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Evidence on the Effects of Mandatory Disclaimers in Advertising With reply to commentators: Should We Put a Price on Free Speech?

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Comments
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With reply to commentators:
Should We Put a Price on Free Speech?

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Abstract

We found no evidence that consumers benefit from government-mandated disclaimers in advertising. Experiments and common experience show that admonishments to change or avoid behaviors often have effects opposite to those intended. We found 18 experimental studies that provided evidence relevant to mandatory disclaimers. Mandated messages increased confusion in all, and were ineffective or harmful in the 15 studies that examined perceptions, attitudes, or decisions. We conducted an experiment on the effects of a government-mandated disclaimer for a Florida court case. Two advertisements for dentists offering implant dentistry were shown to 317 subjects. One advertiser had implant dentistry credentials. Subjects exposed to the disclaimer more often recommended the advertiser who lacked credentials. Women and less-educated subjects were particularly prone to this error. In addition, subjects drew false and damaging inferences about the credentialed dentist.

Key words: consumer protection; corrective advertising; decision making; government regulation; judgment.

Sellers often provide disclaimers in order to inform customers about their products and to avoid lawsuits. Lawmakers and regulators nevertheless sometimes[1] impose disclaimers when they believe that sellers would otherwise fail to inform buyers. Mandatory disclaimers are government-required messages that have the form: Product-X is [not] Y.

In this paper, we scrutinize the rationale for such restrictions on speech, examine the legal history of disclaimers in the U.S., and review the prior experimental evidence on the costs and benefits of disclaimers. We then describe an experiment that we conducted for a court case about a disclaimer mandated by the government of Florida.

Economic Rationale for Restrictions on Commercial Speech

The argument for mandatory disclaimers is inconsistent with economic principles and knowledge of the roles of sellers, regulators (who sometimes stand between sellers and buyers), and buyers, as we describe below[2].

Sellers

It is in sellers' economic interests to treat customers well and, especially, to avoid misleading them. They are motivated to tell consumers about the limitations of their products in order to develop good long-term relationships with them, and to avoid the costs of dealing with disgruntled customers and with lawsuits. Unsurprisingly, then, sellers have long used disclaimers in advertising. Research on advertisements that tell the bad along with the good has found that they are persuasive when the negative features are important to consumers (Armstrong 2010, pp. 124-126).

Sellers are motivated to provide warnings with products that may be dangerous in surprising ways or extents, for example with a clear liquid that is poisonous, but not with a knife. Warnings are usually helpful. In a meta-analysis involving 12 experiments and 3 quasi-experiments involving 79 comparisons, Cox *et al.* (1997) found the warnings yielded an average gain in compliance of 15.7% compared to having no warning. However, in one-third of the comparisons, the presence of a warning had no effect, or reduced safe behavior.

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[1] Ben-Shahar and Schneider (2011) documented the "spectacular prevalence" (p. 647) of mandated disclosures.
[2] For a review of the aspects of the economics of information that are relevant to buyer and seller behavior, see Calfee and Ford (1988).

Sellers are also motivated to provide benefits to potential customers, and to tell them about those benefits, if they are free to do so. Consider the following examples:

- Breakfast cereal companies increased fiber content and introduced advertising of the benefits of fiber when restrictions on advertising health benefits were lifted. Consumers increased their consumption of high-fiber cereals (Ippolito and Mathios 1991).
- Women reduced their consumption of saturated fats within the fats and oils category by 24% in the five years after advertising restrictions were lifted in 1985, a substantially more rapid change than occurred during the preceding eight years (Ippolito and Mathios 1995).
- Cigarette companies reduced tar and nicotine levels after the Federal Trade Commission's prohibition of comparative health claims in cigarette advertisements was lifted (Craswell 1991).
- Prior to mandatory nutrition labeling, sellers were motivated to tell consumers about features of their products that were considered to have health advantages. When a new mandatory labeling regime that restricted claims that sellers could make was instituted, the share of healthier cooking oils sold decreased (Mathios 1998).

Buyers

People are accustomed to dealing with biased information in all areas of life, including when making decisions as consumers. When they are not expert in a product category, consumers tend to seek out independent information, use trusted suppliers, or buy well-known brands. If customers discover they have been misled after they have purchased a product, they are likely to avoid purchasing the product in the future, demand a refund, tell others not to buy it, post comments on the Internet, or sue.

Consumers are also aware from experience and from knowledge of human nature that government officials are fallible, sometimes biased, and sometimes duplicitous in the information they provide. In addition, people often attribute higher benefits to products they are told they cannot have.[3] As a consequence, consumers may fail to respond to government-mandated messages in the ways that the regulators intend them to.

Regulators

While sellers in free markets are motivated to look after buyers, there will likely be some sellers who deliberately mislead consumers in the hope of short-term profits. Such exceptions to normal market behavior are proposed as a key rationale for regulation. Market regulators, however, face a complex problem. They must devise, implement, and enforce regulations that increase welfare beyond that which is achieved by many individual buyers and sellers—each with different information, preferences, situations, and tradeoffs—who are engaged in many voluntary transactions. And they must do so without violating the property and other rights of citizens.

Even with the best of intentions, the available evidence suggests that it may not be possible to increase welfare by government regulation or information policies (see, e.g., Winston 2006, 2008 for reviews of the evidence).

In practice, the regulatory philosophy adopted by governments may not be one of welfare maximization and may vary, thereby increasing uncertainty for sellers and confusion for buyers (Eggers and Fischhoff 2004). Regulators may also fail to implement the wishes of elected legislators, as Emord (2000) described in relation to the Food and Drug Administration's (FDA's) "arbitrary and capricious" and "virtually unbridled discretion over commercial speech" (p. 139) restrictions on health claims about products[4].

Government officials and judges face neither the direct accountability of a seller, nor the search costs and pleasure or regret of a buyer. Instead, they face the temptation to impose their own beliefs on others, and lobbying from sellers—who would like to restrict their competitors' ability to communicate benefits—and from organizations with agendas hostile to the seller.

The following examples suggest that regulators' understanding of these complex situations may never in practice be sufficient to ensure that regulations increase welfare.

In 1980, the FDA issued a warning that pregnant women should avoid coffee due to a risk of birth defects (Burros 1982). In 1981, researchers claimed coffee was responsible for half of all pancreatic cancers. Both claims of harm from coffee consumption were later reversed; the pancreatic cancer claim was reversed by the original researchers. (Simon, 1996, summarized three studies on this issue.) Researchers later claimed that coffee has net health benefits (e.g., Larsson and Orsini 2011).

The U.K. Food Safety Act of 1990 effectively outlawed the use of wooden chopping boards and utensils in commercial kitchens in the belief that they were unhygienic. The belief was based on a study that involved the cultivation of scrapings from wooden working surfaces taken from 211 butchers' shops and 24 restaurants in London. The researchers found that 4% of the cultivated samples contained salmonellae (Gilbert and Watson 1971). Government inspectors vigorously enforced the rule causing much disruption and upset. Subsequent experimental research in 1993 designed to more realistically

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[3] For evidence on this "scarcity principle," see Armstrong 2010, pp.71-74.

[4] "In particular, Congress condemned the FDA's long delay (until 1996) in authorizing a health claim that associated folic acid with a reduction in the risk of neural tube defects (a claim endorsed by the Centers for Disease Control and Prevention in recommendations to the U.S. public in September of 1992), placing blame for preventable neural tube defect births between 1992 and 1996 squarely on the agency" (Emord 2000, p. 140).

replicate conditions in kitchens found that wooden boards have antibacterial qualities, killing 99.9% of bacteria within three minutes, whereas bacteria persisted on the replacement plastic boards. The ban was reversed that year (Booker and North 2007).

The user of a drug developed serious side effects and sued the manufacturer for damages claiming the manufacturer knew about mounting evidence of the generic drug's dangers but did not warn consumers. The manufacturer maintained that the company was bound to stick with the mandated labeling. The Supreme Court found in *Pliva, Inc. v. Mensing* (2011) that pharmaceutical manufacturers could not be held liable under state tort law for insufficiently warning consumers because changing the warning would have breached the Federal warning label mandate.

In a review of government information policies, Winston looked at three situations that had been proposed in 2007 as examples of mandatory disclosure policies that increased welfare: Financial disclosure, mortgage lending, and restaurant hygiene. He found no evidence that the mandated disclosures improved the situations for consumers, or that there were problems in the first place. He concluded, "empirical evidence does not persuasively indicate that any information policy has been effective" (p. 174) and proposed benign neglect as the appropriate response by policy makers to alleged information problems (Winston 2008.)

Economic theory, then, suggests that in free markets sellers are motivated to treat customers well in order to make a profit, buyers are motivated to exercise caution, and welfare tends to be maximized. In regulated markets, sellers are restricted in their ability to serve customers, buyers are less cautious, and regulators face temptations, lack knowledge and, in practice, lack the incentive to obtain useful scientific knowledge on the effects of proposed regulations.

Evidence on Human Behavior Relevant to Mandated Disclaimers

By mandating disclaimers, governments absolve buyers and sellers of responsibility for care and thereby encourage irresponsibility. The presence of a government mandated message suggests that an authority has carefully reviewed the product. The authority of a government mandated message or product feature might reassure consumers that that they are being looked after, causing them to become less vigilant. For example, a study involving 1,307 Washington State drivers and 6,234 observations of their annual accident frequency from 1992 through 1996 found that drivers who purchased cars with airbags and anti-lock brakes drove more aggressively to the extent that the safety benefits were much less than expected (Winston, Maheshri, and Mannering 2006). This type of response is referred to as the risk compensation hypothesis or offset hypothesis in the economics literature.

Consider, now, the effect of a sign posted by the U.S. National Park Service intended to discourage the theft of petrified wood. When the sign was in place, the theft rate was nearly three times higher than when it was not[5]. Why? The sign was a signal to park visitors who would otherwise not have stolen that stealing the petrified wood was a common behavior: In this case, the social proof that fellow visitors stole wood more than outweighed the admonishment from an authority not to steal (Cialdini 2003).

Government-mandated messages often have the purpose of changing or discouraging specific behaviors, for example to stop smoking or to avoid overconsumption of alcohol. Experimental research on persuasion has shown that it is hard to change or to prevent behavior. (This is also the common experience of people with teenage children and spouses.) Mark Twain (1885) recognized that restrictions can make a product *more* attractive to potential consumers when his character, "The Duke," wrote an advertising bill including the lines "For 3 Nights Only!" and "LADIES AND CHILDREN NOT ADMITTED," and then said in reference to the latter "There, if that line don't fetch them, I don't know Arkansaw."

Twain's insight is consistent with the evidence on resistance to persuasion summarized in Armstrong (2010). When consumers are told that they should not or may not do something that they are currently free to do, their desire to engage in the behavior increases. For example, when Miami prohibited the sale, possession, and use of laundry detergents containing phosphates, the regulation induced an artificial scarcity and resentment over the loss of freedom to choose. Consumers responded by increasing their ratings of the effectiveness of phosphates in detergent (Mazis 1975). In another example sixty-four subjects in a laboratory experiment were provided with statements that were said to be from a pornographic book. Half of the subjects were also told that the book was restricted "to those 21 and over." This substantially increased their desire to read the book (Zellinger *et al.* 1975). The phenomenon is widely observed and heavily researched, and is referred to elsewhere in the literature as reactance (Ringold 2002).

Disclaimers sometimes conflict with current behaviors or attitudes, as when consumers are informed of dangerous side effects from smoking. When people are exposed to information that challenges their beliefs or behavior, instead of changing they often react defensively by strengthening their current beliefs. Moreover, contrary to intuition but consistent with evidence from cognitive dissonance studies, when people believe that disconfirming evidence is valid they tend to reinforce their prior beliefs more fervently (see, e.g., Batson 1975).

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[5] Cialdini (2003) cites a theft rate of 7.92% when a sign with a "descriptive-norm" message was present, and of "just under 3%" (his Endnote 2) when no sign was present.

In a related phenomenon, advertisers sometimes use two-sided arguments. They tell about the advantages in order to create positive beliefs about their product and then describe problems, as in the car has extraordinary performance but it is only available in manual and changing gears requires skill. This increases the believability of their advertisements. Customers exposed to a government mandated message might think, "Sure this product has negative aspects, but now that the government has told me what they are I don't have to worry that there might be some really bad problems that I don't know about."

Weak counter arguments are effective at increasing demand when potential consumers are cognitive misers and engage in relatively little effort to process an advertisement. In four experiments involving 555 subjects, the subjects initial positive assessments of products were strengthened when they were exposed to weak negative information (Ein-Gar, Shiv, and Tormala 2012).

Often, mandated disclaimers are irrelevant to consumers and so their presence can distract consumers from product information that is important to them (Osterhouse and Brock 1970). Distracted consumers make inferior decisions.

Much research has been done on how to improve readership and the evidence has been summarized in the form of principles (Armstrong 2010). For effective communication of information, message text should be large enough so that even those with reduced vision can read it, be placed on a white background in columns and in a standard serif typeface. While presenting text all in capitals and a bold sans-serif typeface might intuitively seem likely to emphasize a message, it actually reduces readability and readership. Thus, disclaimers are commonly presented in ways that violate the principles and thereby discourage readership. For audio advertisements, disclaimers are presented using fast talkers, which sounds authoritative and saves on media costs, but is also not effective for conveying information.

The drafters of disclaimers, whether sellers or regulators, are at a disadvantage: Negative arguments and words are more difficult to understand than positive ones.

Disclaimers increase the amount of text in an advertisement. Interestingly, there is evidence that advertisements with more text are regarded as more believable—as in "long copy sells"—even when there is no time to read it (Meyer-Hentschel 1984). Thus, by its mere presence, a disclaimer might encourage greater consumption of the product (such as taking a drug) that the disclaimer is intended to discourage the use of.

In summary, attempts to change behavior using mandatory disclaimers are often ineffective and in many cases lead to effects that are opposite to those intended. When the government takes more responsibility, citizens take less. Most of us do not like being *told* what to do, and may rebel. We cannot justify devoting our time to details that will not affect our decisions and we struggle to understand disclaimers when we do give them our time. [6]

Legal Basis for Commercial Speech Restrictions

"Congress shall make no law…abridging the freedom of speech…"

Our reading of the First Amendment to the U.S. Constitution suggests that it establishes an unconditional right to free speech: The right to choose for oneself what to say, and what not to say. When, in 1731, Benjamin Franklin wrote an editorial regarding his publication of a sea captain's advertisement containing a note that offended some of his readers[7], he made no "commercial speech" distinction in his defense of free speech. The First Amendment apparently applied without restrictions until the late 1920s.

Thierer (2011) argued that it is not possible to make a clear distinction between commercial and other speech. Indeed, the Supreme Court examined the difficulty of properly drawing such a distinction in *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council* (1976). In their opinion in favor of prescription drug consumers who challenged a statute that prevented pharmacists from advertising prices, the Justices stated, "we see no satisfactory distinction between the two kinds of speech… As to the particular consumer's interest in the free flow of commercial information, that interest may be as keen, if not keener by far, than his interest in the day's most urgent political debate."

The Supreme Court has, nevertheless, created a commercial speech distinction and has ruled that such speech has lesser First Amendment protection and can therefore be regulated. Our review of the legal basis for commercial speech regulations (see Appendix) led us to conclude that government and the courts justify regulations on the assumption that they protect consumers from making bad decisions. To our knowledge, there is no evidence to support that assumption, a conclusion that was also reached in a review of mandated disclosures (Ben-Shahar and Schneider 2011).

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[6] A California court case involving a mandatory disclaimer ended abruptly on October 15, 2010, a day before one of us was scheduled to testify, when the judge granted a request for a directed verdict after the State had rested its case. The lawyers making the request pointed out to the judge that the State had not met its burden of justifying the mandatory disclaimer and that the survey experts for the State of California had misinterpreted the disclaimer in the research that they had done to support its use. The case had been going on for 7 years (*Michael Potts and AAID v. Brian Stiger, et al. 2010)*.

[7] The captain's note stated, using colloquial language, that he would not provide passage on his ship to prostitutes or ministers of the Church of England under any circumstances.

U.S. Supreme Court Justices Thomas and Ginsburg issued a dissenting opinion when the Court decided not to hear a mandatory disclaimer case (*Borgner et al. v. Florida Board of Dentistry et al.* 2002). The dissenting Justices stated, "If the disclaimer creates confusion, rather than eliminating it, the only possible constitutional justification for this speech regulation is defeated." The Justices said that the case presented "an excellent opportunity to clarify some oft-recurring issues in the First Amendment treatment of commercial speech and to provide… guidance on the subject of state-mandated disclaimers" including clarification of "the nature and the quality of the evidence a State must present to show that [a disclaimer] directly advances the governmental interest asserted."

We suggest that, in order to obtain proper evidence, it is *necessary* to conduct experiments in order to predict the effects for each and every restriction proposed. Situations change, so it would be necessary to conduct further experiments over time to determine whether a net benefit still existed.

Prior Evidence on Government-Mandated Messages

We examine the issue of mandatory messages by looking first at whether they reduce confusion and then examine whether they have beneficial outcomes. To address these issues, we relied on empirical, especially experimental evidence. For complex situations such as this, findings from non-experimental studies are unreliable (Armstrong 2010, pp. 7–10).[8] By examining experimental evidence on the effects of mandatory disclaimers, we treat the issue as a subject for scientific investigation rather than as a matter for voting or expert opinion. To the best of our knowledge, this is the first comprehensive review of the evidence on mandatory disclaimers.

Our primary criterion for including a study was that it employed an experimental or a quasi-experimental design to compare the effects of using a disclaimer versus not using one. We considered any fully disclosed study, regardless of whether or not it was published in an academic journal.

We conducted Google Scholar, ISI, and JSTOR searches for articles or legal opinions that contained the terms "experiment" and "mandatory disclaimers," "corrective advertising" and related terms. We also examined papers that cited key papers such as the review of corrective advertising by Wilkie, McNeill, and Mazis (1984). We also posted our working paper on the Internet for many months and sought comments widely.

Our most successful search efforts involved contacting legal scholars and leading researchers on the topic, and checking references from key studies.

To ensure that our summaries of the studies were accurate, we sent our paper to the authors. Their replies led to many corrections.[9] We also asked the authors whether we had overlooked evidence. Their responses helped us to find relevant experiments.

Government-Mandated Messages Cause Confusion

Consumers often fail to understand government-mandated messages. For example, in an experiment on corrective advertising, 83 subjects heard one of four versions of a Listerine mouthwash advertisement. Two of the four versions of the advertisement included a U.S. Federal Trade Commission mandated disclaimer. Of the responses from the 36 subjects who recalled a disclaimer after prompting, 39% misperceived the disclaimer in ways that harmed their assessments of aspects of the brand that were not addressed by the disclaimer (Mazis and Adkinson 1976).

Lawyers for the Federal Trade Commission proposed two sets of three corrective advertising messages for the pain relief drugs Excedrin and Bufferin. To test understanding of the messages, 451 subjects were given questionnaires for at least two of the proposed statements. The proposed statements were each followed by ten choices: One or two correct interpretations of the proposed statement, six or seven misinterpretations of the proposed statement, a "none of the above" response, and a "don't know" response. Only 24% of choices made by the subjects were correct interpretations of a proposed statement (Jacoby, Nelson, and Hoyer 1982, p. 63). One reason for the result is that disclaimers typically use negative words, and statements with negative words are difficult to understand (Armstrong 2010, p. 185–6).

Berlex Laboratories, Inc. (part of Schering-Plough Corporation) had been ordered to provide a disclaimer stating that it had no relationship with another company, Schering AG. The disclaimer said that, "Schering AG, West Germany, is not connected with Schering-Plough Corporation or Schering Corporation, Kenilworth, New Jersey." An advertisement with the disclaimer was compared to one with no disclaimer, as well as to one that had a "claimer" saying the companies *were* related. The 600 physician and pharmacist subjects were given as much time as they wanted, and they responded to questions immediately after they had reviewed the advertisements. The disclaimer reduced the incorrect responses from 58% to 46%. However, and surprisingly, the percentage of people who thought the companies were related was *lower* for the claimer than the disclaimer (Jacoby and Szybillo 1994).

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[8] This problem is not unique to advertising. It has been found in other fields, such as epidemiology, where researchers and officials are often misled by analyses of non-experimental data (Kabat 2008).

[9] Wright and Armstrong (2008) found that academic papers often improperly summarize findings from published research, partly because the authors had failed to read the papers they cited.

Government-Mandated Messages Have Unintended Effects on Beliefs and Behavior

FTC policy requires that remedies should correct consumers' misperceptions, but not harm their evaluations of firms. This does not appear to be the case in practice, however, as the following two examples show. When 58 subjects viewed a corrective advertisement about one of a firm's products, they reduced their ratings of unrelated products made by that firm (Johar 1996). Similarly, in a series of five experiments, a total of 961 subjects exposed to an advertisement that included a correction were less persuaded by subsequent advertising for a different product by the same firm and by an unrelated firm selling a similar product (Darke, Ashworth, and Ritchie 2008).

In a lab experiment 64 subjects read "original" and "acceptable" advertisements for Firestone tires, Listerine mouthwash, Freihofer's bread, and Crown petroleum. The original advertisements were ones that had been judged to be deceptive in Federal Trade Commission (FTC) proceedings. The acceptable advertisements were ones that had been modified from the original using FTC guidelines by either eliminating or qualifying offending content. Despite the drafters' intentions, the "acceptable" alternative advertisements had similar effects on subjects' beliefs as the original advertisements. The lack of effect is not surprising in the light of the fact that none of the product attributes of concern to the FTC were considered relevant to purchase decisions by 30 raters (Glassman and Pieper 1980).

How should patients react if they are informed that their doctor has a conflict of interest in recommending a treatment? In two experiments involving 1,704 subjects in the role of patient, the "patients" who were exposed to a required disclosure were less inclined to trust their doctor, to accept the recommended treatment, and to see the doctor in future, but they worried that the doctor would believe they thought he was biased if they turned down his recommendation (Sah, Loewenstein, and Cain 2011).

In a field experiment, approximately 200 male high school students who were exposed to warning signs stating "DANGER, Shallow Water, You Can Be Paralyzed, NO DIVING," were found to be more likely to dive into the shallow end of the pool than were the similar number of students who were not exposed to the sign (DeTurck and Goldhaber 1991).

In a laboratory experiment, 155 subjects exposed to an advertisement (picture of a bottle or can of alcoholic beverage with label) with the U.S. Surgeon General's warning displayed underneath, rated benefits as greater and risks as lower than subjects who were given the advertisement without the warning. In addition, male subjects exposed to the warning reported higher drinking intentions than those who were not (Snyder and Blood 1992, with a successful replication and extension by Blood and Snyder 1993).

In another laboratory experiment, brief descriptions of 12 made-for-television films were provided to 360 subjects, Subjects exposed to warnings that a film contained violent content more often chose a violent film than did subjects who were not exposed to warnings (Bushman and Stack 1996).

In a test of the effect of a warning from the Surgeon General about the relationship between fat consumption and heart disease, subjects were given a choice between full-, reduced-, and no-fat cream cheese. The 120 subjects who were exposed to labels that included information on fat content and the warning were more likely to want to taste the full-fat cheese than the other cheeses. The pattern was similar for the 120 subjects who were not exposed to the information and warning, but 120 subjects who were exposed only to the information on fat content were more likely to want to taste the lower fat, allegedly healthier, cheeses. When asked to choose one of the cheeses to taste, the subjects were no more likely to taste the lower fat cheeses when they were exposed to the Surgeon General warnings than when they were exposed only to the information (Bushman 1998).

Three laboratory experiments involving the consumption of regular or low-fat M&Ms found that when foods were labeled as low fat, consumers, especially overweight consumers, ate up to 50% more (Wansink and Chandon 2006). One possible explanation is that they felt less responsible for their own health.

An experiment on perceptions about a fictitious new energy supplement among 78 current dietary supplement users tested the effects of a warning ("Caution: Taking more than the recommended serving may result in side effects such as high blood pressure, heart attack, or stroke") and a disclaimer ("This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease"). Subjects exposed to the warning saw the product as less safe but more effective than did those who where not exposed to the warning. Subjects exposed to the mandatory disclaimer did not perceive the product any differently from those who were not exposed to the disclaimer. A second study, involving a diet supplement and 199 subjects, led to the same finding: the warning was effective in changing perceptions in the intended direction, but the mandated disclaimer was not. Indeed, among subjects who were dietary supplement users, exposure to the disclaimer *improved* perceptions of the product (Mason, Scammon and Fang 2007).

To test the effect of a mandatory disclaimer, 1,471 randomly selected U.S. residents were shown football jerseys during an interview in their homes. The respondents were shown five jerseys either with or without a disclaimer, and were later shown a National Football League authorized jersey for comparison. The disclaimer read, "Not authorized or sponsored by the N.F.L.". The disclaimer had no meaningful effect on confusion, quality perceptions, or purchase preferences (Jacoby and Raskopf 1986). The authors suggested that this was consistent with behavioral research on information processing and the use of negative words.

In two experiments, a total of 146 subjects were briefly shown claims about health and medical matters on a computer screen. Claims described as false were later incorrectly remembered as true. Repetition of the disclaimer inflated

this false conclusion after three days. Older adults were more prone to this "illusion of truth" memory problem (Skurnik *et al*. 2005).

There is evidence that an extract of "saw palmetto" berries provides relief of problems caused by noncancerous prostate enlargement common among older men. From questioning a convenience sample of older men, Eggers and Fischhoff (2004) found that 40% of 15 men would make choices against their best interests when exposed to a disclaimer. This compares to only 22% of 9 men who would make poor decisions in the absence of the disclaimer.

One variation of each of a test advertisement for a mock anti-hypertensive and for a mock anti-arthritic drug were shown to 676 subjects in groups of 20—of whom about half had high blood pressure or arthritis—during a 17 ½ minute television show. The pairs of advertisements were shown at 1 and 12 minutes into the program. Subjects were much less aware of and knowledgeable about the benefits of the drugs when they were exposed to commercials that included federally mandated disclosures of specific product risks than were subjects who were exposed to the commercials without the mandated disclosures (Morris, Mazis, and Brinberg 1989).

Experimental Evidence Prepared for Court Case on Florida's Implant Dentistry Disclaimer

We conducted an experiment on the effects of the mandatory disclaimer that the State of Florida required dentists to use if they advertised credentials from the American Academy of Implant Dentistry (AAID). We refer to it as the Florida Mandatory Disclaimer or FMD.

All dentists licensed by the Florida State Dental Board are permitted to perform implant dentistry even though few have received formal training in these procedures. The American Academy of Implant Dentistry program offers two credentials—Associate Fellow and Fellow. Each requires substantial skill-training and experience, as is described on the AAID website[10].

Treatment, Subjects, and Administration

Our experiment was designed to measure the extent to which customers comprehend the disclaimers regarding AAID credentials and how these disclaimers affect their decisions. Given the large expenditure and the risk involved in implant dentistry, choosing a dentist to perform implant dentistry is a decision that will typically involve serious deliberation. Thus, consumers and purchasing agents can be expected to attend closely to advertisements and seek further information.

We pre-tested the materials with seven people. Minor modifications to the wording of some questions were made as a result of this pre-testing.

We commissioned Gallup and Robinson to administer the experiment. Neither Gallup and Robinson, nor CRG Global, the fieldwork firm employed by them, was aware of the purpose of the study or the identity of the study's sponsor.

During November 2007, CRG Global interviewed a total of 317 people face-to-face in malls in Orlando, Daytona Beach, and Fort Lauderdale. Potential subjects were screened to ensure that they were over 18 years old and were able to read the English language materials. The interviewers approached 1,053 people in total, 599 declined to participate and 137 did not meet the screening criteria[11]. CRG Global reported that there were no problems with the interviewing.

In order to simulate a high-involvement situation in a realistic way, the interviewers asked subjects to imagine they had a friend in need of implant dentistry. CRG Global conducted the interviews in locations that provided privacy so that subjects would not be distracted or feel rushed.

The subjects were presented with two mock *Yellow Pages* advertisements, each on its own card. Each advertisement was for a single dentist ("Dr. Alan Reed" or "Dr. Barry Smith") and both were headed "IMPLANT DENTISTRY." Both ads described the advertiser as a "General dentist" and carried the statement, "Implant dentistry is a

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[10] http://aaid.com/credentialing/index.html

[11] There is sometimes confusion in court cases about the need for randomization in the experimental design, and the issue was raised in this case. While it is important to ensure that subjects are from the relevant population, the key issue is that the assignment to the experimental treatments be based on a probability design. On the chance that the effect of the disclaimer might have depended on local factors, we conducted the experiments in the area covered by the disclaimer, Florida.

For well over a century, in the social and medical sciences as well as in advertising, convenience samples have been standard practice in experiments. When a tangible item (such as an advertisement) must be shown to a respondent, this has required face-to-face interviews. Jacoby and Handlin (1991) found that marketing researchers used mall interviews on 95% of their face-to-face studies (the others being door-to-door at 3% and other central locations at 2%). None of the studies used probability designs to select the subject pool. Jacoby and Handlin also analyzed papers in academic journals that described "primary empirical research and used samples of people either individually or in groups." Based on a sample of 446 papers from 34 academic journals, they found that 97% of the papers used convenience sampling to select the subject pool.

The issue of the random selection of subjects arose also in the previously mentioned Berlex Case, where a New Jersey company was required to provide a disclaimer that they were not affiliated with a West German company with a similar sounding name. The defendants in that case insisted on conducting a replication study using randomly selected subjects. The findings were nearly identical to those from the study that used a convenience sample of subjects.

technique by which artificial replacement teeth are fastened to metal posts surgically implanted in a patient's jaw bones." Other than his name, that is the only information included in Dr Smith's advertisement, and his advertisement was the same for all treatments.

Dr. Reed's advertisement, on the other hand, described him as a Fellow of the AAID and a Diplomate of the ABOI/ID (American Board of Oral Implantology, Implant Dentistry). The information on Dr Reed's credentials was followed by (1) no disclaimer, (2) the Florida mandatory disclaimer, or (3) a modified disclaimer. The "no disclaimer" variation would be illegal under Florida law. Therefore, we wrote the "modified disclaimer" variation with the objective of causing the smallest harm to dentists who advertise AAID credentials while meeting the expressed aims of the Florida legislature in requiring a disclaimer.

One expects an advertisement to present the seller's strongest arguments. In the case of dentists advertising implant dentistry services, this would include the attainment of credentials in implant dentistry. Dr. Smith's advertisement listed no qualification other than a DDS. Dr. Smith was therefore the less qualified of the two dentists. Because Dr. Smith did not have formal implant dentistry qualifications, he was not obliged to include a disclaimer in his advertisement. The four advertisements are shown in Figure 1.

Figure 1: Advertisements used in the experiment
(The disclaimers are shown below the lines)

IMPLANT DENTISTRY

Dr Alan Reed DDS
General Dentist
Fellow, American Academy of Implant Dentistry
Diplomate, American Board of Oral Implantology/Implant Dentistry

Implant dentistry is a technique by which artificial replacement teeth are fastened to metal posts surgically implanted in a patient's jawbones.

IMPLANT DENTISTRY

Dr Alan Reed DDS
General Dentist
Fellow, American Academy of Implant Dentistry
Diplomate, American Board of Oral Implantology/Implant Dentistry

Implant dentistry is a technique by which artificial replacement teeth are fastened to metal posts surgically implanted in a patient's jaw bones.

Note: Implant dentistry is not recognized as a specialty area by the American Dental Association or the Florida Board of Dentistry. The AAID is not recognized as a bona fide specialty accrediting organization by the American Dental Association or the Florida Board of Dentistry.

IMPLANT DENTISTRY

Dr Alan Reed DDS
General Dentist
Fellow, American Academy of Implant Dentistry
Diplomate, American Board of Oral Implantology/Implant Dentistry

Implant dentistry is a technique by which artificial replacement teeth are fastened to metal posts surgically implanted in a patient's jawbones.

Note: The American Academy of Implant Dentistry (AAID) provides education, training and testing in implant dentistry. The AAID is the oldest U.S. organization offering credentials in the field. It is independent of the American Dental Association, which does not provide training or certification in implant dentistry.

IMPLANT DENTISTRY

Dr Barry Smith DDS
General Dentist

Implant dentistry is a technique by which artificial replacement teeth are fastened to metal posts surgically implanted in a patient's jawbones.

After the subjects were shown the advertisements, they were asked which dentist (Reed or Smith) they would recommend to their friend.

In roughly half of the interviews, the interviewer collected the advertisements before the subjects were questioned about their understanding of the ads. The numbers of subjects for each treatment are shown in Table 1.

Table 1: Number of subjects by treatment

Ads collected before questions?	Disclaimer used			
	None	FMD	Modified	Total
Yes	55	49	51	155
No	57	51	54	162
Totals	112	100	105	317

Subjects were next asked which of the two dentists they thought had the better implant dentistry qualifications. This was an alternative way of asking which of the two dentists would be the best one to perform implant dentistry on their friend. Finally, subjects were asked demographic questions.

Effects of the Florida Mandatory Disclaimer on Consumers' Decisions

When the advertisement for the AAID-credentialed dentist did not include a disclaimer, 13% of subjects said that they would recommend the other dentist who had no apparent qualifications for implant dentistry. When the advertisement for the AAID-credentialed dentist included the Florida mandatory disclaimer (FMD), 21% said that they would recommend the dentist without implant dentistry credentials. Thus, the FMD led to 1.6 times as many inferior decisions (Table 2).

Table 2: Effects of Florida's Mandated Disclaimer (FMD) on the percentage of subjects who recommended the less-qualified dentist (n = 317)

Subject characteristics	No Disclaimer %	FMD %	Inferior decisions increased by x times
All subjects	13	21	1.6
Education			
No college degree	12	25	2.1
College degree	13	16	1.2
Sex			
Female	13	28	2.2
Male	14	15	1.1

Among those who *did not* see a disclaimer, 12% of subjects without and 13% of those with a college degree would recommend the less-qualified dentist. Among those who *did* see the FMD, 25% of the less-educated subjects would recommend the less-qualified dentist, in contrast to 16% of the better educated said they would do so. In other words, the disclaimer was especially harmful to those with less education.

Prior research shows that for high-involvement products, advertisements should contain only material that is relevant to consumers' decisions (Armstrong 2010). Given that the disclaimer provides information on organizational arrangements among the AAID, American Dental Association, and Florida Board of Dentistry only, it is hard to see why it would be relevant to potential customers or to anyone advising them. This is consistent with the observation of Justices Thomas and Ginsburg in their dissent on an earlier AAID case that "the mandated disclaimer is likely to foster *more* confusion" (*Borgner et al. v. Florida Board of Dentistry et al.* 2002).

Effects of Involvement

We used two additional ways to encourage subjects to process the advertisements carefully, as they would do in a high-involvement situation.

Long-Exposure: Subjects Who Retained The Advertisements

Half of the subjects were allowed to retain copies of the advertisements while they answered our questions. Ironically, those who retained the advertisement that included the FMD were much more likely to be confused about the AAID's role and standing. Substantially larger proportions of those who retained the advertisement agreed with three false statements regarding the AAID's credibility (Table 3). In other words, the longer subjects were exposed to the advertisements containing

the FMD, the greater their level of confusion. Note that the AAID is a *bona fide* credentialing organization that confers credentials only after extensive training and experience. The defendants in the court case did not challenge this.

Table 3: Effect of retaining the advertisement including the Florida Mandatory Disclaimer on perceptions about AAID credibility

	Agreed with incorrect statement	
False Statements	**Returned**	**Retained**
	%	**%**
Not a *bona fide* credentialing organization	39	57
Some accredited members not properly trained	20	43
Special training not necessary for good implant dentistry	18	26

Retesting After Subjects Reflected On Their Understanding

To test whether additional time and examination would reduce confusion, we asked subjects a second time to choose between the dentists after they had answered the questions dealing with their understanding of the advertisements. This time we asked them which dentist they thought was better qualified to do implant dentistry.

Among subjects who were shown the FMD, 19% recommended the less qualified dentist, compared to 12% of those not shown the disclaimer. These responses correspond closely to the earlier results on recommendations of 21% and 13% respectively.

Among subjects who received advertisements with the FMD, 16% of those who returned the advertisements before answering our questions to assess understanding thought the dentist with no apparent qualifications specific to implant dentistry was the better qualified, compared with 22% of those who retained the advertisements. In other words, time for reflection led to more confusion.

Effects of a Modified Disclaimer on Consumers' Decisions and Confusion

We examined the extent that protection for consumers might be provided by a modified disclaimer. We tested one possibility (shown in Figure 2) that we expected would lead to less confusion than the Florida mandated disclaimer. It suffered from the inclusion of a negative word, a problem that we were not able to overcome while adhering to the State's aims for the disclaimer.

Figure 2: Modified AAID Disclaimer

> The American Academy of Implant Dentistry (AAID) provides education, training and testing in implant dentistry. The AAID is the oldest U.S. organization offering credentials in the field. It is independent of the American Dental Association, which does not provide training or certification in implant dentistry.

Of those subjects given an advertisement including the modified disclaimer, 15% recommended the dentist with no qualifications. While this is less than the 21% for those who had received the FMD, it is higher than the 13% for those given no disclaimer. Thus, although the modified disclaimer was less harmful to subjects' decision making than the FMD, it did not eliminate the harm.

Effects of Mandatory Disclaimer on Sellers

Confusion about aspects of the AAID's credibility was higher among subjects who had received the FMD than it was among those who had not. Indeed, 48% of those who were exposed to the FMD agreed or agreed strongly that the AAID was "not a *bona fide* credentialing organization" whereas 36% of those who were not exposed to the FMD believed this.

Because the disclaimer unjustly damages the reputation of the AAID, the FMD also harms individual providers who have AAID credentials—which, in the long run, could cause further harm to consumers by reducing the motivation of dentists to improve their skills in implant dentistry.

Discussion on the Role of Evidence to Support Mandatory Disclaimers

Mandated disclaimers are not free. The costs are passed on to consumers as higher prices and higher taxes. Higher costs lead people, especially the poor, to consider inferior substitutes, such as balancing on chairs rather than buying a ladder. It is

reasonable to ask for evidence of benefits that are greater than these and other costs to support the imposition of a mandatory disclaimer. We have been unable to find a single instance of a mandatory disclaimer for which the criterion of experimental evidence of net benefit was met. We therefore expect that applying that criterion to each proposed restriction of commercial speech would, if applied properly, eliminate mandatory disclaimers.

In practice, however, the "commercial speech" distinction is a tenuous one and the process of putting up evidence and fighting for it in the courts is expensive. When regulators, legislators, interest groups, and business opponents wish to restrict speech, they will be motivated to identify an economic interest on the part of a speaker. That would not be hard to do. Those with an interest in restricting the speech could then call for regulation by constructing an argument that net welfare will increase if the speech is restricted.

Shortly before we submitted our final version of this paper, we learned of a review of the evidence on the related policy of mandated *disclosures* (Ben-Shahar and Schneider 2011). Their review covered not only advertising but also other areas including Miranda rights, informed consent, and Institutional Review Boards. The issue of mandatory disclosures might seem less contentious than mandatory disclaimers as it involves simply providing more information to those who might find it useful. Indeed, mandated disclosures are widespread and enormous sums are spent with the intention of making them useful. In their wide-ranging review of the evidence presented in court cases and in the social science literature, however, the authors found that mandated disclosures seldom provided clear explanations. When consumers do read them—typically they do not—they become confused. In those rare situations when they are not confused, they are unlikely to remember the information, or, if they do, they rarely use it properly. Ben-Shahar and Schneider were unable to find a single mandatory disclosure for which the benefits were shown to outweigh the costs.

When disclosures are shown not to work, regulators try to solve the problem with different (typically longer) disclosures. These efforts to improve disclosures lead to greater harm. Ben-Shahar and Schneider explained that the mandated disclosures fail because they are based on false assumptions about how people make decisions, and they require a chain of unlikely achievements by lawmakers, disclosers, and disclosees[12]. As in our study, the efforts of lawmakers and regulators to improve upon the functioning of markets were shown to be "fatal conceits"[13].

Experimental evidence is consistent with economic theory and prior research on consumer behavior in finding that mandated disclaimers disrupt the functioning of markets. Disclaimers confuse customers, and cause them to be less vigilant when they make decisions. Disclaimers restrict the ability of sellers to provide customers with important information about their products and lead them to follow rules set by officials with inferior knowledge of the market. Moreover, the existence of mandatory disclaimers as a policy option encourages lobbying of politicians and regulators by competitors and by interest groups.

Conclusions

Disclaimers can provide important information to consumers and they have been widely used since the beginning of advertising. Our concern in this paper has been only with the special case of *mandated* disclaimers.

We found that the laws that restrict speech identified as "commercial" with mandates rest on unrealistic economic assumptions about the motivations and behaviors of consumers, business managers, and government officials. Moreover, we found experimental evidence from behavioral research on persuasion that mandatory disclaimers are unlikely to influence consumers in the ways that drafters intend and are likely to influence them in unexpected and detrimental ways.

We then examined evidence from 18 experimental studies related specifically to mandatory disclaimers. In all cases the mandatory disclaimers caused confusion among consumers. Mandated messages increased confusion in all, and were ineffective or harmful in the 15 studies that examined perceptions, attitudes, or decisions.

To date, then, mandatory disclaimers have been imposed at the discretion of officials in contravention of economic understanding, in violation of research on persuasion, and in the face of direct experimental evidence showing that they are detrimental.

Mandatory disclaimers fail to meet the criterion suggested by Justices Thomas and Ginsburg on "the nature and the quality of the evidence a State must present to show that [a disclaimer] directly advances the governmental interest asserted" (*Borgner et al. v. Florida Board of Dentistry et al.* 2002). We suggest an extension to the Thomas and Ginsburg criterion: A mandatory disclaimer should be considered only if experiments demonstrate that it will give rise to net long-term benefits without causing serious harm to any buyers or sellers. Such a test properly applied would likely end the use of mandatory disclaimers.

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[12] They ask readers to imagine that they were a doctor whose duty is to inform a patient of the use of a drug when it has 26 side effects such as heartburn, stomach ulcers, hepatitis, inflammation of skin, itching, life-threatening allergic reactions, and so on. Which side effect would you describe? All? The most likely? The most serious? Would your answer differ if you had seen evidence that this drug kills between 3,000 and 10,000 people per year in the US? Would your answer change if you knew that the drug is aspirin?

[13] F. A. Hayek wrote in *The Fatal Conceit*, "The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design."

We used this extended criterion to re-examine the Florida mandatory disclaimer that was the subject of *Borgner v. Florida Board of Dentistry*. Our experiment showed that the disclaimer confused potential customers, led them to make poor decisions, and unfairly harmed sellers. The judge found our evidence compelling (*Ducoin v. Viamonte Ros* 2009).

By considering the costs and benefits, however, free speech becomes in practice conditional on the opinions of courts and regulators as to whether there is sufficient evidence that a particular speech restriction would increase welfare. They may even decide that the increase of one group's welfare was more valuable than the consequent loss in another's. Free speech then ceases to be a right, as commonly understood and as intended by the First Amendment, but becomes instead an uncertain privilege subject to the opinions of courts and government regulators.

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Appendix
Commercial Speech Restrictions in U.S. Law

The First Amendment to the U.S. Constitution states: "Congress shall make no law…abridging the freedom of speech…". The notion that speech should be subject to a government cost-benefit analysis and judicial opinion strikes us as contrary to the principle of free speech as we understand it and as Benjamin Franklin expounded it.

The States ratified the U.S. Bill of Rights, which includes the First Amendment to the Constitution, on 15 December 1791. Two-hundred-and-twenty years later, in *R.J. Reynolds v. FDA* (2012), the judge upheld what has become a more limited right to speech by granting an injunction against the FDA. Judge Leon granted the injunction, and later granted the plaintiffs' Motion for Summary Judgment, on the basis that the FDA rule requiring tobacco companies to display disturbing color graphic images on the top 50% of the front and back of cigarette packets was, in "substantial likelihood," unconstitutionally compelled speech. He found the images did not constitute "purely factual and uncontroversial information" narrowly tailored for the purpose of informing consumers, but amounted to government advocacy.

The government advocacy in this tobacco case involved tampering with images in order to upset viewers. Presumably it would be illegal for a firm to mislead consumers in this way. Judge Leon noted that the government did not provide relevant scientific evidence. In November 2011, we sent an email request to the FDA asking for its evidence that the new packaging regulations would result in a net social benefit. A copy of our request can be found online[14]. Our requests were met with courteous replies, but scant substantive evidence. We were referred to the Federal Register pages 36628 to 36777 for evidence[15] and were told that no experimental evidence was available. A key statistic, the percentage reduction in smoking was based on a single comparison between Canada, in which a similar graphic warnings policy had been enacted in 2001, and the U.S., in which the policy had not been enacted.

Early Commercial Speech Restrictions

Compelled speech in the form of mandatory warnings was introduced in the U.S. in 1927 with the Federal Caustic Poisons Act (FCPA). Egilman and Bohme (2006) reported that prior to the Act, poisons were sold in bottles of unusual shapes, colors, and textures (they showed an image of a dark-blue skull-shaped bottle) in order to warn consumers, including the blind and illiterate, that the contents were dangerous.

After the passage of the FCPA in the U.S., manufacturers shifted to plain bottles in order to display the mandated warning label. The authors observed that the pre-FCPA bottles were more effective at protecting at least some people. The FCPA created the agency which three years later became known, as it is currently, as the Food and Drug Administration.

Exceptions that limited freedom of speech identified as commercial began to be made following *Valentine v. Chrestensen* (1942). The U.S. Supreme Court justices ruled that a New York City ordinance that was used to prohibit the owner of a submarine from distributing advertising material (handbills) on the streets was not a violation of the First Amendment right to free speech—even when the material included a statement of political protest and no prices. Prior to this opinion, the court did not make a commercial speech distinction (Boedecker, Morgan and Wright 1995).

Having created a commercial speech exception to free speech rights, the Supreme Court did not specifically uphold the right to disseminate "truthful and nonmisleading commercial messages about lawful products and services" until 1975. Subsequent judgments provided further clarification of this limited right (Boedecker, Morgan and Wright 1995; *44 Liquormart Inc. v. Rhode Island* 1996, 496). In contrast, citizens, consumer groups, and lobby groups—which often speak against commercial interests in order to further their own—have First Amendment protection to speak about products; protection that is denied to firms, even to the extent that Nike was denied the right to speak in its own defense against media coverage of lobbyists (Shugan 2006).

The Central Hudson Test of Commercial Speech Restriction, and Subsequent Developments

Recall that in *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council* (1976), the Supreme Court Justices stated, "we see no satisfactory distinction between the two kinds of speech…As to the particular consumer's interest in the free flow of commercial information, that interest may be as keen, if not keener by far, than his interest in the day's most urgent political debate."

Despite the Justices' own concerns about the practical difficulties of holding to the concept of a commercial speech distinction, the Supreme Court did not abandon the concept. Instead, from 1980 the Court provided guidelines for making the distinction in ways that further reduced freedom by allowing considerable discretion to governments and courts to judge the importance of regulating the speech in question (Boedecker, Morgan and Wright 1995).

In *Central Hudson v. Public Service Commission of New York* (1980) the Supreme Court set out the requirements that must be met in order to warrant government regulation of commercial speech. Namely, there must be a substantial government interest that might be served by a restriction on speech, the regulation of the speech must directly advance that interest, and the restriction of speech must be no greater than is necessary to serve that interest. While concurring with the

[14] http://kestencgreen.com/letter-to-fda.pdf
[15] Available online at http://www.gpo.gov/fdsys/pkg/FR-2011-06-22/pdf/2011-15337.pdf

judgment, Justices Brennan, Blackmun, and Stevens variously argued that the Court's definition of commercial speech encompassed speech "entitled to the maximum protection afforded by the First Amendment" (Stevens) and that the speech test was too permissive of government regulation.

In relation to mandatory disclaimers and warnings, the U.S. Supreme Court stated, "We do not suggest that disclosure requirements do not implicate the advertiser's First Amendment rights at all. We recognize that unjustified or unduly burdensome disclosure requirements might offend the First Amendment by chilling protected commercial speech. But we hold that an advertiser's rights are adequately protected as long as disclosure requirements are reasonably related to the State's interest in preventing deception of consumers" (*Zauderer v. Supreme Court of Ohio* 1985). Justices Brennan and Marshall elaborated that the State must "demonstrate that the advertising either 'is inherently likely to deceive' or must muster record evidence showing that 'a particular form or method of advertising has in fact been deceptive'… and it must similarly demonstrate that the regulations directly and proportionately remedy the deception." The Justices also noted that compelling the publication of information that is large in quantity relative to the advertiser's information "would chill the publication of protected commercial speech and would be entirely out of proportion to the State's legitimate interest in preventing potential deception."

In *SUNY v. Fox* (1989), the Supreme Court weakened the *Central Hudson* condition that regulation of speech should be "not too extensive", requiring instead only that regulation should be "reasonable" and noted that it would not hold government regulation of commercial speech to the "least restrictive means," as the dissenting Justices argued was required under *Central Hudson*.

The Florida Department of Business and Professional Regulation reprimanded a lawyer for "false, misleading, and deceptive" advertising for advertising her Certified Public Accountant (CPA) and Certified Financial Planner (CFP) credentials (*Ibanez v. Florida* 1994). In this case, which parallels the *Ducoin v. Viamonte Ros* (2009) case for which we conducted our research, the CFP credential was conferred by a private organization and the Department required Ibanez to display a form of the Florida Mandatory Disclaimer. The Supreme Court held that the Board's censure of Ibanez was "incompatible with First Amendment restraints on official action." In particular, the Court rejected the requirement for a disclaimer on the grounds that hypothesized possible deception was not sufficient grounds for rebutting "the constitutional presumption favoring disclosure over concealment." Further, Justice Ginsburg observed that "the detail required in the disclaimer currently described by the Board effectively rules out notation of the 'specialist' designation on a business card or letterhead, or in a yellow pages listing."

Over the years since the review by Boedecker, Morgan and Wright (1995), more than a dozen U.S. Supreme Court decisions have cited the key *Central Hudson* judgment, and seven of these were germane to this paper.

In *Rubin v. Coors* (1995), Coors Brewing sought to include alcohol content on bottle labels. The government sought to restrict Coors speech in order to keep consumers ignorant of the alcohol content of beer, evidently for the sake of their own protection. The Justices found the Federal Alcohol and Tobacco Administration Act clause that prohibits that practice violated the First Amendment right to free speech, because it failed the *Central Hudson* test. Justice Stevens concurred that the labeling ban was unconstitutional but, in a dissenting opinion, claimed that the *Central Hudson* test was not relevant when the legislation was a plain attempt to suppress truthful information that was of interest to consumers.[16]

The Supreme Court found that a Florida Bar rule that prohibited injury lawyers from sending direct mail solicitation to victims or their relatives before 30 days after the accident or disaster passed the *Central Hudson* test for the restriction of commercial speech and did not therefore violate the First Amendment (*Florida Bar v. Went For It* 1995). The Florida Bar rule was based on surveys of public opinion, complaints, newspaper editorials, concerns that victims should not be exposed to invasion of privacy and undue influence, and concerns that the reputation of the legal profession was harmed by the practice of soliciting recent victims. In the opinion of the Court, delivered by Justice O'Connor, the nature of evidence that is needed to satisfy the *Central Hudson* test is at the discretion of the Court, and may be none. The Court was concerned not so much with whether harm was inflicted on the recipients of the advertising material, who could easily make the short trip from mailbox to trashcan, but with the potential damage to the reputation of the legal profession.

Justice Kennedy's dissent, with Justices Steven, Souter, and Ginsburg joining, was scathing of the majority opinion upholding the prohibition. He wrote, "This scheme makes little sense. As is often true when the law makes little sense, it is not first principles but their interpretation and application that have gone awry." He concluded:

> "Today's opinion is a serious departure… from the principles that govern the transmission of commercial speech. The Court's opinion reflects a new-found and illegitimate confidence that it… knows what is best… Self-assurance has always been the hallmark of a censor. That is why under the First Amendment the public, not the State, has the right and the power to decide what ideas and information are deserving of their adherence."

In *44 Liquormart Inc. v. Rhode Island* (1996), the Court followed *Rubin v. Coors* and found that the government of Rhode Island had violated the First Amendment protection of free speech by banning the advertising of alcoholic beverage prices. All Justices concurred but differed in their reasoning. Delivering the Court's opinion, Justice Stevens drew a distinction between State regulation of commercial messages for the purpose of protecting or informing consumers and the

[16] The same legislation required *disclosure* of alcohol content on wine and spirit labels.

complete prohibition on disseminating truthful and non-misleading commercial messages for other reasons. He argued that the latter situation provided "far less reason to depart from the rigorous review that the First Amendment generally demands" (p. 501). Justice Stevens warned that commercial speech bans typically rested solely on the paternalistic premise that people will respond "irrationally" to the truth and need to be kept in the dark for their own good. He further warned that banning speech would conceal the government policy from the public and hence from debate. Justice Stevens rejected the State's claim that commercial speech about "vice" products were not entitled to First Amendment protection, pointing out that such an exception would allow state legislatures to impose censorship on lawful activities by characterizing them as vices.

Justice Thomas argued that the government has no legitimate interest in keeping purchasers ignorant in order to manipulate their choices, and therefore the *Central Hudson* test did not apply. Moreover, Justice Thomas professed skepticism over making a commercial speech distinction: "I do not see a philosophical or historical basis for asserting that 'commercial' speech is of 'lower value' than 'noncommercial' speech" (p. 522). He pointed out that application of the *Central Hudson* test, as interpreted by Justices Stevens and O'Connor in this case, would stop the government from restricting commercial advertising except where it outlaws or otherwise restricts the transactions themselves, because these measures would more effectively achieve the government purpose.

Justice Scalia shared Justice Thomas's "discomfort with the *Central Hudson* test" as seeming to "have nothing more than policy intuition to support it" (p. 517). Justice Thomas observed that the *Central Hudson* test is difficult to apply uniformly, given that it is subject to individual judicial preferences and judges' opinions as to which situations citizens cannot be trusted with information on and for which products consumption should be discouraged. He suggested a return to the holding of *Virginia Board of Pharmacy* (1976).

In *Greater New Orleans Broadcasting v. U.S.* (1999), Justice Stevens presenting the opinion of the Court acknowledged the difficulty of applying the Central Hudson test and that there were calls for its replacement by "a more straightforward and stringent test for assessing the validity of governmental restrictions on commercial speech." The Court, however, decided that it was not appropriate to tackle the broader constitutional issue when the test provided "an adequate basis for decision" for the case before it.

In presenting the Court's opinion on *Lorillard Tobacco Co. v. Reilly* (2001), Justice O'Connor suggested that the Court's established position on the Central Hudson test's requirement for empirical data to support regulation of commercial speech is not an onerous one, but can be met with "studies and anecdotes" from different situations, or even "history, consensus, and 'simple common sense.'" In respect to the cost-benefit test, the Court maintained that, "A careful calculation of the costs of a speech regulation does not mean that a State must demonstrate that there is no incursion on legitimate speech interests, but a speech regulation cannot unduly impinge on the speaker's ability to propose a commercial transaction and the adult listener's opportunity to obtain information about products."

In his partial concurrence, Justice Thomas reasserted his opposition to drawing a commercial speech distinction, as he also did in *Greater New Orleans Broadcasting v. U.S.* He restated his position that there is no historical or philosophical basis for assigning commercial speech a lower value than other speech and adding that it is doubtful "whether it is even possible to draw a coherent distinction". On the question of whether tobacco is a product that is so exceptional as to be outside any First Amendment consideration, Justice Thomas concluded his opinion with the following uncompromising statement about the intended scope of the First Amendment:

> No legislature has ever sought to restrict speech about an activity it regarded as harmless and inoffensive. Calls for limits on expression always are made when the specter of some threatened harm is looming. The identity of the harm may vary. People will be inspired by totalitarian dogmas and subvert the Republic. They will be inflamed by racial demagoguery and embrace hatred and bigotry. Or they will be enticed by cigarette advertisements and choose to smoke, risking disease. It is therefore no answer for the State to say that the makers of cigarettes are doing harm: perhaps they are. But in that respect they are no different from the purveyors of other harmful products, or the advocates of harmful ideas. When the State seeks to silence them, they are all entitled to the protection of the First Amendment.

Pharmacists who wished to advertise that they could supply drugs in compounded and other convenient forms for customer had their right to do so affirmed by the Supreme Court in *Thompson v. Western States Medical Center* (2002). Justice O'Conner, delivering the majority opinion of the Court noted, "We have previously rejected the notion that the Government has an interest in preventing the dissemination of truthful commercial information in order to prevent members of the public from making bad decisions with the information." In a dissenting opinion, Justices Breyer, Stevens, and Ginsburg maintained that the Court's opinion had given insufficient regard to the government's role as protector of consumers from untested products, citing evidence that physicians believe that advertising leads consumers to pressure them to prescribe drugs they would not otherwise prescribe. The dissenting justices argued that commercial speech should be subject to government policy objectives and to less rigorous First Amendment protection.

In *Milavetz, Gallop and Milavetz. v. United States* (2010), the Court upheld a requirement for lawyers who offer bankruptcy advise or assistance to include in their advertisements notice that their operation is a "Debt Relief Agency" that "helps people file for bankruptcy". The plaintiffs claimed that these statements would cause confusion among consumers, but did not offer evidence. The majority opinion, delivered by Justice Sotomayor, held that the likelihood that consumers would be misled if the mandated statements were absent was self-evident.

Should We Put a Price on Free Speech?

J. Scott Armstrong
Kesten C. Green

Should public policy guarantee First Amendment rights to all citizens, at all times? Some of our commentators think not. We argue there is good reason to hold to rights.

Consistent with economic theory and behavioral research, experimental findings show that mandatory disclaimers harm producers and consumers. They are also expensive to develop and to enforce.

Perry and Blumenthal (in this issue) show that similar problems exist with respect to the broader area of mandatory *disclosures*. Their findings conflict with the common assumption that "more information is better," and demonstrate that confusion occurs even when negative words can be avoided. The problem is that people are overwhelmed with information that has little relevance to their decision-making. We do not agree with their statement that experimental evidence is "necessary to examine the effects of disclosures on decision quality and to improve public policy and consumer protection." The burden of proof should be on those who would deny the right of free speech. Furthermore, sufficient experimental evidence exists, and it favors retaining free speech.

Taylor and Capella (in this issue), provide a wide-ranging and useful literature review. Then they take a similar position as Perry and Blumnethal, stating, "a wholesale moratorium on mandatory information provision appears unwarranted." They base this statement on the argument that "sound disclosure is grounded in the public's right to know and corporate ethics." They do not, however, provide any experimental evidence to support their argument or their implicit assumption that government lawmakers and enforcers will behave more ethically than people working in firms.

We encountered a similar status quo bias among some of the people who provided unpublished comments on our paper. We are not sure why we have to prove to them that it is wrong to deprive business people of First Amendment rights. And we are not sure how it would be possible to do so: they were unable to tell us what evidence would convince them. Normally it is up to the government to prove the case beyond a reasonable doubt when trying to take away a person's freedom, say by putting them in jail.

As is shown by Sherman (in this issue), courts have been lax in supporting free speech. They have assumed that government restrictions on free speech are of obvious benefit and thus need no support from evidence. There are exceptions, of course, as in Judge Leon's blocking of the FDA's attempt to force tobacco sellers to use visuals (some of which were falsified) and text to persuade people to stop smoking. In that case, the government, armed with an enormous budget, failed to provide experimental evidence to support the imposition of speech restrictions[i].

In the spirit of evidence-based policy, it would be reasonable to ask that each restriction on speech must be shown beyond a reasonable doubt to confer benefits that are greater than all the costs. Because things change, it would also be reasonable to ask that the case be made again, say every five years, with the same requirement for rigorous evidence.

While it is *reasonable* to ask for comprehensive cost-benefit analyses for government policies, we wonder whether it is *proper* to conduct cost-benefit analyses for the right to free speech. Should we consent to our governments going through each right in the Bill of Rights and decide whether the potential dangers of freedom outweigh the benefits? To do so would be to ignore the years of struggle and lives spent to obtain and retain basic freedoms. Our ancestors put great value on these freedoms. It seems naïve to think they were wrong to do so.

Since we were unable to find experimental evidence to support even one successful use of a mandatory disclaimer over the roughly 70 years and thousands of applications of this policy in the U.S., we conclude that conducting cost-benefit analyses would support the right to free speech. However, conducting comprehensive and open analyses is enormously expensive, while holding to established rights of free speech is, as they say, "free."

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[i] *R.J. Reynolds Tobacco Co et al. v. U.S. Food and Drug Administration et al.* (2012), U.S. District Court for the District of Columbia, No. 11-cv-1482. [Available from www.ana.net/getfile/16887]