DECEPTION FROM IMPLIED SUPERIORITY CLAIMS IN ADVERTISING: THE CASE OF COMBINED COMPARATIVES

By

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I dedicate this work to the loving memory of James B. McCracken, my best friend, coach, and inspirational cheerleader.

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One of the goals of comparative advertising is to achieve a specific positioning for the sponsor brand. Competitive positioning may be achieved via an associative strategy but more often comparative ads are designed to emphasize differences between brands. With combined-comparative claims advertisers can achieve both association and differentiation from the competition. The cause for concern with combined comparatives is based on advertisers' misuse of this format to falsely suggest brand superiority. Recognizing the potential damage to their brands, advertisers are now legally challenging such claims.

The purpose of this dissertation is to identify instances when processing of combined-comparative claims leads to interpretive biases. The linguistic construction of

such claims is predicted to lead to false attribute inferences and to inaccurate consumer perceptions of the comparison brands.

Study one investigates comparative claims that differ in specificity. A second study investigates combined comparatives of different directions (parity and superiority) and interpretive biases when these target different competitors.

Study one did not provide support for the hypothesized effects when the combined comparative consisted of puffery and negated parity claims. A majority of subjects recalled that the sponsor was superior to the parity brand on the depicted attribute, and very few subjects reported a parity comparison between the sponsor and the parity brand. However, there were no statistically significant differences due to the advertising copy manipulations.

Results from the second study were supportive of the hypothesized effects. There were statistically significant effects of the advertising copy manipulation on subjects' recall of sponsor superiority over the parity brand. Significantly more subjects falsely recalled the sponsor was superior on the depicted attribute when the parity claims were in negated parity form than when they were linguistically simplified. Moreover, the number of subjects who said the sponsor was superior over the parity brand increased with delay only in the negated parity condition. When the parity claim was simplified, significantly fewer subjects reported sponsor superiority. The ability of the simplified claims to convey the parity comparison persisted over time.

CHAPTER 1
INTRODUCTION

In the last thirty years consumers have become used to comparative advertisements to such extent that the cola wars, the burger wars, and the long-distance wars are commonplace in the advertising landscape. However, comparative advertising does not enjoy universal appeal (Beller 1995; Donthu 1998). While comparative advertising has been legalized in many European countries (e.g., France, Great Britain, The Netherlands, Denmark), the levels of use and acceptance have varied significantly. The European Union just recently developed guidelines to deal uniformly with comparative advertisements across member states (Donthu 1998). Japan has also recently relaxed its stance against comparative advertising, where it has been legal but rarely used because it is considered taboo and impolite. Although the pressure of globalization is forcing China and Latin American countries to allow use of comparative advertising, some Asian countries like Hong Kong and Korea continue to treat comparative ads as illegal (Beller 1995; Donthu 1998).

Based on the premise that a function of advertising in an economic system is to inform consumers, in the early 1970s the Federal Trade Commission (hereafter FTC or the Commission) encouraged comparative advertising (Wilkie and Farris 1975). Until then, comparative advertising had rarely been used in the United States. The general attitude towards comparative advertising was negative; it was seen as unethical and not the practice of "self-respecting" businessmen (Beller 1995). Estimates indicate that

comparative advertisements now account for approximately 25 to 50% of all advertisements, figures that reflect a quadrupling from 1990 to 1995 (Petty 1991; Felix 1995; Donthu 1998).

In spite of their popularity, practitioners and regulators associate comparative advertisements with consumer confusion and significant legal problems (Muehling, Stem and Raven 1989). Comparative ads are legally challenged more often than non-comparative ads, leading some to suggest that the FTC's endorsement of comparative advertising contributed to the rise in competitive lawsuits (Donthu 1998; Goldman 1993). Since 1980, for instance, sixty-five percent of private lawsuits under the Lanham Act have involved comparative claims. In seventy percent of such cases defendants were found liable, with award damages reaching up to $40 million in once case (Petty 1991; Buchman and Goldman 1989).[1] A survey of policy makers and advertisers suggests that challenges to comparative ads are generally the result of unsatisfactory claim substantiation, particularly in product categories where there is little or no basis to claim objective differences between brands (Muehling et al. 1989). In such instances, advertising is the sole discriminating variable between brands and few, if any, specific attributes are mentioned (Shimp and Preston 1981; Preston 1994; Shimp 1983; Preston 1986).

[1] U-Haul International v. Jartran 793 F. 2d 1034 (9th Cir. July 3, 1986).

Comparative Claims: Definition and Typology

Comparative advertising is defined as advertising that "identifies the competition for the purpose of claiming superiority or enhancing perceptions of the sponsor's brand," rather than promote a product on its own merits (James and Hensel 1991, p.54). The comparison may refer to a specific attribute of the product or it may be a general, all-encompassing comparison. The comparison may be subtle or it may directly address a specific competitor, usually the market leader (Beller 1995; James and Hensel 1991). Researchers have generally distinguished between comparative claims that name the comparison brand (direct comparative ads) and claims that only indirectly refer to the competition (*incomplete comparisons*, e.g., Shimp 1978; Droge and Darmon 1987; Neese and Taylor 1994; Pechmann and Ratneshwar 1991; Muehling, Stoltman and Grossbart 1990). Other typologies distinguish comparative claims on the basis of the *intensity* and *direction* of the comparison. Intensity refers to the degree of specificity of the claim, while direction refers to the positioning of the advertised brand in relation to a competitor (Neese and Taylor 1994; Barry 1993).[2] Specifically, the direction of a comparative claim refers to whether an association or differentiation strategy is being pursued. *Parity* claims, for instance, are used to emphasize similarities between the sponsor and the comparison brand, while superiority claims are intended to emphasize important differences (Pride, Lamb and Pletcher 1979; Muehling and Kangun 1985; Droge and Darmon 1987; Pechmann and Ratneshwar 1991). *Combined comparatives* may feature claims of different direction or specificity (Barry 1993), while *partial comparatives* are

[2] Neese and Taylor (1994) use the term *intensity* to refer to the specificity of comparative claims. The term *specificity* will be used instead in the remainder of the text.

said to feature a mixture of comparative and non-comparative claims (Barone and Miniard 1999).

Combined Comparatives: Direction and Specificity

One of the goals of comparative advertising is to achieve a specific positioning for the sponsor brand (Wilkie and Farris 1975). Such positioning may be obtained via an associative strategy by which the advertised brand claims to be similar to one of its competitors, usually the market leader (Droge and Darmon 1987; Gorn and Weinberg 1984; Wilkie and Farris 1975). More often, however, comparative ads are designed to emphasize differences between brands (Preston 1994; Goldman 1993; Pechmann and Ratneshwar 1991).

When objective differences between brands are negligible, the challenge rests on advertisers to *create* an important difference in the mind of consumers. For instance, half of the lawsuits from 1955 to 1989 involving comparative advertising dealt with explicit differential comparisons, while 20 percent involved explicit associative comparisons and 22 percent involved implicit comparisons. In a majority of these cases, the advertisers' attempt at a unique positioning of the brand was unsubstantiated (Felix 1995).

Combined-comparative claims are popular with advertisers because they can efficiently clarify and strengthen a brand's positioning. With combined-comparative claims advertisers can achieve both association and differentiation from the competition. Such advertisements can position the sponsor against various brands or target a single brand with comparative association and differentiation achieved in relation to different attributes (Muehling and Kangun 1985; Barry 1993; Neese and Taylor 1994). The claims are always literally true. Recent legal challenges indicate, however, that advertisers use

such a strategy to falsely suggest superiority. In American Home Products (AHP) versus Procter and Gamble (1994)[3] the challenged claims included a parity claim for Aleve against Advil and a superiority claim against Extra-Strength Tylenol, both referring to duration of pain relief. AHP, the makers of Advil, challenged the ad on the grounds that the combined claims encouraged a superiority take-away favoring Aleve for duration of pain relief and speed of action. Based on scientific evidence, Aleve could only truthfully make a superiority claim against Tylenol and a parity claim against Advil. [4]

Combined comparatives also motivated a recent complaint to the National Advertising Division (NAD) of the Better Business Bureau. The advertisement in question compared Aquafresh Whitening Toothpaste against Rembrandt Whitening Toothpaste and Crest. In relation to Rembrandt, Aquafresh made an explicit parity claim that was followed with an explicit superiority claim against Crest, both referring to the toothpaste's whitening ability. In its recommendations, the NAD recognized that the language and format of the commercial could lead to consumer confusion and to an overall superiority take-away that would harm the parity brand. [5]

Research suggests that suspicions about the potential harm to competitors and consumers from false complex comparative claims are justified. First, comparative claims negatively impact perceptions of the comparison brand (Kamen 1987). A meta-analysis of the comparative advertising literature reports that attitudes towards the comparison

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[3] American Home Products v. Procter and Gamble Company, Syntex USA Inc. and Proctor-Syntex Health Products Co., 871 F. Supp. 739; 1994 U.S. Dist.

[4] An injunction was denied in this case even though survey evidence suggested consumers took away a superiority rather than a parity comparison against Advil. The court deemed the survey to be methodologically flawed.

brand are less favorable than for the sponsor brand, and that purchase intentions and choice behavior are negatively affected as a result (Grewal, Kavanoor, Ferr, Costley and Barnes 1997).

Second, the language and format of combined comparatives may significantly alter consumers' interpretation of brand information. Several researchers who have reviewed deceptive advertising cases under the Lanham Act suggest that careful selection of language and format proved instrumental in crafting comparative claims that "stretched the truth" (Goldman 1993; Preston 1989b, 1994). The ambiguous wording of some parity claims, in particular, may encourage superiority inferences that cannot be substantiated (Harris and Monaco 1978; Preston 1989 a, b; Snyder 1989). The parity claims against Rembrandt in the Aquafresh ad previously discussed stated that "not even Rembrandt can whiten better than Aquafresh whitening," and "Even Rembrandt can't beat Aquafresh." Similarly, Aleve claimed "Aleve is longer-lasting than Extra-Strength Tylenol. Advil isn't stronger..." The inference strongly encouraged by the wording of these claims is that both Rembrandt an Advil are outperformed by the sponsor brands, even when the explicit claim only makes a parity comparison. In both cases the superiority inferences lacked substantiation. Furthermore, such inferences are likely to be facilitated by the placement of the superiority claims in relation to parity comparisons. In combined comparatives, superiority claims are often placed in close proximity to the

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[5] Report of NARB Panel 97; Disposition of Advertising Referred to NARB regarding Smith Kline Beecham's Aquafresh Whitening Toothpaste.

parity claims, possibly biasing their interpretation and recall (cf. Janiszewski 1990; Hanssens and Weitz 1980).[6]

Finally, research suggests that consumers have difficulty processing comparative claims. For example, consumers have to devote extra effort to avoid confusing the sponsor with the comparison brand (Goodwin and Etgar 1980; Pechmann and Stewart 1990). The potential for confusion is greater with combined-comparative claims given the additional brand and attribute information consumers must process. Thus, when the format or language of comparative ads encourages inferences about the sponsor that cannot be objectively supported, combined comparatives may not only confuse but also mislead consumers and harm competitors. (Snyder 1989; Pechmann and Stewart 1990; Pechmann and Ratneshwar 1991; Pechmann 1996).

Summary

As previously discussed, combined comparatives may position the sponsor brand on par with the competition or as significantly superior. Moreover, such claims may be based on specific attribute information or may be made in the form of general superiority or evaluative statements, even puffery (Pride, Lamb and Pletcher 1979; Neese and Taylor 1994; McDougall 1976; Droge and Darmon 1987; see also Alba, Marmorstein and Chattopadhyay 1992). When consumers are faced with such complex advertisements, they must devote additional cognitive resources to encode and store information, especially when claims are made against various brands.

[6] In fact, the NAD/NARB recommended a change in the placement of the comparative claims in the Aquafresh advertisement for that reason.

Combined Comparatives: Cause for Concern

Claims presented in the format previously described have been generally accepted as obvious parity comparisons by the advertising industry. Recently, however, such statements appear in the presence of other advertising claims that encourage consumers to infer comparative superiority when it cannot be substantiated by the advertiser. Recognizing the potential damage to their brands, advertisers are now challenging the complex and ambiguous linguistic constructions used to make parity claims. NAD has also recognized the seriousness of this problem. In a recent decision, the NAD stated that such claims raise "serious questions with respect to the treatment of parity claims by the courts, state and federal regulators," but conceded that theirs was not an appropriate forum to evaluate what they consider to be a much larger issue.[7] This statement seems to suggest the need for involvement by the appropriate government agencies in examining these claims. To date, no FTC case has specifically addressed this issue,[8] even though these claims certainly have the potential to mislead consumers to their detriment. For instance, most of the complaints made to NAD involving this form of parity claim are for health-related products.[9]

Upcoming chapters will review issues of language and information processing relevant to understanding implied superiority claims and combined comparatives. This review will reveal that no empirical work has directly focused on the linguistic form of complex comparatives as a source of deception. Moreover, no empirical work has

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[7] NAD McNeil Consumer Products Co. versus American Home Products Corp., April 1999.

[8] Teodore Hoppock, Senior Attorney at Advertising Practices, Bureau of Consumer Protection of the FTC. Personal Communication, September 1999.

[9] Table 4 presents a summary of NAD decisions involving implied parity claims.

addressed the processing and integration of several combined comparative claims featured in a single ad. The purpose of this dissertation is to identify instances when processing of combined comparative claims leads to 1) biasing of claim interpretation as a result of the linguistic construction of one of the claims; 2) inferences about attributes or benefits that the advertiser cannot substantiate; 3) false or inaccurate consumer perceptions of comparison brand or brands.

The following chapter provides background on legal issues on deceptive advertising as they pertain to federal regulation, private litigation, and industry self-regulation. Subsequent chapters will review consumer research on implied claims, and behavioral concepts relevant to the processing of combined comparatives. In those sections it is argued that the linguistic format of combined comparative claims biases consumer interpretation of advertising information to the detriment of competitors and consumers. The empirical work follows.

Study one investigates comparative claims that differ in specificity, and the interpretive biases that result when these are featured in a single ad. A second study investigates combined comparatives of different directions (parity and superiority) and interpretive biases when these target different competitors in a single ad. The final chapter discusses the implications of the results and limitations of the studies, suggesting avenues for future investigations.

CHAPTER 2
DECEPTIVE ADVERTISING: OVERVIEW OF LEGAL ISSUES

The advertising industry is regulated by a multi-tiered regulatory system. At the federal level, the Federal Trade Commission (hereafter FTC or the Commission) regulates advertising as part of its mission to protect consumers from unfair, deceptive, or fraudulent practices. Under Section 43 (a) of the Lanham Trademark Act (hereafter Lanham Act) advertisers who are damaged or are likely to be damaged by false representations made by a competitor can bring suit (Cohen 1969; Richards 1990a, Preston 1990; Wegman 1999).[10] The National Advertising Division of the Council of Better Business Bureaus is charged with independent responsibility for monitoring and reviewing national advertising for truthfulness and accuracy.

The Legal Definition of Deception: The FTC

The Federal Trade Commission, through the Bureau of Consumer Protection, regulates advertising as part of its mission to protect consumers from unfair, deceptive, or fraudulent practices. The Deception Policy Statement specifically defines deceptive acts or practices prohibited by Section 5 of the FTC Act. The Commission usually takes action against advertisers when prompted by complaints from consumers, other advertisers, or other regulatory agencies. When the FTC believes a violation has occurred, it first attempts to obtain voluntary compliance from the advertiser through a

[10] Lanham Trademark Act, @ 43 (a) 15 U.S.C. @ 1125 (a), 1982.

consent order. When a consent agreement cannot be reached, the FTC issues an administrative complaint and a formal proceeding before an administrative law judge usually follows (Richards 1990a).

The most recent effort at summarizing the FTC's policy was made in 1983, when the following was established as an omnibus statement describing the elements of deception: "the Commission will find an act or practice deceptive if first, there is a representation, omission, or practice that second, is likely to mislead consumers acting reasonably under the circumstances, and third, the representation, omission, or practice is material" (Deception Policy Statement, appended to Cliffdale Assoc., 103 F.T.C. 110, 1984; hereafter referred to as Deception Policy Statement 1983).

In determining whether an ad is deceptive, the FTC may rely on the *facial* examination of an advertisement when the claim in question was explicitly made. When explicit advertising information suggests multiple interpretations, and the Commission cannot determine with confidence whether at least one of those interpretations is likely to mislead consumers, it may require extrinsic evidence in the form of consumer surveys or expert testimony (see Figure 1).

When research is submitted as evidence to the FTC or the courts, it is generally in the form of copy tests conducted after consumers are exposed to the advertisement in question. During these copy tests, consumers are first asked open-ended questions in order to determine what the advertisement "said or suggested" to them. Subsequent open-ended questions are narrower in focus, and are followed by close-ended questions that probe more deeply to determine whether specific representations were conveyed to consumers (Maronick 1991).

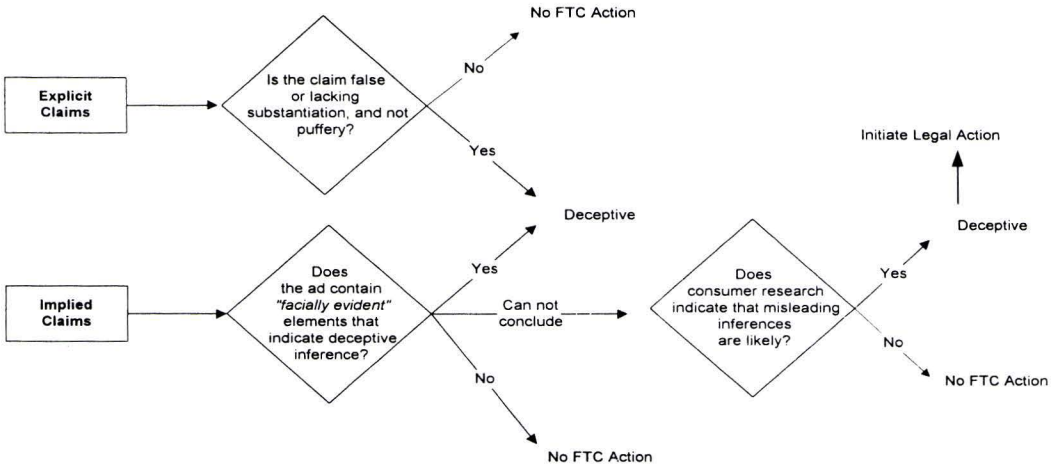

Figure 1. Initial assessment of deception by the FTC

Consumer surveys are expected to provide the FTC and the courts with evidence that allows them to determine if at least one of the meanings implied by an explicit claim has a tendency to mislead a significant number of consumers. Commission decisions suggest that such a meaning should be conveyed to a "substantial portion of the public, " at least 20 to 25 percent (Deception Policy Statement 1983).

The Lanham Trademark Act

Advertisers who are damaged or are likely to be damaged by false representations made by a competitor can bring suit under Section 43 (a) of the Lanham Trademark Act. Before 1989, wording of Section 43 (a) stated that potential damage to a plaintiff could only be claimed when a false representation was made about the defendant's goods or services. With the new wording, action may be taken against an advertiser who makes false claims about the defendant's product and/or the plaintiff's products:

> false or misleading representations of fact, which...in commercial advertising or promotion, misrepresents the nature, characteristics, qualities or geographic origin of *his or her or another person's goods, services, or commercial activities*, shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act. (Act of Nov. 16, 1988, codified as amendment at 15 U.S.C. @ 1125, emphasis added)

Thus, to prevail in a case of false advertising under section 43 (a), the plaintiff must first prove that the defendant made a false or misleading statement regarding its own or the defendant's products. Specifically, the plaintiff must demonstrate that the advertisement is either literally false, or if literally true is likely to mislead or confuse a substantial portion of the intended audience. The plaintiff must also demonstrate damages (or their likelihood). This can be accomplished by showing that sales have been diverted from the plaintiff to the defendant, or by showing the corresponding loss of market share. A loss of goodwill towards the plaintiff or the plaintiffs' product also constitutes damages (Lanham Trademark Act 1982).

The primary objective of most complaints filed under section 43 (a) the Lanham act is to obtain a preliminary injunction to prevent a competitor from continuing an offending marketing practice. At this point, the plaintiff must demonstrate that it is likely to succeed on the merits if its case, that it does not have adequate remedy at law, and will suffer *irreparable harm* if a preliminary injunction is denied. The court makes a decision after weighing the irreparable harm that the defendant will suffer if preliminary relief is granted against the irreparable harm to the plaintiff if relief is denied. How the public interest will be served by granting or denying the preliminary injunction is also

considered.[11] Given the strict standards that must be met in order to obtain a preliminary injunction, few cases proceed beyond this phase and even fewer continue to a full trail (Wegman 1999). In order to prove irreparable harm and claim damages, for instance, a plaintiff has to provide convincing evidence of consumer deception from the claim(s) in question. Extrinsic evidence is almost always required of the plaintiff at this phase, with absence of such evidence considered a material factor by the courts.[12] Extrinsic evidence need not consist of consumer surveys (Jacoby, Handlin and Simonson 1994). However, if consumer surveys are introduced, they must demonstrate that the misleading claim was conveyed to a "not insubstantial" portion of consumers, usually 15 percent (Preston 1989b; Wegman 1999).

The National Advertising Division of the Better Business Bureau

The National Advertising Division (hereafter NAD) of the Council of Better Business Bureaus is charged with independent responsibility for monitoring and reviewing national advertising for truthfulness and accuracy. NAD reviews complaints regarding national advertising made by any person or legal entity, regardless of whether

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[11] See Procter and Gamble Co. v. Chesebrough-Pond's, Inc., 747 F.2d 114, 118 (2d Cir. 1984); Coca-Cola Co. v. Tropicana Prods., Inc., 690 F.2d 312, 314-15 (2d Cir. 1982); United States v. Siemens Corp., 621 F.2d 499, 505 (2d Cir. 1980). *"We will presume irreparable harm where plaintiff demonstrates a likelihood of success in showing literally false defendant's comparative advertisement which mentions plaintiff's product by name."* See McNeilab, Inc. v. American Home Products Corp., 848 F.2d 34, 38 (2d Cir. 1988); Nester's Map and Guide Corp. v. Hagstrom Map Co., 760 F. Supp. 36, 36 (E.D.N.Y. 1991); Valu Eng'g, Inc. v. Nolu Plastics, Inc., 732 F. Supp. 1024, 1025 (N.D. Cal. 1990).

[12] *"It is virtually impossible to prove that so much of one's sales will be lost or that one's goodwill be damaged as a direct result of a competitor's advertisement...The Lanham Act plaintiff must...offer something more than a mere subjective belief that he is likely to be injured as a result of false advertising; he must submit proof which provides a reasonable basis for that belief."* The Coca Cola Company v. Tropicana Products, Inc. 538 F. Supp. 1091; 1982 U.S. Dist; U.S.P.Q. (BNA) 927.

the advertisements were intended for consumers, professionals or business entities. The statement of function and policies was last revised in 1998 and it states:

> The National Advertising Division of the Council of Better Business Bureaus and the Children's Advertising Review Unit (CARU), shall be responsible for receiving or initiating, evaluating, investigating, analyzing (in conjunction with outside experts, if warranted, and upon notice to the parties), and holding negotiations with an advertiser, and resolving complaints or questions from any source involving the truth or accuracy of national advertising, or consistency with CARU's *Self-Regulatory Guidelines for Children's Advertising.* (NAD Case Reports, Vol. 28, No.9, pp. 339-354, 1998)

A decision by NAD that an advertisement has been substantiated does not constitute an endorsement of a company, product or service. Similarly, an advertiser's voluntary modification of advertising in cooperation with NAD does not constitute an admission of impropriety. When an advertiser does not agree to comply with the decision of the NAD, the advertiser is entitled to a panel review of the National Advertising Review Board (NARB). When advertisers elect not to participate in the self-regulatory process, NAD/NARB may prepare a review of the facts, which may be then forwarded to the appropriate federal, or state law enforcement agencies (NAD Case Reports 1998).

After NAD or NARB requests that an advertisement be modified or discontinued, NAD may request that the advertiser report back on the status of the advertisement at issue and explain the steps taken to comply with the decision. When compliance is an issue, NAD may refer the matter to the appropriate government agencies and report these actions to the public and the press.

Elements Implied in the Legal Definition of Deception

In addition to the core elements previously described, there are elements required for a finding of deception that, while not explicitly stated in formal statements, have been included in detailed analyses of prior decisions. Table 1 presents a summary of the requirements of deception as they pertain to the FTC or the Lanham Act. Note that the following additional elements are included: (1) the communication in question must be of a commercial nature and must be disseminated to consumers. (2) Explicit or implied claims must be examined in the context of what is conveyed by the entire communication to a criterion number of consumers. (3) The advertising claim must be considered apart from consumers' knowledge and other sources of information. (4) In Lanham Act cases, the likelihood or actual damages to the plaintiff from a false representation must be shown. (5) For both Lanham Act and FTC cases, the advertiser's intention to deceive is not an issue (Preston 1990a; Deception Policy Statement 1983; Lanham Trademark Act 1982).

Factuality and Truth or Substantiation

Comparative advertisements are most often challenged on the basis of their factuality and whether the sponsor possesses adequate substantiation for its claims. Factuality refers to whether the truth or falsity of a claim can be objectively determined. This is the basis for exclusion of puffery and other subjective claims for which objective evidence cannot be gathered (Deception Policy Statement 1984). Once the factuality of a claim can be objectively determined, an evaluation of the product is undertaken to determine if the seller has a reasonable basis to make such a claim (Preston 1989b,1990;

Table 1. Elements implied in the legal definition of deception

Elements of deception	Federal Trade Commission	Lanham Trademark Act
The claim(s) must be commercial	Acts or practices "in or affecting commerce"	Refers to "commercial advertising or promotion" and to goods or services which a person "uses in commerce
The claim(s) must be disseminated	Dissemination need not be wide, it must be merely wide enough to cause an agency or court to conclude that the effect on consumers or defendants will be significant. Criterion is not defined more precisely	
The claim(s) must consist of what is conveyed	Meaning and interpretation by consumers of what is said in the advertisements. Meaning must be determined on the basis of the entire challenged advertisement or other communication. Claims need not be explicit; they can be implied.	
The claim(s) must be conveyed to a criterion number of consumers	From previous cases, criterion number of consumers to whom the claim needs to have been conveyed is from 20 to 25%.	From previous cases, claim needs to have been conveyed to at least 15% of consumers
The claim must be: • *Material,* • *Factual, and* • *False or unsubstantiated*	• Material: must be likely to affect consumer's choice of, or conduct regarding, the promoted item. Criterion is not actual impact but only potential impact. Involves the fate of the consumer.	• The claim must be one that "is likely to influence the purchasing decision." Challenged claims must also be one for which plaintiff "is or is likely to be damaged" Involves the fate of the plaintiff.
	• Factual: must be capable of being found true or false • False or unsubstantiated: the product or service is then examined to determine whether the conveyed fact about it is true or false. The claim can be found false, or lacking substantiation or a reasonable basis.	
The claim(s): • *Must be considered apart from knowledge from other sources and* • *Must damage or be likely to damage*	• Impact of the advertisement is considered by itself, even if consumers learn the truth before purchase.	• No comments on this issue • Additional element: the claim must damage or be likely to damage the plaintiff (e.g., lost sales, loss of goodwill)
The claim(s) need not be intended, but • *Must have the potential to deceive (FTC)* • *Must create actual deception (Lanham Act)*	• Intent need not be proven by the FTC • Consumers' actual *belief* need not be shown • Violation stems from an advertisement's likelihood to deceive or mislead	• Intent need not be proven by Lanham act plaintiffs • Consumers' actual *belief* need not be shown, but the plaintiff must prove *actual deception* when claiming damages

Deception Policy Statement 1983; Lanham Trademark Act, 1982; Preston, 1990a.

Richards 1990a). Direct observation or experience with the product may be enough to determine if there is any basis to a claim. There may be instances, however, when scientific testing or evidence from consumers is required before substantiation (or lack thereof) can be established (Preston 1989b; 1990). The Policy Statement Regarding

Advertising Substantiation (hereafter Substantiation Policy 1983) [13] provides guidelines for assessing this element in deception cases at the FTC. In addition, the FTC has set specific guidelines to regulate advertisements that make claim to scientific testing.[14]

Summary

The general mandate of the FTC is to ensure a healthy competitive environment and to prevent harm to consumers from commercial activities. Given their limited resources, the FTC exercises caution in selecting "exemplar" cases that will send a message to the industry about unacceptable advertising practices. Thus, compared to the courts and the NAD, the Commission has fewer opportunities to promptly address problematic advertising issues. Once the FTC becomes involved, however, most advertisers opt to settle complaints rather than go to trial (Preston 1990). Similarly, only a fraction of the cases filed under Section 43(a) of the Lanham Act make it to trial. However, given the scope of Section 43(a), the number of cases filed is significantly larger than that of cases seen by the FTC or handled under NAD guidelines. As a result, the courts are the first to see new forms of deceptive claims.

For some time now there has been considerable activity at the NAD and the courts regarding implied superiority claims (Wyckham 1989). Recent challenges involve a variation of implied superiority claims called combined comparatives. Recognizing the potential harm to consumers, the NAD has called for a more serious examination of these

[13]FTC Policy Statement Regarding Advertising Substantiation, 48 Fed. Reg. 10471 (1983), 47 A.T.R.R., reprinted in Thompson Medical Co., 104 F.T.C. 648, 840 (1984).

[14] The guidelines were motivated by advertisements from the makers of analgesics, but they are applicable to proof claims involving other product categories (Scammon and Semenick 1983).

claims by the courts, state and federal regulators. To date, the FTC has not issued a complaint to address this issue.

The following chapter will review behavioral concepts relevant to the processing of combined comparatives, and later chapters will specifically address research on implied superiority claims and combined comparatives. In those sections it is argued that the linguistic format of combined comparative claims biases consumer interpretation of advertising information to the detriment of competitors and consumers.

CHAPTER 3
DECEPTIVE ADVERTISING: OVERVIEW OF BEHAVIORAL ISSUES

Advertising Processing Issues and Deception

After reviewing the legal issues associated with deceptive advertising in the previous chapter, the current chapter will present a brief overview of information processing concepts relevant to the understanding of deception as a behavioral phenomenon. The overlap of these two areas is probably best explained by Richards (1990), who states:

> Whereas the findings of law, which involve whether the facts found indicate the existence of a violation, are wholly within the expert domain of the lawyers, the facts themselves lie within the expert domain of the behavioral researchers...That is because deceptiveness is a phenomenon that lies inside people's heads, and thus is an aspect of human behavior. (Richards 1990, p.27)

The remainder of this chapter will describe an admittedly oversimplified yet helpful model of the concepts involved in processing advertising information. Where appropriate, the relationship between the legal elements and the behavioral issues relevant to deception is discussed.

The Advertising Stimuli

The obvious input to a model of advertising processing is the advertising message (see Figure 2). Regardless of the communication medium, the content of advertising messages usually consists of product information and claims about general performance (Bovee and Arens 1989). However, there are numerous ways in which information can be creatively conveyed through the creative execution and delivery of the message. The

creative execution influences how we interpret and later recall product information; it is critical in making key selling points persuasive (Lutz-Alessandrini 1983; Percy 1981; Scott 1994). The execution of the advertising message includes the layout and placement of visual elements and copy in print ads, the rate of image presentation in television advertising, or the tempo of the background music in radio.

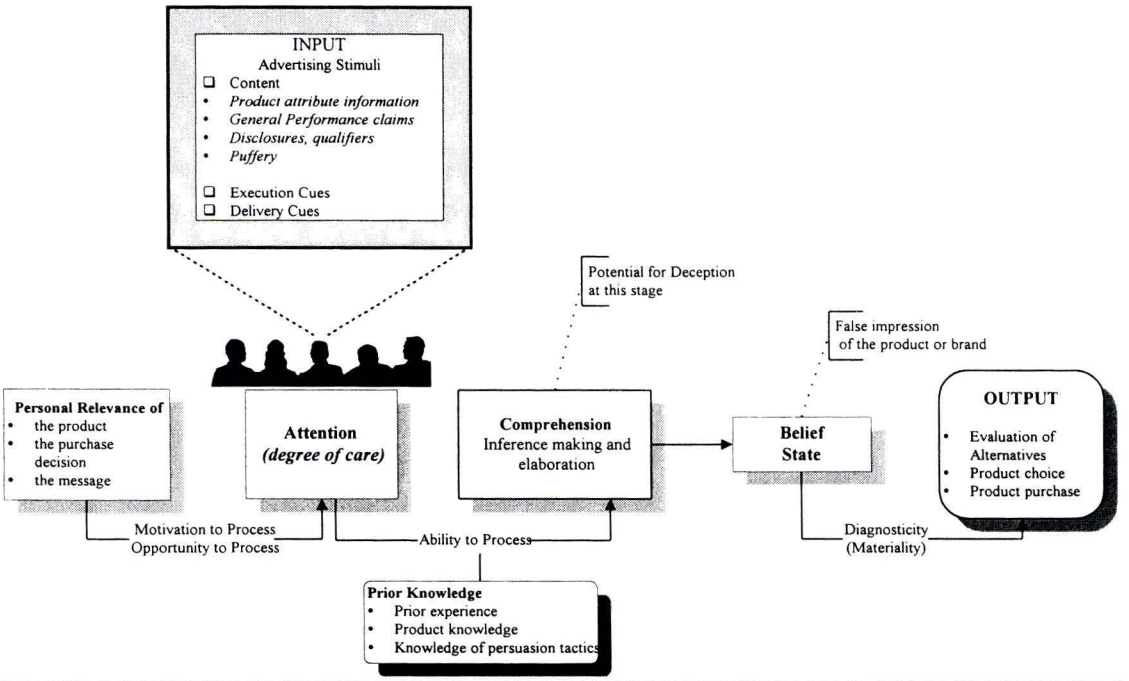

Figure 2. Information processing model of deception.

On the other hand, delivery of the message suggests to the audience how the message should be evaluated, which specific information merits attention, and how advertising elements relate to each other. It often conveys a great deal beyond what is explicitly stated in the ad copy (Bovee and Arens 1989; Jewler 1995; Scott 1994). The theme of an advertisement, for instance, conveys the brand positioning strategy and guides consumer interpretation of specific advertising information. The language chosen to convey the theme is particularly important in achieving effective communication of the

advertising message. Imagery-provoking language, puns, or metaphors are often used to facilitate decoding of the main advertising points (Leigh 1994). On the other hand, overly technical or confusing language may be used to convey important information such as health warnings, legal restrictions, or guarantee information (Rossiter 1980; Funkhouser 1984).

Motivation, Ability and Opportunity to Process Advertising Information

It is helpful to think in terms of three factors affecting the manner in which consumers react to and encode advertising information: motivation, ability and opportunity to process (Batra and Ray 1986; MacInnis and Jaworski 1989). Motivation to process information refers to the allocation of mental resources to process information from advertisements; it is a function of consumers' goals and needs. Motivation is requisite for generating certain types of inferences (Alba and Hutchinson 1987; Kardes 1993), and for elaborating on presented information (Petty and Cacioppo 1986). In the absence of personal relevance, motivation to elaborate is low (Petty and Cacioppo 1986). Motivation may also be low when consumers have high levels of product or brand knowledge (e.g., Johnson and Russo 1984), or when they feel sufficiently familiar with the information (Kardes 1993). In such instances, consumers may process information very superficially if they process it at all.

In order to process advertising information consumers' also require a certain level of ability, usually conceptualized as knowledge about products and brands (Batra and Ray 1986; Alba and Hutchinson 1987), or even advertising (Friestad and Wright 1994). Prior knowledge is necessary to infer missing information, since consumers must know

enough to notice when the information is missing before they can draw inferences about it (Kardes, Sanbonmatsu and Herr 1990).

Finally, the environmental conditions must enable consumers to process information free of distractions, competing stimuli, or other "noise". Even when motivation and ability to process are present, lack of opportunity to process may prevent consumers from focusing on and processing advertising messages in a meaningful way (MacInnis and Jaworski 1989).

Consumers rarely have the motivation, ability and opportunity to carefully process advertising information. Much of the information consumers retain from ads is acquired from incidental exposure, while consumers are attending to other content. In the absence of a specific problem, consumers lack the motivation to search for and evaluate information. However, when the level of personal involvement with the product or the purchase situation is high, consumers are more likely to attend to the advertising message. Clearly, some advertisements will command attention given their creative execution rather than their content. Still, the level of focused attention depends on the perceived relevance of the information given a personally relevant product decision (Lynch and Srull 1982; MacKenzie and Lutz; 1989).

Degree of care. In trademark infringement cases under the Lanham Act, the courts are concerned with the *degree of care* with which consumers approach a purchase. The assumption is that a high level of personal involvement with the product or the purchase situation will lead consumers to examine trademark information carefully,

making trade dress confusion less likely.[15] It is also assumed that when *degree of care* is high, consumers will base their decisions on information beyond that provided by a trademark.[16]

If *degree of care* were applied to an advertising context, it would refer to the level of focused attention consumers devote to processing an advertising message. That is, consumers are expected to attend closely to advertising information (process with high degree of care) when personal relevance is high (Petty and Cacioppo 1986). They are also more likely to search for additional information rather than base a purchase decision solely on information from advertisements (cf. Beatty and Smith 1987; Lee, Herr, Kardes and Chankon 1999).

A significant difference between *degree of care* in the context of trademarks versus that of advertising is that consumers have all necessary information available for direct comparison when looking at packages. They can evaluate trade dress and other package information in the actual purchase setting. In the context of advertising this is rarely the case. Consumers do not have available advertising information at the time of purchase. Considerable time usually elapses between exposure to advertising and a purchase decision, so consumers may have to rely on their memory for information not available at that time (Lynch, Marmorstein and Weigold 1988).

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[15] AMF Incorporated v. Sleekcraft Boats, 599 F2d. 341; 1979 U.S. App.; 204 U.S.P.Q. (BNA) 808. Degree of care is mentioned as one of 8 factors the courts consider when determining the likelihood of confusion between related goods. Subsequent cases have cited "*the Sleekcraft factors*" when determining the likelihood of confusion (see Brookfield Communications Inc., v. West Coast Entertainment Corporation, 174 F. 3d 1036; 1999 U.S. App.; 50 U.S.P.Q. 2D (BNA) 1545).

[16] See Waldmann Lighting Company v. Halogen Lighting Systems, 1993 U.S. Dist., 28 U.S.P.Q. 2D (BNA) 1682.

Diagnosticity and Materiality. Whether consumers dedicate a considerable degree of care to the processing of advertising information will also depend on the extent to which consumers consider the information to be useful. That is, if they perceive it as diagnostic, or instrumental in achieving their objectives (Feldman and Lynch, 1988; Lynch, Marmorstein and Weigold 1988). The FTC presumes that claims about a product's central characteristics (i.e., purpose, safety, healthfulness, efficacy, cost, durability, performance, warranties, or quality) are material. They are important to consumers and will likely influence their purchase decisions (Deception Policy Statement 1983). The courts assume that challenged claims are material, otherwise sellers would not waste resources to disseminate information that consumers do not care about, especially if it does not translate to increased preference for their product (Ford and Calfee 1986; Preston 1990; Richards 1990a; Stewart 1995).

The legal concept of materiality and the diagnosticity construct both address the importance of advertising claims to consumers. However, there may be significant differences in the perceived importance of a claim from time one, when consumers are exposed to an ad, to time two, when they must make a purchase decision. Thus, the model in Figure 2 suggests that materiality be considered when consumers recruit information from memory, not simply at time of exposure.

Comprehension: Inference Making and Elaboration

Comprehension involves a series of processes with opposite functions. It requires that we extract the general meaning of an advertisement, simplifying the details into the gist of the message. At the same time, comprehension involves elaboration upon the presented information in order to arrive at a meaningful interpretation of an ad (Hunt and

Ellis 1999). Because of time and space limitations, for instance, advertisers are not able to include all possible information in a commercial message, so consumers must infer certain facts (Alba and Hutchinson 1987). Consumers also rely on inferences when they are faced with incomplete information but are not motivated to engage in external information search (Kardes 1993). The following sections will discuss various forms of inferences involved in the process of interpreting advertising messages.

Interpretive inferences

Interpretation is an active construction process by which input from advertisements is integrated with previously stored information. The purpose of interpretive inferences is to facilitate comprehension by bridging gaps in the knowledge necessary to derive the likely intent of a message (Alba and Hutchinson, 1987). Our interpretation of advertising information tends to be consistent with concepts and associations in memory as a result of these inferences (Lindsay and Norman 1972; Bettman 1979; Cohen, Miniard and Dickson 1980). Simplification inferences, coherence inferences and pragmatic implications are different forms of interpretive inferences.

Simplification inferences. Simplification inferences involve the abstraction of the overall meaning conveyed by specific information. For example, simplification will translate advertising claims such as "from 0 to 60 in 7 seconds" into more familiar terms, such as "fast," or reduce a set of attributes (e.g., "fast, efficient, and handles well") to a single concept (e.g., "high performance"). Note that these inferences are evaluative when the information on which they are based is not. In addition, simplification inferences allow integration of specific attribute information into a global evaluation (Alba and Hutchinson 1987).

Coherence inferences. Coherence inferences facilitate comprehension by establishing associations between statements with implicitly common concepts on the basis of pre-existing knowledge (Kintsch 1974; Kintsch and van Dijk 1978; Alba and Hutchinson 1987). Given a goal-related relationship, a given point of view, or a causal relationship, readers will interpret a series of statements into a coherent story or episode (Black, Galambos and Reed). Goal-related inferences, for instance, result from the implied relationship between statements regarding a common goal or a plan to achieve a goal. Statements like "*Suddenly it started raining. Everyone headed for the store. The entire stock of umbrellas was depleted,*" are linked by the implied goal of keeping dry (the goal) by buying an umbrella (the plan) (Abbot and Black 1982). A series of statements can also be interpreted as a coherent story given a consistent point of view, the perspective from which a story originates (e.g., as told by the main character or by an observer). When there are changes in the point of view from which a story is told, the inferences generated and the level of comprehension readers can achieve are compromised (Black, Turner and Bower, 1979).

Causal inferences are generated given a causal relationship that is not explicitly stated but is implied by the statements. For instance, "*He walked over to the refrigerator bumping a bowl he had left on the table. Suddenly it fell off the edge and broke,*" implies that the bowl fell and broke from the bump to the refrigerator. Once these statements have been integrated into a coherent unit they are recalled as a unit rather than as separate statements, and often the implied relationship is recalled as if it had been explicitly stated. Black and Bern (1981) in fact found that the above statements were recalled together, and were recalled better than statements without an implied causal relationship. Moreover,

Bower, Black and Turner (1979) found that after a thirty-minute delay subjects false alarmed on a recognition test to script actions of a causal nature when these were not actually presented in a story.

Pragmatic implications.

A pragmatic inference is made when a "...sentence leads the hearer to expect something neither explicitly stated nor necessarily implied..." (Brewer, 1977, p. 673). Because of shared language conventions and world knowledge, inferences from pragmatic implications are spontaneously generated during the process of comprehension (McKoon and Ratcliff 1981). Conversational rules play a particularly important role in the generation of pragmatic inferences (Grice 1975; Hilton 1995). According to Grice (1975), when we engage in conversational exchanges we adhere to a set of unspoken rules that make communication efficient. For instance, the *quantity* rule refers to the informativeness of an utterance in relation to our communication objectives; one should avoid providing information beyond what is needed to make a point. Similarly, the *quality* maxim dictates that we not say what we believe to be false or utter statements for which we lack appropriate evidence.

These principles guide our expectations in conversational exchanges and allow us to interpret the information we receive. We particularly rely on the application of these rules in order to interpret conversational implicatures, when the speaker implies rather than explicitly states a particular fact or piece of information. That is, the speaker assumes that the receiver possesses the background knowledge and has the ability to understand the implication, while the receiver understands that, in the context of the exchange, the speaker is abiding by the conversational rules (Grice 1975).

Advertisers often exploit conversational rules by providing uninformative facts, by making claims for which they lack appropriate evidence, or by manipulating language in a way that falsely suggests they are following such rules (Alba and Hutchinson 1991). Harris (1977, 1983, 1989) explored pragmatic implications in the context of advertising, and proposed a typology of explicit advertising claims likely to lead to misleading inferences. One set of constructions that Harris identified is elliptical comparative phrases. These are claims that include adjectives without referent, such as "*Powderpower cleanser cleans better.*" The statement leaves the consumer to infer the source of the comparison, usually assumed to be *all* competitors. Moreover, the statement cannot be disputed as long as anything true can be used to complete the comparison.

Phrases that include hedges can also mislead. Words such as *may* or *could* serve to weaken the force of the statement but do not deny its content. For instance, the statement "*Scrubble Shampoo may help get rid of all dandruff symptoms*" can be interpreted by consumers as *will get rid of dandruff.* While the former statement may be true, the interpretation falsely suggests the shampoo cures dandruff (Harris 1989). Two other examples featured in Harris' typology are claims that juxtapose imperative phrases to imply causation (e.g., "*Help your child excel in school. Buy XYZ home computer*"), and claims that ask negative questions to imply affirmative false answers (e.g., *"Isn't quality the most important thing when buying aspirin?")* (Harris 1977).

Studies show that subjects recall and believe pragmatically implied claims as if they had been explicitly stated (Harris 1974; Brewer 1977; Harris 1977; Harris and Monaco 1978; Searlman and Carter 1988). This occurred regardless of consumers'

familiarity with the product (Harris, Ponds, Maiorelle and Mermis 1993), and even in situations reflective of real-world advertising exposure (Harris et al. 1980). Moreover, message repetition does not significantly affect subjects' ability to distinguish between pragmatically implied and asserted advertising claims, although repeated training does improve subjects discrimination abilities (Bruno and Harris 1980). These findings suggest that there is a strong tendency for consumers to infer information that is not explicitly stated in advertisements, and to treat the information as if it had been explicitly stated. Because it is based on well-rehearsed communication rules, the normal tendency to generate these inferences is hard to suppress. As a result, people often fail to recognize that beliefs about products or brands are based on inferences rather than facts (Harris, Dubitsky and Bruno 1983).

Summary

Interpretive inferences are likely to be generated on-line given that they require little effort and motivation. Limited knowledge may be required to interpret claims given that the wording of advertising messages makes their meaning unambiguous. When processing of the explicit claims leads to pragmatic inferences, interpretation will reflect the general, abstract meaning from a communication, which may be more influential than the literal content of the message. Moreover, interpretations may be incorporated into consumers' belief system, becoming impossible for consumers to distinguish between beliefs based on their inferences and beliefs based on presented facts (cf. Johnson and Raye 1981).

Beliefs and Behavioral Outcome

In studying deceptive advertising, a number of researchers have operationalized deception as belief in the advertising claims. They argue that unless a claim is believed it is unlikely to impact consumers' actual behavior (e.g. Gardner 1975; Olson and Dover 1978; Shimp 1978; Russo, Metcalf and Stephens 1981; Shimp and Preston 1981; Garfinkel 1983; Gaeth and Heath 1987). Russo, Metcalf, and Stephens (1981), for instance, use the term *falsity* to refer to the discrepancy between an advertising claim and a product's attributes, or a claim-fact discrepancy. Russo et al. (1981) reason, that the key to a misleading ad is whether consumers believe the falsity after being exposed to an ad, so that a belief-fact discrepancy results. These researchers also argue that while not all false claims are believed, only false claims that are believed can be misleading. Building upon the framework proposed by Russo et al., Burke, DeSarbo, Oliver, and Robertson (1988) found that implications in fact led a significant number of subjects to false beliefs about the sponsor brands. Such beliefs were absent when the subjects were exposed to truthful explicit claims or to no claims at all.

From the FTC's perspective, it is irrelevant whether consumers believe a misleading claim. An advertisement must only be *likely* to deceive in order to be actionable. That is, it is sufficient that a significant proportion of those exposed to the message extract the deceptive meaning (Deception Policy Statement, 1983). Section 43 (a) of the Lanham Act does not explicitly require that consumer belief be shown. Belief is assumed as a necessary condition if the deceptive claims are to affect purchase behavior, a fact which must be demonstrated by the plaintiff:

> Where the advertisements are not literally false, plaintiff bears the burden of proving actual deception by a preponderance of the evidence. Hence, it cannot obtain relief by arguing how consumers could react; it must show how consumers actually do react. (Sandoz Pharmaceuticals Corp. v. Richardson-Vicks, Inc., 902 F.2d at 228-229, 3d Cir. 1990)

Summary

The previous section was intended as a brief summary of concepts related to the processing of advertising information and how these relate to legal issues of deception. From the above review, one can assume that consumers rarely elaborate on advertised information at the time of exposure. Their interest and opportunity to elaborate beyond the information presented will be limited in the absence of a specific need or problem (MacInnis and Jaworski 1989). However, given a personally relevant purchase decision, consumers are likely to attend to material claims with a higher degree of care.

The process of inference generation can be represented along a continuum ranging from automatic to controlled. Interpretive inferences may be considered automatic because they are generated unintentionally and in the absence of conscious control (Bargh 1996; 1989). However, the ease with which they are generated depends on the advertising stimulus and the extent to which it triggers well-rehearsed processes that are difficult to control. Specifically, the content and format of the ad will determine which rules are activated and how these rules are applied to interpret the message. For instance, when faced with implied claims, consumers apply well-rehearsed rules of language to arrive at the meaning of an advertisement. The nature of the inferences generated and whether they are accurate or misleading is therefore under the direct control of the advertiser (Pechmann 1996; Preston 1994; Barone and Miniard 1999).

The following chapter will focus on implied comparative claims. The discussion will review consumer research on implied comparative claims. Claims that have resulted in complaints to NAD, and challenges by the FTC and in the Lanham Act courts will also be discussed. The discussion will reveal that no empirical work has focused on combined comparatives as a source of deception. A subsequent chapter will focus on the linguistic form of combined comparatives and the interpretive biases that may lead to deception.

CHAPTER 4
IMPLIED SUPERIORITY CLAIMS IN COMPARATIVE ADVERTISING

Implied superiority claims are typical in product categories where there are few, if any, differences between brands. A survey of advertising content in the 1980s reported that implied superiority claims were most frequently used in ads for over-the-counter health products and personal care items (Wyckham 1987). Not surprisingly, these product categories were also disproportionately represented in legal challenges (Preston 1989a, b; see Tables 2 and 3). As the number of parity products has continued to rise in these and other product categories, implied superiority claims have predominated in their advertisements (Barone and Miniard 1999).

Implied superiority claims have been treated as a special case of puffery because they often use exaggeration (e.g., "*Nobody does it better than Brand X*"). They have also been called "hybrid" claims because in implying superiority, a comparison is also implied (Wyckham 1987). The latter description seems more fitting than that of puffery. An implied superiority claim suggests to consumers an event where the various brands were measured or tested against each other. They assume a dominant product was identified and that factual evidence supports explicit or implied superiority claims (Harris 1989; see Sassoon Inc. v. Bristol-Myers, 1981). On the other hand, consumers understand that puffery has no basis in fact. Such claims are known to represent the exaggerated opinion of the advertiser, and hence tend to be discounted (Preston 1977; cf. Wright 1986; Friedman and Wright 1994). However, implied superiority claims in the form of puffery

can anchor consumers' perceptions of other claims. The spillover, or "halo effect" from puffed claims will be discussed later in the context of combined comparatives.

This chapter will review consumer behavior research dealing with implied superiority claims and the legal treatment of these claims in the area of deception. The next chapter will introduce combined comparatives, a special form in which implied superiority claims are made.

Consumer Research on Implied Superiority Claims

A considerable stream of research has investigated the potential for deception resulting from implied superiority claims in advertising (e.g., Gardner 1975; Olson and Dover 1978; Shimp 1978; Russo, Metcalf and Stephens 1981; Shimp and Preston 1981; Garfinkel 1983; Gaeth and Heath 1987). Researchers have been particularly interested in different forms of comparative claims. Shimp (1978), for instance, focused on incomplete comparisons, or comparative claims where the referent attributes or competitors are not mentioned. He found that consumers naturally infer referents when presented with incomplete claims, interpreting phrases such as "*Mennen goes on warmer and drier*" as "*Mennen goes on warmer and drier than <u>any other deodorant on the market</u>.*"

Johar (1995) was also interested in incomplete comparisons and focused on involvement as a moderator variable in generating inferences. She found that only those subjects who were highly involved with the product or purchase generated invalid inferences when exposed to incomplete comparison claims. On the other hand, subjects who were not highly involved did not naturally generate such inferences. These subjects inferred a comparison referent only when the phrasing of the questions suggested they do

so. In an additional study Johar found that involvement interacted with the amount of processing demanded by the advertisement. That is, when the processing demands of an ad were high (e.g., claims were qualified by an inconspicuous disclosure), only low involvement subjects were deceived. High involvement subjects, on the other hand, benefited from the information in the disclosure and were not deceived.

While involvement appears to play a significant role in generating such inferences, the research reviewed here did not conceptualize involvement in terms of the degree of care with which consumers processed the advertisements. Instead, the operationalization manipulated personal relevance in terms of a time horizon (when the product would be available) or location (availability of a product within the subjects' geographic area). It would be more helpful to conceptualize personal involvement as the extent to which consumers seek to avoid negative consequences associated with a suboptimal choice (e.g., adverse health consequences, monetary loss, etc.). Then, personal relevance of a message would be a better indicator of the degree of care with which consumers process advertising information. Moreover, it would allow a better assessment of the extent to which consumers will rely on such information when making a decision (i.e., is the information material).

Research on implied claims has also focused on complete comparisons. Wyckham (1987) presented consumers with implied superiority claims that included a general comparison referent (e.g., "*No leading brand gets rid of dandruff better than Selsun Blue*"). He found that a majority of subjects interpreted the claim to say that the sponsor brand was superior to unnamed competitors. Consumers also believed the superiority inferences to be true. In 1989, Snyder replicated Wyckham's findings. More

interestingly, however, Snyder found that this effect was more pronounced when familiar brands were used, and for advertisements that mentioned a concrete feature (e.g., *toothpaste X provides cavity protection*) versus a vague feature (e.g., *toothpaste brightens your smile*). Brand familiarity may have primed consumers' perceptual mapping of competing brands against the sponsor, facilitating the superiority inferences. Similarly, a concrete feature is easier to quantify and compare across brands than a vague feature (e.g., "*Brand X provides 25% more cavity protection than Brand Y*").[17]

Pechmann and Ratneshwar (1991) also looked at complete comparatives such as "*Advertised brand X is better than any other brand,*" but focused on inferences about missing attributes. Inferences about attribute information not featured in an ad were affected by whether the claim directly mentioned the competition by name or whether it was implied. Specifically, when the competition was mentioned, subjects made inferences about missing attributes on the basis of the perceived similarity between the compared brands. In another study, Pechmann (1996) found that implied comparative claims led to misleading halo effects. Based on an advertisement's depiction of a company's price for a specific service, consumers mistakenly inferred low prices for services not featured in the ad. In reality, the sponsor company had higher prices than the competition for those services.

[17] A potential limitation of these findings is that the research failed to assess whether the vague feature was in fact material in the evaluation of the products. Subjects were not exposed to actual advertisements, but instead read slogans typed at the top of blank pages. Given such overly simplified stimuli, if the features described as *vague* were not material, consumers may not have spent the effort to process such statements or to generate inferences about unnamed competitors (Johar 1995; cf. Sawyer 1988; Sawyer and Howard 1991).

Summary

As Harris argued (1977), implied superiority claims can be interpreted in two ways: (1) the product is superior to all leading brands, or (2) the product performs as well as all leading brands. When the former is inferred but the latter is true, the claim is deceptive. Research on implied comparative claims suggests that consumers generate superiority inferences when presented with various forms of comparative claims. Moreover, consumers easily generalize the sponsor's superiority to unnamed competitors and to missing attribute values. Thus, implied comparative superiority advertisements are very effective in communicating false and inaccurate meanings to consumers, meanings that tend to unfairly benefit the sponsor brand.

Implied Superiority Claims in Adjudicated Cases

The potential of implied claims to deceive consumers has been long recognized by the FTC, and there have been numerous challenges of implied claims under Section 43 (a) of the Lanham Act and at the NAD. The following sections will review some prominent cases and some of the most recent cases involving implied claims.

FTC Challenges to Implied Superiority Claims

The use of implied claims as part of branding and positioning strategy increased along with the increase of regulatory activity at the FTC in the 1970s. As the FTC challenged advertisers to substantiate explicit superiority claims, some found it easier to suggest superiority than to run the risk of litigation. Advertisers have employed clever copy-writing tactics, used visual elements, spokespersons, and other symbols to signal superiority to consumers. Nonetheless, the Commission has been relatively successful in identifying and challenging a significant number of implied claims. One of the most

comprehensive reviews of implied claims challenged by FTC and at the Lanham Act courts was undertaken by Preston (1977; 1989b; 1989a; 1994).[18] His catalog of implications from adjudicated cases is presented in Tables 2 and 3 along with specific case examples of the implied claims.

Among the cases tried in the early 1980s at the FTC, those against the makers of analgesics were particularly noteworthy. The makers of over-the-counter pain relievers relied heavily on implied claims to differentiate their brands in light of minimal product differences. For instance, In American Home Products (1981), the claim that Anacin had more aspirin than other pain relievers was found to falsely suggest superior pain relief.[19] The FTC also challenged implied superiority claims made by visual elements in this case. The presence of graphs and chemical formulas in the background of the advertisements falsely implied scientific proof for Anacin's implied efficacy claims. In another case involving analgesics, the makers of Bayer aspirin claimed to have superior manufacturing (e.g., purity, freshness, speed of disintegration), which falsely implied to consumers superior therapeutic qualities.[20]

One of the most influential cases tried by the FTC was that against Thompson Medical (1984).[21] Among the issues disputed in Thompson, the FTC argued that the phrase "*contains no aspirin*" did not eliminate consumers' perceptions that Aspercreme contained aspirin, as was implied by the product's name. Claims for Aspercreme were

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[18] With few exceptions, definitions for the implications were generated by Preston and have been named by him rather than by the courts (Preston, 1989b).

[19] American Home Products Corp., 98 F.T.C. at 291(1981).

[20] Sterling Drug, 102 F.T.C. at 462 (1983).

[21] Thompson Medical Co., 104 F.T.C. 648, 840 (1984).

deceptive because Thompson did not have scientifically valid tests to substantiate the product's explicit and implied superior efficacy claims in treating arthritis pain.

Noteworthy among recent cases involving implied claims are the challenges against Kraft Foods, Stouffers Foods and Doan's Pills. Kraft (1991)[22] was the first case where consumer surveys were submitted as evidence to challenge materiality (Richards and Preston 1992; Jacoby and Szybillo 1995). The case involved implied claims about the calcium content of Kraft's "Singles" cheese slices versus the calcium content of its competitors. The advertisements implied that Kraft's cheese slices were superior because they contained the calcium equivalent of five ounces of milk. In fact, the slices contained only 70% of the five ounces after some was lost during processing. The advertisement also falsely implied that Kraft's contained more calcium than "imitation" cheese slices, when in fact the latter were fortified with calcium (Stewart 1995; Jacoby and Szybillo 1995). Survey evidence established the importance of calcium to consumers, and the claims were found to mislead the public (Kent 1991; see Jacoby and Szybillo 1995; Stewart 1995; and Sudman 1995 for a discussion of the survey evidence in Kraft).

The complaint against Stouffer Foods (1994)[23] involved allegations that advertisements for Lean Cuisine frozen entrees misrepresented their sodium content. Claims of low calories and fat were accompanied by phrases such as "*always less than 1 gram of sodium per entrée.*" Although a footnote stated in fine print that "*entrées are formulated to contain less than 1 gram (1000 milligrams) of sodium,*" the Commission found that the overall advertisement did not adequately convey that the standard unit of

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[22] Kraft, Inc., 114 F.T.C. 40 (1991).

[23] Stouffer Foods Corp., Commission Decision, FTC, Docket No. 9250, (1994).

measurement for sodium is milligrams. As a result, consumers were left with the false impression that Lean Cuisine entrees were superior because they had lower sodium content than other frozen entrees (Andrews and Maronick 1995).

The case against Doan's pills[24] involved implied claims to a special ingredient that made Doan's more effective in relieving back pain. The challenged claims included "*If nothings seems to help try Doan's. It relieves back pain no matter where it hurts. Doan's has an ingredient these pain relievers don't have.*" The FTC argued and survey evidence demonstrated that this and similar claims were interpreted by consumers to say that Doan's was more effective than Advil, Aleve, Bayer, Motrin and Tylenol for relieving back pain. In fact, there was no substantiating evidence that the extra ingredient in Doan's relieved back pain. The FTC held that consumers were being economically injured given that Doan's was priced significantly higher than all other over-the-counter analgesics.

Challenges to Implied Superiority Claims under Section 43 (a) of the Lanham Act

Given the volume of competitive lawsuits filed under Section 43(a), an exhaustive review of such cases is beyond the scope of this dissertation. However, challenged comparative advertisements under the Lanham Act generally involve defendants who falsely imply that their products are superior or equivalent because their products alone

[24] Novartis Corporation and Novartis Consumer Health Inc., FTC Docket 9279, 1998.

posses certain qualities[25] or ingredients,[26] lack harmful substances,[27] or have unique benefits.[28]

Sample cases of implied comparatives under Section 43 (a) of the Lanham Act include American Brands versus R. J. Reynolds Tobacco (1976).[29] The incomplete comparison claim "*Now 2mg. Tar is lowest*" falsely implied that Now cigarettes had the lowest tar content of all cigarettes. In fact, the Carlton brand of cigarettes was equal to Now in tar content. Similarly, In American Home Products versus Johnson and Johnson (1977) comparative claims of Anacin's ability to reduce inflammation better than Tylenol falsely implied that it was a superior analgesic.

A case decided in January of 2000 involved the implied superiority claims of Papa John's Pizza. Pizza Hut, the largest pizza chain in the United States, challenged advertisements that mentioned "big pizza chains" used tomato paste while Papa John's used sauce made fresh from real tomatoes. Other advertisements mentioned Pizza Hut by name, and suggested that using filtered as opposed to tap water made Papa John's pizza dough superior. The general theme of the challenged Papa John's campaign was "Better ingredients. Better pizza", to which Pizza Hut objected given the false implication of

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[25] For instance, Tyco Industries, Inc., v. Lego Systems, Inc. 5 U.S.P.Q.2D (BNA) 1023 (D. N.J. 1987), aff'd, 853 F.2d 921 (3d. Cir. 1988), cert denied, 488 U.S. 955, 102 L.. Ed 2d 381, 109 S. Ct. 392 (1988); Castrol, Inc. v. Quaker State Corp., 977 F.2d 57 (2d Cir. 1992); Castrol Inc., v. Penzoil Co., 987 F.2d 939 (3d Cir. 1993); American Home Products v. Johnson and Johnson, 654 F. Supp. 568 (S.D.N.Y 1987); Avis Rent A Car System, Inc. v. Hertz Corp., 782 F. 2d 381 (2d Cir. 1986).

[26] Camel Hair and Cashmere Institute of America, Inc., v. Associated Dry Goods Corp., 799 F.2d 6 (1st Cir. 1986).

[27] Media Arts Intern, Ltd. V. Trillium Health Products, 1992 U.S. Dist., 25 U.S.P.Q 2D (BNA) 1764 (E.D. Pa. 1992).

[28] Abbott Laboratories v. Mead Johnson and Co., 971 F.2d 6 (7th Cir. 1992).

[29] American Brands, Inc., v. R. J. Reynolds Tobacco Co., 413 Supp. 1352 (S.D.N.Y 1976).

superior taste and quality, claims Papa John's could not support. The courts agreed with Pizza Hut and enjoined Papa John's from making such claims in their advertisements.[30]

NAD Disputes involving Implied Superiority Claims

Challenges made by competitors to the NAD include the claims against Rembrandt in the Aquafresh ad previously discussed. In that ad it was stated that "*not even Rembrandt can whiten better than Aquafresh whitening*," and "*Even Rembrandt can't beat Aquafresh.*" Similarly, Aleve claimed *"Aleve is longer-lasting than Extra-Strength Tylenol. Advil isn't stronger...."* These ads falsely imply that both Rembrandt and Advil are outperformed by the sponsor brands.

In Sterling Winthrop versus Procter and Gamble (1994) superiority was implied by a bar graph that depicted the recommended dosing schedule for Aleve (8-12 hours, Extra-Strength Tylenol (6-8 hours), Advil (4-6 hours) and Bayer (4 hours). Sterling challenged the accuracy of this representation because Bayer is available in a variety of dosing schedules. NAD recommended that Procter and Gamble qualify the graphic.

The Aspirin Foundation of America (AFA) complained to NAD about advertisements for Tylenol by Johnson and Johnson/McNeil Consumer Products (1997). Claims in the ads stated, "*Tylenol won't irritate your stomach the way aspirin sometimes can. Aspirin for your heart; Tylenol for your pain.*" The AFA objected to the implication that aspirin is not as effective for pain relief as Tylenol or that it was only for heart attack prevention and not for pain relief. The NAD disagreed with the AFA, but did not agree with McNeil that such claims were within the acceptable realm of puffery, as they had argued.

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[30] Pizza Hut, Inc. vs. Papa John's International, Inc., Civil Action No. 3:98cv1902-AH.

Summary

Regulators and advertisers have long challenged implied comparative claims when these have falsely suggested superiority. Still, advertisers have continued to develop creative presentations to best position their brands against the competition. Whether superiority claims are challenged at NAD or in the Lanham Act courts, the general complaint refers to the lack of substantiation to support meanings indirectly conveyed to consumers.

The following chapter will describe legal challenges to a specific type of implied claim that has been increasingly used in advertisements. As their name indicates, combined comparatives refer to a combination of claims of different directions (parity or superiority) or specificity (puffery or specific attribute). The claims can also be made explicitly or can be implied. The problem with such claims is that often one of the claims is unsubstantiated, but the juxtaposition with other claims conveys to consumers unqualified substantiation for all claims in the ad. While advertisers have begun to challenge the pairing of claims that falsely suggest comparative superiority, there has been limited research addressing the manner in which consumers process such claims. Chapter six will address this issue.

Table 2. Typology of implications challenged by the FTC.

Types of Implications	Definition	FTC Sample Cases	Description
1) Proof Implication	An explicit or implicit reference to a technical, scientific, or medical test or survey is held to imply falsely that the test or survey proves the claim to a degree acceptable to appropriate experts.		
	1) Explicit claims as to exact performance levels	Crown Central Petroleum Corp., 84 F.T.C. (1976)	Cited study claiming "reduction of pollutants in automobile exhaust by as much as 66% of hydrocarbons and 41% of carbon monoxide." Exact nature of performance claims falsely implies these are results from adequate tests.
	2) Explicit reference to existence of substantiating proof	Porter & Dietsch, Inc., 90 F.T.C. 770, 865 (1977)	Claims such as "laboratory science has perfected," "proven and sound method," "clinically tested ingredients" falsely implied existence of substantiation, and represented substantiation as competent scientific proof for diet pills
	3) Explicit reference to surveys	Litton Industries, Inc., 97 F.T.C. (1981)	Claims stated that 73% of microwave oven service technicians sampled would recommend its brand. Claim falsely implied that same figure applied to such technicians generally when survey respondents were drawn only from a list of Litton-authorized microwave oven service agencies.
	4) Indirect references to visuals implying existence of tests, and thus of proof	American Home Products Corp., 98 F.T.C. (1981)	• Use of technical graphs and chemical formulas contributed to overall impression that claims of superior efficacy for ANACIN were supported by scientific proof. • Opinions about ANACIN expressed by doctors were held to imply existence of tests, thus of proof.
2) No Qualification Implication	A claim is broadly stated with no explicit qualification, thus implying falsely that no qualification exists. The explicit claim is generally true, but is less true or untrue for some consumers under some conditions. The implication is that the claim is true generally for all consumers under all conditions.	Firestone Tire & Co., 81, F.T.C. 398, 457 (1972)	Firestone's use of the phrase "The Safe Tire" implied its tires were safer under all conditions of use. False given that consumer neglect or misuse may lead to unsafe driving conditions.

Table 2—continued

Types of Implications	Definition	FTC Sample Cases	Description
3) Ineffective (Inconspicuous) Qualification Implication	The qualification for a claim is included but is so inconspicuous or otherwise ineffective (e.g., unclear) as to go unnoticed. The implied claim is the claim not included in the qualification. The practical outcome of being unnoticed is no different from that of being completely absent.	Thompson Medical Co., 104 F.T.C. (1984)	A disclosure saying "contains no aspirin" in some of their television advertisements did not eliminate the conveyed message that the product contained aspirin.
		Stouffer Foods Corp., Commission Decision, F.T.C., Docket No. 9250 (1994)	Advertisements for Lean Cuisine frozen entrees misrepresented the sodium content. A footnote in small print did not adequately convey to consumers the unit of measurement for sodium, resulting in false perception of low sodium content.
4) Uniqueness Implication	The product is claimed explicitly and truthfully to have a certain feature, but the treatment and context create a false implication that it alone does so (use of the word "unique" is not necessary to find one of these types of implications)	Kraft, Inc., 114 F.T.C. 40 (1991)	Advertisements falsely gave the impression that Kraft's individually wrapped cheese slices were superior to imitation cheese slices because Kraft's were made with real milk and contained more calcium.
5) Halo Implication	A true explicit claim of superiority in some specific way implies falsely that superiority exists in one or more other specific ways, or overall.	American Home Products Corp., 98 F.T.C. (1981)	Claim that ANACIN had more of a specific pain relief ingredient (aspirin) falsely implied that it contained more total pain relief ingredients. These claims were also taken to imply "more pain relief."
6) Confusion Resemblance Implication	Explicit conveyance of an unusual, unfamiliar word or phrase, name or description similar to one more familiar and understandable, falsely implies the latter.	Thompson Medical Co., 104 F.T.C. (1984)	Name ASPERCREME falsely conveyed to consumers that product contained aspirin.
7) Ordinary Meaning Implication	An explicitly stated word, phrase, name or description, falsely implies its ordinary meaning, but that meaning is not applicable in its present usage.	National Commission on Egg Nutrition, 88 F.T.C., (1976)	Name falsely implied an impartial, independent, quasi-governmental health commission, when actually referred to people in the egg industry
8) Contrast Implication	A truthful contrast to a competitor implies an additional contrast, the latter being far more significant than the former, but false.	Thompson Medical Co., 104 F.T.C. (1984)	Contrast of ASPERCREME to oral aspirin implied ASPERCREME was aspirin in creme form
9) Endorsement Implication	Involves one or a few endorsements of the product by consumers or celebrities, implying falsely that many or most consumers seeing the ad will find the facts about the product to be as the endorser found them, and derive the same benefits form the product.	Porter & Dietsch, Inc., 90 F.T.C. 770, 865 (1977)	Net impressions from testimonials conveyed false message that extraordinary large weight losses from diet pills were typical and ordinary.

Table 2--continued

Types of Implications	Definition	FTC Sample Cases	Description
10) Expertise Implication	The explicit claim is an endorsement of the product by a person or an organization called an expert in the product field, so as to imply the application of expert knowledge to the product. Endorser's expertise is implied to serve as adequate basis for the endorsement.	Standard Brands, Inc., 97 F.T.C. 233, 235-236 (1981)	Doctors had not used their professional expertise when in response to a survey they said they recommended, used, or chose Fleischmann's margarine
11) Significance Implication	A true but insignificant fact is explicitly claimed, and implies falsely that it matters or should matter to the consumer in purchasing the product.	General Foods Corp., 84 F.T.C. 1572, 1573 (1974)	Ad falsely implied that dogs have a special need for milk or milk protein, and that Gainesburgers contain a nutritionally significant amount of that protein.
12) Puffery Implication	Opinion statements which explicitly state a high evaluation of the product, but which imply no factual basis and thus remain only subjective and constitute no violation. Presumably consumers, unless acting unreasonably, will know not to believe them, i.e., will ascribe no factual basis to them.	Sterling Drug 102 F.T.C. at 480, 749 (1983)	"Bayer works wonders" and "the world's best aspirin" held to be puffery
13) Product Specific Implications	Set of implications, each of which involves an implied meaning drawn from the idiosyncratic characteristics and contexts of the specific product, with applicability to few or no other types of products.	American Home Products, Corp., 70 F.T.C. 1524, 1609-11 (1966)	Preparation H's claims to shrink hemorrhoids without surgery and stop all pain and itching were held to imply a permanent cure.
14) Demonstration Implication	The demonstration and its direct result are literally and truthfully depicted, but the implied effect usually cannot or is not likely to occur. The implied claim suggested by the demonstration is much more relevant and important; demonstration of an effect is taken to be proof of another more impressive effect.	Colgate-Palmolive Co., 77 F.T.C. 150, 151 (1970)	Underwater demonstration that "Baggies" sandwich bags kept sandwich from getting wet while competitor failed falsely superiority of keeping food fresh under ordinary conditions

Inputs for this table correspond to Preston (1977, 1989a, 1994).

Table 3. Typology of implications challenged in Lanham Act cases.

Types of Implications	Definition	Lanham Act sample cases	Description
1) Proof Implication	An explicit or implicit reference to a test or survey as supporting a claim is held to imply falsely that the test or survey proves the claim to a degree acceptable to appropriate experts.	Vidal Sassoon, Inc. v. Bristol-Myers, Co. 661 F.2d 272 (1981)	Higher ratings for one shampoo than for another held to imply proof of its superiority in tests comparing the two, where in fact the shampoos were judged only in separate tests.
2) No Qualification Implication	A claim is broadly stated with no explicit qualification, thus implying falsely that no qualification exists. The explicit claim is generally true, but is less true or untrue for some consumers under some conditions. The implication is that the claim is true generally for all consumers under all conditions.	American Home Products Corp. v. Johnson & Johnson, 654 F. Supp 568 (1987)	Defendant omitted the information on potential side effect (liver damage) from one of its pain relievers
3) Ineffective (Inconspicuous) Qualification Implication	The qualification for a claim is included but is so inconspicuous or otherwise ineffective (e.g., unclear) as to go unnoticed. The implied claim is the claim not included in the qualification. The practical outcome of being unnoticed is no different from that of being completely absent.	Cuisinarts v. Robot-Coupe International Corp., 509 F Supp 1036, 213 USPQ 551 (SDNY 1981)	Footnote was so obscure that the overall ad was found to convey the false implication that Robot-Coups was formerly known as, or was successor to, Cuisinarts. In fact, Robot-Coupe was just marketing the product under its own name rather than selling to Cuisinarts.
4) Uniqueness Implication	The product is claimed explicitly and truthfully to have a certain feature, but the treatment and context create a false implication that it alone does so.	McNeilab Inc. v. American Home Products Corp., 501 F. Supp. 540, USPQ 573 (SDNY 1980)	Claim of "maximum strength" by ANACIN followed by reference to a competitor as just "extra strength" implied falsely that ANACIN alone had the greatest dosage of pain reliever, and thus was analgesically superior.
5) Halo Implication	A true explicit claim of superiority in some specific way implies falsely that superiority exists in one or more other specific ways, or overall.	American Home Products Corp. v. Johnson & Johnson, 436 F. 785 USPQ 484 (SDNY 1977)	A claim that ANACIN reduces inflammation as it relieves pain was held to imply ANACIN was better for relieving pain for conditions involving inflammation, and that it was a superior analgesic generally.
6) Confusing language Implication	Literal content of the claim is so semantically ambiguous as to be capable of implying both true and false messages, the latter being the more attractive of the two.	American Home Products Corp. v. Johnson & Johnson, 436 F. 785 USPQ 484 (SDNY 1977)	Claim was ambiguous enough to falsely suggest that ANACIN relieved both inflammation and pain faster than Tylenol and Datril. Argument rejected.
7) Ordinary Meaning Implication	An explicitly stated word, phrase, name or description, falsely implies its ordinary meaning, but that meaning is not applicable in its present usage.	American Home Products Corp. v. Abbott Laboratories, 522 F. Supp. 1035, USPQ 351 (SDNY 1981)	The claim that TRONOLANE "stops" pain falsely implied to consumers that it would completely eliminate the pain.

Table 3--continued

Types of Implications	Definition	Lanham Act Sample Cases	Description
8) Contrast Implication	A truthful contrast to a competitor implies an additional contrast, the latter being far more significant than the former, but false.	American Home Products Corp. v. Johnson & Johnson, 436 F. 785 USPQ 484 (SDNY 1977)	AHP complained TYLENOL's claim that it was trusted by hospitals and was used more than its competitors falsely implied that TYLENOL had different ingredients than ANACIN-3. *Charge was rejected*
9) Endorsement Implication	Involves one or a few endorsements of the product by consumers or celebrities, implying falsely that many or most consumers seeing the ad will find the facts about the product to be as the endorser found them, or will otherwise prefer the product as much as the endorser does.	American Home Products Corp. v. Johnson & Johnson, 436 F. 785 USPQ 484 (SDNY 1977)	Endorsement by an ANACIN user indicated no stomach upset. The implication was found not to be false because only a small percentage of users suffer from stomach upset.
10) Expertise Implication	The explicit claim is an endorsement of the product by a person or an organization called an expert in the product field, so as to imply the application of expert knowledge to the product. Endorser's expertise is implied to serve as adequate basis for the endorsement.	Consumers Union of United States Inc. v. New Regina Corp., 664 F. Supp 753, 765-766 4 USPQ 2d 1257 (SDNY 1987)	Endorsement by an organization falsely implied the application of expert knowledge.
11) Significance Implication	A true but insignificant fact is explicitly claimed, and implies falsely that it matters or should matter to the consumer in purchasing the product.	American Home Products Corp. v. Abbott Laboratories, 522 F. Supp. 1035, USPQ 351 (SDNY 1981)	A medication was called "new," implying not only that it was a new brand (which was true) but that it was a new type of medication (which was false).
12) Puffery Implication	Opinion statements which explicitly state a high evaluation of the product, but which imply no factual basis and thus remain only subjective and constitute no violation. Presumably consumers, unless acting unreasonably, will know not to believe them, i.e., will ascribe no factual basis to them.	U-Haul International Inc. v. Jartran Inc., 522 F. Supp. USPW 49 (1981)	"No one can rent you a truck like Jartran can" was found to be within acceptable range of commercial puffery
13) Product Specific Implications	Set of types of implications, each of which involves an implied meaning drawn from the idiosyncratic characteristics and contexts of the specific product, with applicability to few or no other types of products.	Johnson & Johnson v. Carter Wallace Inc., 487 F. Supp. 740 (1979)	Claim implied that baby oil's usual moisturizing effects were obtained from baby oil in NAIR, when this was false.

Inputs for this table correspond to Preston (1977, 1989b, 1994).

CHAPTER 5
IMPLIED SUPERIORITY CLAIMS AS COMBINED COMPARATIVES

As previously discussed, combined comparatives may position the sponsor brand either on par with the competition or as significantly superior. Moreover, such claims may be based on specific attribute information or may be made in the form of general superiority or evaluative statements, even puffery (Pride, Lamb and Pletcher 1979; Neese and Taylor 1994; McDougall 1976; Droge and Darmon 1987). This form of claim is popular with advertisers because it allows them to efficiently clarify and strengthen a brand's positioning. With combined-comparative claims advertisers can achieve both association and differentiation from the competition. Such advertisements can position the sponsor against various brands, or target a single brand with comparative association and differentiation achieved in relation to different attributes (Muehling and Kangun 1985; Barry 1993; Neese and Taylor 1994).

Research suggests that suspicions about the potential harm to competitors and consumers from false combined comparative claims are justified. First, comparative claims negatively impact perceptions of the comparison brand (Kamen 1987). A meta-analysis of the comparative advertising literature reports that attitudes towards the comparison brand are less favorable than for the sponsor brand, and that purchase intentions and choice behavior are negatively affected as a result (Grewal, Kavanoor, Fern, Costley and Barnes 1997).

Second, the language and format of combined comparatives may significantly alter consumers' interpretation of brand information. Several researchers who have reviewed deceptive advertising cases under the Lanham Act suggest that careful selection of language and format proved instrumental in crafting comparative claims that "stretched the truth" (Goldman 1993; Preston 1989b, 1994). The ambiguous wording of some parity claims, in particular, encourages superiority inferences that cannot be substantiated (Harris and Monaco 1978; Preston 1989 a, b; Snyder 1989).

Finally, research suggests that consumers have difficulty processing comparative claims (Goodwin and Etgar 1980; Pechmann and Stewart 1990). Consumers report that they have to devote extra effort to avoid confusing the sponsor with the comparison brand, for example. The potential for confusion is greater with combined-comparative claims given the additional brand and attribute information consumers must process. Thus, when the format or language of comparative ads encourages inferences about the sponsor that cannot be objectively supported, combined comparatives may not only confuse but also mislead consumers and harm competitors. (Snyder 1989; Pechmann and Stewart 1990; Pechmann and Ratneshwar 1991; Pechmann 1996).

Legal Challenges to Combined Comparative Claims

Most challenges to combined comparative claims have involved the way in which the parity claims were phrased. While claims such as "*No brand is better than Brand X*" were generally treated as parity comparisons, they are now being challenged when they appear in the presence of superiority claims or puffery.

In a recent legal challenge under Section 43 (a) of the Lanham Act, American Home Products (AHP) challenged advertisements that included a parity claim for Aleve

against Advil and a superiority claim against Extra-Strength Tylenol, both referring to duration of pain relief. AHP, the makers of Advil, argued that the combined claims encouraged a superiority take-away favoring Aleve for duration of pain relief and speed of action. Based on scientific evidence, Aleve could only truthfully make a superiority claim against Tylenol and a parity claim against Advil. [31]

At NAD, complaints against combined comparatives include that of Hoechst Marion Roussel, the makers of Seldane, against Whitehall-Robbins Healthcare, the makers of Dimetapp Extentabs (1996). The challenged claim stated "*In fact, a study showed its antihistamine works better on your allergie than Seldane, a leading prescription...And it doesn't make you as drowsy as Benadryl.*" Hoechst argued that the advertisement falsely communicated that Dimetapp Extentabs do not have a sedating effect and that they are less sedating than Seldane, neither of which was true or accurate. Superiority on this attribute was implied by the combination of a direct comparison to Seldane with the drowsiness claim against Benadryl.

American Home Products also filed a complaint at NAD against the makers of Motrin IB for claiming that "*For headaches and muscles aches, nothing, not even Advil, works better than Motrin IB.*" They argued that although such a claim would be generally considered a parity comparison, the language used (i.e. *not even Advil*) changed the claim into a superiority comparison. Since the ad also mentioned other qualities in which Motrin was superior, AHP argued that consumers might be led to falsely believe that Advil is superior to Motrin IB overall.

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[31] An injunction was denied even though survey evidence suggested consumers took away a superiority rather than a parity comparison against Advil. The court deemed the survey to be methodologically flawed. American Home Products v. Procter and Gamble Company, Syntex USA Inc. and Proctor-Syntex Health Products Co., 871 F. Supp. 739; 1994 U.S. Dist.

The makers of Motrin cited numerous instances when claims similar to those being challenged were considered parity claims. They cited an NAD case involving Maytag Dishwashers, where claims such as "*Nobody, but nobody cleans better than Maytag and holds more dishes*" and "*No dishwasher washes quieter and also cleans better than Maytag*" were considered to be typical parity claims. The National Advertising Review Board even affirmed this decision on appeal. Nonetheless, NAD ruled in favor of AHP, saying that "depending on the language used and the context in which the claim appears, a traditional parity claim may be interpreted by consumers as a superiority message" (NAD Case Reports, Vol. 29, p. 60).[32]

Another recent complaint filed at NAD involves an advertisement by the makers of Advil Liqui-Gels.[33] The makers of Bayer objected to the claim "*On tough pain, Advil Liqui-Gels are stronger and faster than Extra Strength Tylenol. Headaches to muscle aches. New Advil Liqui-Gels. Stronger and faster.*" The Bayer corporation argued that combining the *stronger* and *faster* claims against Tylenol with a broader, incomplete superiority claim suggested to consumers that Advil Liqui-Gels acted faster than *all* single ingredient pain relievers. Bayer questioned the ability of Whitehall to factually support such implication. NAD agreed with Bayer, saying that unless the claims were adequately qualified to limit the superiority comparison against Tylenol, it was reasonable to expect that consumers would interpret the claims to mean that Advil is superior to all other brands of pain relievers.

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[32] American Home Products versus McNeil Consumer Products, NAD Case Reports, Vol 29, No. 2, 1999.

[33] Bayer Corporation versus Whitehall-Robins Healthcare, NAD Case Reports, Vol. 29, No. 3, 1999.

Summary

Advertisers use combined comparatives to achieve a clearer positioning of their brands. Within a single ad, a brand can be positioned against several competitors and in relation to various attributes. Take the following examples: "*For relief of acid indigestion or heartburn with headache, nothing, not even Pepcid AC or Tagamet HB makes you feel better, faster than Alka Seltzer*;" "*Nobody, not even Ensure, gives you more protein with less fat than Sustacal*;" or "*Nothing stops diarrhea faster, not even the AD medicine. Pepto Diarrhea control.*" These claims were presented along with other superiority claims and puffery about the sponsor brands.

The problem with such claims is that often one of the claims is unsubstantiated, but the juxtaposition with other claims conveys to consumers unqualified substantiation for all claims in the ad. When advertisers cannot make truthful claims about attributes that are important to consumers, they resort to this copy-writing tactic as a way to avoid making outright false claims (Wyckham 1987). NAD has recognized the potential of this tactic to mislead consumers, stating that such claims raise "serious questions with respect to the treatment of parity claims by the courts, state and federal regulators." To date, however, no FTC case has specifically addressed this issue,[34] even though these claims have been repeatedly challenged in the courts and at NAD. A number of complaints made to NAD, for instance, involve health-related products (see Table 4). Lack of action against such potentially misleading claims is likely to result in adverse consequences for consumers.

[34] Teodore Hoppock, Senior Attorney at Advertising Practices, Bureau of Consumer Protection of the FTC. Personal Communication, September 1999.

The following chapter will review information-processing research relevant to understanding how consumers interpret combined comparative claims. This review will reveal that no empirical work has directly focused on the linguistic form of complex comparatives as a source of deception. Moreover, no empirical work addresses the processing and integration of comparative claims that include claims that differ in direction (parity and superiority) or specificity when these are featured in a single ad.

Table 4. NAD decisions on combined comparative claims.

Case Details	Challenged Claim	Basis of Inquiry	NAD Decision
Date: December 1994 **Advertiser:** The Procter and Gamble Co. **Challenger**: Sterling Winthrop, Inc. **Product:** Aleve analgesic Tablets	Print and television advertisements stated: *Aleve is longer lasting than Extra-Strength Tylenol. Advil isn't stronger*	Challenger argued that by including the phrase "Advil isn't stronger" along with the superiority claim against Tylenol the advertiser changed the phrase from a parity claim into a specific superiority comparison to Advil.	"The coexistence of these two claims within the same advertisement distorts the distinction between objective and subjective information and substantiated and unsubstantiated claims...one cannot consider these claims singly and in a vacuum"
	Some ads included a bar graph depicting the recommended dosing schedule for Aleve (8-12) hours, Extra-Strength Tylenol (6-8 hours), Advil (4-6 hours) and Bayer (4 hours)	Sterling challenged the accuracy of this representation by emphasizing the fact that Bayer is available in a variety of dosing schedules	The advertiser needs to qualify the graphic claim by indicating that its dosing comparison is based on the 4 hour dosing schedule of Regular Strength Bayer Aspirin The bar graph should be modified to reflect that the term "Bayer" refers exclusively to Bayer Regular Strength
Date: April 1999 **Advertiser**: McNeil Consumer Products **Challenger**: American Home Products **Product:** Motrin IB Pain Reliever	The challenged claim appeared in a free standing insert (FSI) which contained one of the advertised claims in the "Take the Motrin IB challenge" campaign "For headaches and muscles aches, *nothing, not even Advil, works better than Motrin IB*" and "We guarantee that you will find that for headaches and muscle aches, *nothing works better than Motrin IB or your money back*"	Challenger argued that by including the term "not even Advil" in what is traditionally viewed as a parity claim- "nothing works better"—McNeil changed the general parity claim into a specific "superiority" comparison to Advil. The advertiser contends that "Nothing works better" clearly communicates parity, not superiority, they contend that other OTC manufacturers commonly make these claims based on proof of parity. McNeil noted that NAD has routinely held advertising claims of this sort to be parity claims, so long as there is nothing else in the advertising that confuses or contradicts parity.	NAD statement: "Depending on the language used and the context in which the claim appears, a traditional parity claim may be interpreted by consumers as a superiority message" "NAD shares the concern of the challenger that, depending on the language and the context in which such claims appear, even a traditional parity claim may be interpreted by consumers as a superiority message." NAD Decision: "NAD had in the past routinely viewed claims such as the one at issue ("nothing, not even Advil, works better than Motrin IB") to be garden variety parity claims requiring evidence of equal performance, rather than evidence of superiority, as support. However, there is evidence that this advertisement may be communicating a false superiority message."

Table 4--continued

Case Details	Challenged Claim	Basis of Inquiry	NAD Decision
Date: January 1996 **Advertiser:** Whitehall-Robbins Healthcare **Challenger**: Hoechst Marion Roussel, Inc. (maker of Seldane) **Product:** Dimetapp Extentabs	The challenged claim stated: "In fact, a study showed its antihistamine works better on your allergies than Seldane, a leading prescription...*And it doesn't make you as drowsy as Benadryl*"	Hoechst argued that the advertisement falsely communicates that Dimetapp Extentabs do not have a sedating effect and that it is less sedating than Seldane, neither of which is true and accurate. The claim is implied by the ad copy which combines a direct comparison to Seldane with the drowsiness claim against Benadryl	NAD Decision: "While it is true that, in some instances, a commercial which contains two different comparisons to two different products can create an implication that the comparisons could apply to both products, NAD finds that the execution of this commercial is such that the two claims are sufficiently separated by the visual and audio elements of the ad. The two comparisons are separated by a non-comparative sentence and the visuals in which the two claims are made are completely different. Accordingly, without a communication study to the contrary, NAD finds that this commercial, as structured, does not communicate this alleged non-sedating claim. The advertiser has substantiated its claim for Dimetapp Extentabs
Date: January 1997 **Advertiser:** Johnson and Johnson McNeil Consumer Products Co. **Challenger**: Aspirin Foundation of America (AFA) **Product:** Tylenol Acetaminophen	The challenged claim appeared in a print ad and stated: "So what should you take for everyday aches and pains if you're already taking aspirin for your heart today? Doctors are recommending Tylenol the most. That's because Tylenol is a strong, effective and proven pain reliever. And Tylenol works differently than aspirin. Tylenol *won't irritate your stomach* the way aspirin sometimes can. Aspirin for your heart; Tylenol for your pain."	The AFA challenged the "*recommended most*" claim and maintained that the advertising implied: That combining aspirin use for heart attack prevention with aspirin use for relief of pain results in excessive or 'too much' aspirin That aspirin is not as effective for pain relief as Tylenol or is indicated only for heart attack prevention and not for pain relief. That for patients who take aspirin for their heart, doctors recommend against taking aspirin for aches and pains and instead recommend Tylenol	NAD Decision: "NAD concludes that in the context of the ads, the slogan "Aspirin for your heart, Tylenol for your pain" does not convey an implied claim that aspirin is not effective or less effective. However, it is not in the genre suggested by McNeil i.e., acceptable hyperbole involving unprovable and general statements often associated with puffery. In this case, however, the implied claims are supported."

Table 4--continued

Case Details	Challenged Claim	Basis of Inquiry	NAD Decision
Date: May 1999 **Advertiser:** Whitehall-Robins Healthcare **Challenger**: Bayer Corporation **Product:** Advil Liqui-Gels Advertising	On tough pain, *Advil Liqui-Gels are stronger and faster than Extra Strength Tylenol.* Headaches to muscle aches. New Advil Liqui-Gels. Stronger and faster."	The commercial includes a claim that Advil Liqui-Gels are stronger and faster than Extra Strength Tylenol," but it also includes a broader superiority language, which suggests to consumers that Advil Liqui-Gels act faster than all single ingredient pain relievers, a claim that Bayer contends Whitehall cannot support. The advertiser argues that the ads do not contain express language comparing Advil to any other pain reliever, and dismiss allegations that there was an implied general superiority claim. Advil's comparison is limited to Extra Strength Tylenol. The challenger argues that the ads include a "set up"- which involves a visual depiction of fast moving forms of transportation, new technology, and athletes competing – the depiction is followed by the question "So how come pain relief isn't faster" Bayer contends that the commercial answers the question with an express superiority claim "Introducing Advil Liqui-Gels, the first and only pain reliever in a faster-acting liquid filled capsule..." The term "faster acting" is qualified only by the "super" which appears at the bottom of the screen: *among single ingredient pain relievers.*	Whenever qualified and unqualified superiority claims are combined together in a single advertisement there is the potential for a spill-over effect in which the qualified claim is interpreted more broadly than perhaps the advertiser intended. Only after the commercials make an unqualified superiority claim with respect to pain relievers in general that the more limited comparison, that Advil Liqui-Gels are stronger and faster than Extra Strength Tylenol, is introduced. Moreover, this limited claim is followed by a final unqualified superiority claim. Given the sandwiching of these claims, NAD determined that consumers could reasonably interpret the commercials to mean that Advil Liqui-Gels a) work faster than Advil in a non-Liqui-gel formulation, b) work faster than Extra Strength Tylenol, c) work faster than other single ingredient pain relievers, as suggested by the "super", or d) work faster than all pain relievers. NAD's Conclusion: To avoid communicating a superiority message that is broader than the evidence can support, NAD recommends that he advertiser modify its commercials to more clearly limit any "works faster" claims to a comparison with Extra Strength Tylenol.

CHAPTER 6
PROCESSING OF COMBINED COMPARATIVE CLAIMS AND FRAMING EFFECTS

While the effectiveness of an advertisement depends on the presentation and strength of its claims, persuasion is not always achieved by providing new information to consumers. Advertisers also rely on the audience's prior knowledge to frame their interpretation of a message and influence their beliefs (Nelson, Oxley, and Clawson 1997). By activating specific concepts in memory, advertisers create meaningful associations between the advertising claims and pre-existing knowledge. Such cognitions guide the organization and integration of the information presented. They suggest the relationships by which claims will be grouped into larger units and determine how related items will be categorized (Ellis and Hunt 1983; Bransford and Franks 1971; Sulin and Dooling 1974; Bransford, Barclay and Franks 1972).

As previously discussed, there is cause for concern regarding the deceptive potential of some combined comparative claims. In this chapter it will be argued that consumers are misled when framing effects bias the interpretation of comparative claims. As a result such claims falsely suggest attributes and benefits that favor the sponsor at the expense of competing brands featured in the ad.

Framing Effects in Advertising

There is an extensive literature on the role of framing effects in decision-making. Some of the research in this area has focused on the framing of choice alternatives (i.e., in terms of gains or losses) and decision-makers' perceptions of risk (Tversky and Kahneman 1973, 1974; Kuhn 1997; Highhouse, Paese, and Leatherberry 1996). Other research has investigated framing and how consumers weigh issue-relevant facts when choosing between alternatives (Feldman and Lynch 1987; Wright and Rip 1980; Bettman and Sujan 1987).

In communication research, however, framing is defined as the act of selecting and emphasizing certain facts in a message in order to influence its interpretation and the subsequent evaluation of issue-relevant arguments (Entman, 1993). In the context of advertising, a frame is a central organizing idea that suggests to consumers what they should attend to and which information is important (Nelson, Oxley and Clawson 1997). Frames are different from persuasive arguments in that they typically do not present the audience with new information. Instead, frames activate information in long-term memory (e.g., categories, decision rules, or heuristics) (Nelson, Oxley, and Clawson 1997; Shiv, Edell and Payne 1997).

Overview of Research on Framing Effects in Advertising

Research on framing effects in advertising has focused on positively and negatively framed claims and their effect on consumers' brand evaluations and purchase intentions (Smith 1996; Shiv, Edell and Payne 1997; Homer, 1992; Maheswaran and Meyers-Levy 1990). Other research has focused on the role of advertisements as frames

that influence how consumers interpret ambiguous product information (Ha and Hoch 1989; Hoch and Deighton 1989; Hoch and Ha 1986; Deighton 1984).

Another stream of research focused on the impact of advertising context on the processing of direct and indirect advertising claims. In a series of studies Yi (1990 a,b,c, 1993, 1996) looked at the role of the editorial content in framing the interpretation of print advertisements. In one condition the content was varied to prime either desirable or undesirable attributes of a product with the intent of guiding subject's interpretation of information in a subsequent ad. For instance, a magazine article about automobiles would discuss either fuel efficiency or safety. The information in the article was intended to influence whether consumers perceived an ad's depiction of the large size of a car as a positive or negative attribute.

Yi found that the context in fact influenced whether subjects interpreted the featured advertising claim as positive or negative. The subjects' attitude toward the brand and their purchase intentions were affected accordingly (1990a, b, c). Yi also reported that the affective tone of the surrounding context affected consumers' interpretation of attribute information. A positive versus a negative tone resulted in higher purchase intentions and a better attitude toward the ad (1990a,c). In looking at the influence of subjects' product knowledge, Yi (1993) found that only subjects with moderate levels of knowledge were susceptible to such contextual effects.

Yi's studies replicate findings from the priming literature in an advertising context. Beyond that, the contribution of such findings to the understanding of advertising processing is debatable. First, it is highly unlikely that advertisers would rely on such a strategy to effect belief change in customers. Even if advertisers could request

that ads be embedded in favorable context, too many unpredictable variables are at play during exposure conditions. There is no guarantee that consumers will have the opportunity to process the content *and* the ad in the appropriate order required for priming effects. Second, given advertising clutter, the actual impact of a priming cue embedded in surrounding content is likely to be minimal. Yi's contribution is even more negligible in the context of public policy and legal decisions about deceptive advertising. It would be impossible to fault an advertiser with deception that results from the interaction of claims and an advertisement's surrounding context.

Nevertheless, Yi's focus on advertisers' use of indirect strategies to change consumer beliefs is consistent with the previous discussion of combined comparatives. When there is little or no basis to make truthful claims about important attributes, advertisers indirectly suggest benefits rather than explicitly state falsehoods.

Framing Effects and Combined Comparatives

Currently, no advertising research has addressed the processing of combined comparative claims. However, the research of Barone and Miniard (1999) provides some insight, as they investigated deceptive partial comparatives. They specifically looked at copy by copy interactions, where processing of a direct comparison claim leads to false beliefs about a non-comparative claim. The researchers hypothesized that copy by copy interactions could result from one of two processes: inferences or priming effects. If inference processes were responsible, Barone and Miniard expected to find that beliefs about attributes featured in the non-comparative claims would be affected by the direct comparison claim. However, this would only occur if the attributes were typical (if schematic inferences were generated) or correlated (if probabilistic inferences were

generated). Distorted beliefs about non-featured attributes would suggest that evaluation-based inferences were generated. On the other hand, if priming was the responsible process, they expected to find that beliefs about attributes in non-comparative claims would be distorted, regardless of their typicality or correlation.

Their data was consistent with a priming explanation. Subjects rated attributes mentioned in non-comparative claims more favorably when direct comparative claims preceded such claims. Several issues must be raised regarding Barone and Miniard's characterization of the process involved in copy by copy interactions. First, their description of the process is more consistent with framing than with priming effects. They argue that processing of direct comparative claims primes thoughts of superior performance of the sponsor against the comparison brand. As attention shifts to other parts of the ad, concepts primed by the previous claims will influence their interpretation of non-comparative statements. This is framing, not priming. Priming is a memory phenomenon referring to facilitative effects on recall or recognition from the increased accessibility of concepts that were previously activated. Shorter response times in recall or recognition of the target, for instance, is the usual dependent variable used to determine if priming took place (Ashcraft 1989; McNamara 1992).

Second, Barone and Miniard (1999) concluded that their findings were only consistent with a priming (framing) explanation, not with inferential processing. Framing and inferential processes are not mutually exclusive, however. Comprehension requires that we extract the general meaning of an advertisement, simplifying the details into the gist of the message. This process is often guided by the general theme of the ad and other salient elements. At the same time, comprehension involves elaboration upon the

presented information by way of inferences (Ellis and Hunt 1999). Comprehension thus involves both top-down and bottom-up processes, as general themes guide the audience's inferential processes and stimulus characteristics suggest how the information should be interpreted (cf. Bartlett 1932).

Say, if a product is positioned as *heart healthy* consumers are likely to infer missing attribute values consistent with this positioning message (e.g., low in fat, cholesterol, sodium, etc.) (Andrews, Netemeyer and Burton 1998). The theme serves as a category prime that leads consumers to infer attributes typically associated with the category (cf. Rosch 1978). When general superiority statements or puffery are part of the positioning strategy, consumers will tend to infer that the sponsor outperforms the competition on such attributes, even if attribute claims are made in a non-comparative format (cf. Landy and Sigall 1974; Beckwith and Lehman 1975; Nisbett and Wilson 1977). Consumers will also infer superiority on non-featured attributes in a manner consistent with the explicit superiority statements (Pechamn 1996). Similarly, attribute claims used to position the brand may suggest to consumers the presence of other related attributes and benefits (Dick, Chakravarti and Biehal 1990). Explicit attribute claims will *activate* thoughts about other closely associated attributes, and their increased accessibility will guide inferences about such attributes (Collins and Quillian 1972; Collins and Loftus 1975).

Finally, in Barone and Miniards' second study, which they claim presents the strongest evidence for priming versus inferences, the target and prime were presented separately on different pages. Since a copy by copy interaction refers to the influence of

one claim on another when these are presented *within* the same ad, their findings are not entirely helpful in understanding the processes involved in such effects.

Framing Effects involving Parity and Superiority Claims. In a previous chapter it was discussed how combined comparative claims may include parity statements, superiority claims, and even puffery and how they may refer to specific attributes or to general performance (Barry 1993). It was also argued that the form of the parity claims has been the source of a number of legal challenges. Claims such as "Brand X is not faster than [the sponsor]" which have been traditionally treated as parity claims, have recently been challenged because other comparative claims within the ad suggest to consumers a superiority interpretation. That is, consumers take away that "Brand X is slower than [the sponsor]", even if that interpretation has no factual basis.

The problem with the form of such parity claims is that their interpretation is strongly suggested by everyday language conventions (Grice 1977; Harris and Monaco 1978). For subjects, negating a dichotomous antonym (e.g., "not alive") logically implies its antonym (dead), while negating a continuous antonym (e.g., "not hot") pragmatically implies its antonym (cold). As a result, subjects erroneously identify the pragmatically implied antonyms as if they were the original sentences (Brewer and Lichtenstein 1975).

Other evidence of linguistic and verbal framing effects has been reported in studies involving logical reasoning tasks (Fiedler and Hertel 1994). When testing an if *p then q* rule, such as "*If you tell the truth, I will treat you kind*" subjects easily understand the rule to mean if *q then p*, that is, "*If you want me to treat you kind, you have to tell the truth.*" Given a problem-solving task, subjects were less likely to attempt to falsify the rule (to test with not-q), unless they were instructed to do so. Thus, it does not appear

that *negation* is a natural way of thinking, as it involves "shifting focus from the cause to the effect, and reframing in terms of negation" (Fiedler and Hertel 1994, p.134).

In an advertising context, Lowrey (1998) found that syntactically complex claims, claims in a negated form, were less persuasive than simple claims (Study 2). The impact of sentence complexity was not due to an inability to process the information, as the level of comprehension for simple and complex claims did not significantly differ. However, in Lowrey's and other studies subjects do tend to make more recall errors when claims are presented in complex than in simple format (cf. Jacoby, Nelson and Hoyer 1982).

Summary Discussion

Given the complexity of parity claims in negated form, the potential for misinterpretation, and their persuasive weakness, why do such claims continue to appear in comparative advertisements? The fact is that these claims are rarely found without accompanying superiority information (Wyckham 1987). They may be paired with comparative superiority claims, or with puffery. Visual cues or other elements may also accompany the claims in order to facilitate an interpretation that benefits the sponsor. Thus, parity claims in negated form are never truly intended to be interpreted as such. They are used to the extent that they allow the advertiser to make claims about attributes that are important to consumers in a way that has not, at least until recently, been legally challenged.

The following sections present the empirical work on combined comparatives. Study one investigates paring of negated parity claims with puffery statements and the interpretive biases that result when these are featured in a single ad. Study two investigates combined comparatives of different directions (parity and superiority) and

interpretive biases when these target different competitors in a single ad. The final chapter presents conclusions derived from the empirical work.

CHAPTER 7
COMBINED COMPARATIVES OF DIFFERENT SPECIFICITY

As previously discussed, combined comparatives are a series of statements that differ on the specificity and/or direction of comparisons between brands. Recent legal challenges to combined comparatives suggest that some implied parity claims could mislead consumers. Specifically, parity claims made in a negated linguistic format may falsely imply competitive superiority when they are presented alongside superiority claims. Whether combined comparatives are in fact deceptive has not been empirically tested. The purpose of the first study is to investigate the extent to which the combination of superiority statements and negated parity claims leads to misleading inferences. Of particular interest is whether such inferences are contingent upon the level of specificity of the superiority and the parity claims.

General Superiority Statements and Puffery

According to Neese and Taylor (1994), the specificity of a comparative claim ranges "from casual, nonspecific references to the competition to explicit, point-by-point comparisons based on attribute differences and similarities inherent in the brands concerned" (p.2). Combined comparatives may therefore include broad, exaggerated superiority claims or puffery *("the best money can buy")* along with claims that mention specific attributes on which a brand is superior to specific competitors.

The persuasive impact of puffery is well known (Preston 1975, 1977, 1983a; Rotfeld and Preston 1981; Rotfeld and Rotzoll 1981; Shimp and Preston 1981). Puffed

claims can serve as positioning statements that influence consumer decisions. Research suggests that puffery has a lasting influence on consumers and at times it may lead to sub-optimal choices. For instance, consumers have been shown to prefer an inferior brand based on their memory of puffery information, even when available attribute information suggested a different choice (Chattopadhyay and Alba 1988; Alba, Marmorstein and Chattopadhyay 1992).

Consumers often discount the validity of exaggerated claims knowing these only reflect the opinion of the advertiser (Friestad and Wright 1994). Still, some researchers argue that certain puffed claims should be regulated because consumers believe them (Preston 1975, 1977, 1983a; Rotfeld and Preston 1981; Rotfeld and Rotzoll 1981; Shimp and Preston 1981). With combined comparatives the issue is not whether consumers believe the exaggerated superiority claims. The cause for concern is the potential for framing effects that bias how consumers process parity claims. Broad comparative statements that present the brand as superior are likely to suggest to consumers how other information in the ad should be interpreted. Such superiority statements will be like halo effects that result in overgeneralization about the brand's superiority on specific attributes (cf. Pechmann 1996).

An additional cause for concern is that in legal challenges, advertisers have been given a lot of leeway in their use of puffery. The FTC dismissed challenges to superiority statements such as *"Bayer works wonders"* and *"the world's best aspirin."* Puffed claims such as these are not deemed legally deceptive or misleading by the FTC or the courts because, being the opinion of the seller, consumers should know not to rely on them (Deception Policy Statement 1983; Lanham Act Section 43(a)). Because they

tend to be less scrutinized, exaggerated superiority statements may be used along with other claims that allow advertisers to suggest, sometimes falsely, that a brand is comparatively superior on important attributes.

Based on the previous discussion it is hypothesized that the combination of broad superiority statements and negated parity claims leads consumers to overgeneralize sponsor superiority. Negated parity claims are ambiguous and thus more susceptible to the influence of other ad elements in their interpretation (Harris 1977; Wyckham 1987). In addition, consumers expect a comparative ad to present only favorable information about the sponsor brand. Interpretation of the parity statements may be anchored on the superiority claims, which are consistent with consumers' expectations (cf. Friestad and Wright 1994).

> H1: The combination of exaggerated superiority statements or puffery with negated parity claims leads consumers to overgeneralize sponsor superiority on the attribute depicted by the parity claim.

> H2: The combination of exaggerated superiority statements or puffery with negated parity claims suggests overall superiority of the sponsor over the comparison brand.

If an advertisement is to influence consumers' product decisions, it has to be memorable. The most memorable elements of an ad may affect how consumers frame a problem, which brands enter a consideration set, and even how they formulate a search strategy (Hoch and Ha 1986; Lynch Marmorstein and Weigold 1988; Pechmann 1996). In order to explore framing's lasting effects, a delay condition was included in this study.

Memory for specific attribute information decays to a greater extent than recall of general superiority statements (Alba and Chattopadhyay 1988; cf. Bartlett 1932; Sulin and Dooling 1974; Bransford, Barclay and Franks 1972). Thus, as memory for the parity

claim decays, recall of superiority statements will influence whether the depicted attribute is recalled in a superiority or a parity context. Moreover, as respondents fail to recall attribute information and rely on the general positioning of the sponsor, the comparison brand will be perceived as inferior overall.

> H3: Recall of the attribute parity claim declines over time to a greater extent than memory for general superiority statements.
>
> H4a: After delay, recall of sponsor superiority on the parity attribute increases over time when the combined comparative consists of a parity claim in negated form and superiority statements.
>
> H4b: Recall of overall sponsor superiority over the comparison brand increases over time.

Pretest Surveys

A series of pretest surveys were conducted in order to select the product category, brands, and attributes to be featured in the advertisements. Thirty-one marketing students were asked how often (if at all) they used a series of over the counter health products.[35] For those products they reported using at least once in the last six months they were asked to list the brand used most often, as well as three other brands they had purchased in the past or had considered purchasing. Finally, they were asked to list the attributes they considered important when choosing between brands in each of the product categories for those products they had used at least once.

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[35] Over the counter medications were chosen given the FTC's ongoing interest in products of this nature and the potential harm to consumers from false or inaccurate information.

Selection of the product category was based on usage frequency.[36] Pain relievers were selected as the product category to be featured in the ads, with 100% of respondents using pain relievers often, 87% reporting that they use pain relievers anywhere from once a week to at least once a month. Replication to a less familiar product category and brands is expected to strengthen the case for the hypothesized effects. Thus, a second product category, antacids, was selected as a replicate. This second product category was chosen since respondents reported using antacids less frequently than the principal category. Only 52% percent reported using antacids often, of those only 44% use antacids more than once a week or at least once per month.

The brands with the lowest market share were featured as the sponsors in the ads, since it is usually those brands that pursue a comparative strategy. While Aleve's market share data was identical to that of Advil, Aleve was chosen as the sponsor given that a lower percentage of respondents had purchased or considered purchasing that brand. The antacid market share data suggested Zantac 75 as the sponsor (see Table 5).[37]

The criteria for selection of attributes were that the attribute be important in choosing between brands and that the importance ratings did not differ greatly between the chosen product categories. A second survey was conducted to verify the importance of those attributes reported most often by respondents in the first survey. Fifty-one respondents rated a series of attributes on a five-point Likert scale, with higher numbers denoting more importance.

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[36] This was intended to simulate the manner in which the universe of respondents is selected in copy tests for litigation. The relevant universe of respondents is usually defined as those likely to purchase the product at some time in the near future (e.g., 3 or 6 months).

Based on the importance ratings, speed of relief was chosen as the target attribute featured in the advertisements. The mean importance rating when choosing between pain relievers for speed of relief was 4.55, and when choosing between antacids 4.58 (see Table 6).

Table 5. Usage and market share data for pain relievers and antacids.

Pain Reliever Usage: 100% have used pain relievers						
Brands used or considered using in the last 6 months	**Tylenol**		**Advil**		**Aleve**	
	83%		71%		26%	
	Used most often	*Have used or Considered Using*	*Used most often*	*Have used or Considered Using*	*Used most often*	*Have used or Considered Using*
	35%	**48%**	**39%**	**32%**	**3%**	**23%**
Market Share	**23.2%**		**13.7%**		**13.7%**	
Antacid Usage: 52% have used antacids						
Brands used or considered using in the last 6 months	**Pepcid AC**		**Tagamet HB**		**Zantac 75**	
	19%		19.25%		6.2%	
	Used most often	*Have used or Considered Using*	*Used most often*	*Have used or Considered Using*	*Used most often*	*Have used or Considered Using*
	19%	**0%**	**13%**	**6.25%**	**0%**	**6.2%**
Market share	17.2%		8.9%		<4%	

Study 1

Overview

The purpose of the study is to investigate framing effects that may lead combined comparative claims to be deceptive. It is specifically hypothesized that the combination

[37] Pain reliever market share data from Market Share Reporter (October 1997); antacid market-share data from Chain Drug Review (November 1996).

of broad claims of brand superiority with negated parity claims leads consumers to make false inferences.

Table 6. Attribute importance ratings for pain relievers and antacids.

Attributes considered when choosing between brands of **pain relievers**	Mean rating (N = 51)	Attributes considered when choosing between brands of **antacids**	Mean rating (N = 51)
1. Duration of symptom relief	4.44	1. Duration of symptom relief	4.46
2. Dosage amount	2.8	2. Dosage amount	3.39
3. Few side effects	4.55	3. Few side effects	4.23
4. Speed of pain relief	**4.55**	**4. Speed of pain relief**	**4.58**
5. Does not irritate stomach	4	5. Does not irritate stomach	4.53
6. Does not cause drowsiness	3.75	6. Does not cause drowsiness	3.76
7. Easy to swallow pills/tablets	3.19	7. Easy to swallow pills/tablets	3.14
8. Does not interact with other medications	3.68	8. Does not interact with other medications	3.69
9. Is low in sodium	2.37	9. Is low in sodium	2.1
10. Dosing schedule (how often you take it)	3.13	10. Dosing schedule (how often you take it)	3.24
11. Most prescribed by doctors	3.54	11. Most prescribed by doctors	3.48

Design

The design is a 4x2x2x2 factorial design. The factors are combined comparatives of different specificity and direction (explained below), product category (pain reliever or antacid), delay (immediate, 24-hour delay), and two measurement order manipulations. The main dependent variables are recall of superiority and parity claims.

Operationalization. As previously discussed, the direction of a claim refers to whether a parity or superiority statement is being made, while claim specificity refers to the extent to which specific attribute information versus general performance statements serve as the basis of the comparison (Neese and Taylor 1994). In order to test the

hypothesized effects, a general superiority claim ("the most advanced"), was paired along with a parity claim about speed of relief. Three other conditions were included reflecting combinations of parity and superiority claims of different specificity. These conditions were included to allow comparisons that would reveal the extent of the hypothesized effects. The four conditions can be found in Table 7.

Table 7. Combined comparative conditions for Study 1.

	Claim specificity (B=Broad claim, Sp=specific attribute claim)	
Condition 1	B -Sp	The most advanced pain reliever. Advil isn't faster
Condition 2	B-Sp	The most advanced pain reliever. Advil isn't more advanced
Condition 3	Sp-B	The fastest pain reliever. Advil isn't faster
Condition 4	Sp-B	The fastest pain reliever. Advil isn't more advanced

Expanding on the hypotheses presented earlier, H1 would be supported by a main effect of the advertising condition on recall of the parity attribute. It is expected that respondents exposed to condition one will take away similar meanings to those in conditions three and four. That is, the pairing of a broad superiority statement with a negated parity claim implies superiority on speed of relief to the same extent as when superiority is explicitly stated. Because such implications are false, the first condition is targeted as potentially deceptive. Condition two, where neither the parity nor superiority claims mention the attribute will serve as a baseline. This combination of claims is less likely than the first condition to suggest superiority on speed of relief.

A main effect of advertising copy on recall of general superiority statements would support H2. It is expected that subjects exposed to conditions one and two, which include general superiority statements, will be more likely to express sponsor superiority in general terms than subjects in conditions three and four. The latter conditions describe

sponsor superiority in terms of speed of relief, so they are not expected to convey general superiority to the same extent as the first two conditions.

In the case of H3, its is expected that an advertising condition by delay interaction will be reflected in subjects' recall of general superiority statements and recall of the parity comparison. Specifically, subjects in condition one are expected to recall general superiority statements as well as subjects in condition two. However, recall of the attribute parity statements for the same subjects will decline over time. Condition four is included for completeness in testing H3.

An interaction of advertising condition by delay on recall of specific attribute claims will support H4a, while support for H4b involves a main effect of delay on recall of superiority statements. It is expected that over time subjects will recall the sponsor as being superior overall (H4b), and for conditions one and three subjects are expected to be more likely than subjects in the other conditions to recall superiority on speed of relief (H4a).

Stimuli

Four advertisements were designed, one for each advertising condition described (see Appendix A). In each of the advertisements, a negated parity claim is paired with a superiority claim against a comparison brand. The phrasing and format of the advertisements is similar to that of advertisements currently featuring combined comparatives.

Sample

One hundred and seventy marketing students were recruited for the experiment and received extra credit points for their participation. In order to ensure a minimal level

of personal relevance, respondents were representative of the universe of consumers targeted by the sponsor brands (e.g., prior or potential users of the product).

Experimental Procedure

Subjects were randomly assigned to one of two timing conditions (immediate, 24-hour delay), and to one of the four advertising conditions, for one of the product categories. They were informed that the purpose of the study was to assess their attitude toward a new magazine targeted at college students. In order to justify the return session for those in the delay conditions, all participants were told that the study was structured as a series of phases, which they might not be able to complete during one session.[38]

Respondents were handed a booklet and were instructed to look through it as if they were browsing through a magazine. The booklet contained a magazine cover page, a table of contents, and three advertisements, with the second advertisement in the series being the advertisement of interest (see Appendix B). Participants were allowed to view the booklet for two minutes. After the two minutes, subjects were instructed to remove an index card from the inside back cover of the booklet. A three-digit number corresponding to one of the experimental conditions and a three-digit subject number were written on the card. The booklets were then collected and participants were seated at a computer terminal where they entered the six-digit number that activated the computerized questionnaire. Those in the twenty-four hour delay condition were asked to return the following day to complete additional phases of the experiment, and were

[38] In order to prevent participants from rushing in an attempt to complete all phases in one session, the experimenter explained that they would be unable to proceed to subsequent phases of the experiment until all respondents had completed each specific phase.

scheduled for the return session. These subjects completed the questionnaire during the return session.

The questionnaire began by asking a series of open-ended questions regarding what the advertisements explicitly said and implied. Depending on subjects' responses, different sequence of questions followed. Ad communication questions specifically asked about the featured attributes and brands. A series of questions asked their opinion of the brand's performance. These questions were intended to capture the extent to which the advertising manipulations were reflected on the subjects' answers. Also of interest was the effect of delay.

The order of presentation was counterbalanced so that the opinion questions appeared before the specific ad-communication questions for half of the subjects and after those questions for the other half. Subjects were then asked to rate the importance of a series of attributes for the product category for which they saw an ad. Comparing these ratings with those taken from the pretest subjects would aid in assessing the ad's potential to elevate the perceived importance of speed of relief.

In private litigation, the plaintiff is asked to demonstrate damages or potential damages from the challenged advertisement. Often, damages are equated with the impact of the ad on consumers' preferences, especially if preference for the defendant's brand comes at the expense of the challenger. After completion of the advertising questionnaire, all participants were asked to allocate a fixed amount of points between a series of brands (including the target brand) in the product category of interest. Participants were instructed that point allocation should reflect the likelihood that they

would choose that brand if they were faced with a purchase decision for that product at that time.

Questionnaire Administration

The computerized administration of the questionnaire allowed for automatic screening of subjects based on their responses. First, subjects were not questioned about the target advertisement if they were unable to recall the ad for the target product or were unable to recall or incorrectly identified the sponsor of the target ad (see Table 8). These subjects were instead directed by the computer program to answer the opinion questions and to rate the importance of a series of attributes related to the target product category.

Those participants who were able to recall the target advertisement for the target brand were asked a series of open-ended questions about what the advertisement said and suggested to them (see Table 9). At the end of this questioning phase the computer program randomly assigned subjects to one of two counterbalancing conditions. Subjects would either answer specific ad-related questions before or after the opinion questions previously described. These questions specifically asked subjects what the ad said or suggested about the target brand with regard to specific attributes, including the attribute of importance (see Table 10).

Table 8. Screening questions.

Text as displayed in the computer questionnaire	**Response Options**			
1. Tell me whether you recall seeing an advertisement for any of these products in the mock magazine that you browsed through:	*Products appeared one at a time, and only after the subject had provided an answer for the previous one			Target Category = Pain Reliever or Antacid • Real Product means there was an ad in the mock magazine for that product. • Control Product means there was no ad for that product in the mock magazine.
# 1 Real product 1	Yes	No	Don't Know/ Don't Remember	
# 2 Control Product				
# 3 TARGET CATEGORY				
# 4 Real product 2				
2.1. What brand of REAL PRODUCT 1 was featured by the advertiser?	Open ended			Real Product 1= sunscreen
2.2. What brand of TARGET CATEGORY was featured by the advertiser?	Open ended			Pain Reliever = Aleve Antacid = Zantac
2.2a. Several brand names will appear now. Indicate whether you think the brand appeared in the ad by selecting the appropriate option. If you are unsure, or don't know, select that option.	*Brands appeared one at a time, and only after the subject had provided an answer for the previous brand			• These questions were asked only if the subject did not know, or did not recall what brand of the target product category was featured in the ad • Comparison brands: Advil and Pepcid AC
• TARGET BRAND • COMPARISON BRAND 1 • FILLER BRAND	Yes	No	Don't know/ Don't Remember	
2.2b Which of these brands do you believe sponsored the advertisement?	Open ended			

To control for acquiescence, three questions about attributes not featured in the ad were asked along with the key question about the target attribute. Subjects who responded incorrectly to at least two of the three questions (i.e., they answered *yes* to whether the ad said or suggested anything about the non-featured attributes) were considered unreliable and were eliminated. Only one such person was found and he was eliminated from further analyses.

Table 9. Ad communication questions: unaided recall.

Text as displayed in the computer questionnaire	Response Options
What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND?* Please be as specific as possible	Open ended
What else, if anything, did the advertisement mention about the TARGET CATEGORY TARGET BRAND?	Open ended
Anything else?	Open ended

Subjects were then asked to rate the importance of a series of attributes related to the product category of interest on a five-point Likert scale. The final phase instructed the students to allocate 15 points among 3 competitors, including the target brand. Their point allocations were to reflect their likely brand choice.

Table 10. Specific ad communication questions.

Text as displayed by the computer questionnaire	Response Options				
Did the advertisement say or suggest anything about **TARGET BRAND** and **TARGET ATTRIBUTE**?	Yes	No		Don't Know/ Don't Remember	Target attribute: speed of relief
What did the ad say or suggest about **TARGET BRAND** and **TARGET ATTRIBUTE?**	Open ended				
Did the advertisement say or suggest that **TARGET BRAND** would be inferior to, equal to, or superior to **COMPARISON BRAND 1** on **TARGET ATTRIBUTE?**	Inferior	Equal.	Superior	Don't Know/ Don't Remember	Comparison Brand Pain reliever: Advil Antacid: Pepcid AC

Screening. Based on their answers to the screening questions, forty-five subjects (26%) out of the initial one hundred and seventy did not answer the ad communication questions. They were instructed to answer the opinion questions and to complete the last

two phases of the experiment. The data set for the specific ad-communication questions was further reduced by one case based on incorrect answers to the control questions about non-featured attributes. The total number of eligible respondents for analysis was 124.

Preliminary Analyses

Unaided Recall Communication Questions

Two independent raters who were blind to the experimental condition and the predicted effects coded responses to the open ended questions. In order to identify all possible categories by which to classify responses, subsets of the data were reviewed first. The final coding scheme consisted of 97 possible categories (see Appendix C). The main categories of interest were the expressed superiority of the sponsor brand, mention of the comparison brand, and the specificity of the comparison.

Each rater coded the responses independently. Initial agreement between raters was high, 91%. Disagreements were reconciled through discussion and mutual agreement. When no agreement was achieved the response was coded as inconclusive.

The key dependent variable from the open-ended questioning phase was the question *What did the advertisement say or suggest to you about the pain reliever/antacid Aleve/Zantac?* Two follow-up questions prompted the subjects to report anything else that the ad may have conveyed to them. The analyses were conducted on the pooled responses to the main question and the follow-ups. Responses were classified on the basis of the subjects' mention of a parity or superiority comparison, mention of the target attribute and the comparison brand. Logistic regression analyses were used to assess the effect of advertising condition, delay, and product category on the likelihood of each category of responses.

Aided recall and follow-up questions

As previously discussed, half of the subjects answered the aided recall questions before answering questions about their personal opinion and beliefs regarding the sponsor and the comparison brand. The variable *order* was added as a factor in all analyses to determine if the order of the questions had a statistically significant effect on subjects' responses. Unless otherwise noted, there were no statistically significant main effects or interactions of order with any of the other variables.

The first aided recall question asked whether the advertisement said or suggested anything about Aleve/ Zantac (the sponsor) and speed of relief. Sixty-two respondents (50.8%) responded *yes*, ten responded *no* (8 %), and 51 chose the response option *don't know/don't remember* (41%). Those respondents who answered yes were asked the open-ended question *what did the ad say or suggest about Aleve/ Zantac and speed of relief?* Responses to this question were analyzed in the same manner as responses for the unaided recall question. That is, responses were classified by whether they mentioned superiority or parity, and then assigned to subcategories depending on the specificity of the response (mention of the comparison brand, mention of the target attribute).

The next aided recall question specifically asked subjects whether the ad said or suggested that the sponsor was *superior, equal to, or inferior to* the comparison brand on speed of relief. A fourth response option allowed subjects to indicate if they did not know or did not remember what the ad said or suggested. A logistic regression analysis was conducted on the combination of the first three response options versus the fourth option, in order to determine if there were any statistically significant differences between the groups. This analysis yielded no statistically significant differences.

Subsequent analyses were conducted excluding the fourth option in order to fit a cumulative logit model for ordered response categories. Advertising condition, delay, product category, and measurement order were entered in the logistic regression model. Because the second response option (*equal*) was never selected, the regression modeled a binary response instead of an ordered multinomial.

In order to determine whether the comparison was anchored on the sponsor or the comparison brand, respondents were then asked whether the ad said or suggested anything about the comparison brand and speed of relief. Forty-nine percent of respondents (61) said *yes,* 24% said *no* (30), and twenty-five percent answered *don't know/don't remember* (33). Those who answered yes were then asked what the ad said or suggested about the comparison brand on speed of relief. As in the previous open-ended questions, responses were analyzed on the basis of the subjects' mention of the target brand and speed of relief.

As before, the next aided recall question specifically asked subjects whether the ad said or suggested that the comparison was *superior, equal to, or inferior to* the sponsor on speed of relief. Logistic regression analysis yielded no statistically significant differences between subjects who answered *don't know don't remember* and those who chose one of the three response options. Subsequent analysis concentrated on the comparative statements. Advertising condition, delay, product category and measurement order were entered in the logistic regression model. Because the second response option (*equal*) was never selected, the regression modeled a binary response instead of an ordered multinomial.

Results

Test of H1

Responses to the unaided-recall question did not support H1. The main effect of ad condition on recall of sponsor superiority on speed of relief was not statistically significant. Similarly, there was no support for H1 from responses to the open-ended aided recall questions whether they were anchored on the sponsor or the comparison brand.

No support was found for H1 from the closed-ended questions that asked whether the ad said or suggested that the target or the comparison brand was *inferior*, *equal*, or *superior* to the sponsor brand on speed of relief. The second response option *equal* was never selected in response to either question. There were no statistically significant main effects or interactions of any of the independent variables. However, 85% of respondents (53) chose the *superior* option when the question was anchored on the sponsor brand. Eighty-five percent (52) said the comparison brand was inferior to the target brand on speed of relief when the question was anchored on the comparison brand.

Overall, H1 was not supported by the data. Table 11 summarizes the results.

Test of H2

H2 predicted that the combination of exaggerated superiority statements or puffery with negated parity claims would suggest overall superiority of the sponsor over the comparison brand. The pattern of responses predicted was not supported by responses to the unaided recall question. The main effect of advertising condition on subjects' recall of general superiority statements, whether the comparison brand was mentioned or not, was not statistically significant.

Table 11. Test of H1: Results.

H1: *The combination of exaggerated superiority statements or puffery with negated parity claims leads consumers to overgeneralize sponsor superiority on attributes depicted by the parity claim.*

	Unaided Recall			**Aided Recall Open-ended**			**Aided Recall Open-ended**		
Question Text	N=124			N=62			N=61		
	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			What did the ad say or suggest about COMPARISON BRAND and TARGET ATTRIBUTE?		
Response Categories									
Statements of sponsor superiority on speed of relief									
	n=31			n=36			n=11		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	1.33	.19	.24	.003	.23	.95	1.14	.32	.28
Statements of sponsor superiority on speed of relief mentioning the comparison brand									
	n=69			n=25			n=27		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	.33	.15	.56	.36	.24	.54	1.22	.23	.26
Statements of comparative parity on speed of relief									
Main effect of Ad Condition	n =3			n =2			n =8		
	effects could not be estimated			effects could not be estimated			effects could not be estimated		

	Aided Recall close-ended				**Aided Recall close-ended**			
Question Text	N=62				N=61			
	Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?				Did the ad say or suggest that the COMPARISON BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?			
	Superior	Equal	Inferior	Don't know/ Don't remember	Superior	Equal	Inferior	Don't know/ Don't remember
	85%	0	1.6%	12.9%	85%	0	5%	9.8%
	(53)	(0)	(1)	(8)	(52)	(0)	(3)	(6)
	Chi Square			p value	Chi Square			p value
Main effect of Ad Condition	3.21			.35	4.36			.22

In addition, H2 was not supported by responses to the open-ended recall questions. Few, if any subjects expressed sponsor superiority in general terms in response to these questions. Table 12 summarizes the results for H2.

Table 12. Test of H2: Results.

H2: *The combination of exaggerated superiority statements or puffery with negated parity claims suggests overall superiority of the sponsor over the comparison brand.*									
	Unaided Recall			**Aided Recall Open-ended**			**Aided Recall Open-ended**		
Question Text	N=124			N=62			N=61		
	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			What did the ad say or suggest about COMPARISON BRAND and TARGET ATTRIBUTE?		
Response Categories									
General statements of sponsor superiority									
	n=14			n=1			n=2		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	.27	.24	.60	no effects were estimated			no effects were estimated		
General statements of sponsor superiority mentioning the comparison brand									
	n=30			n=0			n=3		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	.01	.19	.89	no effects were estimated			no effects were estimated		

Test of H3

H3 predicted that recall of the attribute parity claim declines over time to a greater extent than memory for general superiority statements. Statistically significant differences were found for the subgroup of responses that mentioned superiority on the target attribute to the unaided recall question. The ad copy by delay interaction predicted by H3 was statistically significant (ChiSq. =3.87, p<.04). However, the pattern of responses was not as predicted (see Figure 3). The simple effects of the ad condition at immediate testing drive the interaction. Significantly fewer subjects in condition four say the sponsor is superior on speed of relief. These subjects saw the combined comparative that explicitly stated superiority on speed of relief in combination with a negated general parity claim. Given the low cell numbers, this unanticipated pattern of responses is not taken as definitive evidence against H3.

H3 was not supported by responses to the open-ended aided recall question phrased in terms of the sponsor. The ad condition by delay interaction was statistically significant when the question was phrased in terms of the comparison brand (ChiSq.= 4.7, $p<.02$). However, given that only eleven subjects across the eight ad by delay cells provided such answers, this interaction cannot be interpreted meaningfully.

No meaningful analyses to test H3 were possible for responses mentioning the parity comparison. Only three subjects mentioned the parity comparison between the sponsor and the competitor to the unaided recall question. Similarly, only two subjects mentioned parity in response to the open-ended aided recall question about the sponsor, and eight in response to the open-ended aided recall question about the comparison brand.

Responses to the closed-ended questions did not support H3. The ad condition by delay interaction was not statistically significant. As reported earlier, 85% of respondents (53) chose the *superior* option when the question was anchored on the sponsor brand, while 85% (52) said the comparison brand was inferior to the target brand on speed of relief when the question was anchored on the comparison brand. Table 13 summarizes results for H3.

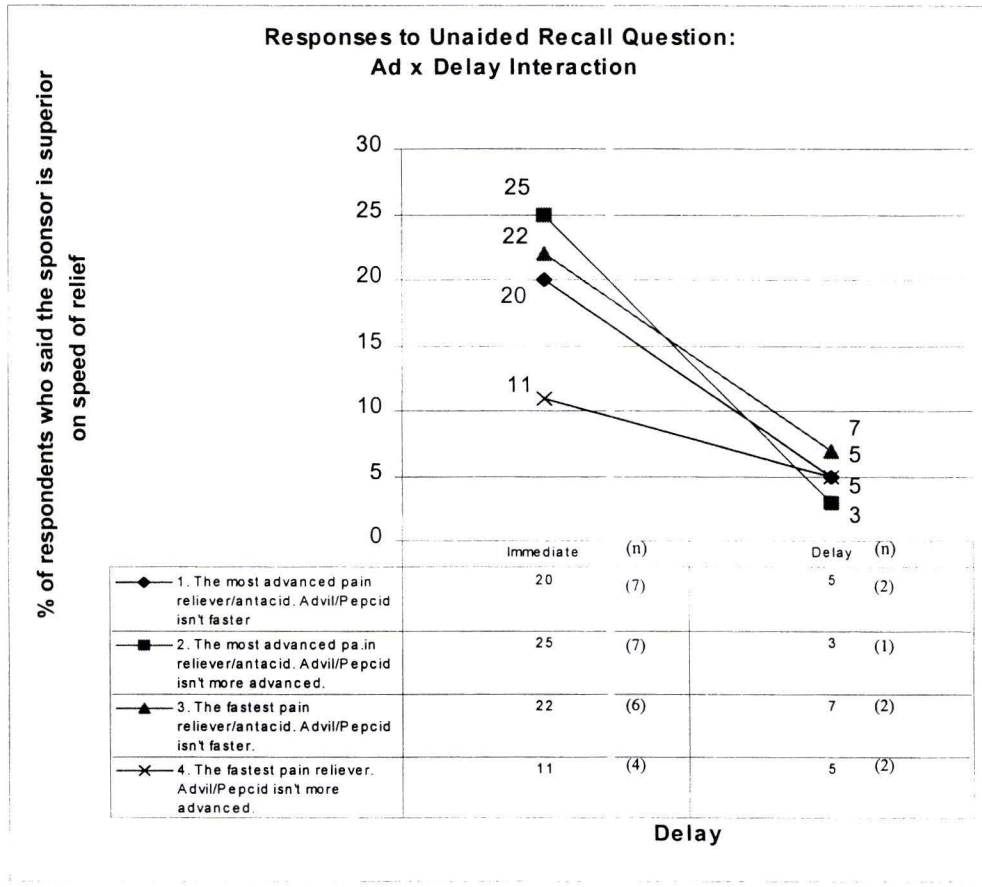


Figure 3. Delay by ad condition interaction: Sponsor superiority on speed of relief.

Test of H4a and H4b

As discussed in relation to H3, the delay-by-ad-condition interaction in responses to the unaided recall question was significant, but the pattern of results is not consistent with those predicted by H4a. Support for H4a required an increase in the percentage of subjects who recalled sponsor superiority on speed of relief when in the negated parity condition. The results suggest that sponsor superiority responses on speed of relief

decline after delay, although only the simple effects of ad condition at immediate testing are statistically significant.

Table 13. Test of H3: Results.

H3: *Recall of the attribute parity claim declines over time to a greater extent than memory for general superiority statements.*

	Unaided Recall			**Aided Recall Open-ended**			**Aided Recall Open-ended**		
Question Text	N=124			N=62			N=61		
	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			What did the ad say or suggest about COMPARISON BRAND and TARGET ATTRIBUTE?		
Response Categories									
Statements of sponsor superiority on speed of relief									
	n=31			n=36			n=11		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Ad Condition x Delay Interaction	**3.87**	**.07**	**.04**	.001	.08	.96	**4.4**	**.36**	**.02**
Statements of sponsor superiority on speed of relief mentioning the comparison brand									
	n=69			n=25			n=27		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Ad Condition x Delay Interaction	2.19	.05	.13	1.49	.09	.22	1.66	.09	.19
Statements of comparative parity on speed of relief									
Ad Condition x Delay Interaction	n =3			n =2			n =8		
	effects could not be estimated			effects could not be estimated			effects could not be estimated		

	Aided Recall close-ended				**Aided Recall close-ended**			
Question Text	N=62				N=61			
	Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?				Did the ad say or suggest that the COMPARISON BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?			
	Superior	Equal	Inferior	Don't know/ Don't remember	Superior	Equal	Inferior	Don't know/ Don't remember
	85%	0	1.6%	12.9%	85%	0	5%	9.8%
	(53)	(0)	(1)	(8)	(52)	(0)	(3)	(6)
	Chi Square			p value	Chi Square			p value
Ad Condition x Delay Interaction	*quasi complete data separation did not allow estimation of this effect				*quasi complete data separation did not allow estimation of this effect			

The main effect of delay was statistically significant for the group of responses that mentioned superiority on speed of relief (ChiSq.=9.41, p<.002), and also for those who mentioned speed of relief and mentioned the comparison brand (ChiSq.=3.38. p<.06). For the group of responses that mentioned superiority on speed of relief, 19.2% of subjects said the sponsor was superior versus 5.6% for the delay condition. When subjects mentioned the comparison brand, subjects in the immediate condition were also more likely to mention that the sponsor was superior on speed of relief (34.4%) than those in the delay condition (21%) (see Table 14).

Table 14. Effect of delay on responses to unaided recall question.

Main effect of delay						
Statements of sponsor superiority on speed of relief				Statements of sponsor superiority on speed of relief mentioning the comparison brand		
N=124	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
	9.41	**.25**	**.002**	**3.38**	**.18**	**.06**
Immediate		Delay		Immediate		Delay
19.2 % (24)		5.6% (7)		34.4% (43)		20.8% (26)

There was no support for H4a from responses to the open-ended aided recall question when it was phrased in terms of the sponsor. The delay by ad copy interaction was not statistically significant for the subset of respondents who said the sponsor was superior to the comparison brand on speed of relief.

When the question was phrased in terms of the comparison brand, and as discussed in relation to H3, responses to the open-ended aided recall question phrased in terms of the sponsor yielded a statistically significant ad condition by delay interaction.

(ChiSq.= 4.7, p<.02). However, given that only eleven subjects across the eight ad-by-delay cells provided such answers, this interaction cannot be interpreted meaningfully.

A statistically significant ad copy by delay by product category interaction was found for responses to the same open-ended recall question. The interaction was found for the group of responses that mentioned sponsor superiority on speed of relief and also mentioned the sponsor brand. Specifically, the ad copy by delay interaction varied across category conditions (see Table 15). A statistically significant decrease in the percentage of respondents that said the sponsor Aleve was superior to Advil was found after delay, but only for subjects in the third ad condition. This condition presented both the superiority and parity claims in terms of speed of relief. No statistically significant differences were found for respondents who said that Zantac was superior to Pepcid. The small cell sizes suggest that this pattern of results should be interpreted with caution.

Responses to the closed-ended questions did not support H4a or H4b. Neither the main effect of advertising condition nor the ad condition by delay interaction was statistically significant. As reported earlier, 85% of respondents chose the *superior* option when the question was anchored on the sponsor brand, while 85% said the comparison brand was inferior to the target brand on speed of relief when the question was anchored on the comparison brand. Table 16 summarizes the results for H4a, and Table 17 summarizes results for H4b.

Table 15. Ad condition by delay by product category interaction.

Percentage of respondents who said the sponsor was superior on speed of relief and also mentioned the comparison brand to the open-ended aided recall question about the comparison brand.											
N=124											
Pain Relievers						**Antacid**					
(n)		**Ad condition**				(n)		**Ad condition**			
Delay		1	2	3	4	**Delay**		1	2	3	4
Immediate	(25)	**16%** (4)	**0%** (0)	**24%** (6)	**8%** (2)	Immediate	(15)	**13%** (2)	**20%** (3)	**6%** (1)	**6%** (1)
24 hours	(11)	**18%** (2)	**0%** (0)	**0%** (0)	**18%** (2)	24 hours	(11)	**27%** (3)	**9%** (1)	**0%** (0)	**0%** (0)
		(11)	(4)	(14)	(7)			(9)	(9)	(2)	(6)
Condition 1	The most advanced pain reliever. Advil isn't faster										
Condition 2	The most advanced pain reliever. Advil isn't more advanced										
Condition 3	The fastest pain reliever. Advil isn't faster										
Condition 4	The fastest pain reliever. Advil isn't more advanced										

Opinion Questions

Subjects were asked to provide their personal opinion about the target brand on a series of attributes. The questions were phrased as follows: *Based on everything you know, is it your personal opinion that the target brand x is superior, the same, or inferior to the comparison brand on attribute y.* The question of interest specifically referred to speed of relief. As discussed earlier, these questions were asked before the ad-communication questions for half of the subjects and after for the other half. Based on their responses to the screening questions, another set of respondents answered these questions without answering the ad communication questions. In order to determine if there were any differences between the three groups, a variable *order* was included in the logistic regression analyses. No statistically significant main effects or interactions of order were found.

Table 16. Test of H4a: Results.

H4a: After delay, recall of sponsor superiority on the parity attribute increases when the combined comparative consists of a parity claim in negated form and superiority statements.

	Unaided Recall			**Aided Recall Open-ended**			**Aided Recall Open-ended**		
Question Text	N=124			N=62			N=61		
	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			What did the ad say or suggest about COMPARISON BRAND and TARGET ATTRIBUTE?		
Response Categories									
Statements of sponsor superiority on speed of relief									
	n=31			n=36			n=11		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Ad Condition x Delay Interaction	**3.87**	**.07**	**.04**	.001	.08	.96	**4.4**	**.36**	**.02**
Main effect of delay	**9.41**	**.25**	**.002**						
Statements of sponsor superiority on speed of relief mentioning the comparison brand									
	n=69			n=25			n=27		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Ad Condition x Delay Interaction	2.19	.05	.13	1.49	.09	.22	1.66	.09	.19
Main effect of delay	**3.38**	**.18**	**.06**						
Ad x delay x category interaction							**4.01**	**.06**	**.04**
Statements of comparative parity on speed of relief									
Ad Condition x Delay Interaction	n =3			n =2			n =8		
	effects could not be estimated			effects could not be estimated			effects could not be estimated		

	Aided Recall close-ended				**Aided Recall close-ended**			
Question Text	N=62				N=61			
	Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?				Did the ad say or suggest that the COMPARISON BRAND would be *inferior, equal, superior* to the comparison brand on the TARGET ATTRIBUTE?			
	Superior	Equal	Inferior	Don't know/ Don't remember	Superior	Equal	Inferior	Don't know/ Don't remember
	85%	0	1.6%	12.9%	85%	0	5%	9.8%
	(53)	(0)	(1)	(8)	(52)	(0)	(3)	(6)
	Chi Square			p value	Chi Square			p value
Ad Condition x Delay Interaction	*Quasi-complete data separation prevented estimation of this effect				*Quasi-complete data separation prevented estimation of this effect			

Table 17. Test of H4b: Results.

H4b: *Recall of overall sponsor superiority over the comparison brand increases over time.*									
	Unaided Recall			**Aided Recall Open-ended**			**Aided Recall Open-ended**		
Question Text	N=124			N=62			N=61		
	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			What did the ad say or suggest about COMPARISON BRAND and TARGET ATTRIBUTE?		
Response Categories									
General statements of sponsor superiority									
	n=14			n=1			n=2		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Delay	2.6	.29	.12	no effects were estimated			no effects were estimated		
General statements of sponsor superiority mentioning the comparison brand									
	n=30			n=0			n=3		
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Delay	.006	.23	.93	no effects were estimated			no effects were estimated		

Analyses for the opinion questions were similar to those for the specific ad-communication questions. Subjects had four response options. The first three options were comparative statements (i.e., the brand is superior, the same, or inferior), and the last was a *no opinion* option. As with the ad-communication questions, analyses were conducted to identify differences between those subjects who chose the first three response options and respondents who answered *no opinion*. There were no statistically significant differences between these groups. Cumulative multinomial logit analyses focused only on the comparative statements.

A statistically significant ad copy condition by delay interaction emerged from the analyses (ChiSq.=4.34, p.<.03). Specifically, delay had a statistically significant effect

only on the first ad condition. The percentage of subjects that said the sponsor was superior to the comparison brand on speed of relief increased with delay from 3.6% to 14.8% (See Figure 4). Recall that the combined comparative claim in the first ad copy condition featured the negated parity comparison (e.g., "*The most advanced pain reliever/antacid. Advil/Pepcid isn't faster*"). Although subjects did not report the parity comparison in the ad-communication questions, their answers to the opinion question suggests that, at least immediately after exposure, subjects did not believe the sponsor was faster than the comparison brand. Over time, however, their opinion reflects the implied superiority on speed of relief. Information integration that takes place over time may have led subjects to forget the source of the information and to attribute the sponsor superiority claim to their beliefs (cf. Johnson and Raye 1981).

Brand Preference

In order to assess brand preference, subjects were presented with the following scenario:

> Imagine that you need to purchase a [TARGET CATEGORY] today...
> You have 15 points to allocate between brands. Indicate how likely you would be to purchase each of the following brands by assigning some of those 15 points to each of them. More points indicate a greater chance that you would purchase that brand. You must not exceed 15 points, so add up the points at the end to make sure you have assigned only 15 points between all brands. You may change the number of points you assign to each brand until you feel comfortable that they reflect your intended choice.

Subjects then viewed a list of three brands, the ad sponsor, the comparison brand featured in the ad, and a well-known filler brand. The computer program was designed to detect when subjects erroneously assigned more than 15 points and prompted them to try

again. As the instructions indicated, subjects were allowed to change their point allocations until they reflected their brand preferences.

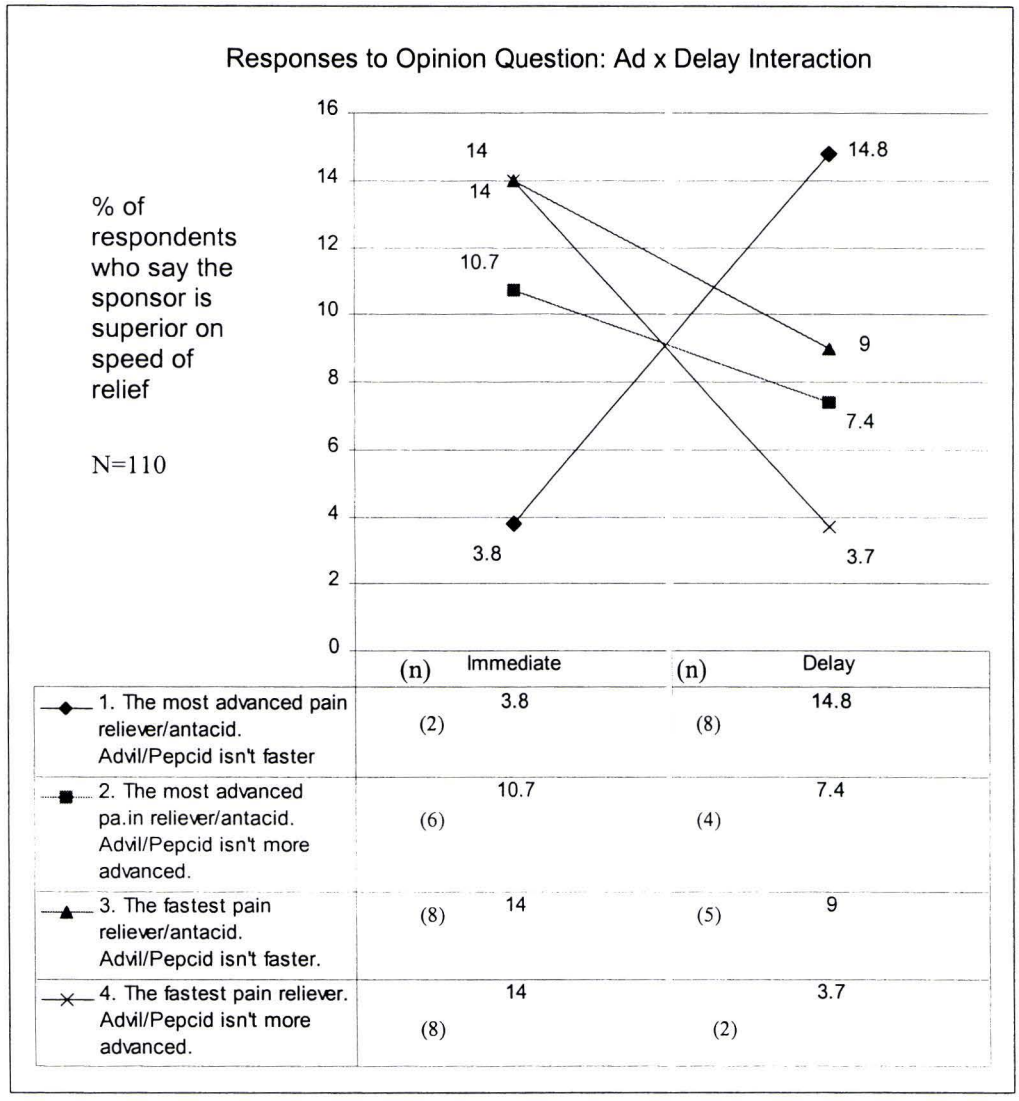


Figure 4. Sponsor superiority on speed of relief in response to opinion question.

An analysis of variance on the mean preference score and a categorical analysis on the relative brand preference were conducted. The analysis of variance revealed a product category main effect on the mean preference of the sponsor brand (F = 34.81,

p<.0001). The mean preference score for the sponsor (Aleve) in the pain reliever condition was lower than the mean score for the brand in the antacid category (Zantac), 4.23 versus 6.18 respectively. The corresponding effect of product category was also statistically significant on the comparison brand score (F = 6.83, p<.009). Logically, more subjects chose the comparison brand for the pain reliever category (Advil, 6.21), than the comparison brand for antacids (Pepcid, 5.21).

An interaction between ad copy condition and delay was also statistically significant for the comparison brand scores. The decline in mean scores for the comparison brand was statistically significant over time in the first ad condition (the key combined comparative), but not in the other ad conditions (see Figure 5).

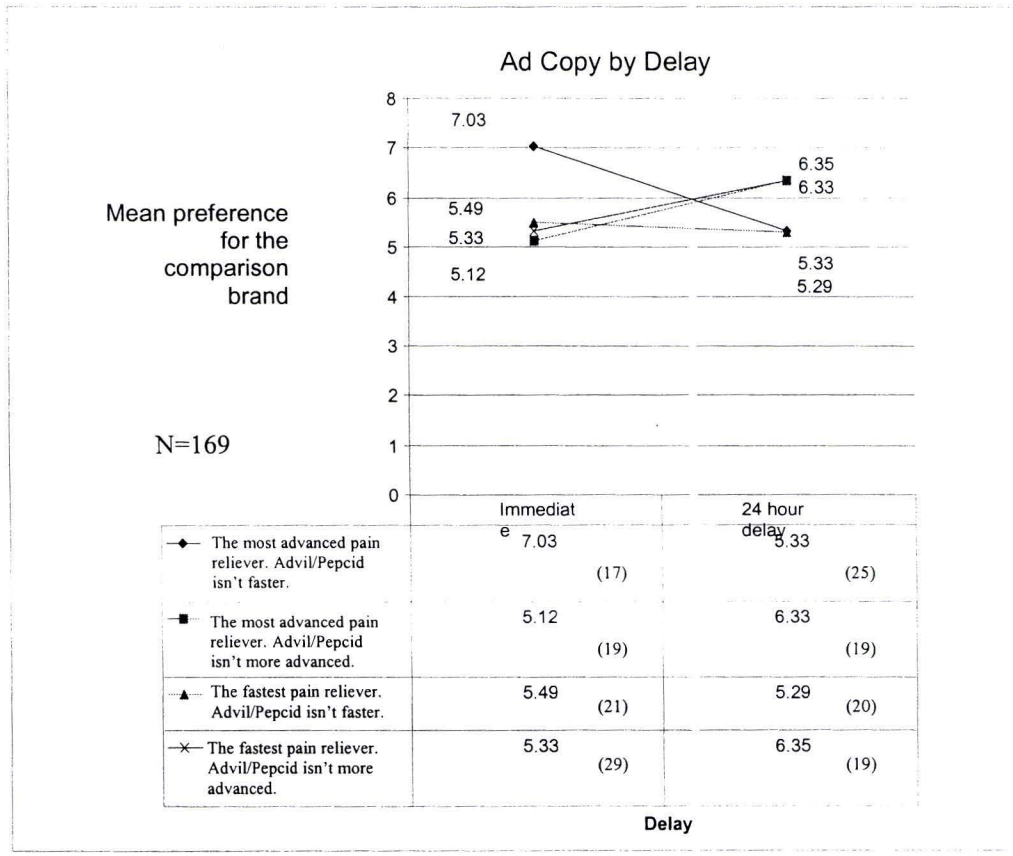


Figure 5. Mean preference for the comparison brand.

Two categorical dependent variables were created based on the points allocated to the brands. The first variable indicated whether the sponsor brand was preferred over the comparison brand and the filler, the second variable indicated whether the comparison brand was preferred over the sponsor and the filler. A conditional logit analysis was conducted for respondents who were not indifferent (i.e., did not allocate points equally to the three brands).

The analyses revealed two statistically significant main effects on the likelihood of choosing the sponsor over the other brands. As in the analysis of variance, the product category effect was statistically significant (ChiSq.=11.20, $p<.008$). Subjects in the pain reliever condition were more likely to choose the comparison brand Advil, than the sponsor Aleve. On the other hand, those in the antacid category chose the sponsor brand Zantac, over the comparison brand Pepcid AC. The second main effect was the order in which subjects answered the opinion questions (ChiSq.=7.98, $p<.004$). Subjects were more likely to choose the sponsor brand when they answered the ad-communication questions before they gave their opinion.

Individual level analyses

In copy tests for litigation, evidence of deception is generally presented in terms of the percentage of responses that replay the deceptive claim, after deducting the percentage of responses to a series of control questions. While this type of broad assessment of deception has satisfied the courts, it does not address whether individual consumers were or were not deceived by a specific ad. In order to determine with greater accuracy the number of subjects who may have been deceived, additional analyses were

conducted after taking into account the pattern of responses for all the ad communication questions.

First, it was important to determine if there were any contradictions in the subjects' answers. For instance, subjects may have said the sponsor was superior in response to an open-ended question, but chosen a different response option to the aided recall questions. The subjects' unique identifying number allowed examination of their responses to all ad-communication questions. No inconsistencies in the subjects' answers were found.

Second, a series of specific response patterns were created to reflect various degrees of deception. That is, whether subjects in the key combined comparative condition (condition one) reported that the sponsor brand was superior on speed of relief. Subjects who consistently reported that the sponsor was superior on speed of relief, while also reporting the comparison brand was inferior, were classified as the highest on a four-point *deception scale.* Subjects were classified in the next level of deception when they provided sponsor superiority responses on speed of relief in answer to the unaided recall question, and to both aided recall questions. The lowest level of deception was defined by subjects' choice of responses to the close-ended questions. Subjects needed to have chosen *superior* for the sponsor and *inferior* for the comparison brand on speed of relief. Finally, when the subjects' pattern of responses consistently expressed a parity comparison between the sponsor and the featured competitor, subjects were classified as *not deceived*, and received a negative score on the deception scale.

As the previous results indicated, not a single subject met the criteria necessary to be considered *not deceived.* All 78 subjects who answered the ad-communication

questions were classified in the second level of the deceived variable. They expressed sponsor superiority on speed of relief in their answers to the unaided recall question and to both open-ended, aided recall questions. A logistic regression analysis revealed a statistically significant main effect of product category (ChiSq.= 4.32, $p<.03$). Seventy-two percent of subjects in the antacid condition were categorized as deceived, versus 55% of the subjects in the pain reliever condition.

Discussion

The results of this study do not provide support for the stated hypotheses. H1 stated that the combination of a general superiority statement and negated parity claim about a specific attribute would lead consumers to infer attribute superiority. As discussed, the pattern of responses did not support this prediction. Similarly, there was no support for H2. H2 predicted that in response to the open ended questions, subjects would be more likely to express attribute superiority when the parity claim was in negated form.

In general, results are not supportive of H3. However, there is some indication that the specific attribute claim was not recalled as well as the general superiority information. A main effect of delay was found for responses to the unaided recall question. Over time, statistically significantly fewer subjects mentioned the attribute when saying the sponsor was superior, and when they specifically mentioned the comparison brand.

H4a hypothesized that considerably fewer subjects would take away a parity comparison versus a superiority comparison favoring the sponsor after delay. Only three subjects reported that the ad said or suggested a parity comparison between the sponsor

and the comparison brand. Moreover, none of the subjects selected the *equal* or *same* option to describe what the ad said about the sponsor and the competitor on speed of relief. These results are not claimed as support for the hypothesis, however. The low number of respondents eligible after the screening phase makes the results suspect. Alternatively, the superiority statement manipulation may have been too strong in comparison to the subtle manipulation of the parity claim. H4b predicted main effects of delay, by which subjects would be more likely to say the sponsor was superior on speed of relief once the attribute information was no longer accessible. There was no support for this hypothesis.

In spite of the lack of support for the hypothesized effects, there were some interesting results. Several of the statistically significant effects differed for each product category. For instance, a three-way interaction between the product category, the ad copy condition, and delay was statistically significant for the subgroup of responses that expressed superiority in general terms (e.g., *brand x is the best*) and also mentioned the comparison brand (ChiSq.=3.74, $p<.05$). This interaction was driven in part by the absence of such responses from subjects in the antacid condition. None of the respondents in the antacid condition used general superiority terms when saying Zantac was superior. Analysis of the pain reliever data did not reveal any delay by ad copy condition interaction.

Such differences may be explained in terms of the subjects' familiarity with the products and the featured brands. The antacid brands had been recently introduced in non-prescription form at the time of the study. In the absence of any knowledge or experience with these products, subjects may have relied on the ad's depiction of the

sponsor as superior, especially after delay, when memory for the specific ad information had faded.

On the other hand, because of their familiarity with pain relievers, the subjects may not have as easily accepted advertising information. A single exposure to the stimuli was probably insufficient to alter their prior beliefs and preferences. In fact, their choices reflected marketplace share data, with Advil and the filler brand, Tylenol, being chosen more often than Aleve.

Whether the advertisements had any impact on subjects' brand preferences and opinions can be inferred from some of the statistically significant results. First, even though subjects were instructed to answer based on their own opinions, the advertising information appears to have influenced the subjects' responses. An ad copy by delay interaction for the opinion questions was statistically significant only for the combined comparative of interest (i.e., "*The most advanced pain reliever/antacid. Advil/Pepcid isn't faster*"). Few if any subjects reported the parity comparison in the ad-communication questions. However, their answers to the opinion question suggest that, at least immediately after exposure, they did not believe the sponsor was faster than the comparison brand. Over time, however, their opinion reflects the implied superiority on speed of relief. Information integration that takes place over time may have led subjects to forget the source of the information and to attribute the sponsor superiority claim to their beliefs (cf. Johnson and Raye 1981).

Second, the order in which subjects answered the ad-communication questions had a statistically significant effect on brand preferences. More subjects chose the sponsor when they answered the ad communication questions before they gave their

opinion. It is possible that once subjects were asked to provide their opinion, prior experience and knowledge diluted any impact of the ad on their preferences. These issues, however, were not empirically tested here and should prove an interesting avenue for future research.

CHAPTER 8
COMBINED COMPARATIVES OF DIFFERENT DIRECTIONS

The previous study looked at the deceptive potential of combined comparative claims made against a single brand. Advertisers often use combined comparatives to position the brand against several competitors. The desired positioning strategy can be more effectively achieved by differentiating the sponsor from one competitor while also associating it with the market leader or another desirable brand (cf. Pechmann and Ratneshwar 1991). The purpose of this study is to investigate the biasing effects of combined comparatives that include superiority attribute claims against one brand and parity claims against another brand.

In advertisements that target several competitors, superiority claims against one brand are usually presented first and in close proximity to parity claims against a second brand (e.g., the Aquafresh and Aleve challenged ads). Based on the previous discussion about framing effects, it is argued that such positioning influences consumer' interpretations of parity claims, especially when these are made in a negated format. The pairing of such claims will lead to superiority inferences about the sponsor in relation to both featured competitors. When such superiority implications cannot be substantiated, ads featuring combined comparatives may not only mislead consumers, but also harm the parity brand.

H1: The combination of superiority claims against one brand with parity claims against another brand leads consumers to infer comparative superiority over the parity brand on the attribute depicted.

In discussing framing effects and negated parity claims, it was suggested that even though the interpretation of these claims depends on the application of common, everyday conversation rules, such claims are actually difficult to process. Negation is not a natural way of thinking. There appears to be a transformation of such claims to their corresponding affirmative, or their antonym (Fiedler and Hertel 1994; Brewer and Lichtenstein 1975). Thus, it is hypothesized that the biasing effects of superiority claims are less likely when the parity claims are not made in such a linguistically complex format. A simplified linguistic structure will be more easily integrated with other advertising information, making it less susceptible to framing effects. Take the Aleve example previously discussed. The parity claim was made in a negated form, with the implied comparison referent being the sponsor (i.e., *"Advil isn't stronger..."* implied *"Advil isn't stronger than Aleve").* Stating the comparison referent eliminates one source of potential confusion. Further simplification would also prevent consumers from inferring the pragmatically implied antonym by which *"Advil isn't stronger..."* necessarily implies "*Advil is weaker than Aleve."* The phrase "*Aleve isn't stronger or weaker than Advil*, " which explicitly refers to parity performance, is less likely to lead to unsubstantiated inferences.

H2: Consumers are less likely to generate false attribute superiority inferences from the complete comparison version of the parity claim than from the negated parity version.

While the previous simplification is easier to comprehend, the sentence structure may appear awkward in the context of other advertising copy. Another form of simplifying comparative parity claims is by using a *comparison of equality* phrase. Such a phrase conveys an equivalent meaning by including an adjective or an adverb, as in

"*Brand A is as good as Brand B*" or "*Brand A performs as well as Brand B*" (Hill and Bradford 1991). This phrase accurately portrays the nature of the comparison, replacing the negated antonym without distortion of the intended meaning. Moreover, the phrase specifically indicates the source of the comparison (i.e., attribute or benefit), and clarifies the comparison referent. Moreover, the information presented by such a parity statement is more likely to be accurately recalled over time, as it is more easily integrated with other brand information.

H3: False superiority inferences are less likely when a parity claim is phrased as a comparison of equality than when the claim is in negated form.

H4: After delay, consumers recall sponsor superiority over the parity brand on the depicted attribute when the claims are presented in negated form. When the claims are presented in a linguistically simplified format, consumers recall the parity comparison between the sponsor and the parity brand.

Study 2

Overview

The focus of the current study is to investigate the role of the linguistic form of parity claims on their susceptibility to framing effects. The study specifically concentrates on the biasing impact of comparative superiority claims made against one brand on negated parity claims against another brand.

Sample

Two hundred and twenty marketing students were recruited for the experiment and received extra credit points for their participation. In order to ensure a minimal level of personal relevance, respondents were representative of the universe of consumers targeted by the advertisement (e.g., prior users or potential users of the product).

Design

The design was a 3x3x2x2 factorial design. The factors were form of the parity claim (negated parity claim, complete comparison parity statement, comparison of equality), delay (immediate testing, 1-hour delay, 24-hour delay), product category (pain reliever or antacid), and two measurement order manipulations. The dependent variables of interest were recall of superiority and parity claims at immediate testing and after delay.

Stimuli

Three advertisements were constructed, one for each parity claim condition. In each of the advertisements, explicit parity claims against one comparison brand (Advil for pain relievers, Pepcid AC for antacids) were paired with superiority claims against a second comparison brand (Tylenol for pain relievers, Tagamet HB for antacids).[38] The phrasing and format of the superiority claims were similar to that of advertisements currently featuring combined comparatives (see Appendix E).

Experimental Procedure

Participants were randomly assigned to one of three delay conditions (immediate, one-hour delay, 24-hour delay) and one of the three advertising conditions for one of the product categories. They were informed that the purpose of the study was to assess their attitude toward a new magazine targeted at college students. In order to justify the return session for those in the delay condition, all participants were told that the study consisted of multiple phases, which they might not be able to complete during one session.

[38] For Study 2, the three brands most frequently mentioned by respondents as having been purchased or considered for purchase in the past six months were selected for the pain reliever advertisements (Advil, Aleve, and Tylenol). The brands respondents reported using less frequently were selected for the antacid category, these were Zantac 75, Tagamet HB, and Pepcid AC.

Respondents were handed a booklet and instructed to look through it as if they were browsing through a magazine. The booklet contained a magazine cover page, a table of contents, and three advertisements, with the second advertisement in the series being the advertisement of interest. Participants were allowed to view the booklet for 2 minutes. After collecting the booklets, participants in the immediate condition were seated at a computer terminal where they completed a computerized questionnaire. Subjects in the one-hour-delay condition participated in a filler task before completing the computerized questionnaire. Those in the twenty-four hour delay condition were asked to return the following day to complete additional phases of the experiment, and were scheduled for the return session.

The questionnaire began by asking a series of questions open-ended questions regarding what the advertisements explicitly said and implied. Depending on subjects' responses, a different sequence of specific questions followed. A series of opinion (brand performance on a series of attributes) were included in the questionnaire. The order of the questions was counterbalanced so that they appeared before the close-ended questions for half of the subjects, and after the closed-ended questions for the other half.

After completion of the advertising questionnaire, all participants were asked to allocate 20 points between four competing brands, among them the target brand. Participants were instructed that point allocation should reflect their likely brand choice.

Questionnaire administration. The computerized administration of the questionnaire allowed for automatic screening of subjects based on their responses. First, subjects were not questioned about the target advertisement if they were unable to recall the ad for the target product, and they were unable to recall or incorrectly identified the

brand advertised in the target ad (see Table 18). These subjects were instead directed by the computer program to answer a series of opinion questions about the advertised brand and to rate the importance of a series of attributes related to the target product category.

Table 18. Ad communication questions: unaided recall.

Text as displayed in the computer questionnaire	**Response Options**			
1. Tell me whether you recall seeing an advertisement for any of these products in the mock magazine that you browsed through:	*Products appeared one at a time, and only after the subject had provided an answer for the previous one			Target Category = Pain Reliever or Antacid Real Product means there was an ad in the mock magazine for that product. Control Product means there was no ad for that product in the mock magazine.
# 1 Real product 1	Yes	No	Don't Know/ Don't Remember	
# 2 Control Product				
# 3 TARGET CATEGORY				
# 4 Real product 2				
2.1. What brand of REAL PRODUCT 1 was featured by the advertiser?	Open ended			Real Product 1= sunscreen
2.2. What brand of TARGET CATEGORY was featured by the advertiser?	Open ended			Pain Reliever = Aleve Antacid = Zantac
2.2a. Several brand names will appear now. Indicate whether you think the brand appeared in the ad by selecting the appropriate option. If you are unsure, or don't know, select that option.	*Brands appeared one at a time, and only after the subject had provided an answer for the previous brand			These questions were asked only if the subject did not know, or did not recall what brand of the target product category was featured in the ad
• TARGET BRAND • COMPARISON BRAND 2 • FILLER BRAND • COMPARISON BRAND 1	Yes	No	Don't know/ Don't Remember	Comp Brand 1=Tylenol/Tagamet Comp Brand 2= Advil/Pepcid
2.2b Which of these brands do you believe sponsored the advertisement?	Open ended			

Those participants who were able to recall the target advertisement for the target brand were asked a series of open-ended questions about what the advertisement said and suggested to them about the target brand. At the end of this questioning phase the computer program randomly assigned subjects to one of two counterbalancing conditions. Subjects would either answer close-ended questions before or after the opinion questions previously described. The closed-ended questions specifically asked

subjects what the ad said or suggested about the target brand with regard to specific attributes, including the attribute of importance.

To control for acquiescence, two questions about attributes not featured in the ad were asked along with the key question about the target attribute. Subjects who responded incorrectly to these questions (i.e., they answered *yes* to whether the ad said or suggested anything about the non-featured attributes) were considered unreliable and were eliminated.

Subjects were then asked to rate the importance of a series of attributes related to the product category of interest on a five-point Likert scale. The final phase instructed the students to allocate 20 points among 4 competitors, including the target brand. Their point allocations were to reflect their likely brand choice.

Screening. Based on their answers to the screening questions, 30% (66) out of the two hundred and twenty subjects did not answer the ad communication questions. They were instructed to answer the opinion questions and to complete the last two phases of the experiment. The data set was further reduced by eight cases based on incorrect answers to the control questions about non-featured attributes. Table 19 shows the sample size for each of the ad-communication questions.

Preliminary Analyses

Unaided recall communication questions

Two independent raters who were blind to the experimental condition and the predicted effects coded responses to the open ended questions. In order to identify all possible categories by which to classify responses, subsets of the data were reviewed first. The final coding scheme consisted of 84 possible categories (see Appendix F).

Table 19. Sample size for each of the ad-communication questions.

Total subjects	**Subjects eliminated because of screening**	**Removed because of acquiescence**
N=220	**n= 66**	**n = 8**

Unaided recall	**n= 146**		
Aided recall screening question • **Did the advertisement say or suggest anything about** TARGET BRAND **and** TARGET ATTRIBUTE?	**n=146**		
	Yes	**No**	**Don't know/ Don't Remember**
	91	**10**	**45**
Aided recall open ended • **What did the ad say or suggest about** TARGET BRAND **and** TARGET ATTRIBUTE?	**n=91** • Open ended		
Aided recall closed-ended • Did the advertisement say or suggest that **TARGET BRAND** would be inferior to, equal to, or superior to **COMPARISON BRAND** on **TARGET ATTRIBUTE?**	**n=136** • Those who answered Yes and Don't know/don't remember		

The main response categories of interest were the expressed parity or superiority of the sponsor, their mention of each of the comparison brands, and mention of the comparison attribute.

Each rater coded the responses independently. Initial agreement between raters was high, 89.6%. Disagreements were reconciled through discussion and mutual agreement. When no agreement was achieved the response was coded as inconclusive. The key dependent variable from this phase was the question *What did the advertisement say or suggest to you about the pain reliever/antacid Aleve/Zantac?* Two follow-up questions prompted the subjects to report anything else that the ad may have conveyed to them. The analyses were conducted on the pooled responses to the main question and

follow-ups. Responses were classified into subgroups on the basis of the subjects' mention of a parity or superiority comparison, mention of the target attribute and the comparison brands (see Appendix G). Logistic regression analyses were used to assess the effect of advertising condition, delay, and product category on the different response subgroups.

Aided recall and follow-up questions

As previously discussed, half of the subjects answered the aided recall questions before answering questions about their personal opinion and beliefs regarding the sponsor and the comparison brands. The variable *order* was included in all analyses to determine if the order of the questions had a statistically significant effect on subjects' responses. Unless otherwise noted, there were no statistically significant main effects or interactions of order with any of the other variables.

The first aided recall question asked whether the advertisement said or suggested anything about Aleve/ Zantac (the sponsor) and speed of relief. Sixty-two percent of those respondents eligible said *yes* (91), 6.8% said *no* (10), and 30.8% chose the response option *don't know/don't remember* (45). Those respondents who answered yes were asked the open-ended question *what did the ad say or suggest about Aleve/ Zantac and speed of relief?* Responses to this question were analyzed in the same manner as responses for the unaided recall question. That is, responses were classified by whether they mentioned superiority or parity, and then assigned to subcategories depending on the specificity of the response (mention of the comparison brands, mention of the target attribute).

The next question specifically asked subjects whether the ad said or suggested that the sponsor was *superior*, *equal to*, or *inferior* to the brand depicted as inferior on speed of relief. A fourth response option allowed subjects to indicate if they did not know or did not remember what the ad said or suggested. A logistic regression analysis was conducted in order to determine if there were any statistically significant differences between the combination of the first three response options (superior, equal, inferior) versus the fourth option. This analysis yielded no statistically significant differences. A cumulative logit analysis for ordered response options was conducted on the three comparative responses.

Subjects were then asked whether the ad said or suggested that the sponsor was superior, equal to, or inferior to the parity brand on speed of relief. There were no statistically significant differences between those respondents who chose *superior*, *equal*, or *inferior* versus those who selected the *do not know/do not remember* option. Analyses were conducted on the comparative responses.

Results

Test of H1

H1 predicted a main effect of the advertising condition, with more subjects in the negated parity condition inferring sponsor superiority on speed of relief than subjects in the simplified versions. Responses to the unaided recall question supported H1. A statistically significant main effect of ad condition was found for the group of responses that said the sponsor was superior to the parity brand on speed of relief (ChiSq.= 5.7, $p<.01$). Although few subjects reported such responses, subjects in the negated parity condition were more likely (8%) than subjects in the complete comparison condition

(2.7%) and subjects in the statement of equality condition (1.3%) to say the sponsor was superior on speed of relief.

Support for H1 was also found from responses to the aided-recall open-ended question. Specifically, the main effect of ad condition was statistically significant for subjects who said the sponsor was superior to the parity brand on speed of relief (ChiSq.=7.44, p<.02). However, the pattern of results was not entirely as predicted. Subjects in the negated parity condition were more likely than subjects in the comparison of equality condition to say the sponsor was superior on speed of relief (48.2% versus 11.1% respectively). However, there were no statistically significant differences between responses of subjects in the negated-parity condition and subjects in the complete comparison condition (48.2% and 40.74% respectively) (see Table 20).

The main effect of advertising condition was statistically significant for the close-ended recall question about the parity brand (ChiSq.=5.93, p<.04). Significantly more subjects in the negated parity condition said the sponsor was superior to the parity brand on speed of relief than subjects in the complete comparison condition (33% versus 14.8%) or the statement of equality condition (18.3%) (See Table 20). Table 21 summarizes results for H1.

Table 20. Ad condition effects on aided recall questions about the parity brand.

What did the advertisement say or suggest about Aleve / Zantac and speed of relief?			**Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the PARITY BRAND on the TARGET ATTRIBUTE?**		
Statements of sponsor superiority over the parity brand on speed of relief			**Superiority Responses**		
Ad Condition	**Response % (n)**	**Chi square**	**Ad Condition**	**Response % (n)**	**Chi square**
Negated Parity claim	48.2%	7.44 p <.02	Negated Parity claim	33% (38)	3.9 p <.04
Complete Comparison	40.7%		Complete Comparison	14.8% (17)	
Comparison of equality	11.1%		Comparison of equality	18.3% (21)	

Table 21. Test of H1: Results.

H1: *The combination of superiority claims against one brand with parity claims against another brand leads consumers to infer comparative superiority over the parity brand on the attribute depicted.*

	Unaided Recall			**Aided Recall Open-ended**		
	N=146			N=91		
Question Text	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?		
Response Categories						
Statements of sponsor superiority on speed of relief over the parity brand						
	n=24					
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	**5.7**	**.29**	**.01**	**7.44**	**1.13**	**.02**
Statements of comparative parity on speed of relief						
	n=26					
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value
Main effect of Ad Condition	.46	.26	.49			

	Aided Recall close-ended				**Aided Recall close-ended**			
	N=136				N=136			
Question Text	Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the COMPARATIVELY INFERIOR BRAND on the TARGET ATTRIBUTE?				Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the PARITY BRAND on the TARGET ATTRIBUTE?			
	Superior	Equal	Inferior	Don't know/ Don't remember	Superior	Equal	Inferior	Don't know/ Don't remember
	70.6%	5.9%	5.9%	17.6%	55.9%	23.5%	5.1%	15.4%
	(96)	(8)	(8)	(24)	(76)	(32)	(7)	(21)
	Chi Square		p value		Chi Square		p value	
Main effect of Ad Condition	.10		.74		**3.9**		**.04**	

Test of H2

H2 predicted that subjects exposed to the complete comparison condition would be less likely than subjects in the negated parity condition to generate false superiority inferences about the parity brand. As discussed in relation to H1, there were several statistically significant effects of ad condition. The effects supportive of H2 include the statistically significant ad condition effect on unaided recall of sponsor superiority over

the parity brand (ChiSq.=5.7, p<.01). Subjects in the complete comparison condition were less likely to recall sponsor superiority on speed of relief than subjects in the negated parity condition (2.7% and 8% respectively). H2 was also supported by the statistically significant main effect of ad condition for the close-ended recall questions about the parity brand (ChiSq.=5.93, p<.04). Significantly fewer subjects in the complete comparison condition said the sponsor was superior to the parity brand on speed of relief than subjects in the negated parity condition (14.8% versus 33%).

Sponsor superiority responses to the open-ended aided recall question did not support H2. As reported earlier, there were no statistically significant differences between the negated-parity condition subjects and those in the complete comparison condition (48.2% and 40.74% respectively, see Table 20). Table 22 summarizes results for H2.

Test of H3

H3 predicted that subjects would be less likely to generate false superiority inferences when the parity claim was phrased as a comparison of equality than when the claim was in negated form. Again, as discussed in relation to H1, the pattern of results from the statistically significant ad-condition main effects supports H3. Significantly fewer subjects in this condition versus the negated parity condition said the sponsor was superior on speed of relief over the parity brand. The effects were found for responses to the unaided recall question (1.3% versus 8%, ChiSq.=5.7, p<.01), to the aided open-ended question (11.1% versus 48.2% respectively, ChiSq.=7.44, p<.02), and to the close-ended recall question (18% versus 33%, ChiSq.=5.93, p<.04) (see Table 18). Table 23 summarizes results for H3.

Table 22. Test of H2: Results.

H2: *Consumers are less likely to generate false attribute superiority inferences from the complete comparison version of the parity claim than from the negated parity version.*							
H3: *False superiority inferences are less likely when a parity claim is phrased as a omparison of equality than when the claim is in negated form.*							
	Unaided Recall			**Aided Recall Open-ended**			
	N=149			N=91			
Question Text	What did the advertisement say or suggest to you about the TARGET CATEGORY TARGET BRAND? Please be as specific as possible			What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE?			
Response Categories							
Statements of sponsor superiority on speed of relief over the parity brand							
	n=24						
	Chi Square	Std. Error	p value	Chi Square	Std. Error	p value	
Main effect of Ad Condition	**5.7**	**.29**	**.01**	**7.44**	**1.13**	**.02**	
	Aided Recall close-ended				**Aided Recall close-ended**		
	N=136				N=136		
Question Text	Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the COMPARATIVELY INFERIOR BRAND on the TARGET ATTRIBUTE?				Did the ad say or suggest that TARGET BRAND would be *inferior, equal, superior* to the PARITY BRAND on the TARGET ATTRIBUTE?		
	Superior	Equal	Inferior	Don't know/ Don't remember	Superior	Equal	Inferior	Don't know/ Don't remember
	70.6%	5.9%	5.9%	17.6%	55.9%	23.5%	5.1%	15.4%
	(96)	(8)	(8)	(24)	(76)	(32)	(7)	(21)
	Chi Square		p value		Chi Square		p value	
Main effect of Ad Condition	.10		.74		**3.9**		**.04**	

Test of H4

H4 stated that after delay consumers would recall sponsor superiority on the depicted attribute over the parity brand when the claims were presented in negated form. When the claims were presented in a linguistically simplified format, H4 predicted that consumers would recall the parity comparison between the sponsor and the parity brand. A statistically significant ad condition by delay interaction was required as support for H4 would.

The interaction between advertising copy and delay condition was statistically significant for the close-ended question about the parity comparison brand (ChiSq.=4.0, p<.04). Specifically, the number of respondents who said the brand was superior to the parity brand increased over time, but only for the negated parity claim. There were no statistically significant differences between those subjects who saw the complete comparison claim *"Aleve/Zantac isn't faster or slower than Aleve/Pepcid,"* and those who saw the comparison of equality claim "*as fast as*" (see Figure 6). No other results supported H4.

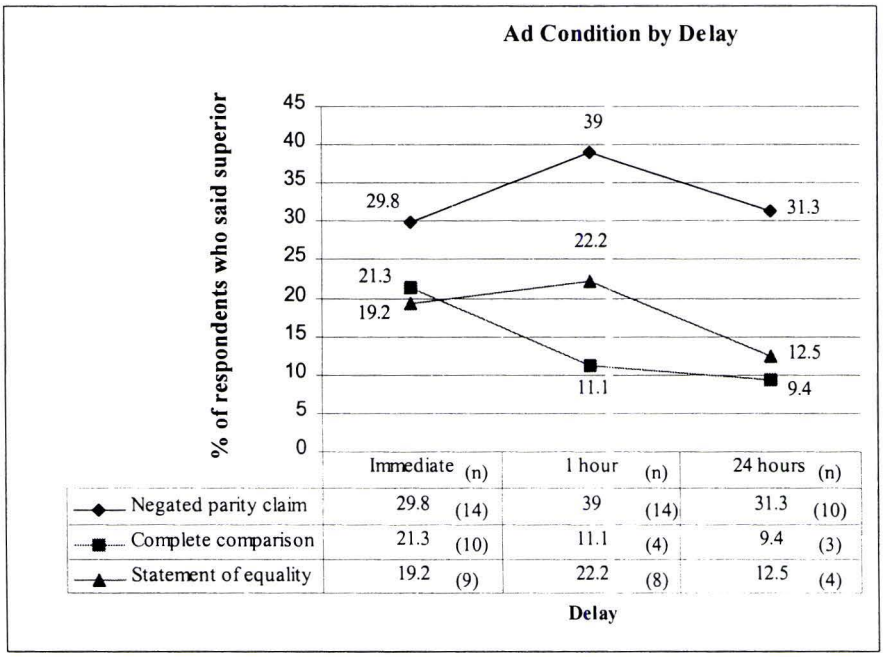


Figure 6. Superiority responses over parity brand to close-ended question.

Product Category Effects

No effects of product category were hypothesized, as the second category was included as a replicate. However, several statistically significant effects of product category were found in responses to the unaided recall question. A statistically

significant main effect of category was found for the group of responses that mentioned the parity comparison on speed of relief (ChiSq. = 6.08, p<.01). Eighty percent of subjects in the pain reliever category said that Aleve worked as fast as Advil, while 19.23% of subjects in the antacid category said that Zantac and Pepcid were equal on speed of relief.

Similar results were obtained when respondents mentioned the parity performance of the sponsor against both comparison brands (ChiSq. = 9.75, p< .0018). Eighty-six percent of subjects in the pain reliever condition said that Aleve "*worked as well as/was as effective as/ relieves pain as well as*" both Advil and Tylenol. Thirteen percent of those in the antacid category said the same about Zantac versus Pepcid and Tagamet (See Table 23).

Table 23. Product category effects: Responses to unaided recall question.

What did the ad say or suggest to you about Aleve/Zantac?				
Response	Independent Variable	Chi Square	Response%	
Parity comparison of the sponsor versus the parity brand on speed of relief	Category	6.08, p<.01	Pain Reliever	Antacid
			80.7%	19.2%
Overall Parity of the sponsor over both comparison brands	Category	9.75, p<.0018	Pain Reliever	Antacid
			86.2%	13.8%

Moreover, a statistically significant two-way interaction between delay and product category was found for responses to (ChiSq.=5.53, p<.01). The percentage of respondents who said the sponsor Zantac was superior to Tagamet (the inferior brand)

decreased over time, while there were no statistically significant differences of delay for the pain reliever category (see Figure 7).

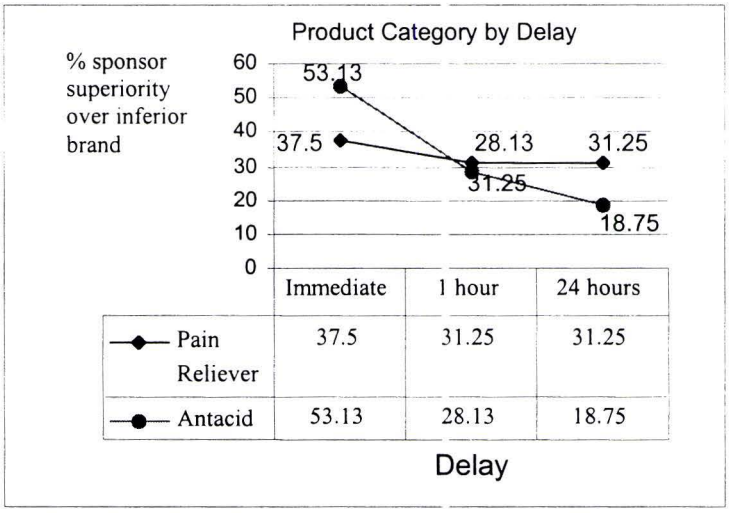


Figure 7. Responses to close-ended question: sponsor superiority over the comparatively inferior brand.

Opinion Questions

The opinion questions were phrased as follows: *Based on everything you know, is it your personal opinion that the target brand is superior, the same, or inferior to [comparison brand] on speed of relief.* This question was asked about both comparison brands. As discussed earlier, these questions were asked before the ad-communication questions for half of the subjects and after for the other half. Based on their responses to the screening questions, another set of respondents answered the opinion questions without answering the ad communication questions. In order to determine if there were any differences between the three groups, a variable *order* was included in the logistic regression analyses. No statistically significant main effects or interactions of order were found for either of the opinion questions.

Subjects were presented with four response options. The first three were comparative statements (i.e., the brand is superior, the same, or inferior), and the last was a *no opinion* option. As with the ad-communication questions, analyses were conducted to identify differences between those subjects who chose the first three response options and respondents who answered *no opinion*. There were no statistically significant differences between these groups. Cumulative multinomial logit analyses focused on the comparative statements.

There were statistically significant differences in the opinions of respondents based on the product category condition. When the question referred to the brand depicted as inferior on speed of relief, 57.7% of subjects in the antacid category said the sponsor (Zantac) was superior to Tagamet. Only 35.4% of those in the pain reliever category said the sponsor (Aleve) was superior to Tylenol (ChiSq.=6.04, p.<01). When the question was asked about the parity brand, 58% of those in the antacid category said Zantac was superior to Pepcid on speed of relief, but only 30% said Aleve was superior to Advil (ChiSq.=4.66, p.<.03). On the other hand, 53.8 % said Aleve and Advil were similar on speed of relief, but only 38.7% said that Zantac and Pepcid were similar.

Brand Preference

In order to assess brand preference, subjects were presented with the following scenario:

> Imagine that you need to purchase a [TARGET CATEGORY] today…
> You have 20 points to allocate between brands. Indicate how likely you would be to purchase each of the following brands by assigning some of those 20 points to each of them. More points indicate a greater chance that you would purchase that brand. You must not exceed 20 points, so add up the points at the end to make sure you have assigned only 20 points between all brands.
> You may change the number of points you assign to each brand until you feel comfortable that they reflect your intended choice.

Subjects then viewed a list of four brands, the ad sponsor, the comparison brand featured in the ad, and a well-known filler brand. The computer program was designed to detect when subjects erroneously assigned more than 20 points and prompted them to try again. As the instructions indicated, subjects were allowed to change their point allocations until these reflected their brand preferences.

An analysis of variance on the mean preference scores and a categorical analysis on the relative brand preference were conducted. The analysis of variance revealed a product category main effect on the mean preference of the sponsor brand ($F = 91.93$, $p<.0001$). The mean preference score for the sponsor (Aleve) in the pain reliever condition was lower than the mean score for the brand in the antacid category (Zantac), 3.83 versus 6.8 respectively. No statistically significant effects were found for preference scores of the parity brand.

Three categorical dependent variables were created based on the points allocated between the brands. The first variable indicated whether the sponsor brand was preferred over the parity brand, the inferior brand, and a filler brand. The second variable indicated the relative preference of the parity brand versus the other three brands. The final variable indicated the relative preference of the inferior brand versus the other three variables. A conditional logit analysis was conducted on these variables.

The analyses revealed a statistically significant category main effect on the likelihood of choosing the target over the parity and the inferior brand (ChiSq.=24.30, $p<.001$). Subjects in the pain reliever condition were equally likely to choose Aleve as they were to choose Advil and Tylenol. Of those who chose Aleve 97.3% also chose

Advil, and 96.4% chose Tylenol. On the other hand, those in the antacid category more often preferred the sponsor brand Zantac to Pepcid AC (61.2%) and Tagamet (65.7%). No other effect was statistically significant for any of the three categorical variables.

Individual level analyses

As in the previous study, individual level analyses were conducted in order to determine with greater accuracy the number of subjects who may have been deceived. Each subject's response pattern to the ad communication questions was considered.

First, no inconsistencies in the subjects' answers were found. Second, a series of specific response patterns were created to reflect various degrees of deception. Subjects who consistently reported that the sponsor was superior on speed of relief over the parity brand were classified as the highest on a four-point *deception scale.* Subjects were classified in the next level of deception if they expressed sponsor superiority over the parity brand on speed of relief in either of the open-ended questions. The lowest level of deception was defined by subjects' choice of response to the close-ended question about the parity brand. Finally, when subjects expressed a parity comparison between the sponsor and the featured competitor to any of the open-ended questions, subjects were classified as *not deceived*, and received a negative score on the deception scale.

No subject was classified at the highest level of deception. The majority of subjects (55%) were classified at the lowest level of the deception scale. These subjects answered that the sponsor was superior over the parity brand to a close-ended question. Sixteen percent of subjects met the criteria to be classified at the second level of deception. They expressed sponsor superiority on speed of relief in their answers to the

unaided recall questions. Finally, 23% of subjects met the criteria to be classified as *not deceived*.

Discussion

The results of Study 2 are somewhat encouraging. The statistically significant effects ad condition on the subgroup of responses to the open-ended aided recall question supported H1. Significantly fewer subjects in the simplified versions took away a superiority message over the parity brand on speed of relief compared to the negated parity condition. The ad condition by delay interaction to the close-ended recall question also supports H1, as a greater percentage of subjects in the negated parity condition said the sponsor was superior to the parity brand.

H2 was only partially supported. The statistically significant ad condition by delay interaction for the close-ended question about the parity brand supports the ability of the complete-comparison parity statement to prevent false superiority inferences. The number of respondents who said the sponsor was superior to the parity on speed of relief was significantly lower in this condition than in the negated parity condition at every level of delay. In addition, a significantly higher percentage of respondents said the sponsor was equal to the parity brand in response to the same question. The impact of the complete comparison statement appears to be strongest immediately after ad exposure.

However, responses to the open-ended question "*what did the ad say or suggest about [brand x] and speed of relief*" suggest otherwise. Subjects in the negated parity condition were as likely as subjects in the complete comparison condition to take away a superiority message over the parity brand. One possible explanation for the inconsistency of these results could be the close-ended recall question itself. The

response options (i.e., superior, equal, inferior) may have reinstated the parity comparison, which would not have been mentioned otherwise.

H3 received support from the ad condition by delay interaction previously mentioned, and from the main effect of ad condition in response to both open-ended questions. Statistically significantly fewer subjects said the sponsor was superior over the parity brand when the parity claim was made by the equality versus the negated statement. This effect was consistent over all delay conditions. Subjects in this condition were also more likely than subjects in the negated parity condition to say that the sponsor was equal to the parity brand on speed of relief.

The statistically significant ad condition by delay interaction already discussed also supports H4. As predicted, the number of subjects in the negated parity condition who falsely recalled that the sponsor was superior over the parity brand significantly increased with delay. The same was not true for subjects in either of the other conditions.

As in the first study, there were some effects of product category. In response to the unaided recall question, significantly more subjects expressed a parity comparison between the sponsor and parity pain reliever brands. Subjects in the antacid category were more likely to favor the sponsor over the parity brand. In addition, subjects were also more likely to say that the pain reliever categories were similar overall than were subjects in the antacid category.

As already discussed in relation to Study 1, subjects were less familiar with the antacid brands than with the brands of pain relievers. In the absence of direct experience or knowledge about the antacid brands, subjects appear to have responded in accord with the ads' portrayal of the brands. Subjects were more likely to choose the sponsor and

perceived it more favorably than the other brands. On the other hand, responses to the opinion questions and the brand preference results suggest that consumers believe that the pain reliever brands are equally effective, and treat them as substitutes. These responses are the likely result of subjects' prior experience with the brands.

CHAPTER NINE
GENERAL DISCUSSION

Prior research on deceptive advertising has not focused on combined comparatives as a source of deception. The purpose of the studies presented here was to address this void in the literature. In addition, framing was suggested as the process responsible for the copy by copy interactions that result from combined comparatives. Study 1 did not provide support for the hypothesized effects when the combined comparative consisted of puffery and negated parity claims. Very few subjects reported a parity comparison between the sponsor and the parity brand. The lack of variance in subjects' responses may be result of the puffery manipulation. The subtle manipulation of the parity claim may have been lost on subjects, who anticipate comparative ads to present only favorable information about the sponsor.

But even if subjects' responses to the ad communication questions did not reflect the framing effects predicted, their opinions and preferences suggest the ads had some influence. Subjects expressed preference for the sponsor brand in the antacid category, which was unfamiliar to subjects. In the absence of personal experience or knowledge about the product, subjects appear to have considered the ad's claims. On the other hand, exposure to the ads was insufficient to influence subjects, who may have personal experience using each of the pain reliever brands.

Results from Study 2 were more encouraging than those from Study 1. A statistically significant ad condition by delay interaction supported the framing

hypothesis. Significantly more subjects said the sponsor was superior over the parity brand when the parity claim was in negated antonym form and the percentage of such responses increased with delay. Moreover, when the parity claim was simplified, significantly fewer subjects reported sponsor superiority. The ability of the simplified claims to convey the parity comparison persisted over time.

Challenges to deceptive advertisements rest on the assumption that they influence consumers' preferences and choice behavior. The findings of Study 2 on these variables suggest that the framing effects from combined comparatives may be more pronounced for new or unfamiliar brands. Significantly more subjects preferred the sponsor in the antacid category than in the pain reliever category. Their opinions also favored the sponsor over the competitors. However, preference scores for the pain reliever brands suggest that subjects perceived few differences between them, as their opinions also show.

Limitations

The most significant limitation to these studies was the sample size. For external validity purposes, it was important to approximate the methods used in copy tests for litigation. However, the screening process required by the funneling technique resulted in a small number of respondents per cell in some conditions. This was especially true for the first study, which was seriously underpowered to detect the effect of interest.

An additional limitation was the use of existing brands. Again, the choice was made with external validity in mind. It is difficult to determine with certainty the impact of prior experience on the effects observed for the pain reliever category. At the time the studies were conducted, the antacid brands had been recently introduced. However, as

data collection progressed, advertising campaigns for the antacid brands were more visible. Again, it is difficult to determine what impact, if any, this had on subjects' responses.

Nonetheless, the statistically significant effects for the antacid category hold potentially interesting implications for the advertising of new or less familiar brands. From a competitive standpoint, established brands need to carefully monitor such claims, even when it appears that their brands are not the primary target of a competitive attack. Negated claims have been typically accepted as conveying only a parity comparison between brands, and only until recently have the *parity* brands begun to challenge that assumption. The results presented here provide some empirical evidence that such challenges are justified.

From a consumer welfare standpoint, regulators should attend to the linguistic complexity of claims, especially when they are intended to convey health-related information. Consider, for example, the recent surge of advertising for prescription medication. While these advertisements may not always be for new brands, advertising will be the first source of information about these products for a majority of the general public. Because consumers tend to rely on advertisements to learn about brands during their initial introduction, combined comparative claims should be carefully scrutinized during this phase.

Measurement Issues

One of the goals of this research was to approximate copy-testing methods employed in surveys for litigation purposes. However, as already mentioned, one of the shortcomings of these studies was the sample size. Because of the funneling technique,

surveys for litigation usually have very large sample sizes, which allow adequate testing of the issues in question even after a number of subjects has been disqualified. The same could not be achieved in the current testing situation.

Another issue worthy of note is the use of control questions in the assessment of deception. Typically, the percentage of the total subjects who have been classified as *deceived* is reduced by the percentage of those who answered incorrectly to one or more control questions. While the courts accept this method of eliminating subjects, it does not give a precise count of the subjects who were in fact deceived. The individual level analyses conducted for both studies were an attempt to improve upon this practice. Looking at the pattern of subjects' responses allows a better understanding of the extent to which an ad is deceptive. Different levels of deception can suggest whether corrective measures need to be taken, or whether simple modifications of the ad copy are necessary to prevent misleading inferences.

Future Research

These initial results suggest interesting research avenues involving combined comparative claims. First, the role of prior knowledge and experience with the advertised products and brands should be further explored. Consumers who are familiar with a brand may be less susceptible to framing effects from combined comparatives, for instance. Similarly, the effect of combined comparatives on lesser known versus well-established brands is likely to differ.

The results from the first study suggest that even though subjects fail to recall the offending claims, the influence of such claims may be reflected in the opinions and preference towards the advertised brands. In private litigation, the latter is considered

more convincing evidence of the deceptive impact of an ad. In fact, it is required in order for plaintiffs to claim damages. Thus, future research should also incorporate similar measures that reflect the direct and indirect effects of advertising claims on opinions and references.

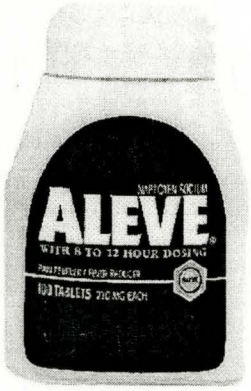
The relationship between linguistic complexity and susceptibility to framing effects should also be explored. Negated parity claims are ubiquitous in advertising, yet only until recently has their interpretation been challenged. It is not uncommon to encounter complex legal disclosures and other disclaimers in current advertisements. Their phrasing and language, driven by legal considerations, is likely to challenge consumers' processing abilities.

APPENDIX A
STIMULI FOR STUDY 1

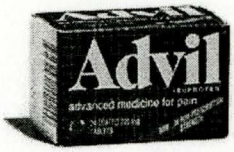
Condition 1 For Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.



The most advanced pain reliever.
Advil isn't faster.

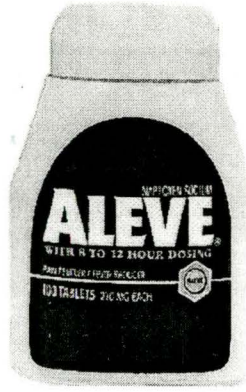


If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Condition 2 for Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.



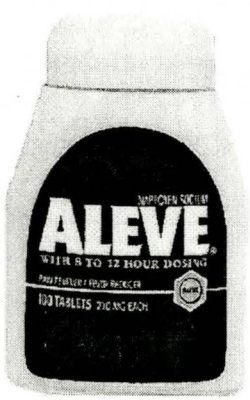
The most advanced pain reliever.
Advil isn't more advanced.

If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Condition 3 for Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.



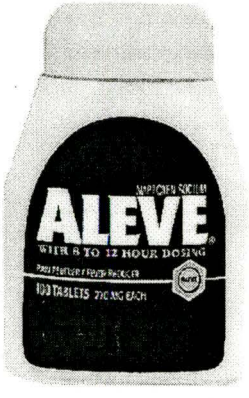
The fastest pain reliever.
Advil isn't faster

If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

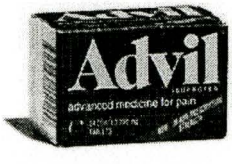
Condition 4 for Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.



The fastest pain reliever. Advil isn't more advanced

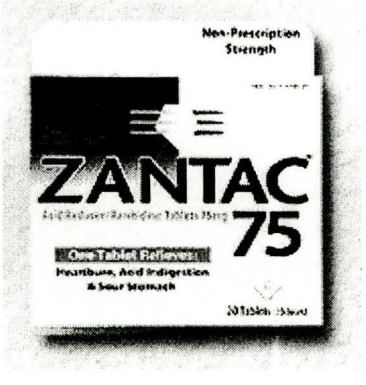


If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Sample Antacid Ad: Condition 1

When you have heartburn... speed counts

That is why Zantac®75 is the first antacid with the non-prescription strength of Zantac,® with fast acting Ranitidine.

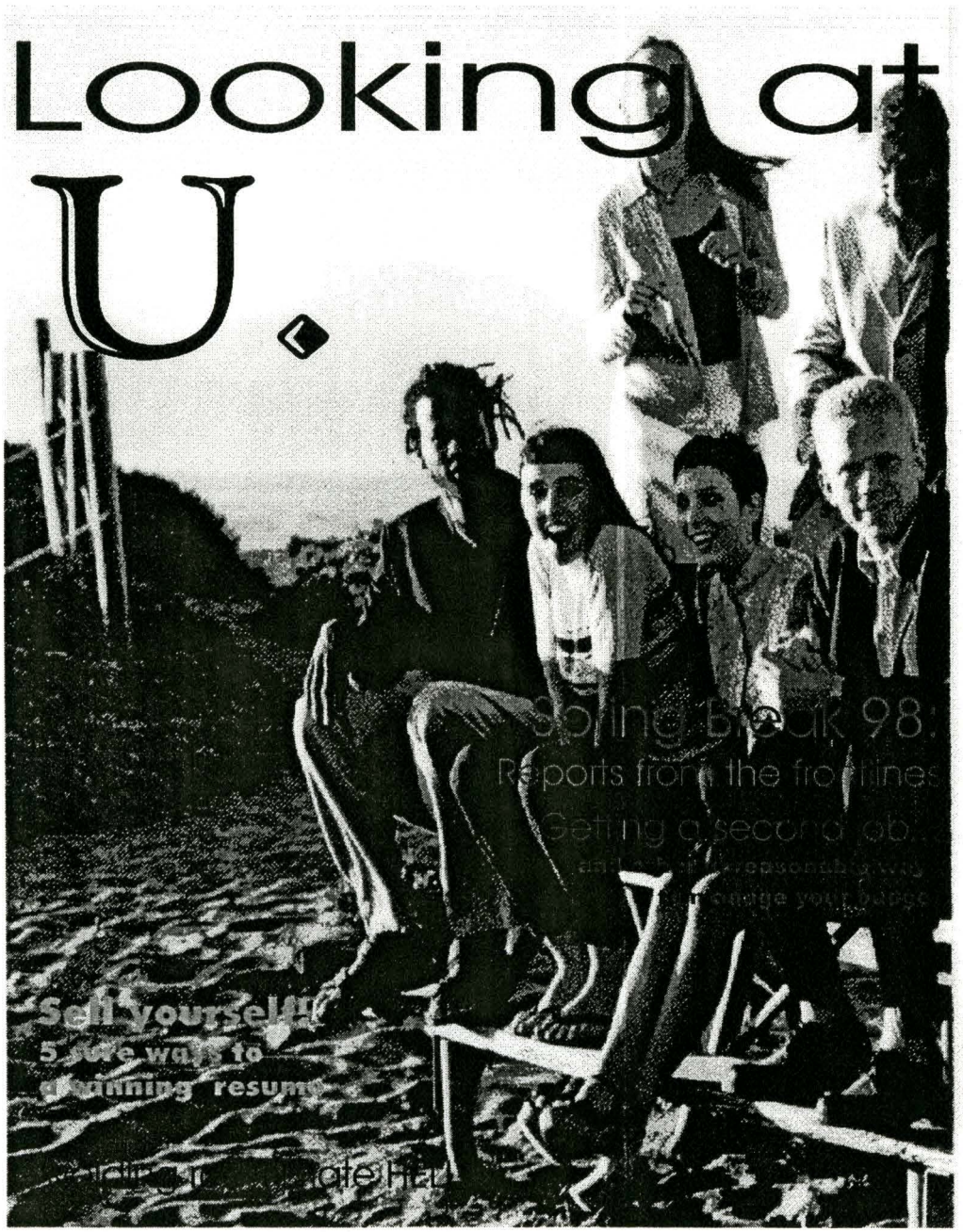


The most advanced antacid. Pepcid AC isn't faster.

Do not take the maximum daily dose for more than 14 consecutive days.
Read consumer leaflet before use.

APPENDIX B
MOCK MAGAZINE COVER AND FILLER ADS

Mock Magazine Cover



Sunscreen Filler Ad

Now you don't have to wear the beach home!

* Stay clean. So lightweight and non-greasy that sand brushes right off.

*Stay Protected. Full-range UV protection against the sun's burning UVB rays.

*Stay Comfortable. Spreads on evenly, dries quickly. Non-sticky feeling.

For more information about suncare, call the Neutrogena Serious Suncare line at 1-800-299-4SUN.

Perfume Filler Ad

Introducing GAP BLUE NO. 655

A clean, modern scent
in an architecturally inspired bottle.

Blue for her is clean and fresh.

Blue for him is masculine and straightforward.

GAP

Visit our online store @ www.gap.com

APPENDIX C
OPEN-ENDED RESPONSE CODES FOR STUDY 1

Q#3 3a 3b	**What did the ad say or suggest about the [target brand]** **Anything else** **Anything else**
Q#11	**What did the ad say or suggest about [target brand] and [target attribute]**
Q#14a	**What did the ad say or suggest about [comparison brand] and [target attribute]**

		Frequency of responses		
CODE	**RESPONSES**	**Q#3 3a 3b**	**Q#11**	**Q#14a**
	OVERALL SUPERIORITY AGAINST COMPARISON BRAND			
1.	**Superior** to/More powerful/stronger/Better/better relief/works better/more effective **than ADVIL**	**26**		**3**
2.	Relieves pain/headache Works **quicker/faster** than Advil	**13**	**9**	**7**
3.	More advanced than Advil	**1**		
4.	Advil **isn't more advanced than** Aleve	**1**		
5.	**Advil** isn't faster than Aleve/ Advil isn't the faster of the two/Advil doesn't relieve pain as fast/quick as Aleve **Advil** not quick/quicker/does not work as fast /is **not faster than Aleve**	**2**	**1**	**4**
6.	**Advil** is slower than Aleve			**7**
7.	**Superior** to/More powerful/stronger/Better/works better/better relief/more effective **than PEPCID**	**21**	**2**	
8.	Relieves heartburn/Works **quicker/faster** than Pepcid	**10**	**8**	**4**
9.	More advanced than Pepcid			**2**
10.	Pepcid **isn't more advanced than** Zantac			
11.	**Pepcid** isn't faster than Zantac/ Pepcid isn't the faster of the two/Pepcid does not relieve heartburn as fast/quick as Zantac/**Pepcid** not quick/quicker/does not work as fast /is **not faster than Zantac**	**1**		**3**
12.	**Pepcid** is slower than Zantac			**6**
	PARITY: COMPLETE COMPARISON			
13.	**Aleve** as good as **Advil/** Advil **as good as** Aleve	**1**		
14.	**Aleve** as fast as **Advil/**Advil **as fast as** Aleve			
15.	**Zantac** as good as **Pepcid** / Pepcid **as fast as** Zantac			
16.	**Zantac** as fast as **Pepcid/** Pepcid **as fast as** Zantac			

		Frequency of responses		
CODE	**RESPONSES**	**Q#3 3a 3b**	**Q#11**	**Q#14a**
	SUPERIORITY, NO REFERENT			
17.	Better/works better/more effective	**2**		**1**
18.	More powerful/stronger	**1**		
19.	Works quicker/faster/quick relief	**4**	**10**	**7**
20.	Works/lasts longer	**2**		
21.	Fast acting/works fast/ quick/ speed of relief/stops headache-heartburn quickly	**17**	**15**	**4**
22.	Strong/strength	**1**		
	OVERALL SUPERIORITY			
23.	Fastest pain reliever out there	**3**	**1**	
24.	Fastest heartburn reliever out there	**6**		
25.	Is the Strongest	**2**		
26.	Is the most advanced	**1**		
27.	Has advantage over the competition/better than the competition/better than other brands	**2**		**1**
28.	Best over the counter medication/Best pain/heartburn reliever/ best on the market/superior /no other is better	**3**	**1**	
29.	**NON-PRESCRIPTION STRENGTH** -No mention of ingredients	**9**		
30.	**DISCLOSURE**	**12**		
31.	**INGREDIENTS**	**28**	**1**	
32.	Relieves pain/headache Works/**lasts longer** than Advil	**1**		
33.	Relieves pain/headache Works/**lasts longer** than Pepcid			
34.	Lasts 8-12 hours	**4**	**1**	
35.	Lasts longer	**2**		
36.	**Don't know/Don't remember/don't recall--**	**15**		**4**
37.	**That's all I remember**	**13**		
38.	**No/Nothing/nothing else/ not that I remember**	**38**		
39.	**OTHER**	**39**	**3**	**8**

APPENDIX D
RESPONSE SUBGROUPS FOR STUDY 1

Q#3	**What did the ad say or suggest about the [target brand]**
3a	Anything else
3b	Anything else
Q#11	**What did the ad say or suggest about [target brand] and [target attribute]**
Q#14a	**What did the ad say or suggest about [comparison brand] and [target attribute]**
CODE	**SUPERIORITY RESPONSES**
	Pain Relievers
Superiority overall and speed over Advil with and without referent	
1	**Superior** to/More powerful/stronger/Better/better relief/works better/more effective **than ADVIL**
2	Relieves pain/headache Works **quicker/faster** than Advil
3	More advanced than Advil
6	**Advil** is slower than Aleve
17	Better/works better/more effective
18	More powerful/stronger
19	Works quicker/faster/quick relief
21	Fast acting/works fast/ quick/ speed of relief/stops headache-heartburn quickly
Superiority over Advil speed and general with referent	
1	**Superior** to/More powerful/stronger/Better/better relief/works better/more effective **than ADVIL**
2	Relieves pain/headache Works **quicker/faster** than Advil
3	More advanced than Advil
6	**Advil** is slower than Aleve
Superiority overall with referent	
1	**Superior** to/More powerful/stronger/Better/better relief/works better/more effective **than ADVIL**
3	More advanced than Advil
Superiority overall without referent	
17	Better/works better/more effective
18	More powerful/stronger
25	Is the Strongest
26	Is the most advanced
27	Has advantage over the competition/better than the competition/better than other brands
28	Best over the counter medication/Best pain/heartburn reliever/ best on the market/superior /no other is better

CODE	SUPERIORITY RESPONSES
	Pain Relievers
Speed only w referent	
2	Relieves pain/headache Works **quicker/faster** than Advil
6	**Advil** is slower than Aleve
Speed only w and w/o referent	
2	Relieves pain/headache Works **quicker/faster** than Advil
6	**Advil** is slower than Aleve
19	Works quicker/faster/quick relief
21	Fast acting/works fast/quick/stops heartburn quickly
23	Fastest pain reliever out there
	Antacids
Superiority overall and speed over Pepcid with and w/o referent	
7	**Superior** to/More powerful/stronger/Better/works better/better relief/more effective **than PEPCID**
8	Relieves heartburn/Works **quicker/faster** than Pepcid
9	More advanced than Pepcid
12	**Pepcid** is slower than Zantac
17	Better/works better/more effective
18	More powerful/stronger
19	Works quicker/faster/quick relief
21	Fast acting/works fast/ quick/ speed of relief/stops headache-heartburn quickly
Superiority over Pepcid speed and general without referent	
7	**Superior** to/More powerful/stronger/Better/works better/better relief/more effective **than PEPCID**
8	Relieves heartburn/Works **quicker/faster** than Pepcid
9	More advanced than Pepcid
12	**Pepcid** is slower than Zantac
	Superiority overall with referent
7	**Superior** to/More powerful/stronger/Better/works better/better relief/more effective **than PEPCID**
9	More advanced than Pepcid
Superiority overall without referent	
17	Better/works better/more effective
18	More powerful/stronger
25	Is the Strongest
26	Is the most advanced
27	Has advantage over the competition/better than the competition/better than other brands
28	Best over the counter medication/Best pain/heartburn reliever/ best on the market/superior /no other is better

CODE	SUPERIORITY RESPONSES
	Antacids
Speed only with referent	
8	Relieves heartburn/Works **quicker/faster** than Pepcid
12	**Pepcid** is slower than Zantac
Speed only with and without	
8	Relieves heartburn/Works **quicker/faster** than Pepcid
12	**Pepcid** is slower than Zantac
19	Works quicker/faster/quick relief
21	Fast acting/works fast/quick/stops heartburn quickly
24	Fastest Heartburn reliever out there
	PARITY RESPONSES
	Pain Relievers
	Speed with referent
5	**Advil** isn't faster than Aleve/ Advil isn't the faster of the two/Advil doesn't relieve pain as fast/quick as Aleve **Advil** not quick/quicker/does not work as fast /is **not faster than Aleve**
14	**Aleve** as fast as **Advil**/Advil **as fast as** Aleve
	Overall performance with referent
4	Advil **isn't more advanced than** Aleve
13	**Aleve** as good as **Advil/** Advil **as good as** Aleve
	Antacids
	Speed with referent
11	**Pepcid** isn't faster than Zantac/ Pepcid isn't the faster of the two/Pepcid does not relieve heartburn as fast/quick as Zantac/**Pepcid** not quick/quicker/does not work as fast /is **not faster than Zantac**
16	**Zantac** as fast as **Pepcid/** Pepcic **as fast as** Zantac
	Overall performance with referent
10	Pepcid **isn't more advanced than** Zantac
15	**Zantac** as good as **Pepcid** / Pepcid **as fast as** Zantac

APPENDIX E
STIMULI FOR STUDY 2

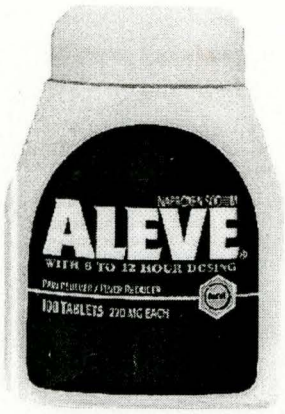
Condition 1 for Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.

Aleve relieves pain faster than Extra Strength Tylenol.

Advil isn't faster.



Trust ALEVE
to take pain away fast.

If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Condition 2 for Pain Relievers

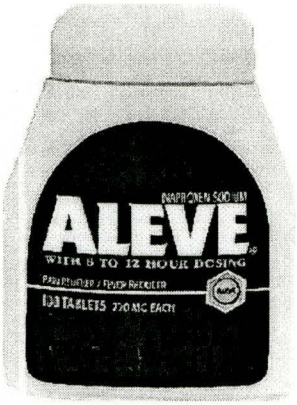
When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.

Advil isn't faster or slower than Aleve.

Aleve relieves pain faster than Extra Strength Tylenol.

Aleve won't irritate your stomach.



Trust ALEVE to take pain away fast.

If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Condition 3 for Pain Relievers

When you're in pain... speed counts

That is why ALEVE is the first pain reliever with the non-prescription strength of Anaprox®, a fast acting form of the medicine in Naprosyn®.

Aleve relieves pain as fast as Advil.

Aleve relieves pain faster than Extra Strength Tylenol.

Aleve won't irritate your stomach.

Trust ALEVE to take pain away fast.

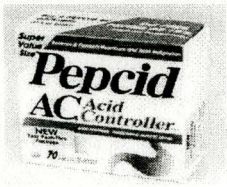
If aspirin- or ibuprofen- allergic, consult your doctor before use.
Read consumer leaflet before use.

Sample Antacid Ad: Condition 1

When you have heartburn... speed counts

That is why Zantac®75 is the first antacid
with the non-prescription strength of Zantac,®
with fast acting Ranitidine.

Zantac 75 relieves heartburn faster than Tagamet HB.



Pepcid AC isn't faster.

Trust Zantac 75
to relieve heartburn fast.

Do not take the maximum daily dose for more than 14 consecutive days.
Read consumer leaflet before use.

APPENDIX F
OPEN-ENDED RESPONSE CODES FOR STUDY 2

PAIN RELIEVERS	
Q#3 **3a** **3b**	**What did the ad say or suggest about the pain reliever Aleve** **Anything else** **Anything else**
Q#11	**What did the ad say or suggest about [target brand] and [target attribute]**

		Frequency of responses	
CODE	**RESPONSE**	**Q#3** **3a** **3b**	**Q#11**
	OVERALL SUPERIORITY AGAINST SPECIFIC BRAND(S)		
1.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tylenol and Advil**	**37**	**17**
2.	Relieves pain/headache Works **quicker/faster** than Tylenol and Advil	**12**	
3.	Relieves pain/headache Works/**lasts longer** than Tylenol and Advil	**1**	
4.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tylenol**	**45**	
5.	Relieves pain/headache/Works **quicker/faster** than Tylenol	**16**	**30**
6.	Relieves pain/headache/Works/**lasts longer** than Tylenol	**2**	
7.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Advil**	**1**	
8.	Relieves pain/headache/Works **quicker/faster** than Advil	**4**	**5**
9.	Relieves pain/headache/Works/**lasts longer** than Advil		**4**
10.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Aspirin**	**4**	
11.	Relieves pain/headache/Works **quicker/faster** than Aspirin	**3**	**1**
12.	Relieves pain/headache/Works/**lasts longer** than Aspirin		
13.	**Superior** to/More powerful/stronger/Better/works better/more effective **than other brand(s) / the competition**	**15**	
14.	Relieves pain/headache/Works **quicker/faster** than other brand (s) /the competition	**12**	**11**
15.	Relieves pain/headache/Works/**lasts longer** than other brand (s) /the competition	**1**	

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
	PARITY: COMPLETE COMPARISON/ALEVE REFERENT	**4**	**3**
16.	**Advil** not quick/quicker/does not work quicker/**faster or slower than Aleve**	**1**	
17.	Advil **not weaker or stronger** than Aleve		**1**
18.	Advil **not better or worse** than Aleve		
19.	Advil **did not relieve pain as quick/ as fast as** Aleve		
20.	**Tylenol** not quick/quicker/does not work quicker/ **faster or slower than Aleve**	**2**	
21.	Tylenol not **weaker or stronger** than Aleve	**2**	**1**
22.	Tylenol not **better or worse** than Aleve		
23.	Tylenol **did not relieve pain as quick/as fast as** Aleve		
	COMPLETE COMPARISON -ADVIL REFERENT-		
24.	**Aleve not faster or slower** than **Advil**	**8**	**2**
25.	Aleve **as fast/quick as** Advil	**11**	**10**
26.	Aleve **as effective/good as** Advil	**6**	
27.	Aleve **relieves pain/works as well as** Advil	**6**	**2**
28.	Aleve **as powerful/strong as** Advil	**4**	
	COMPLETE COMPARISON -TYLENOL REFERENT-		
29.	**Aleve** not **faster or slower** than **Tylenol**	**2**	
30.	Aleve **as fast/quick as** Tylenol		
31.	Aleve **as effective/good as** Tylenol	**2**	
32.	Aleve **relieves pain/works as well as** Tylenol	**2**	
33.	Aleve **as powerful/strong as** Tylenol		
	INCOMPLETE COMPARISON -NO REFERENT--		
34.	**Advil** not quick/quicker/does **not work quicker or slower**	**2**	
35.	Advil **not weaker or stronger**		
36.	Advil **not better or worse**	**2**	
37.	Advil **not as good/effective**		
38.	**Tylenol** not quick/quicker/does **not work quicker or slower**		
39.	Tylenol **not weaker or stronger**		
40.	Tylenol **not better or worse**		
41.	Tylenol **not as good/effective**		
42.	**Tylenol isn't stronger**		
43.	**Tylenol isn't faster**		

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
	OVERALL SUPERIORITY, other ADVERTISED brands		
44.	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**	**15**	**1**
45.	Relieves pain/headache/ Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**	**5**	**1**
46.	Relieves pain/headache/ Works/lasts longer than **the other two /the two competing brands/ the brands in the ad**	**6**	
	SUPERIORITY, NO REFERENT		
47.	Better/works better/more effective	**11**	**1**
48.	More powerful/stronger	**4**	
49.	Works quicker/faster	**44**	**14**
50.	Works/lasts longer	**2**	
	OVERALL SUPERIORITY		
51.	Fastest pain reliever out there	**9**	**5**
52.	Has advantage over the competition	**2**	
53.	Best over the counter medication, Best pain reliever/ best on the market/superior pain reliever	**6**	**1**
54.	Gets rid of headache/Works on/relieves pain/all pain/ headaches/muscle aches	**15**	**1**
83.	Fast acting/works fast/ quick/ speed of relief	**3**	**5**
84.	Strong/strength		**2**
	DURATION OF PAIN RELIEF		
55.	Long-lasting pain relief	**2**	
56.	Good for/lasts for 8-12 hours	**4**	
	MENTION INGREDIENTS		
57.	Anaprox/strength of Anaprox	**22**	
58.	Contains Naprosyn	**8**	
59.	Better/special ingredients/because of ingredients	**8**	
60.	Ingredients only found in Aleve	**3**	
61.	Ingredients speed up effects	**2**	**2**
62.	New pain relieving agent	**4**	
63.	**NON-PRESCRIPTION STRENGTH (only if it mentions non-prescription, but no mention of ingredients)**	**15**	

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
	DISCLOSURE		
64.	Consult/check with doctor	**14**	
65.	Read leaflet before taking	**2**	
66.	Check if allergic to Ibuprofen or aspirin/not recommended if allergic to Ibuprofen or aspirin	**10**	
	NON-TARGET ATTRIBUTES		
67.	**Gentle on/ does not irritate/better for stomach**	**4**	
	ATTRIBUTES NOT MENTIONED IN THE AD		
68.	No side effects	**2**	
69.	Safer/ as safe as	**4**	
70.	New and improved	**2**	
71.	Recommended/trusted by doctors	**6**	
	EXECUTION COMMENT		
72.	Showed other pain relievers/compared to other pain relievers/ brands/to Tylenol/Advil	**6**	**3**
73.	Poor ad	**2**	
74.	Good ad		
75.	Had a "fine print" statement/disclosure	**4**	
76.	Other brands mentioned	**18**	
77.	Bottle of Aleve bigger than other pain relievers	**2**	
78.	**Don't know/Don't remember/recall--**	**31**	**5**
79.	**That's all I remember/not that I remember**	**13**	
80.	**No/Nothing/nothing else**	**94**	
81.	**OTHER**	**14**	**3**
82.	**Copy points " When you're in pain, speed counts"**	**2**	**2**

ANTACID	
Q#3 **3a** **3b**	**What did the ad say or suggest about the antacid Zantac** **Anything else** **Anything else**
Q#11	**What did the ad say or suggest about [target brand] and [target attribute]**

		Frequency of responses	
		Q#3 3a 3b	**Q#11**
	OVERALL SUPERIORITY AGAINST SPECIFIC BRAND(S)		
1.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tagamet and Pepcid AC**	**18**	

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
2.	Relieves heartburn /Works **quicker/faster** than Tagamet and Pepcid AC	**5**	
3.	Relieves heartburn/Works/**lasts longer** than Tagamet and Pepcid AC		
4.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tagamet**	**7**	**2**
5.	Relieves heartburn/Works **quicker/faster** than Tagamet	**8**	**4**
6.	Relieves heartburnWorks/**lasts longer** than Tagamet		
7.	**Superior** to/More powerful/stronger/Better/works better/more effective **than Pepcid AC**	**15**	
8.	Relieves heartburn/Works **quicker/faster** than Pepcid AC	**7**	**4**
9.	Relieves heartburn/Works/**lasts longer** than Pepcid AC		
10.	**Superior** to/More powerful/stronger/Better/works better/more effective **than other brand(s) / the competition**	**9**	**2**
11.	Relieves heartburn/Works **quicker/faster** than other brand (s) /the competition	**11**	**21**
12.	Relieves heartburn/Works/**lasts longer** than other brand (s) /the competition	**2**	
	PARITY: COMPLETE COMPARISON/ZANTAC REFERENT		
13.	**Pepcid AC** not quick/quicker/does not work quicker/**faster or slower than Zantac**		**2**
14.	Pepcid AC **not weaker or stronger** than Zantac	**1**	
15.	Pepcid AC **not better or worse** than Zantac	**1**	**1**
16.	Pepcid AC **did not relieve hartburnas quick/ as fast as** Zantac		
17.	**Tagamet** not quick/quicker/does not work quicker/ **faster or slower than Zantac**	**1**	
18.	Tagamet not **weaker or stronger** than Zantac		
19.	Tagamet not **better or worse** than Zantac		
20.	Tagamet **did not relieve hartburnas quick/as fast as** Zantac		
	COMPLETE COMPARISON -PEPCID AC REFERENT-		
21.	**Zantac not faster or slower** than **Pepcid AC**	**7**	**2**
22.	Zantac **as fast/quick as** Pepcid AC	**1**	**2**
23.	Zantac **as effective/good as** Pepcid AC	**5**	**1**
24.	Zantac **relieves heartburn/works as well as** Pepcid AC	**1**	
25.	Zantac **as powerful/strong as** Pepcid AC		

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
	COMPLETE COMPARISON -TAGAMET REFERENT-		
26.	**Zantac** not **faster or slower** than **Tagamet**	**1**	
27.	Zantac **as fast/quick as** Tagamet		
28.	Zantac **as effective/good as** Tagamet		
29.	Zantac **relieves pain/works as well as** Tagamet		
30.	Zantac **as powerful/strong as** Tagamet		
	INCOMPLETE COMPARISON, NO REFERENT		
31.	**Pepcid AC** not quick/quicker/does **not work quicker or slower**	**2**	
32.	Pepcid AC **not weaker or stronger**		
33.	Pepcid AC **not better or worse**		
34.	Pepcid AC **not as good/effective**		
35.	**Tagamet** not quick/quicker/does **not work quicker or slower**		
36.	Tagamet **not weaker or stronger**		
37.	Tagamet **not better or worse**		
38.	Tagamet **not as good/effective**		
39.	**Tagamet isn't stronger**		
40.	**Tagamet isn't faster**		
	OVERALL SUPERIORITY, other ADVERTISED brands		
41.	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**		
42.	Relieves heartburn Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**	**2**	**1**
43.	Relieves heartburn Works/lasts longer than **the other two /the two competing brands/ the brands in the ad**		
	SUPERIORITY, NO REFERENT		
44.	Better/works better/more effective	**2**	
45.	More powerful/stronger		
46.	Works quicker/faster	**13**	**7**
47.	Works/lasts longer	**1**	
	OVERALL SUPERIORITY		
48.	Fastest antacid out there	**4**	**7**
49.	Has advantage over the competition		
50.	Best over the counter medication, Best antacid/ best on the market/superior antacid	**8**	

		Frequency of responses	
CODE	**RESPONSE**	**Q#3 3a 3b**	**Q#11**
51.	Gets rid of headache/Works on/relieves pain/all pain/ headaches/muscle aches	**11**	
52.	Fast acting/works fast/ quick/ speed of relief	**13**	**11**
53.	Strong/strength	**2**	
	DURATION OF HEARTBURN RELIEF		
54.	Long-lasting heartburn relief	**1**	
55.	Good for/lasts for 8-12 hours		
	MENTION INGREDIENTS		
56.	Better/special ingredients/because of ingredients	**4**	
57.	Ingredients only found in Zantac	**2**	
58.	Ingredients speed up effects		
59.	New heartburn relieving agent		
60.	**NON-PRESCRIPTION STRENGTH—(if it mentions non-prescription, but no mention of ingredients)**	**7**	
	DISCLOSURE		
61.	Consult/check with doctor	**3**	
62.	Read leaflet before taking		
63.	Do not take for more than 10-14 days straight	**9**	
	Non-target attributes		
64.	**Few/No side effects**	**18**	
65.	**Dosage amount**		
	Attributes not mentioned in the ad		
66.	New and improved		
67.	Recommended/trusted by doctors	**5**	
	Execution Comments		
68.	Showed other antacids/compared to other antacids/ brands/to Tagamet/Pepcid AC	**9**	
69.	Poor ad		
70.	Good ad		
71.	Had a "fine print" statement/disclosure		
72.	Other brands mentioned		
73.	**Don't know/Don't remember/recall--**	**21**	**1**
74.	**That's all I remember/not that I remember**	**23**	
75.	**No/Nothing/nothing else**	**51**	
76.	**OTHER**	**16**	**2**
77.	**Copy points " When you have heartburn, speed counts"**		

APPENDIX G
RESPONSE SUBGROUPS FOR STUDY 2

PAIN RELIEVERS	
Q#3	**What did the ad say or suggest about the pain reliever Aleve**
3a	Anything else
3b	Anything else
Q#11	**What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE**
CODE	**SUPERIORITY RESPONSES**
Superiority overall and on speed of relief with referent	
1	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tylenol and Advil**
2	Relieves pain/headache Works **quicker/faster** than Tylenol and Advil
13	**Superior** to/More powerful/stronger/Better/works better/more effective **than other brand(s) / the competition**
14	Relieves pain/headache/Works **quicker/faster** than other brand (s) /the competition
44	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**
45	Relieves pain/headache/ Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**
Speed of relief	
2	Relieves pain/headache Works **quicker/faster** than Tylenol and Advil
14	Relieves pain/headache/Works **quicker/faster** than other brand (s) /the competition
45	Relieves pain/headache/ Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**
8	Relieves pain/headache/Works **quicker/faster** than Advil
Superiority with and without referent	
1	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tylenol and Advil**
13	**Superior** to/More powerful/stronger/Better/works better/more effective
37	Advil **not as good/effective**
41	Tylenol **not as good/effective**
44	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**
47	Better/works better/more effective
48	More powerful/stronger

CODE	SUPERIORITY RESPONSES
53	Has advantage over the competition
53	Best over the counter medication, Best pain reliever/ best on the market/superior pain reliever
Speed of Relief with and without referent	
2	Relieves pain/headache Works **quicker/faster** than Tylenol and Advil
14	Relieves pain/headache/Works **quicker/faster** than other brand (s) /the competition
45	Relieves pain/headache/ Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**
49	Works quicker/faster
Parity responses speed of relief over the parity brand	
16	**Advil** not quick/quicker/does not work quicker/**faster or slower than Aleve**
19	Advil **did not relieve pain as quick/ as fast as** Aleve
24	**Aleve not faster or slower** than **Advil**
25	Aleve **as fast/quick as** Advil
34	**Advil** not quick/quicker/does **not work quicker or slower**
Overall superiority over the parity brand	
17	Advil **not weaker or stronger** than Aleve
18	Advil **not better or worse** than Aleve
26	Aleve **as effective/good as** Advil
27	Aleve **relieves pain/works as well as** Advil
28	Aleve **as powerful/strong as** Advil
35	Advil **not weaker or stronger**
36	Advil **not better or worse**
	ANTACIDS
Q#3	**What did the ad say or suggest about the antacid Zantac**
3a	Anything else
3b	Anything else
Q#11	**What did the ad say or suggest about TARGET BRAND and TARGET ATTRIBUTE**
CODE	**SUPERIORITY RESPONSES**
Superiority overall and on speed of relief with referent	
1	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tagamet and Pepcid**
2	Relieves heartburn Works **quicker/faster** than Tagamet and Pepcid
10	**Superior** to/More powerful/stronger/Better/works better/more effective **than other brand(s) / the competition**
11	Relieves heartburn /Works **quicker/faster** than other brand (s) /the competition
41	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**
42	Relieves heartburn / Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**

CODE	SUPERIORITY RESPONSES
Speed of Relief	
2	Relieves heartburn/ Works **quicker/faster** than Tagamet and Pepcid
11	Relieves heartburn/ /Works **quicker/faster** than other brand (s) /the competition
42	Relieves heartburn/ / Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**
5	Relieves heartburn/Works **quicker/faster** than Tagamet
8	Relieves heartburn/Works **quicker/faster** than Pepcid
Overall Superiority with and without referent	
1	**Superior** to/More powerful/stronger/Better/works better/more effective **than Tagamet and Pepcid**
7	**Superior** to/More powerful/stronger/Better/works better/more effective **than Pepcid**
10	**Superior** to/More powerful/stronger/Better/works better/more effective
34	Pepcid **not as good/effective**
38	Tagamet **not as good/effective**
41	More powerful/stronger/Superior to /Better/works better/more effective **the other two/the two competing brands/ the brands in the ad**
44	Better/works better/more effective
45	More powerful/stronger
49	Has advantage over the competition
50	Best over the counter medication, Best heartburn reliever/ best on the market/superior heartburn reliever
Speed of relief with and without referent	
2	Relieves heartburn/. Works **quicker/faster** than Tagamet and Pepcid
11	Relieves heartburn/Works **quicker/faster** than other brand (s) /the competition
42	Relieves heartburn/ Works quicker/faster than **the other two / the two competing brands/ the brands in the ad**
46	Works quicker/faster
CODE	**PARITY RESPONSES**
Speed of relief with and without referent	
13	**Pepcid** not quick/quicker/does not work quicker/**faster or slower than Zantac**
16	Pepcid **did not relieve heartburn as quick/ as fast as** Zantac
21	**Zantac not faster or slower** than **Pepcid**
22	Zantac **as fast/quick as** Pepcid
31	**Pepcid** not quick/quicker/does **not work quicker or slower**
Overall parity	
14	Pepcid **not weaker or stronger** than Zantac
15	Pepcid **not better or worse** than Zantac
23	Zantac **as effective/good as** Pepcid
24	Zantac **relieves heartburn/works as well as** Pepcid
25	Zantac **as powerful/strong as** Pepcid

REFERENCES

Aaker, David A. (1978). Deceptive advertising. In David A. Aaker and George S. Day (eds.), Consumerism: Search for the consumer interest. New York: The Free Press.

Abbot, Valerie, & John B. Black (1986). Goal-related inferences. In James A. Galambos, Robert P. Abelson, & John B. Black (eds.), Comprehension in Knowledge Structures. Hillsdale, NJ: Erlbaum.

Alba, Joseph W., & Amitava Chattopadhyay (1986). Salience effects in brand recall. Journal of Marketing Research, 23, 363-369.

Alba, Joseph W., & J. Wesley Hutchinson (1987). Dimensions of consumer expertise. Journal of Consumer Research, 13, 411-453.

Alba, Joseph W., & J. Wesley Hutchinson (1991). Public policy implications of consumer knowledge. Advances in Marketing and Public Policy, 2, 1-39.

Alba, Joseph W.,& Wesley Hutchinson, & John G. Lynch, Jr. (1991). Memory and decision making. In H. H. Kassarjian & T. S. Robertson (eds.), Handbook of consumer theory and research. Englewood Cliffs, NJ: Prentice Hall, 1-49.

Alba, Joseph W., & Howard Marmorstein, & Amitava Chattopadhyay (1992). Transitions in preference over time: The effects of memory on message persuasiveness. Journal of Marketing Research, 29, 406-416.

Andrews, J. Craig & Thomas J. Maronick (1995). Advertising research issues from FTC versus Stouffer foods corporation. Journal of Public Policy and Marketing, 14, 301-309.

Andrews, J. Craig, & Richard G. Netemeyer, & Scot Burton (1998). Consumer generalization of nutrient content claims in advertising, Journal of Marketing, 62, 62-75.

Armstrong, Gary M., & Fredrick A. Russ (1975). Detecting deception in advertising. MSU Business Topics, 23, 21-32.

Ashcraft, Mark H. (1989), Human Memory and Cognition, Boston: Scott, Foresman and Company.

Bargh, John A. (1996). Automaticity in social psychology. In Tory Edward Higgins, & Arie W. Krugslanski (eds.), Social Psychology: Handbook of Basic Principles. New York: Guilford Press.

--------- (1989), Conditional automaticity: Varieties of automatic influence in social perception and cognition. In J. S. Uleman, & J. A. Bargh (eds.), Unintended Thought. New York: Guilford Press.

Barone, Michael J. & Paul W. Miniard (1999). How and when factual ad claims mislead consumers: Examining the deceptive consequences of copy by copy interactions for partial comparative advertisements. Journal of Marketing Research, 36, 58-74.

Barry, Thomas E. (1993). Twenty years of comparative advertising in the United States. International Journal of Advertising, 12, 525-548.

Bartlett, Frederick C. (1932). Remembering: A study in experimental and social psychology. London: Cambridge University Press.

Batra, Rajeev, & Michael Ray (1986). Situational effects of advertising repetition: The moderating influence of motivation, ability and opportunity to respond. Journal of Consumer Research.

Beckwith, Neil E. & Donald R. Lehman (1975). The importance of halo effects in multi-attribute attitude models. Journal of Marketing Research, 12, 265-275.

Beller, Jenna D. (1995). The law of comparative advertising in the United States and around the world: A practical guide for U.S. Lawyers and their clients. The International Lawyer, winter, 109-153.

Bettman, James R. (1979). An information processing theory of consumer choice. Reading, MA: Addison-Wesley.

Bettman, James & Mita Sujan (1987). Effects of framing on evaluation of comparable and noncomparable alternatives by expert and novice consumers. Journal of Consumer Research, 14, 141-154.

Black, John B., Terrence J. Turner, & Gordon H. Bower (1979). Point of view in narrative comprehension, memory, and production. Journal of Verbal Learning and Verbal Behavior, 18, 187-198.

Black, John B. & Hyman Bern (1981). Causal coherence and memory for events in narratives. Journal of Verbal Learning and Verbal Behavior, 20, 267-275.

Boush, David M., Marian Friestad, & Gregory M. Rose (1994). Adolescent skepticism toward TV advertising and knowledge of advertiser tactics. Journal of Consumer Research, 21, 165-175.

Bovee, Courtlan L., & William F. Arens (1989). Contemporary advertising, (3rd ed.). Homewood, IL: Irwin.

Bower, Gordon H., John B Black, & Terrence J. Turner (1979). Scripts in memory for text. Cognitive Psychology, 11, 177-220.

Bransford, John, & Jeffrey J. Franks (1971). The abstraction of linguistic ideas. Cognitive Psychology, 2, 331-350.

Bransford, John, Richard Barclay, & Jeffrey J. Franks (1972). Sentence memory: A constructive versus interpretive approach. Cognitive-Psychology, 3, 193-209

Brewer, William F. (1977). Memory for the pragmatic implications of sentences. Memory and Cognition, 5, 673-678.

Brewer, William F., & Edward H. Lichtenstein, (1974). Memory for marked semantic features versus memory for mearning. Journal of Verbal Learning and Verbal Behavior, 13, 172-180.

Brewer, William F., & Edward H. Lichtenstein (1975). Recall of logical and pragmatic implications in sentences with dichotomous and continuous antonyms. Memory-and-Cognition, 3, 315-318.

Bruno, Kristin Jo, & Richard J. Harris (1980). The effect of repetition on the discrimination of asserted and implied claims in advertising. Applied Psycholinguistics, 1, 307-321.

Buchman, Bruce, & Doron Goldman (1989). "Us vs them: The minefield of comparative ads." Harvard Business Review, May/June.

Burke, Raymond R., Wayne S. DeSarbo, Richard L. Oliver, & Thomas S. Robertson (1988). Deception by implication: An experimental investigation. Journal of Consumer Research, 14, 483-494.

Chattopadhyay, Amitava, & Joseph W. Alba (1988). The situational importance of recall and inference in consumer decision making. Journal of Consumer Research, 15, 1-12.

Cohen, Dorothy (1969). The FTC and the regulation of advertising in the consumer interest. Journal of Marketing, 33, 40-44.

Cohen, Joel B., Paul W. Miniard, & Peter R. Dickson (1980). Information integration: an information processing perspective. In Jerry C. Olson (eds.), Advances in Consumer Research, 7. Association for Consumer Research, 161-170.

Collins, Allan M., & Elizabeth F. Loftus (1975). A spreading activation theory of semantic processing. Psychological Review, 82, 407-428.

Collins, Allan M., & M.R. Qullian (1969). Retrieval time from semantic memory. Journal of Verbal Learning and Verbal Behavior, 8, 240-247.

Darley, John M., & Paget H. Gross (1983). A hypothesis-confirming bias labeling effects. Journal of Personality and Social Psychology, 44, of Applied Psychology, 73, 421-435.

Deighton, John (1984). The interaction of advertising and evidence. Journal of Consumer Research, 11, 763-770.

Dick, Alan S., Dipankar Chakravarti, & Gabriel Biehal (1990). Memory-based inferences during consumer choice. Journal of Consumer Research, 17, 82-93.

Donthu, Naveen (1998). A cross-country investigation of recall of and attitude toward comparative advertising. Journal of Advertising, 27, 111-122.

Droge, Cornelia, & Rene Y. Darmon (1987). Associative positioning strategies through comparative advertising: Attribute versus overall similarity approaches." Journal of Marketing Research, 26, 193-204.

Entman, Robert M (1993). Framing: Toward clarification of a fractured paradigm. Journal of Communication, 4, 351-58.

Feldman, Jack M., & John G. Lynch (1988). Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. Journal of applied Psychology, 73, 421-435.

Felix, Kent H. (1995). "Round-up of 1995 and look ahead." New York Law Journal, 7-9.

Fiedler, Klaus, & Guido Hertel (1994). Content-related schemata versus verbal-framing effects in deductive reasoning. Social Cognition, 12, 129-147.

Ford, Gary T., & John E. Calfee (1986). Recent developments in FTC policy on deception. Journal of Marketing, 50, 82-103.

Friestad, Marian, & Peter Wright (1994). The persuasion knowledge model: How people cope with persuasion attempts. Journal of Consumer Research, 21, 1-31.

Funkhouser, Ray (1984). An empirical study of consumers' sensitivity to the wording of affirmative disclosure messages. Journal of Public Policy and Marketing, 3, 26-37.

Gaeth, Gary, & Timothy B. Heath (1987). The cognitive processing of misleading advertising in young and old adults: Assessment and training. Journal of Consumer Research, 14, 43-54.

Gardner, David M. (1975). Deception in advertising: A conceptual approach. Journal of Marketing, 39, 40-46.

Garfinkel, Andrew (1983). A pragmatic approach to truth in advertising. In Richard Harris (eds.), Information Processing Research in Advertising, Hillsdale, NJ: Erlbaum, 175-193.

Goldman, Lee (1993). The world's best article on competitor suits for false advertising. Florida Law Review, 45, 322-346.

Goodwin, Stephen, & Michael Etgar (1980). An experimental investigation of comparative advertising: Impact of message appeal, information load, and utility of product class. Journal of Marketing Research, 17, 187-202.

Gorn, Gerald J., & Charles B. Weinberg (1984). The impact of comparative advertising on perception and attitude: Some positive findings. Journal of Consumer Research, 11, 719-727.

Grewal, Dhruv, Sukumar Kavanoor, Edward F. Fern, Carolyn Costley, & James Barnes, (1997). Comparative versus noncomparative advertising: A meta-analysis. Journal of Marketing, 61, 1-15.

Grice, H. Paul (1975). Logic and conversation. In Peter Cole & Jerry L. Morgan (eds.), Syntax and Semantics, 3. New York: Academic Press, 41-58.

Ha, Young-Won, & Stephen J. Hoch (1989). Ambiguity, processing strategy, and advertising-evidence interactions. Journal of Consumer Research, 16, 354-360.

Hanssens, Dominique, & Barton A. Weitz (1980). The effectiveness of industrial print advertisements across product categories. Journal of Marketing Research, 17, 294-306.

Harris, Richard J. (1974). Memory and comprehension of implications and inferences of complex sentences. Journal of Verbal Learning and Verbal Behavior, 13, 626-637.

---------- (1977). Comprehension of pragmatic implications in advertising. Journal of Applied Psychology, 62, 603-608.

---------- (1989). A cognitive psychology of mass communication. Hillsdale, NJ: Erlbaum.

Harris, Richard J., Tony M. Dubitsky, & Kristin Jo Bruno (1983). Psycholinguistic studies of misleading advertising. In Richard Harris (eds.), Information Processing Research in Advertising. Hillsdale, NJ: Erlbaum.

Harris, Richard J., Tony M. Dubistsky, Karen L. Perch, Cindy S. Ellerman, & Mark W. Larson (1980). Remembering implied advertising claims as facts: Extensions to the 'Real World'. Bulletin of the Psychonomic Society, 16, 317-320.

Harris, Richard J., & Gregory E. Monaco (1978). Psychology of pragmatic implication: Information processing between the lines. Journal of Experimental Psychology: General, 107, 1-22.

Harris, Richard J., Julia C. Pounds, Melissa J. Maiorelle, & Maria Mermis (1993). The effect of type of claim, gender, and buying history on the drawing of pragmatic inferences from advertising claims. Journal of Consumer Psychology, 2, 83-95.

Herr, Paul M. (1989). Priming price: Prior knowledge and context effects. Journal of Consumer Research, 16, 67-75.

Higgins, E. Tory, Gillian A. King, & Gregory H. Mavin, (1982). Individual construct accessibility and subjective impressions and recall. Journal of Personality and Social Psychology, 4, 335-47.

Highhouse, Scott, Paul W. Paese, & Tamara Leatherberry (1996). Contrast effects on strategic issue framing. Organizational Behavior and Human Decision Processes, 65, 95-105.

Hilton, Denis J. (1995). The social context of reasoning: Conversational inference and rational judgment. Psychological Bulletin, 118, 248-271.

Hoch, J. Stephen, & John Deighton (1989). Managing what consumers learn from experience. Journal of Marketing, 53, 1-20.

Hoch, J. Stephen, & Young-Won- Ha (1986). Consumer earning: Advertising and the ambiguity of product experience. Journal of Consumer Research, 13, 221-233.

Homer, Pamela M. & Sun-gil Yoon (1992). Message framing and the interrelationships among ad-based feelings, affect, and cognition. Journal of Advertising. 21, 19-32.

Hunt Reed R. & Henry C. Ellis (1999). Fundamentals of cognitive psychology. Boston, MA:McGraw-Hill.

Jacoby, Jacob, Amy H. Handlin, & Alex Simonson (1989). Survey evidence in deceptive advertising cases under the Lanham Act: An historical review of comments from the bench. The Trademark Reporter, 84, 541-585.

Jacoby, Jacob, & George J. Szybillo (1995). Consumer research in FTC versus Kraft (1991): A case of heads we win, tails you lose? Journal of Public Policy and Marketing, 14, 1-14.

Jacoby, Jacob, Margaret Nelson, C, & Wayne-D Hoyer (1982). Corrective advertising and affirmative disclosure statements: Their potential for confusing and misleading the consumer. Journal of Marketing. 46, 61-72.

James, Karen E., & Paul J. Hensel (1991). The malicious strain of comparative advertising. Journal of Advertising, 20, 53-69.

Janiszewski, Chris (1990). The influence of print advertisement organization on affect toward a brand name. Journal of Consumer Research, 17, 53-65.

Jewler, A. Jerome (1995). Creative strategy in advertising. New York: Wadsworth Publishing Company.

Johar, Gita V. (1995). Consumer involvement and deception from implied advertising claims. Journal of Marketing Research, 32, 267-279.

Johnson, Eric J., & J. Edward Russo (1981) . "Product familiarity and learning new information." In Kent B. Monroe (eds.), Advances in Consumer Research, 8. Ann Arbor, MI: Association for Consumer Research, 23-30.

Johnson, Hollyn M., & Colleen M. Seifert (1994). Sources of the continued influence effect: When misinformation in memory affects later inferences. Journal of Experimental Psychology: Learning, Memory and Cognition, 20, 1420-1436.

Johnson, Marcia K., & Carol L. Raye (1981). Reality monitoring. Psychological Review, 88, 67-85.

Kamen, Joseph M. (1987). Cross-impacts of competitive advertising: How to find out whether it helps or hurts you. Journal of Advertising Research, 27, 33-37.

Kardes, Frank R. (1986). Effects of initial product judgments on subsequent memory-based Judgments. Journal of Consumer Research, 14, 96-113.

Kardes, Frank R, David M. Sanbonmatsu, & Paul M. Herr (1990). Consumer expertise and the feature-positive effect: Implications for judgment and inference. In G. J. Horn, R. Pollay, & M. E. Goldberg (eds.), Advances in Consumer Research, 17. Provo, UT: Association for Consumer Research, 144-153.

Kardes, Frank R. (1993). "Consumer inference: Determinants, consequences, and implications for advertising." In Andrew A. Mitchel (eds.), Advertising Exposure, Memory, and Choice. Hillsdale, NJ: Erlbaum.

Kent, Felix H. (1991). The 'Kraft' case: Symbol of FTC activity. New York Law Journal, June 3, 7-19.

Kintsch, Walter (1974). Abstract nouns: Imagery versus lexical complexity. Journal of Verbal Learning and Verbal Behavior; 11, 59-65.

Kintsch, Walter, & Teun A. van Dijk (1978). Toward a model of text comprehension and production. Psychological Review, 85, 363-394.

Kuhn, Kristine M. (1997). Communicating uncertainty: Framing effects on responses to vague probabilities. Organizational Behavior and Human Decision Processes, 71, 55-83.

Landy, David, & Harold Sigall (1974). "Beauty is talent: Task evaluations as a function of the performer's physical attractiveness," Journal of Personality and Social Psychology, 29, 299-304.

Lee, Hanjoon, Paul M. Herr, Frank R. Kardes & Kim Chankon (1999). Motivated search: Effects of choice accountability, issue involvement, and prior knowledge on information acquisition and use. Journal of Business Research, 45, 75-88.

Leigh, James H. (1994). The use of figures of speech in print ad headlines. Journal of Advertising, 23, 17-33.

Lingle, John H., & Thomas M. Ostrom (1979). Retrieval selectivity in memory-based impression judgments. Journal of Personality and Social Psychology, 37, 180-194.

Lowrey, Tina M.(1998). The effects of syntactic complexity on advertising persuasiveness. Journal of Consumer Psychology, 7, 187-206.

Lutz Alessandrini, Kathryn (1983). Strategies that influence memory for advertising communications. In Richard Harris (eds.), Information processing research in advertising. Hillsdale, NJ: Erlbaum.

Lynch, John G., Howard Marmorstein, & Michael F. Weigold (1988). Choices from sets including remembered brands: Use of recalled attributes and prior overall evaluations. Journal of Consumer Research, 9, 18-37.

Lynch, John G., & Thomas K. Srull (1982). Memory and attention factors in consumer research: Concepts and research methods. Journal of Consumer Research, 9, 18-37.

Lindsay, Peter H. & Donald A. Norman (1972). Human information processing: An introduction to psychology. New York: Academic Press.

MacInnis, Deborah J. & Bernard J. Jaworski (1989). Information processing from advertisements: Toward an integrative framework. Journal of Marketing, 53, 1-23.

MacKenzie, Scott B., & Richard J. Lutz (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. Journal of Marketing, 53, 48-65.

Maheswaran, Durairaj, & Joan Meyers-Levy (1990). The influence of message framing and issue involvement. Journal of Marketing Research, 27, 361-367.

Maronick, Thomas J. (1991). Copy tests in FTC deception cases: Guidelines for researchers. Journal of Advertising Research, 9-17.

McKoon, Gail, & Roger Ratcliff (1981). The comprehension processes and memory structures involved in instrumental inferences. Journal of Verbal Learning and Verbal Behavior, 20, 671-682.

McNamara, Timothy (1992). Priming and constraints it places on theories of memory and retrieval. Psychological Review, 99, 650-662.

Monaco, Gregory E. & Don Kaiser, (1983). Effects of prior preference, inferences, and believability in consumer advertising. In Richard Harris (eds.), Information Processing Research in Advertising. Hillsdale, NJ: Erlbaum.

Muehling, Darrel D., & Norman Kangun (1985). The multi-dimensionality of comparative advertising: Implications for the Federal Trade Commission. Journal of Public Policy and Marketing, 4, 112-128.

Muehling, Darrel D., Jeffery J. Stolman, & Sanford Grossbart (1990). "The impact of comparative advertising on levels of message involvement." Journal of Advertising, 19, 41-50.

Muehling, Darrel D., Donald Stem, Jr., & Peter Raven, (1989). Comparative advertising: views from advertisers, agencies, media, and policy makers. Journal of Advertising Research, 38-48.

Neese, William T., & Ronald D. Taylor, (1994). Verbal strategies for indirect comparative advertising. Journal of Advertising Research, 34, 56.

Nelson, Thomas E., Zoe M. Oxley, & Rosalee A. Clawson, (1997). Toward a psychology of framing effects. Political-Behavior, 19, 221-246.

Nisbett, Richard E., & Timothy Wilson (1977). "The hallo effect: Evidence for unconscious alteration of judgment." Journal of Personality and Social Psychology, 35, 250-256.

Olson, Jerry C., & Philip A. Dover (1978). Cognitive effects of deceptive advertising. Journal of Marketing Research, 15, 29-38.

Pechmann, Cornelia (1996). Do consumers overgeneralize one-sided comparative price claims, and are more stringent regulations needed? Journal of Marketing Research, 33, 150-162.

Pechmann, Cornelia, & S. Ratneshwar (1991). The use of comparative advertising for brand positioning: Association versus differentiation. Journal of Consumer Research, 18, 145-60.

Pechmann, Cornelia, & Stewart, David W. (1990). How direct comparative ads and market share affect brand choice. Journal of Advertising Research, 31, 47-55.

Percy, Larrry (1981). Psycholinguistic guidelines for advertising copy. In Andrew A Mitchel (eds.), Advances in Consumer Research, 9. Provo UT: Association for Consumer Research, 107-111.

Petty, Richard E., & John T. Cacioppo (1986). The elaboration likelihood model of persuasion, In L. Berkowitz (eds.), Advances in Experimental Social Psychology, 19, 100-137.

Petty, Ross D. (1991). The evolution of comparative advertising law: Has the Lanham Act gone too far. Journal of Public Policy and Marketing, 10, 161.

Preston, Ivan L. (1975). The great american blow-up: Puffing in advertising and selling. Madison, WI: The University of Wisconsin Press.

Preston, Ivan L. (1977). The FTC's handling of puffery and other selling claims made by implication. Journal of Business Research, 5, 155-181.

---------- (1983a). A review of the literature on advertising regulation. Current Issues and Research in Advertising, 1-37.

---------- (1983b). Research on deceptive advertising: Commentary. In Richard Harris (eds.), Information Processing Research in Advertising. Hillsdale, NJ: Erlbaum .

---------- (1986). Date free at the FTC? How the FTC decides whether extrinsic evidence of deceptiveness is required. American Business Law Journal, 24, 360-376.

---------- (1989a). The FTC identification of implications as constituting deceptive advertising. Cincinnati Law Review, 1243-1310.

---------- (1989b). False or deceptive advertising under the Lanham Act: Analysis of factual findings and types of evidence. The Trademark Reporter, 79, 508-541.

---------- (1990). The definition of deceptiveness in advertising and other commercial speech. Catholic University Law Review, 39, 1035-1079.

---------- (1994). The tangled web they weave: Truth, falsity, and advertisers. Madison, WI: University of Wisconsin Press.

Pride, John, Charles Lamb & C. Plecher (1979). A taxonomy for comparative advertising research. Journal of Advertising; 7, 43-7.

Richards, Jeff I. (1990a). Deceptive advertising: Behavioral study of a legal concept, Hillsdale, NJ: Erlbaum.

---------- (1990b). A 'new and improved' view of puffery. Journal of Public Policy and Marketing, 9, 73-84.

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

Rosch, Eleanor (1978). Principles of categorization, In Eleanor & Barbara Lloyd (eds.), Cognition and Categorization. Hillsdale, NJ. : Erlbaum, 27-48.

Rossiter, John R. (1980). Visual imagery: Applications to advertising, In Andrew A. Mitchel (eds.), Advances in Consumer Research, 9. Provo, UT: Association for Consumer Research, 101-106.

Rotfeld, Herbert J., & Ivan L. Preston (1981). The potential impact of research on advertising law. Journal of Advertising Research, 21, 9-17.

Rotfeld, Herbert J., & Kim B. Rotzoll (1981). Puffery versus fact claims: Really different? Current Issues and Research in Advertising, 85-103.

Russo, J. Edward, Barbara Metcalf, & Debra Stephens (1981). Identifying misleading advertising. Journal of Consumer Research, 8, 119-131.

Sanbonmatsu, David M., Frank R. Kardes, & Carol Sansone (1991). Remembering less and inferring more: Effects of time of judgment on inferences about unknown attributes. Journal of Personality and Social Psychology, 61, 546-554.

Sawyer, Alan G. (1988). Can there be effective advertising without explicit conclusions? Decide for yourself in Susan. Heckler and David W. Stewart (eds.) Nonverbal communication in advertising,. Lexington, MA: D. C. Heath and Company, 159-184.

Sawyer, Alan G. & Daniel J. Howard (1991). Effects of omitting conclusions in advertisements to involved and uninvolved audiences. Journal of Marketing Research, 28, 467-474.

Schumann, David, Richard E. Petty, & Scott D. Clemons (1990). Predicting the effectiveness of different strategies of advertising variation: A test of the repetition variation hypotheses. Journal of Consumer Research, 17, 192-202.

Scott, Linda M. (1994). The bridge from text to mind: Adapting reader-response theory to consumer research. Journal of Consumer Research, 21, 461-480.

Searlman, Alan, & Helen Carter (1988). The effectiveness of different types of pragmatic implications found in commercials to mislead subjects. Applied Cognitive Psychology, 2, 265-272.

Shimp, Terence (1983). Evaluative verbal content and deception in advertising: A review and critical analysis. In Richard Harris (eds.), Information Processing Research in Advertising. Hillsdale, NJ: Erlbaum, 195-216.

---------- (1978). Do incomplete comparisons mislead? Journal of Advertising Research, 18, 21-27.

Shimp, Terence, & Ivan L. Preston (1981). Deceptive and non-deceptive consequences of evaluative advertising. Journal of Marketing, 45, 22-32.

Shiv, Baba, Julie A. Edell, & John W. Payne, (1997). Factors affecting the impact of negatively and positively framed ad messages. Journal of Consumer Research 24, 285-294.

Smith, Gerald E. (1996). Framing in advertising and the moderating impact of consumer education. Journal of Advertising Research, 36, 49-64.

Snyder, Rita (1989). Misleading characteristics of implied-superiority claims. Journal of Advertising, 4, 54-61.

Srull, Thomas K., & Robert S. Wyer, Jr., (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. Journal of Personality and Social Psychology, 38, 1660-72.

Stanton, John (1998). Comparative effectiveness of executional elements in TV advertising: 15- versus 30-second commercials. Journal of Advertising Research, 38, 6-7.

Stewart, David W, (1995). Deception, materiality, and survey research: Some lessons from Kraft. Journal of Public Policy and Marketing, 14, 15-28.

Sudman, Seymour (1995). When experts disagree: Comments on the articles by Jacoby, Szybillo & Stewart. Journal of Public Policy and Marketing, 14, 29-34.

Sulin, R. A., & D. J. Dooling (1974). Intrusion of a thematic idea in retention of prose. Journal of Experimental Psychology, 103, 255-262.

Tversky, Amos, & Daniel Kahneman (1974). Judgment under uncertainty: Heuristics and biases. Science, 185, 1124-1131.

Tversky, Amos, & Daniel Kahneman (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology, 5, 207-232.

Wegman, Jean B (1999). Confused jurisprudence: False advertising under the Lanham Act. Boston University Law Review, 79, 807.

Wilkie, William, & David M. Gardner (1974). The role of marketing research in public policy decision making. Journal of Marketing, 38, 38-47.

Wilkie, William, & Paul W. Farris (1975). Comparison advertising: Problems and potential. Journal of Marketing, 39, 7-15.

Wright, Peter (1986). "Schemer schema: Consumers' intuitive theories about marketers' influence tactics." In Richard J. Lutz (eds.), Advances in Consumer Research, 13. Provo UT: Association for Consumer Research, 1-13.

Wright, Peter, & Peter D. Rip, (1980). Product class advertising effects on first-time buyers' decision strategies. Journal of Consumer Research, 7, 176-188.

Wyckham, Robert G. (1987). Implied superiority claims. Journal of Advertising Research, 27, 54-64.

Yi, Youjae (1990). The effects of contextual priming in print advertisements. Journal of Consumer Research, 17, 215-222.

------(1993). Contextual priming effects in print advertisements: The moderating role of prior knowledge. Journal of Advertising, 22, 1-10.

------(1996). Contextual priming effects in print advertisements: The moderating role of prior knowledge. Journal of Advertising, 22, 1-10.

BIOGRAPHICAL SKETCH

Norma A. Mendoza was born in Ciudad Juarez, Chihuahua Mexico on December 13, 1967 to Sergio Mendoza and Alicia Rodriguez. Ms. Mendoza attended primary and secondary school in Ciudad Juarez. In 1986 she graduated from the Mexican equivalent of high school from the Colegio de Bachilleres Plantel Numero Cinco, where she graduated second in her class.

In 1987 she began her undergraduate studies at the University of Texas at El Paso (UTEP), where she was awarded a Presidential Scholarship, and a scholarship from the National Hispanic Scholarship fund. She double majored in Psychology and Mass Communications, with a minor in English-to-Spanish Translation and Interpretation. Ms. Mendoza was a member of the Psychology Honor Society, Psi Chi, and the Advertising Honor Society, Alpha Delta Sigma. Ms. Mendoza graduated Summa Cum Laude in August of 1992. In the fall of the same year she enrolled in the Masters program in Experimental Psychology at UTEP. She finished the coursework for that program in the summer of 1993. In the fall of the same year she began her doctorate studies in Business Administration at the University of Florida. Ms. Mendoza is currently Assistant Professor at the University of Arkansas, Fayetteville.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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