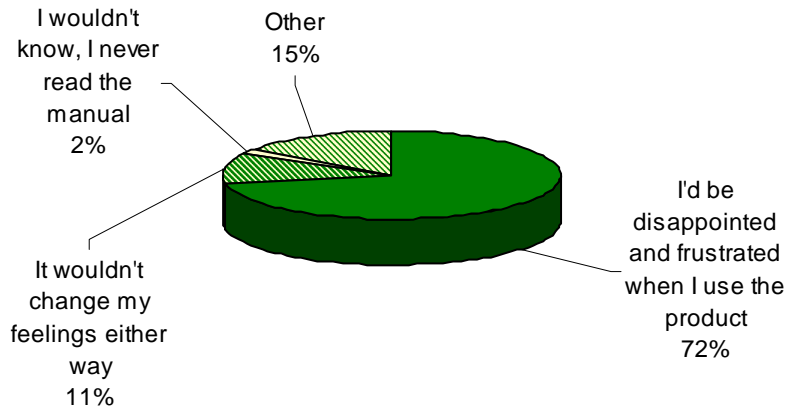
94% of respondents said that documentation mattered at least somewhat to them, with 81% rating it as significantly important.

So if manuals are important to consumers, and if many of them are unhappy with the manuals they receive, what are the effects this has on their perception of the product and manufacturer?

Ease of Use

We asked respondents to rate how a bad manual made them feel about how easy the product is or will be to use:

How Would a Bad Experience with the Manuals Make You Feel About How Easy the Product Is to Use?



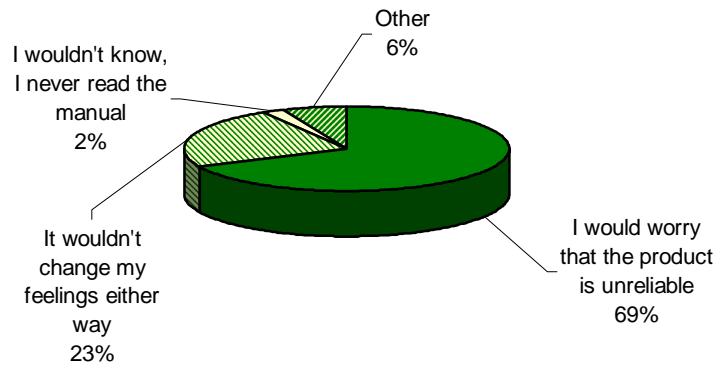
72% of respondents replied that a bad manual experience sets them up to be disappointed by and frustrated with the product—and often these feelings occur before they ever use the product.

Consumers don't want to struggle with the products they buy. Parents are even less inclined to be pleased with a children's product they perceive as difficult to use.

Reliability

The perceptions consumers have about a product go beyond ease of use. Parents seem to be particularly sensitive to issues of reliability:

**How Would a Bad Experience with the Manual
Make You Feel About How
Reliable the Product Is?**

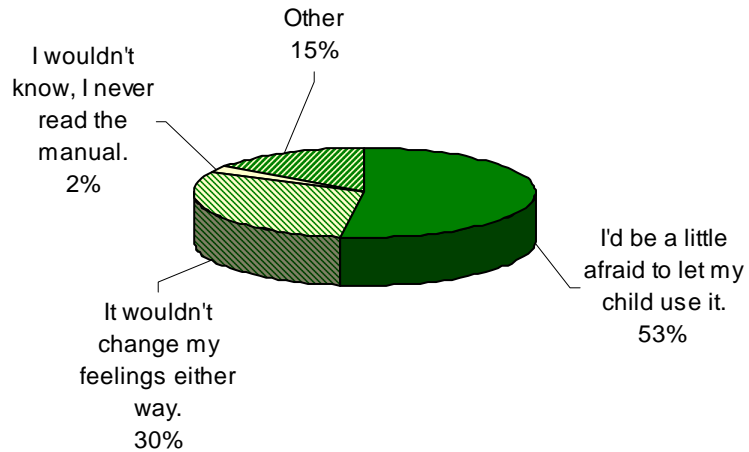


Over half of parents surveyed indicated that difficulty with the manual made them question the product's reliability. Parents are concerned about the reliability of products they use for or give their children. Children don't understand that things wear out, and they often break items faster than adults do. Reliability is a touchstone for parents.

Product Safety

One of the things parents worry most about is their children’s safety. A bad experience with a manual can have an effect on their perception of a product’s safety:

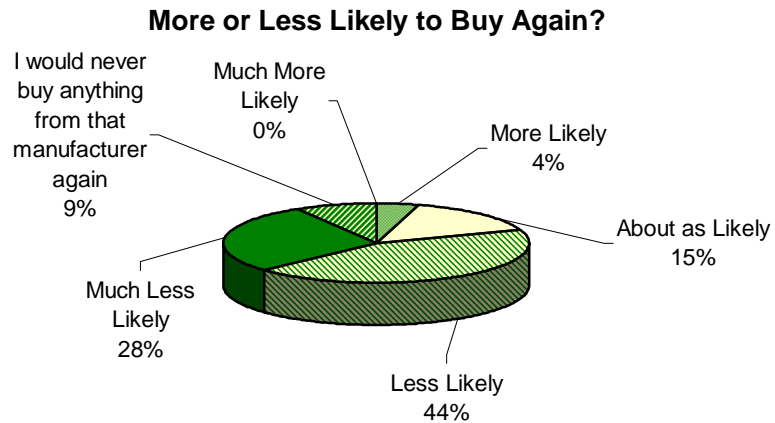
How Would a Bad Experience Make You Feel About How Safe the Product Is?



Over half the parents surveyed admitted to some worry about a product’s safety after a bad experience with the manual. Most of the “other” responses indicated that their reaction depended on the product. They were more likely to allow their children to play with toys that had poor instructions, but less likely to use other types of products, such as safety seats or bouncy chairs. One respondent said, “My son received a bouncy horse from Grandma. Although I have put together many, many things—I found it impossible to get this stupid horse together. The instructions were completely unclear and so I have been just trying to figure out my own way. Right now the horse sits abandoned in my garage, incomplete...”

Likelihood of Further Purchase

The sales implications of parents' dissatisfaction with the manuals are dramatic:

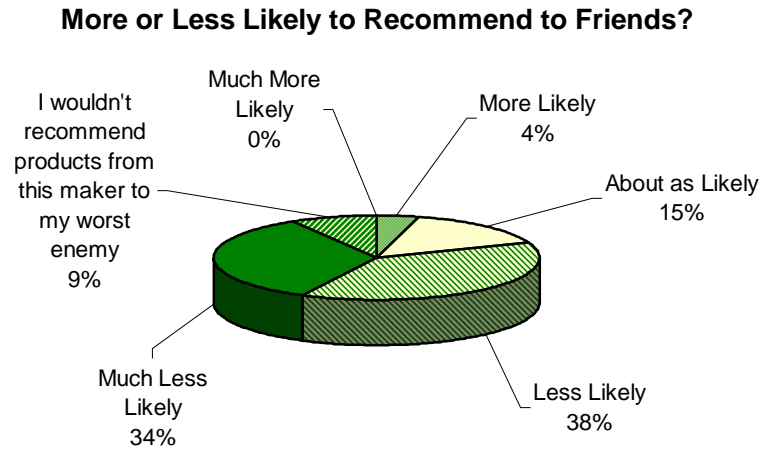


81% of parents are less likely to buy any other product again from a manufacturer who shipped a disappointing manual, with 9% feeling particularly emphatic. That translates to lost market share, lowered sales, smaller profits—all due to a product defect that is easily and inexpensively corrected.

Likelihood of Recommendation

Even further, a grateful market base has friends. Word of mouth is a powerful advertising tool. People like to show that they have discerning taste and expertise, and one of the easiest ways to do that is to recommend good products they buy to others. Marketing experience shows that happy customers not only buy more themselves, but also recommend a product, store, or manufacturer to about seven friends or colleagues.

But a bad product experience, starting with the manual, has a negative effect on parent's likelihood to recommend a product or manufacturer:



Again, a clear majority is less likely to recommend a product with a bad manual to other parents. Again, 9% feel particularly emphatic. And, since conventional sales wisdom holds that unhappy customers warn up to twenty other people away from a product or manufacturer, further market share is lost. A good manual can reverse that effect. One respondent noted, “Because of the ease, reliability, and overall glowing satisfaction I have had with [a manufacturer], I recommend their products to everyone I know.”

How Can Manufacturers Capture More Market Share?

Based on our study, the solution is clear: include better manuals. Make the text easy to read and understand, improve the graphics, ensure that grammar and style are correct for the market.

More from our respondents:

- “Better illustrations. Frequently manuals are generalized and not specific to the actual product, which is frustrating.”
- “Definitely, step-by-step illustrations with clear, concise written instructions. Some of them have written instructions are often unnecessarily verbose.”
- “Better illustrations, plain English!! Sometimes it seems they leave out steps all together.”

Why Manufacturers Haven't Made Improvements

“But,” manufacturers argue, “We don't have the *time* to deliver a good manual. Once the product is finished, we barely have time to get any manual back from the printer, let alone develop a good one.” In fact, this shows that the decision to produce a bad manual is just that: a decision, not an inevitability.

There is also the perception (hopefully now dispelled) that it doesn't matter because consumers don't read the manuals anyway. In this paper, we've shown that consumers *do* read the manual, but simply don't—or can't—find the information they need.

What Can Manufacturers Do?

Fortunately, the fix is simple and comparatively inexpensive: create better manuals. You do not have to create or improve your existing documentation department—there are a variety of solutions to help you, including using independent providers. Hire or contract with professionals who have built a career out of and amassed expertise in understanding readers and their needs. Bring them in early and work with them to formulate a plan to document the things that are less likely to change first, then document more volatile features as they stabilize.

Legislation is being planned to define how installation manuals must be created for child safety seats. Doing so is inexpensive and provides a handsome return on investment in operating costs and customer satisfaction. Show your customers your concern for their well-being and safety. Demonstrate a cutting-edge approach to your market by creating better manuals before government regulation forces you to.

About the Author

Bonni Graham is the president and CEO of Manual Labour, Inc., a full-service technical documentation firm that supports the juvenile products industry. As a member of the Board of Directors of the Society for Technical Communication and a popular presenter (both in the US and internationally), she helps define and guide the theory and practice of technical communication. As an instructor at two University of California campuses, she trains the next generation of technical communicators.

About Manual Labour

Manual Labour, Inc. provides technical communications services to the juvenile products industry. These services include:

- Preparation of consumer manuals (for both online and print delivery) for new or redesigned products
- Market and audience analysis for upgrades to consumer manuals for existing products
- Consulting to publications departments on improved development methods
- Consulting (hiring and policy formation) to manufacturers looking to create publications departments

For more information about Manual Labour's services, contact our Customer Development department at 858-366-0170 x 101 or visit our web page at <http://www.manuallabour.com>.