

## Beliefs and Behaviour: The Use of Survey Evidence in Deceptive Advertising Cases

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Advertising is a frequent target of criticism and has been blamed for social ills as diverse as increased materialism to corruption of the young (Pollay, 1986). The advertising industry has often responded to these criticisms by introducing and monitoring a range of self-regulatory codes, and by funding and administering complaints boards. Governments internationally have also responded by introducing legislation which prohibits "*unfair or deceptive acts or practices in or affecting commerce*" (Federal Trade Commission Act, § 5, U.A.C. §45 (1994)).

Preston (1992) identifies the necessary requirements for establishing deceptiveness. First, he notes there must be evidence about the claims the advertisement in question is making, and these claims must represent consumers' view of what is either stated explicitly or implied in the advertisement. However, Preston acknowledged the difficulty of proving conveyance because, as he states: "*it is located in consumers' minds*" (p. 58). Establishing that a given claim has been conveyed thus often requires evidence from expert witnesses, or from consumers themselves, via a survey.

The second requirement is evidence of materiality; that is, evidence that the claim has the potential to affect consumers. Finally, the regulatory authority must address the truth of the conveyed and material claims. Preston notes that this process may range from quite straightforward to very complex, in which cases, external evidence may be required. Overall, despite variations between international statutes, case law generally has established that misrepresentations may be made expressly or implied, and may be of concern even if they affect only a minority of viewers or readers.

However, as Preston has noted many times, defining misleading or deceptive is difficult because the terms themselves are vague and open to varying interpretations. While true statements are easily recognised, as are overtly false claims, misleading claims may appear true on one level, while conveying incorrect (and thus misleading) information on another level. In situations such as this, Preston observed,

common sense judgement is insufficient and consumer evidence is necessary to establish the presence of deceptiveness and evidence of materiality. Yet although consumer surveys have been adduced, the status and rigour of survey research require clarification.

Examination of US Federal Trade Commission cases offers some insight into the apparent lack of status accorded survey research. Although a range of audience reaction test results have been admitted as evidence, debate over the types of questions used (forced-choice or open-ended), the conditions under which exposure is measured (artificial or natural), the measurement and control of extraneous factors, the statement construction, and the response scales employed, has not been satisfactorily resolved (see Preston 1992b for a detailed analysis of these issues).

Overall, however, Preston (1987) remains convinced that the best extrinsic evidence is well-designed consumer research which directly examines the messages conveyed by the advertising under examination, although he acknowledges the difficulty of designing and conducting these surveys. Preston (1992) sets out a detailed analysis of evidence (including survey research evidence) that has, in his view, been erroneously submitted in FTC or Lanham Act cases and predictably rejected. However, while this analysis gives both researchers and lawyers guidance about existing precedents, and clearly sets out approaches virtually guaranteed to fail, it does not map out a clear alternative which would not suffer the same ignominious fate.

To establish deceptiveness researchers must establish whether the allegedly deceptive message was implied by the advertisement, and *not* whether consumers actually believed that message. Thus research which has investigated the extent to which respondents *believe* certain claims fails to address the more important question of whether those claims are an accurate summary or interpretation of an advertisement's message (see Rotfeld & Preston, 1981, for a discussion of this point). For this reason, researchers have examined the range of possible interpretations made of a given advertisement (and the reasoning processes thought to underlie these interpretations) and have then assessed the proportion of people who regard these interpretations as accurate statements of an advertisement's content.

Preston's (1967) work was amongst the first studies to examine the processes that might shape

consumers' response to questions about advertisement content. He developed a methodology to test his hypothesis that readers of advertisements often commit logical fallacies and so believe that some advertisements make claims which they do not in fact make. Although he considered whether this pattern may be due to respondents' innate dullness, ambiguity in the instructions, unclear statements, or response errors, he ultimately rejected these explanations in favour of a more cognitive line of reasoning. Preston suggested that consumers expect advertisers to promote the benefits of their products, thus they agree with statements which seem consistent with this expectation. In other words, because they expect to see a certain bias in the communications issued by manufacturers about the brands they market, respondents believe what they think the manufacturer would have liked to have claimed, even if these claims were not explicitly made.

To test the existence of this phenomenon, Preston developed a series of five statements: true statements; logically valid statements; logically invalid statements; independent statements, and false statements. Work conducted by Preston & Scharbach (1971) revealed a predictable and generalisable pattern, in the response distribution of these statements.

Our interest lay in investigating whether an adaptation of this methodology could provide evidence which might help the courts to evaluate the alleged deceptiveness of claims brought before them. A key advantage offered by this methodology is that it presents a standard framework which may be used in different cases. The study thus marks a movement towards the development of a more objective survey framework. In particular, we replicated and extended Preston's work into the accuracy of implied claims allegedly made by advertisements. Second, we critically evaluated this methodology in terms of its ability to produce evidence which would guide the courts and which would withstand attack from opposing counsel.

## METHODOLOGY

The study examined consumers' interpretations of *ETA Slims* packaging. In 1997, the New Zealand Commerce Commission (analogous to the FTC) issued proceedings against ETA on the grounds that the name "*Slims*" implied the product was a low oil chip when in fact it was not. Given that the Commerce Commission normally only takes action when it believes it has a high probability of winning the case, it is surprising that in this particular case it was not successful. Part of the evidence presented by the

Commerce Commission consisted of a survey which revealed that "*between 20 and 30 out of every 100 main grocery shoppers interpreted the name-and-pack presentations to have a fat-weight-health benefit over and above other brands*". This survey was heavily criticised by expert witnesses for the defence and it is clear that it was flawed in both its design and its implementation.

The survey was criticised for four reasons. First, the reliability of the findings was questioned because the original questionnaires had been destroyed and so were not available for inspection.

Because the survey was conducted some 12 months after the alleged offence occurred, counsel for *Slims* alleged that too much time had elapsed for the estimates to be valid. Yet since the product had been on sale continuously since the date of the investigation, this complaint seems irrelevant. In other words, there were no obvious reasons why the allegedly misleading connotations of the name *Slims* should have changed over that 12 month period.

The survey mode was also criticised on the grounds that mall intercept interview methodology employed did not capture an adequate cross-section of the market affected. Counsel for the defence alleged that the survey did not include responses from groups, such as children, who made their purchases from outlets other than a supermarket. While it is true that children were not included in the sample (an issue which raises other ethical questions) there is no reason to suppose that their responses would have improved the overall accuracy of the final estimates. Nor are there logical grounds for supposing that respondents who were main household shoppers confined their shopping to supermarkets.

The fourth criticism was that the questions themselves were misleading. The questions used included:

*Is there anything said or shown which leads you to feel that the product is 'special' or 'different' in any other way to other chips made by ETA or other companies?*

*Would you expect there to be any more or any less of any ingredient in this packet of Slims chips?*

*"With regard to the word "Slims" which of these do you understand it to be....*

*It's just a brand name for the product?*

OR

*It's a brand name for the product which tells you something about the product?"*

Although these questions do not suggest or highlight a specific response that is expected of respondents, they do suggest that some substantive response is expected. Given our knowledge of the norms of conversational logic (Sudman, Bradburn & Schwarz, 1996), it seems likely that respondents would opt to give a specific answer rather than state that they did not know, thereby implicitly declaring that they had failed to find what had been expected of them. Richards & Preston (1992) explicitly acknowledged this problem when they noted: "*Simply by asking the question, the interviewer is suggesting some degree of importance.... consumers may feel that by saying [the attribute] is unimportant they would cause the seller to respond by lowering the product's quality*" (p. 52).

The difficulties associated with interpreting and classifying open-ended questions have also been well-documented in FTC decisions and in survey research literature and, given the need to present evidence that was as "objective" as possible, the use of this type of question was unwise.

This case highlights the need for great care in the design of surveys which will be adduced as evidence and identified problems which merited more rigorous scrutiny.

### Procedure and Sample

The data for this research were obtained from a cross-sectional survey involving 377 face-to-face mall intercept interviews conducted within a random sample of shoppers to the Plaza, a major shopping mall, over the period 10-12 October, 1997. The response rate was 47.4%. The interviews were conducted by fully trained and experienced graduate and final year undergraduate students.

Mall intercepts were used for several reasons. First, respondents needed access to visual stimuli; second, mall intercepts are a timely method of conducting a large number of interviews of the general public within a limited period of time. Finally, notwithstanding the criticisms raised in the *Slims* case, mall intercept interviews are widely accepted as providing responses from a cross-section of the general public. The latter two factors are important considerations when interim injunctions are sought and companies typically have only a limited period of time in which to collect and analyse survey evidence.

### Survey Instrument

For our purposes, only three of Preston's five statements were of interest, since our objective was to attempt to quantify the level of potential deception

rather than to explore the processes by which respondents arrived at illogical conclusions. The analysis we present thus refers only to the true, the logically invalid and the false statements contained in Table 1 below.

**Table 1: Statements Employed**

Statement	Preston's Classification
ETA Slims are a brand of thinly cut potato chips	True
ETA Slims are a low oil brand of potato chip	False
ETA Slims contain the same amount of fat as low oil potato chips	Logically invalid

These statements were designed so they expressed, first, the truth about *Slims'* attributes - it is a brand of thinly cut potato chip (this claim is the basis of the defence offered by the manufacturer). Second, the false statement was the claim the Commerce Commission alleged the name *Slims* to have made - namely that it is a low oil brand of potato chip. Finally, the logically invalid statement required respondents to reason that, if *Slims* was a low oil brand of chips, it would contain the same amount of fat as low oil potato chips (i.e., if X, then Y, reasoning).

Respondents were given a copy of an ETA Slims packet and were asked to examine this packet and then to indicate whether these statements were accurate or inaccurate descriptions of ETA Slims. The questioning procedure used closely followed Preston's methodology. The remaining section of the questionnaire examined whether respondents ate potato chips and, if so, which brands they had consumed in the last four weeks.

### RESULTS

If, according to Preston's study, logical structure was an important determinant of respondents' classification, we expected the proportion of accurate responses to decrease as the falsity of the statement increased. Table 2 outlines the pattern of responses we found:

**Table 2: Attribution of accuracy to belief statements**

Statement	Classification		
	Acc.	Inacc.	DK
ETA Slims...	%	%	%
Are a brand of thinly cut potato chips (T)	88.6	9.0	2.4
Contain the same amount of fat as low oil potato chips (LI)	45.4	39.8	14.8
Are a low oil brand of potato chip (F)	35.8	58.1	6.1

Table 2 shows that the results followed the general pattern predicted by Preston. Overall, respondents appreciated that ETA *Slims* is a wafer cut chip (a fact stated clearly on the packaging). Nearly half described the comparative oil statement as accurate, even though this information was not stated on the packaging and was in fact untrue. However, nearly the same proportion disagreed with this statement, and 15% stated they were unable to classify the statement. Perhaps most interestingly, over a third described the claim that ETA *Slims* are a low oil brand of chips as accurate, although well over half classified this statement as inaccurate.

The relationship between these latter two statements is of particular interest since classification of the logically invalid statement as accurate depends on acceptance of the false statement as accurate. That is, *Slims* can only contain the same amount of fat as low oil chips if it is in fact a low oil chip itself. Rotfeld & Preston argued that the expansionary effect they detected means that response to the false statement may underestimate the potential for deception that is present.

However, although these results are consistent with Preston's hypothesised pattern, they are clearly inconsistent with what we would expect to find if respondents had interpreted these statements correctly. Looking at the true statement, 11% of the sample classified this statement as false, even though the packet clearly described the product as "wafer cut". If we assume that this error is due to factors other than the logical structure of the statement, we must also consider this error in the context of the two statements

known to be inaccurate. To accommodate these additional error sources, we subtracted 11 percent from the estimates for the logically invalid statement and the false statement. This calculation reduced the proportion classifying each statement as accurate to 34 percent and 25 percent respectively. By any standards, between a quarter and a third of the sample represents a substantial proportion of the population, and this finding suggests that a sizeable group of people had at least the potential to be misled about the oil content of this product. These results are therefore somewhat at odds with the Court's findings relating to the evidence, although the final judgement was determined in reference to a variety of factors, of which the survey evidence was only one.

If, however, this research had been submitted in the *Slims* case, how might it have assisted the court? These findings provide two different measures of the potential for deception, both of which, in this particular case, suggest that this potential was non-trivial. After discounting, the results are in fact very similar to those obtained from the Commerce Commission's survey.

However, would this evidence withstand scrutiny from the defence counsel? Our concern is that although this method offers a structure missing from the ad hoc studies reported in the literature or submitted as evidence, it is also open to criticism. In particular, the development of the statements, especially the logically invalid statement, is subjective and there are no empirical guidelines to guide the construction of the statements used. This problem affects question wording in general, at least to some extent, but the environment within which this particular methodology would be examined makes it especially vulnerable to these criticisms. Although this renders the evidence less than objective, it is nevertheless possible that a detailed programme of replication research could evaluate methods of statement construction with the aim of producing empirical guidelines that are more likely to withstand criticisms of subjectivity or bias.

Yet while these findings may offer some insight into the potential (or actual) deception that was present, they offer no insights into the effect these beliefs had on consumers' behaviour. Thus the second requirement Preston identifies is not addressed by this type of work; the following section examines this requirement in more detail and outlines a methodology which might be used to meet it.

### Behavioural Implications

Examination of respondents' interpretation of an advertisement provides information which can be used to assess the first question considered by the courts: whether deceptiveness exists, and, if so, the proportion of people

likely to be affected by it. To establish materiality, prosecutors and plaintiffs need access to a survey methodology which will enable them to measure consumers' beliefs *and* the effect these have had on their subsequent choice behaviour. This question requires the courts to consider an additional question: the materiality of allegedly misleading claims. The methodological implications of this question, which require an estimation of the behavioural consequences of deceptiveness, have not been considered in detail.

Richards & Preston (1992) noted: "*where deceptiveness represents a probability that consumers will form a false belief about a product attribute, as a result of an explicit or implied claim about that attribute, materiality is the probability that this false belief will affect their ultimate behaviour*" (p. 53).

This argument differentiates between deceptiveness and belief formation, but links the two in a possible causal sequence, which in turn is linked to behaviour. The model they proposed relies heavily on the view that consumers are rational processors of information, and that the beliefs they hold about a brand will shape their behaviour towards that brand (see Fishbein & Azjen, 1975 for a discussion of this model). However, this view has attracted strong criticism, and, although the debate is on-going, many researchers now accept that beliefs are often formed as a consequence of usage behaviour, and not as a precursor to it (see Barwise & Ehrenberg, 1985).

Richards & Preston suggested asking respondents to use a four point scale to rate how important various characteristics are in a given purchase decision. The deficiencies of this method (and intentions based instruments generally) as a gauge of behavioural impact are obvious and have been well documented (see Juster, 1966, Day *et al*, 1991). Other issues also require consideration. Richards & Preston (1992) noted that there were few guidelines to suggest whether the allegedly deceptive attribute should be measured without reference to the advertisement itself; only in the context of the advertisement and its explicit claim; only in comparison with the truth, or in the context of the allegedly false implied claim.

They suggested that research should examine not the absolute effect of the allegedly deceptive claim, but its effect in relation to a true claim. To do this, they proposed a split sample experiment where a control group would view a true claim while a test group would view the allegedly false claim. Both groups would use a series of bipolar scales to rate how the claim they had seen had affected their search and purchase behaviour, and these responses would then

be compared. However, as Richards & Preston noted: "*This method is cumbersome and problematic*" (1992, p.54), and it does not represent an unambiguous solution to this problem.

By contrast, discrete choice modelling represents an alternative method of identifying the behavioural consequences of advertising claims (as well as other marketing mix variables). The research typically begins with a qualitative phase to identify key attributes consumers consider when purchasing. Various levels of different attributes are established and experimental procedures are used to generate sets of alternative attributes and levels. Respondents are shown a number of these sets, each of which contains a different combination of attributes, and asked to choose one alternative from each set.

Multinomial logit regression (MNL) can then be used to identify the relative importance of various attributes. The MNL model posits that the probability of selecting a given attribute depends on the relative attractiveness, or utility, of that alternative. The regression co-efficient calculated for each attribute is a measure of its relative utility. This methodology enables trade-offs to be estimated between different types and levels of attributes, and arguably provides a close approximation of consumers' actual choice behaviour.

In the ETA Slims case, the MNL model would look like this:

$$\text{Utility} = \beta_1\text{Slims} + \beta_2\text{Lites} + \beta_3\text{Naturals} + \beta_4\text{Price} + \beta_5\text{Oil Perception}$$

The brands and price levels would be incorporated in the different choice sets presented to a sample of consumers, and oil perception would be measured by asking consumers to rate each brand's "oiliness" on an appropriate scale.

The coefficient  $\beta_5$  is the effect on total utility, or market share, of a one-point change in perceived "oiliness". By making some assumptions about the oiliness perception of Slims in the absence of any deception, the effect of this deception can be calculated in terms of market share. In other words, discrete choice analysis can be used to provide a quantifiable measure of the effect of deception (if in fact this has occurred).

However, this approach is not immune from criticism. It is still based on respondent ratings and choice behaviour, and there are potential methodological problems, such as whether the model includes all of the relevant choice attributes. Nevertheless, choice modelling has the distinct advantage that it attempts to predict consumer behaviour, rather than to infer it, and it can produce a quantitative estimate of the effect of deception.

## CONCLUSIONS

The research currently undertaken to compile evidence used in cases alleging misleading or deceptive advertising has often been poorly designed and has not constituted an adequate test of whether the potential for deception exists. While this is the case, survey evidence will be accorded little weight and the views of the consumers purportedly protected by the consumer legislation used to prosecute traders who allegedly engage in misleading conduct will have little weight accorded to them.

Adaptation of Preston's methodology provides a question framework which could be applied across a variety of cases and which is not open to the same criticisms that have been levelled at recent surveys. This method captures the complexity associated with the interpretation of allegedly deceptive claims, though it relies heavily on the construction of statements whose status may be challenged.

Thus, even if this type of survey evidence were accepted, it still offers no insight into the effect any potential for deception may have on consumers' behaviour and it therefore leaves unaddressed the critical issue of materiality. Discrete choice analysis represents a potential method of addressing this requirement and of dealing with a number of the criticisms that have been levelled at survey evidence. However, even though this methodology appears superior, at least in principle, to much of the research currently submitted, it leaves unaddressed a major problem, which Preston has already noted.

Ultimately, the major problem is lawyers and the legal system. Lawyers are generally not well trained in statistics and, even if they are, evidence which relies on sampling theory is always open to question. As one lawyer put it: "If only you could give me a sample estimate with a 100% confidence interval". Under these circumstances, no methodology could guarantee the acceptance of survey evidence in deceptive advertising cases. However, we believe it is possible to develop approaches which will make survey evidence more generally acceptable in the courts and less vulnerable to attack on methodological grounds. Choice modelling is one approach which offers this potential and the insights this methodology can offer, as well as its potential frailties in a courtroom context, merit closer investigation.

## REFERENCES

Barwise, T. & Ehrenberg, A (1985). Consumer beliefs and brand usage. *Journal of the*

*Market Research Society*, 27, 81-93.

Day, D., Gan, B., Gendall, P. & Esslemont, D. (1991). Predicting purchase behaviour. *Marketing Bulletin*, 2, 18-30.

Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour*. Reading, MA: Addison-Wesley.

Juster, T. (1966). Consumer buying intentions and purchase probability: An experiment in survey design. Occasional Paper 99, National Bureau of Economic Research: New York.

Pollay, R. (1986). The distorted mirror: Reflections on the unintended consequences of advertising. *Journal of Marketing*, 50, 15-36.

Preston, I. (1967). Logic and illogic in the advertising process. *Journalism Quarterly*, 44 (2), 231-239.

Preston, I. (1983). Research on deceptive advertising: Commentary. In *Information processing Research in advertising*, ed. Norris, R.J., pp. 289-305. Lawrence Erlbaum Assoc: New Jersey.

Preston, I. (1987). Extrinsic evidence in Federal Trade Commission deceptiveness cases. *Columbia Business Law Review*, 3,

Preston, I. (1995). Dissension at the FTC in identifying consumer response to advertisements. *1995 Marketing and Public Policy Conference*, 286-294.

Preston, I. (1992). The scandalous record of avoidable errors in expert evidence offered in FTC and Lanham Act deceptiveness cases. *Journal of Public Policy and Marketing*, 11 (20), 57-67.

Preston, I. (1998). Puffery and other 'loophole' claims: how the law's 'Don't ask, don't tell' policy condones fraudulent falsity in advertising. *American Business Law Journal*, in press.

Preston, I. & Scharbach, S. (1971). Advertising: More than meets the eye? *Journal of Advertising Research*, 11 (3), 19-24.

Richards, J. & Preston, I. (1992). Proving and disproving materiality of deceptive advertising claims. *Journal of Public Policy and Marketing*, 11 (2), 45-56.

Rotfeld, H. & Preston, I. (1981). The potential impact of research on advertising law. *Journal of Advertising Research*, 21 (2), 9-17.

Sudman, S. Bradburn, N. & Schwarz, N. (1996). *Thinking about answers: The application of cognitive Processes to survey methodology*. San Francisco, CA: Jossey-Bass.