

Sound Disclosures: Assessing When a Disclosure Is Worthwhile

John Kozup, Charles R. Taylor, Michael L. Capella, and
Jeremy Kees

In this article, the authors introduce the notion of a “sound disclosure” and define it from the perspective of academic, business, and legal/policy (expert) constituencies. The authors define sound disclosure as the direct linkage of a policy standard to a dedicated, rigorous consumer testing methodology that measures explicitly stated communication objectives put forth in the policy. Sound disclosure results when the policy is influenced by the disclosure testing. Consequences of a sound disclosure testing regime can include withdrawing the disclosure from the marketplace because of harmful, unintended consequences to the target population or, conversely, adding supplementary materials (e.g., educational primes) to maximize the disclosure’s effectiveness. Drawing from previous research, the authors illustrate various standards of sound disclosure efficacy.

Keywords: disclosure, disclaimer, comprehension, Nutrition Labeling and Education Act, marketing communications

Scholars in the marketing and public policy arena have tested the merits and effects of the mandated information provision (in the form of various disclosures and disclaimers) on consumer attitudes, intentions, and behaviors (e.g., Argo and Main 2004; McGuire 1980; Wogalter and Laughery 1996) for more than three decades (for a review, see Stewart and Martin 1994). This topic continues to evolve, with some calling for an outright removal of mandatory disclosures and disclaimers (Green and Armstrong 2012) from the marketplace and others calling for more rigorous information provisions with increased limits on the claims made by marketers (Bloom 1989). Our goal is not to debate the use and efficacy of disclosures; they are frequently employed by multiple constituencies and will continue to be valuable for information dissemination. Rather, our goals for this essay are (1) to define the concept of sound disclosure—that is, disclosure policies consistently linked to rigorous consumer testing—and (2) to provide evidence, support, and guidance for researchers interested in establishing a standard of empirical efficacy for sound disclosure policies going forward.

John Kozup is Director, Center for Marketing and Public Policy Research, and Associate Professor of Marketing (e-mail: john.kozup@villanova.edu), *Charles R. Taylor* is John A. Murphy Professor of Marketing (e-mail: raymond.taylor@villanova.edu), *Michael L. Capella* is Associate Professor of Marketing (e-mail: michael.l.capella@villanova.edu), and *Jeremy Kees* is Associate Professor of Marketing and The Richard Naclerio Emerging Scholar in Public Policy (e-mail: jeremy.kees@villanova.edu), Villanova School of Business, Villanova University. Josh Weiner served as guest editor for this article.

Defining Sound Disclosure

Common Objectives of Disclosures

When considering the overall effectiveness of disclosures, it is important to frame the overall views of scholars and stakeholders. As evidenced by the work of Wilkie (1985), Stewart and Martin (2004), and others, a continuum of views exists. At one end of the continuum, scholars and regulators find simple availability of information to be sufficient. At the other end, a cohort believes that information comprehension and actual use by the consumer must be the norm. Stewart and Martin contend that a middle view exists in which consumers may attend to the information but ultimately discount it because of a host of individual differences and situational constraints. We believe that this “middle ground” is where scholars have made significant contributions to disclosure research since Stewart and Martin first brought it to light nearly a decade ago.

Despite numerous academic articles across different disciplines, large-scale government-sponsored studies, and meta-analyses, it is difficult to ascertain the conditions under which disclaimers and disclosures are most beneficial. Communication standards vary from simple comprehension to behavioral change (Wilkie 1985). However, researchers have demonstrated that because of individual differences in consumer beliefs and decision-making processes, not *all* consumers will be affected in exactly the same manner.

Wide varieties of standards have been proposed for effectiveness testing of disclosures and are commonly known among scholars in the marketing field (Andrews and Maronick 1995). Whether it is the clear and conspicuous standard and the policy and communication objectives put forth by Wilkie (1985), McGuire’s (1980) Communication

Information Processing Model, or Stewart and Martin's (2004) revised disclosure objectives, the question for scholars is whether meeting a limited number of policy or communication objectives is sufficient to continue using disclosures as a preferred information remedy on a case-by-case basis. Summarizing and applying these objectives to consumer welfare, Lynch and Wood (2006) suggest that an important public policy intervention that can help consumers is providing better information to them about options they might consider. A strong case can be made that disclosures can be helpful by providing additional option-based information to consumers. For example, it could be argued that the disclosure of nutrition facts on a food package can stimulate consumers to change their behavior by influencing their beliefs, attitudes, and intentions. For the purposes of this article, we highlight several common objectives observed across the aforementioned models of disclosure effectiveness and reference more recent work that exhibits the qualified merits of what we term "sound disclosures." We hope to demonstrate the continued need for fact-based, empirical studies that promote effective disclosure policies.

Before examining the conditions under which disclosures and disclaimers may be useful, it is important to understand the difference between the two terms. Many scholars conducting research in this area often use the terms "disclaimers" and "disclosures" interchangeably. However, there are subtle differences that should be clarified. According to the *Merriam-Webster* dictionary, disclaimers are defined as "a denial or disavowal of legal claim," and the verb disclaim is synonymous with the act of disavowal (<http://www.merriam-webster.com/dictionary/disclaimer>). For example, disclaimers have traditionally been employed in advertising to correct prior misleading advertising (Tangari et al. 2010) or to qualify information contained on the package or advertisement (Stewart and Martin 2004). In contrast, disclosure, or the act of disclosing, is defined as "to expose to view" or "to make known or public" (<http://www.merriam-webster.com/dictionary/disclose>). To be clear, "disclaimer" has a negative connotation and is the active denial or rejection of information. In contrast, "disclosure" is more neutral in connotation and has to do with informing or making complete information known. Therefore, disclosures have typically been used to warn consumers (e.g., product warnings), clarify agreements such as warranties, or provide important information relevant to the purchase (e.g., nutrition facts, energy efficient ratings).

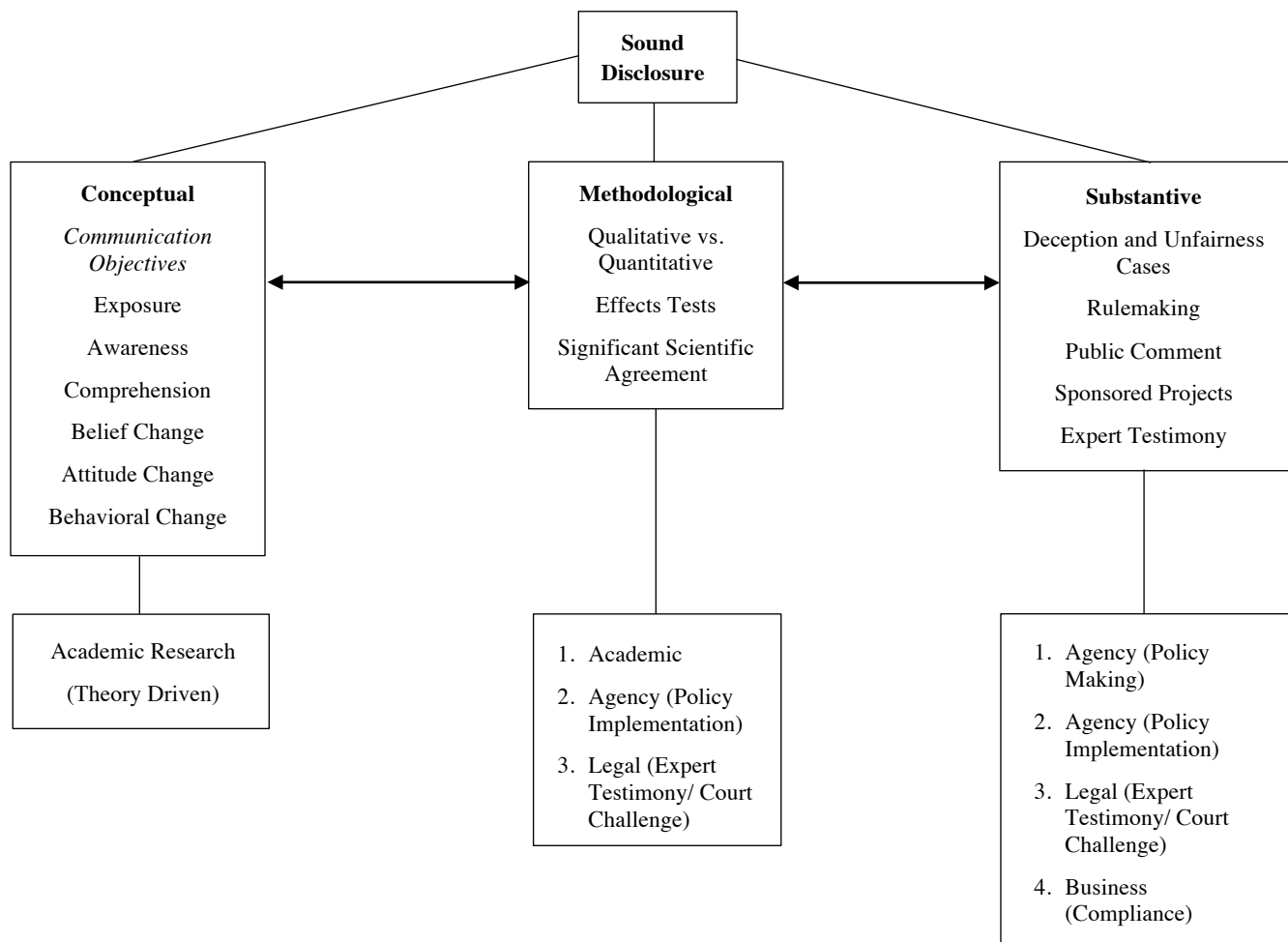
Because some disclaimers and disclosures are required by law and others are made at the discretion of the marketer (i.e., nonmandatory disclaimers and disclosures), multiple stakeholders' policies and strategies are affected by the question of efficacy. In some cases, it is apparent that disclosures (in various forms, including disclaimers and warnings) serve to effectively provide the opportunity for consumers to access useful information. In a meta-analysis of warnings (a popular form of disclosures), Cox et al. (1997) conclude that warnings can increase the incidence of consumers engaging in safe behavior. Such analyses greatly increase understanding of what constitutes sound disclosure by providing a level of certainty that can inform policy makers and regulators.

What Constitutes Sound Disclosure Research?

By discussing the merits of sound disclosure from empirical and normative perspectives and providing relevant examples, we aim to highlight the perspectives and scholarship of thought leaders in the field while proposing a potential path forward for all interested parties, including those calling for a moratorium on these information remedies. Before further defining sound disclosure and providing examples of research, we make one important point: *Sound disclosure research is mission driven*. For example, the communication and policy objectives of academics as compared with policy makers and regulatory agencies may be quite different (Wilkie 1985). These objectives become even more narrowly defined when disclosure regimes are challenged in court or tested for a manufacturer (e.g., liability protection). We define "sound disclosure" as the direct linkage of a policy standard to a dedicated, rigorous consumer testing methodology that measures explicitly stated communication objectives put forth in the policy. *Sound* disclosure results when the policy is influenced by the disclosure testing. This can include withdrawing the disclosure from the marketplace because of harmful, unintended consequences to the target population or adding other materials (e.g., educational primes) to maximize the disclosure's effectiveness. For the purposes of this essay, the term "sound disclosure" takes its origin from a multiple paradigmatic approach derived from Brinberg and McGrath's (1985) model of academic research. Figure 1 illustrates the definition of sound disclosure research within a multiparadigmatic/multiconstituency framework.

The left-hand side of Figure 1 defines sound disclosure research purely from a conceptual academic perspective, that is, research for publication in scholarly journals without direct regard to policy objectives. This is a world familiar to *Journal of Public Policy & Marketing* researchers but not represented by submissions to the journal, which traditionally have direct relevancy to the policy sphere. Research that has advanced knowledge in the field while providing a baseline for future policy testing includes work purely geared toward the advancement of theory, for example, in the area of information processing and risk (Cox, Cox, and Zimet 2006).

Moving to the right of Figure 1, sound disclosure research has its origins primarily in the methodological and substantive domains. Researchers for the Food and Drug Administration (FDA), Federal Trade Commission (FTC), and the Federal Reserve Board routinely test mandated disclosure regimes for efficacy and soundness. Although the definition of disclosure effectiveness varies with the agency (e.g., the FTC employs disclosures primarily to prevent deception and unfairness, whereas the FDA uses disclosures for comprehension and, in some instances, behavioral change), common copy-testing procedures and methodologies are used to justify the use of disclosures. For example, the FDA (2006) provided consumer guidance and conducted consumer testing on the provision of trans fat nutrition information. From an academic perspective, sound disclosure research has an extensive publication tradition, particularly driven by several key policies and industries. The following two industries provide rich examples of such research.

Figure 1. Sound Disclosure: Origins and Underpinnings

Evidence from Two Industries

What follows is a brief discussion of two industries in which regulated disclosure has been standard and well researched in the past decade: the food industry and the dietary supplements industry. These industries have been the focus of research on the effectiveness of the mandated information provisions of the Nutrition Labeling and Education Act (NLEA; 21 U.S.C. 343) and the Dietary Supplement Health and Education Act (DSHEA; Pub. L. 103-417) (e.g., Burton, Garretson, and Velliquette 1999; France and Bone 2005; Mason and Scammon 2000). Both acts mandate some level of information provision to the consumer. Scholars have tested the standard disclosure policies as well as the modifications, situational constraints, and moderating variables associated with each (e.g., Burton, Biswas, and Netemeyer 1994; Mason, Scammon, and Fang 2007; Nayga 2000). What follows is a brief discussion of some recent findings regarding the information provision (policy) standard as well as the attitudinal and belief change (communication) standards being met.

The NLEA and Nutritional Labeling

Research around the NLEA (e.g., Andrews, Netemeyer, and Burton 2009; Block and Peracchio 2006; Keller et al. 1997) is one area in which communication objectives have been frequently measured. Proponents of mandatory information provision cite the Nutrition Facts Panel (NFP) as an effective mechanism for communicating nutrition information to consumers. Consumers use the NFP to verify the claims made by both advertising and product claims on food packages (Derby and Levy 2001). Boundary conditions for the effects of nutrition have been demonstrated in research focused on packaged foods (Ford et al. 1996; Garretson and Burton 2000) and restaurant menus (Kozup, Creyer, and Burton 2003), among other areas. In addition, recent research suggests that message format has profound effects on different attitudinal, belief, and knowledge variables.

For example, in their recent nutrition study, Andrews, Burton, and Kees (2011) find that a simple front-of-package icon led to more positive (misleading) nutrient evaluations and product healthfulness scores while a more complex

icon led to greater comprehension in the form of nutrition accuracy scores. Referring to our definition of sound disclosure, the work of Andrews, Burton, and Kees derives its origins from methodological/substantive perspectives and has potentially profound implications in a legal setting and for manufacturers (product liability as well as the impact of truthful and nonmisleading claims). In addition, a recent review by Hieke and Taylor (2012) critically examines the impact of the NLEA and reaches conclusions that the on-package information (in the form of the NFP as well as product claims) is helpful to some consumers under some instances and that message characteristics, such as the format of the label, can make a difference (Rotfeld and Taylor 2009). Although these findings reinforce an established boundary condition of prior research using the clear and conspicuous standard and other message objectives that formatting can increase efficacy, additional research on format specificity is necessary. It is clear, however, that the weight of evidence from experiments conducted in laboratory settings suggests that consumers respond to labeling with more detail; however, it is not clear that this carries over to real-world settings. Indeed, it seems that the provision of information in a simpler format, such as front-of-package labels that contain qualitative information (e.g., “very low”), may be more effective in changing beliefs and subsequent behavior (Hieke and Taylor 2012).

It does seem clear that motivation and ability to process label information are key moderators in the use of nutritional label information. Prior studies suggest that consumers who are highly motivated to use such information (often rating high on the dimensions of “enduring importance of nutrition”) and have the ability to process the information provided are more likely to use the information (e.g., Howlett, Kozup, and Burton 2008).

In addition to studies on comprehension and interpretation, researchers have examined opportunities to facilitate information processing by consumers. Some evidence (see Andrews, Burton, and Kees 2011; Wansink 2003; Wansink and Chandon 2006) suggests that combining front-of-package labeling with detailed information on the back of the package has the potential to increase label usage (thus increasing the opportunity to comprehend information) because it can cater to the needs of those who are less motivated and able to process information while serving the needs of those wanting more detailed information. Despite critiques surrounding the format, content, and placement of the NFP, the idea of requiring standardized, credible information on all packaged food has at least been helpful to some consumers. Although there might be improvements in how nutrition information is presented (e.g., front-of-package), and though that usefulness depends largely on individual differences (e.g., consumer knowledge and motivation), many consumers clearly use the NFP when making food purchase decisions, thus meeting a baseline requirement of sound disclosure.

Dietary Supplement Labeling and the Impact of DSHEA

While the efficacy of the NFP has been demonstrated in prior research, in other cases, government-mandated disclo-

ures and disclaimers have been less effective. One area frequently cited by scholars is the DSHEA. Since the landmark First Amendment rights case *Pearson v. Shalala* (1999), dietary supplement marketers are permitted to make claims on food supplement labels that imply health benefits without meeting a substantiation standard, as long as a disclaimer is included. This mandatory disclaimer provides the level of scientific evidence behind the claim (e.g., scientific evidence suggests but does not prove, limited and not conclusive, very limited and preliminary). Although this mandatory disclaimer is designed to protect First Amendment free speech rights of the marketer by allowing health claims based on emerging science to be used on marketing materials, scholars have frequently questioned its efficacy (Bone et al. 2009; Mason and Scammon 2000). Several empirical studies have demonstrated the potential problems with these disclaimers (i.e., qualified health claims) on food supplements (Bone et al. 2009; Eggers and Fischhoff 2004; France and Bone 2005; Mason and Scammon 2000; Murphy 2005).

Specifically, research into dietary supplement disclaimers has yielded some boundary conditions for the effectiveness of such information on consumer beliefs. For example, consumers’ prior beliefs act as a filter for the processing of disclaimer information (France and Bone 2005), as does product usage. Using the basis of sound disclosure for dietary supplements (grounded in commonly accepted policy and communication objectives), Mason, Scammon, and Fang (2007) find that consumer beliefs are most strongly affected by a risk-enhanced warning statement. As they suggest, the purpose of government-mandated disclosures is to help consumers make optimal decisions with access to complete and nondeceptive information. Using this as a basis for effectiveness, the DSHEA fails to meet the objectives for sound disclosure because policy makers must also consider First Amendment considerations, which protect the marketer’s right to communicate truthful information about the product or service to the consumer. The DSHEA presents ongoing challenges and opportunities for researchers. Balancing the normative and legal considerations of all stakeholders with recognized empirical work that is used within the policy-making process is paramount. Although the studies conducted by France and Bone (2005) and Mason, Scammon, and Fang (2007) meet their sound disclosure threshold of rigorous testing of communication standards, the DSHEA remains an incomplete policy, neither fully informed nor modified by consumer testing. Therefore, if research is not incorporated into DSHEA modifications, the option of a disclosure moratorium should be considered because the objectives set forth in our definition of sound disclosure are not satisfied.

The Legal Perspective of Sound Disclosure Research

Within the substantive paradigm of sound disclosure research, policy making and policy implantation by legislative and regulatory bodies are of paramount importance. As it applies to litigation in areas related to marketing practice, the role of sound disclosure is paramount in the legal realm. In examining the impact of disclosures on the three primary

stakeholder groups (policy makers, consumers, and marketers), researchers have established a series of standards that should be applied in determining the degree of weight a disclosure should be given in a court context.

Issues for Policy Makers

As the courts apply the *Daubert* criteria in deciding whether to admit expert testimony and surveys from experts (see Ford 2005), it makes sense for policy makers to apply similar criteria in judging a body of research before making a disclosure mandatory. In examining the admissibility of scientific evidence, the Supreme Court specified that the following criteria should be applied:

1. Whether the technique has general acceptance and is widely known or has attracted only minimal support.
2. Whether standards and controls have been developed.
3. Whether the expert's method or technique can be tested and, if so, whether it has been.
4. Whether the theory or technique has been subjected to the peer review process.
5. Whether the scientific technique has a known or potential rate of error.

In policy making related to disclosures, it is an entire body of literature that needs to be assessed rather than the work of a single expert. As a result, it is worthwhile for policy makers to examine what research findings (e.g., effects of a label on consumers) are generally accepted by following appropriate procedures and using appropriate standards and controls. The weight of the evidence from peer-reviewed studies, in terms of both magnitude of effects and whether there is a known or potential rate of error, should be taken into account. When available, meta-analyses are particularly useful for assessing a body of research (Franke 2001) in terms of the known state of knowledge. As a result, well-conducted meta-analyses pertaining to disclosures should be given significant weight in decisions to making a disclosure mandatory.

Consumer protection is most frequently at the forefront of policy decisions on mandatory disclosures. As a result, policy makers need to consider whether the scientific body of research provides compelling evidence in favor of making a disclosure mandatory. To this end, there should be clear scientific evidence that the disclosure is a factual statement (e.g., alcoholic beverage consumption during pregnancy can cause birth defects) that provides competent and reliable evidence (FTC standard) or "significant scientific agreement" (FDA standard) and that having the disclosure is likely to achieve a valid or sound objective (e.g., informing the public about a danger related to a product). The standard for the factual statement should be stringent, and the research evidence needs to be strong on any mandated disclosure. Similarly, there should be strong reason to believe that a mandatory disclosure will meet its intended objectives. It should also be noted that in judging individual studies, policy makers would be well advised to consider additional criteria applied by the courts, such as the "red flag" criteria used to evaluate surveys and other evidence (summarized by Ford 2005; see also Andrews and Maronick 1995; Diamond 2000; Preston 1992). Moreover, evidenced-based studies, as

Armstrong (2011) describes, should be viewed as especially important. Thus, for complex issues such as labeling (or other promotional impacts; see Choi, Paek, and King 2012), findings should be based on intensive and repeated testing, especially in experimental contexts, including those conducted in both laboratory and field settings.

Issues for Consumers

In examining claims brought by a consumer or group of consumers in certain types of legal proceedings, it is worthwhile to examine whether information on a disclosure was appropriately educational and/or informative to consumers. For example, if a class action lawsuit is based (at least in part) on a deceptive advertising claim, the presence of disclosures is a factor that can be weighted. For example, in direct-to-consumer prescription drug advertising, the appearance of mandated information on side effects would be relevant to claims based on someone experiencing a side effect. As with all deceptive advertising claims, evidence is usually given on the claims the advertising (or promotional practice) conveys to the consumer, the materiality of the claim, and the truth of a conveyed and material claim to determine whether a claim is deceptive (Richards and Preston 1992). Regarding what the advertising conveys, it can be argued that a disclaimer may factor into the consumer's net impression of the advertisement.

If consumers have been exposed to disclaimers in either the advertisement itself or other contexts, this exposure is something that should be factored into determining the net impression of the advertisement and/or consumers' overall level of knowledge pertaining to the product. As is normally the case in deceptive advertising cases, well-designed surveys can contribute evidence as to what was conveyed by the advertisement and what the consumer's overall level of knowledge was. As Wilkie, McNeill, and Mazis (1984) note, communicating with consumers is complex; people must be attentive to the information, process it, and retain it. This process also takes place in the context of existing knowledge as well, and as a result, the impact of such disclaimers is a factor that can be weighted. In the case of mandatory disclaimers, the source credibility associated with a government-approved message will have a tendency to lead consumers to find the message believable. As the persuasion knowledge model (Amos and Grau 2011; Friestad and Wright 1994) suggests, consumers are skeptical of persuasive attempts to sell and weight information in advertisements in light of this. However, a mandatory disclaimer is generally not subject to this level of skepticism because it comes from an objective source (Capella, Taylor, and Kees 2012).

Issues for Marketers

Many disclosures (e.g., credit card or mortgage disclosures) are already developed by marketers at least in part for the purposes of legal protection. To the extent that this reduces consumer miscomprehension that lead to accidents or other harm, this is a positive feature of disclosures. However, the disclosure itself, if factual in nature, should be based on sound scientific evidence and obviously should not be designed to mislead.

The concept of a sound disclosure suggests that marketers should weigh both consumer interest on the basis of the best scientific knowledge and considerations related to possible litigation. As with policy makers, it is important for marketers to be familiar with the best scientific evidence on issues related to disclosures and should consider the same set of criteria for evaluating a body of research. For example, if sound research suggests that certain types of financial disclosures help consumers make sensible decisions, marketers who choose to provide nonmandatory disclosures should consider presenting that type of disclosure. Moving forward, as a practical matter, it makes considerable sense for marketers to consider the ability of the consumer to comprehend the disclosure as a component of a sound disclosure versus simply making that information available regardless of any communication objective being met.

The Sound Disclosure Objectives Matrix

Further illuminating the concept of sound disclosure, Figure 2 highlights activities (or a lack of activity in the case of a moratorium) by researchers when attempting to address the various communication and policy objectives deemed crucial to sound disclosure research (for reviews, see Stewart and Martin 2004; Wilkie 1985). Specifically, Figure 2 demonstrates examples of sound disclosure research in relation to satisfying explicitly posited policy and communication objectives for effectiveness. Simply put, a flat moratorium addresses neither policy nor communication objectives while leaving consumers on their own to search the environment for relevant information. Disclaimers as mandated by DSHEA simply address the most basic policy objectives, leaving the communication objectives largely unsatisfied. Both policy and communication objectives are satisfied by the many studies published in *Journal of Public Policy & Marketing*, *Journal of Consumer Affairs*, and elsewhere, that test the provisions of the NLEA. As we have discussed, over the past 20 years, researchers have broadly found that the NFP is a credible disclosure that consumers use to verify nutrition informa-

tion. Although there are caveats and boundary conditions to that broad finding, from a comparative standpoint with other disclosure regimes (e.g., DSHEA), the NLEA has a demonstrated track record of meeting certain policy and communication objectives. Last, well-developed, academic studies that advance theory and conceptual knowledge without direct correlation to a specific policy or specific policy objectives are nonetheless highly valued and provide a baseline for policy studies going forward.

Policy Standards and Consumer Testing for Sound Disclosure

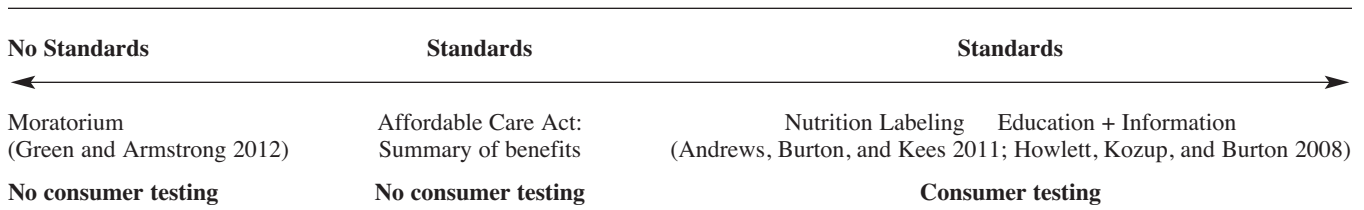
Figure 3 illustrates a continuum of sound disclosure based on the establishment of standards by policy-making bodies and consumer testing by policy researchers. At the far left of the continuum lies the moratorium standard that some scholars advocate (Green and Armstrong 2012) because of their contention of a lack of disclosure efficacy. Further along the continuum lies legislation mandating information provision but lacking consumer testing such as the Affordable Care Act (Pub. L. 111–148). The act mandates a summary-of-benefits statement that needs extensive testing to ensure that consumers comprehend the information without the negative outcomes of overload or misinterpretation. As of this writing, a disclosure-testing protocol for the act had not been established (Quincy 2011).

Moving further along the continuum, policy standards such as the NLEA are matched with extensive consumer testing—for example, recent research on front-of-package nutrition information that demonstrates comprehension and attitudinal and intention effects. Testing that maximizes the efficacy of the disclosure also resides along this portion of the continuum—for example, research combining mandated information provision with an effort to educate the consumer outside the mandated space (whether it be by the marketer, the regulator, or a third party) while addressing individual differences, including motivation, knowledge, and education (Howlett, Kozup, and Burton 2008; Kozup, Burton, and Creyer 2006).

Figure 2. Sound Disclosure Objectives Matrix

Communication Objectives Addressed (Com)		
Policy objectives addressed (policy)	Policy (Yes), Com (Yes) = NLEA	Policy (No), Com (Yes) = Academic Study
	Policy (Yes), Com (No) = DSHEA	Policy (No), Com (No) = Moratorium

Figure 3. Sound Disclosure Continuum



We contend that this continuum provides recent examples of sound disclosure research linked specifically to policy standards. Each point along the continuum incorporates either a normative or an empirical perspective on sound disclosure, thus providing context and boundary conditions for researchers.

Discussion

An examination of the seminal reviews of the warning and disclosure literature offers inconsistent conclusions regarding the effectiveness of various efforts; nevertheless, it provides enough evidence of effectiveness and satisfied goals (e.g., improved comprehension) that a wholesale moratorium on disclosure use seems unwarranted. For example, in addition to the food and dietary supplement industry, consumer disclosures in financial services are being employed, with varying degrees of success. Experimental evidence from the financial services sector suggests that among payday loan consumers, disclosure has the potential to improve comprehension, resulting in positive decision making (i.e., less borrowing) (Bertrand and Morse 2011).

Thus, the questions remain the same: How can public policy protect marketers' rights to communicate information about the products they sell while also protecting consumers from exaggerated or false claims made by some marketers? Should the burden of proof lie with the marketer (i.e., the marketer must provide ample evidence supporting the claim) or with the government (i.e., the government must provide ample evidence that the claim is not substantiated or evidence that qualifying information in the form of a disclaimer or disclosure would be helpful to the consumer)? Or should the market be left to correct itself (i.e., consumers will detect false or misleading claims, and the marketers making those claims will cease to stay in business)? We propose that the benefits of well-tested, objective, sound disclosure policies outweigh the costs to key stakeholders. For policy makers, mandated sound disclosures should be the result of a rigorous consumer testing process linked to specified communication objectives. For marketers, sound disclosures should have the impact of providing court protection and help the marketer withstand legal challenges from plaintiffs. This type of outcome again results from a rigorous consumer testing regime linked to specific communication goals (e.g., noticeability, awareness, comprehension). For consumers, sound disclosures run the gambit from informing them of key product characteristics that may affect their decision making to inducing behavioral change so as to avoid product harm or unhealthy behaviors. The rich tradition of disclosure scholarship published in outlets such as the *Journal of Public Policy & Marketing* is also representative of sound research-based policy and should be employed on a rigorous, consistent basis. In addition, research consistent with the "middle-ground" viewpoint that Stewart and Martin (2004) espouse expands the baseline "clear and conspicuous standard" for disclosure effectiveness by demonstrating conditions in which disclosures can and do work in the intended manner. Continued advances by some of the leading scholars in the field also refute the notion that a blanket moratorium on disclosures is warranted; however, in some cases, specific

disclosures deemed ineffective (through rigorous testing) should be modified or withdrawn. Disclosure research is, by nature, a complex topic replete with conditions and caveats; however, progress continues to be made on the effective provision of information to consumers. Therefore, we believe that more effects testing and sound scholarship is required to effectively establish boundary conditions for disclosure efficacy, thus limiting ineffective and costly compliance regimes.

Future Research Areas

Many areas require sound disclosure research going forward. In Andrews's (2011) recent review of the warnings and disclosure literature, he emphasizes that disclosures must take into account audience characteristics, prior beliefs, and message content; therefore, continued work building on the rich tradition of warnings and human factors research in these areas is necessary. In addition, research into audience characteristics, such as literacy levels and language fluency, is increasingly important for many different processing situations in a multicultural society. For example, studies taking into account vulnerable populations, such as the elderly and consumers with low levels of literacy, should be conducted to assess the design of mandatory prescription drug label disclosure information. Current prescription drug labeling has been shown to be deficient at communicating risk to consumers. Because the FDA is in the early stages of redesigning drug label information, it is important to study the audience characteristics of health literacy and health motivation to gauge the effectiveness of the disclosures (Andrews et al. 2012).

Another area worthy of continued investigation is audience prior beliefs. It is important to take these into account when considering mandatory disclosures or disclaimers. For example, one area in which the near-term impact of this condition applies is implementation of a provision of the U.S. Patient Protection and Affordable Care Act (2010; Pub. L. 111-148). Under the act, restaurants will soon be required to disclose calorie information on menus and menu boards. The effectiveness of this particular mandatory disclosure largely depends on whether the information in the disclosure (i.e., nutrition information) differs from prior beliefs. If consumers already expect certain foods to be high in calories, the disclosure of calorie information is unlikely to change behaviors (Burton and Kees 2012). Continued research into sound disclosure should also focus on message content factors, specifically the "critical gaps" between what consumers know and what they need to know (Fischhoff et al. 1998).

Concluding Comments

In general, it makes sense that decisions regarding both mandatory and nonmandatory information provisions should factor in the degree of impact on the intended populace. Although some scholars argue that this is not often the case, advances in effects testing should continue. To that point, we propose a combinatory approach to achieve sound disclosure going forward. In cases in which labeling changes are being considered, both studies using laboratory settings and behavioral studies should be considered

because what is found in experimental studies does not always translate to real-world changes (Cook and Campbell 1979). Although “mixed methodologies” may be more difficult to navigate through the review process, the *Journal of Public Policy & Marketing* is considered a leading outlet for disclosure research and thus should take such efforts by authors into account in the face of mounting criticism with regard to the limited effectiveness of disclosures. Additional studies using in-depth interviews that probe consumers on mandated information provision usage would also be worthwhile to better understand the degree to which such policies are effective (Hieke and Taylor 2012). We propose the two-stage, qualitative–quantitative research approach that Hill (2007) and others advocate, specifically geared toward sound disclosure. Again, disparate reviewer perspectives can make this research seem daunting, with little chance for publication; however, the *Journal of Public Policy & Marketing* has a rich history of recognizing and elevating work grounded in each methodology.

As Rotfeld and Taylor (2009) observe, it should not be assumed that labeling (or disclosures more generally) can be a panacea for widespread public health issues or can instantly correct flaws in consumer decision making. Indeed, too often, introductions to academic articles on labeling and/or advertising have focused on issues such as the “obesity epidemic” or excessive underage drinking and have suggested that a tool such as labeling has the power to solve these problems overnight if appropriate regulations are implemented. Although this is clearly not the case, we believe that there is sufficient evidence that sound disclosures can have a positive impact on stakeholders when refined under empirically tested circumstances. The fundamental question determining when disclosures are appropriate, if they are appropriate, and how they are best structured is one that should continue to enrich the research tradition of *Journal of Public Policy & Marketing*.

References

- Amos, Clinton and Stacy L. Grau (2011), “Does Consumer Skepticism Negate the Effects of Visceral Cues in Weight Loss Advertising?” *International Journal of Advertising*, 30 (4), 693–719.
- Andrews, J. Craig (2011), “Warnings and Disclosures,” in *Communicating Risks and Benefits: An Evidence-Based User’s Guide*, Baruch Fishhoff, Noel T. Brewer, and Julie S. Downs, eds. Washington, DC: Food and Drug Administration, U.S. Department of Health and Human Services, 149–61.
- , Scot Burton, and Jeremy Kees (2011), “Is Simpler Always Better? Consumer Evaluations of Front-of-Package Nutrition Symbols,” *Journal of Public Policy & Marketing*, 30 (Fall), 175–90.
- , Jeremy Kees, Kala Paul, Michael Wolf, and Terry Davis (2012), “The Role of Health Literacy and Health Motivation in the Comprehension and Intended Use of Revised Prescription Drug Label Information,” working paper, Marketing Department, Marquette University.
- and Thomas J. Maronick (1995), “Advertising Research Issues from FTC Versus Stouffer Foods Corporation,” *Journal of Public Policy & Marketing*, 14 (Fall), 301–309.
- , Richard G. Netemeyer, and Scot Burton (2009), “The Nutrition Elite: Do Only the Highest Levels of Caloric Knowledge, Obesity Knowledge, and Motivation Matter in Processing Nutrition Ad Claims and Disclosures?” *Journal of Public Policy & Marketing*, 28 (Spring), 41–56.
- Argo, Jennifer J. and Kelly J. Main (2004), “Meta-Analyses of the Effectiveness of Warning Labels,” *Journal of Public Policy & Marketing*, 23 (Fall), 193–208.
- Armstrong, J. Scott (2011), “Evidence-Based Advertising,” *International Journal of Advertising*, 30 (5), 743–67.
- Bertrand, Marianne and Adair Morse (2011), “Information Disclosure, Cognitive Biases, and Payday Borrowing,” *Journal of Finance*, 66 (6), 1865–93.
- Block, Lauren G. and Laura A. Peracchio (2006), “The Calcium Quandary: How Consumers Use Nutrition Labels,” *Journal of Public Policy & Marketing*, 25 (Fall), 188–96.
- Bloom, Paul N. (1989), “A Decision Model for Prioritizing and Addressing Consumer Information Problems,” *Journal of Public Policy & Marketing*, 8, 161–80.
- Bone, Paula Fitzgerald, Jeremy Kees, Karen Russo France, and John Kozup (2009), “Consumer Confusion in the Marketplace,” in *Marketing and Public Policy Proceedings*, Vol. 19, Elizabeth Moore, Jan Pappalardo, and William Wilkie, eds. Chicago: American Marketing Association, 258–59.
- Brinberg, David and Joseph E. McGrath (1985), *Validity and the Research Process*. Beverly Hills, CA: Sage Publications.
- Burton, Scot, Abhijit Biswas, and Richard Netemeyer (1994), “Effects of Alternative Nutrition Label Formats and Nutrition Reference Information on Consumer Perceptions, Comprehension, and Product Evaluations,” *Journal of Public Policy & Marketing*, 13 (Spring), 36–47.
- , Judith A. Garretson, and Anne M. Velliquette (1999), “Implications of Accurate Usage of Nutrition Facts Panel Information for Food Product Evaluations and Purchase Intentions,” *Journal of the Academy of Marketing Science*, 27 (4), 470–80.
- and Jeremy Kees (2012), “Flies in the Ointment? Addressing Potential Impediments to Population-Based Health Benefits of Restaurant Menu Labeling Initiatives,” *Journal of Public Policy & Marketing*, 31 (Fall), [DOI: 10.1509/jppm.10.104].
- Capella, Michael L., Charles R. Taylor, and Jeremy Kees (2012), “Tobacco Harm Reduction Advertising in the Presence of a Government Mandated Warning,” *Journal of Consumer Affairs*, 46 (2), 235–59.
- Choi, Hojoon, Hye-Jin Paek, and Karen Whitehill King (2012), “Are Nutrient-Content Claims Always Effective? Match-Up Effects Between Product Type and Claim Type in Food Advertising,” *International Journal of Advertising*, 31 (2), 421–43.
- Cook, Thomas D. and Donald T. Campbell (1979), *Quasi-Experimentation: Design and Analysis Issues for Field Settings*. Boston: Houghton Mifflin.
- Cox, Anthony D., Dena Cox, and Gregory Zimet (2006), “Understanding Consumer Response to Product Risk Information,” *Journal of Marketing*, 70 (January), 79–91.
- Cox, Eli P., Michael S. Wolgalter, Sara L. Stokes, and Elizabeth J. Tipton Murff (1997), “Do Product Warnings Increase Safe Behavior? A Meta-Analysis,” *Journal of Public Policy & Marketing*, 16 (Fall), 195–204.
- Derby, Brenda S. and Alan S. Levy (2001), “Do Food Labels Work? Gauging the Effectiveness of Food Labels Pre- and Post-NLEA,” in *Handbook of Marketing and Society*, Paul N. Bloom

- and Greg T. Gundlach, eds. Thousand Oaks, CA: Sage Publications, 372–98.
- Diamond, Shari (2000), “Reference Guide for Survey Research,” in *Reference Manual on Scientific Evidence*, 2d ed. Washington, DC: Federal Judicial Law Center.
- Eggers, Sara and Baruch Fischhoff (2004), “Setting Policies for Consumer Communications: A Behavioral Decision Research Approach,” *Journal of Public Policy & Marketing*, 23 (Spring), 14–27.
- FDA (2006), “Questions and Answers About Trans Fat Nutrition Labeling,” (January), (accessed January 18, 2008), [available at <http://www.cfsan.fda.gov/~dms/qatrans2.html>].
- Fischhoff, Baruch, Donna Riley, Daniel C. Kovacs, and Mitchell Small (1998), “What Information Belongs in a Warning?” *Psychology & Marketing*, 15 (7), 663–86.
- Ford, Gary T. (2005), “The Impact of the *Daubert* Decision on Survey Research Used in Litigation,” *Journal of Public Policy & Marketing*, 24 (Fall), 234–52.
- , Manoj Hastak, Anusree Mitra, and Debra Jones Ringold (1996), “Can Consumers Interpret Nutrition Information in the Presence of a Health Claim? A Laboratory Investigation,” *Journal of Public Policy & Marketing*, 15 (Spring), 16–27.
- France, Karen Russo and Paula Fitzgerald Bone (2005), “Policy-makers’ Paradigms and Evidence from Consumer Interpretation of Dietary Supplement Labels,” *Journal of Consumer Affairs*, 39 (2), 27–51.
- Franke, George R. (2001), “Applications of Meta-Analysis for Marketing and Public Policy: A Review,” *Journal of Public Policy & Marketing*, 20 (Fall), 186–200.
- Friestad, Marian and Peter Wright (1994), “The Persuasion Knowledge Model: How People Cope with Persuasion Attempts,” *Journal of Consumer Research*, 21 (June), 1–31.
- Garretson, Judith A. and Scot Burton (2000), “Effects of Nutrition Facts Panel Values, Nutrition Claims, and Health Claims on Consumer Attitudes, Perceptions of Disease-Related Risks, and Trust,” *Journal of Public Policy & Marketing*, 19 (Fall), 213–27.
- Green, Kesten and J. Scott Armstrong (2012), “Evidence on the Effects of Mandatory Disclaimers in Advertising,” *Journal of Public Policy & Marketing*, 31 (Fall), [DOI: 10.1509/jppm.12.053].
- Hieke, Sophie and Charles R. Taylor (2012), “A Critical Review of the Literature on Nutritional Labeling: Conceptual and Methodological Directions for Future Research,” *Journal of Consumer Affairs*, 46 (1), 120–56.
- Hill, Ronald Paul (2007), “*Journal of Public Policy & Marketing* Scholarship: Changing the World One Article at a Time,” *Journal of Public Policy & Marketing*, 26 (Spring), 1–3.
- Howlett, Elizabeth H., John Kozup, and Scot Burton (2008), “How Modification of the Nutrition Facts Panel Influences Consumers At-Risk for Heart Disease: The Case of Trans Fat,” *Journal of Public Policy & Marketing*, 27 (Spring), 83–97.
- Keller, Scott B., Mike Landry, Jeanne Olsen, Anne M. Velliquette, Scot Burton, and J. Craig Andrews (1997), “The Effects of Nutrition Package Claims, Nutrition Facts Panels, and Motivation to Process Nutrition Information on Consumer Product Evaluations,” *Journal of Public Policy & Marketing*, 16 (Fall), 256–69.
- Kozup, John C., Scot Burton, and Elizabeth H. Creyer (2006), “The Provision of Trans Fat Information and Its Interaction with Consumer Knowledge,” *Journal of Consumer Affairs*, 40 (1), 163–76.
- , Elizabeth H. Creyer, and Scot Burton (2003), “Making Healthful Food Choices: The Influence of Health Claims and Nutrition Information on Consumers’ Evaluations of Packaged Food Products and Restaurant Menu Items,” *Journal of Marketing*, 67 (April), 19–34.
- Lynch, John G., Jr., and Wendy Wood (2006), “Special Issue Editors’ Statement: Helping Consumers Help Themselves,” *Journal of Public Policy & Marketing*, 25 (Spring), 1–7.
- Mason, Marlys J. and Debra L. Scammon (2000), “Health Claims and Disclaimers: Extended Boundaries and Research Opportunities in Consumer Interpretation,” *Journal of Public Policy & Marketing*, 19 (Spring), 133–50.
- , ——, and Xiang Fang (2007), “The Impact of Warnings, Disclaimers, and Product Experience on Consumers’ Perceptions of Dietary Supplements,” *Journal of Consumer Affairs*, 41 (1), 74–99.
- McQuire, W.J. (1980), “The Communication-Persuasion Model and Health-Risk Labeling,” in *Product Labeling and Health Risks: Banbury Report 6*, Louis A. Morris, Michael B. Mazis, and Ivan Barofsky, eds. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory, 99–122.
- Murphy, Dennis R. (2005), “Consumer Perceptions of Qualified Health Claims in Advertising,” Federal Trade Commission Working Paper No. 227.
- Nayga, Rodolfo M., Jr. (2000), “Nutrition Knowledge, Gender, and Food Label Use,” *Journal of Consumer Affairs*, 34 (1), 97–112.
- Pearson v. Shalala* (1999), 164 F.3d 650 (D.C. Cir.).
- Preston, Ivan L. (1992), “The Scandalous Record of Avoidable Errors in Expert Evidence Offered in FTC and Lanham Act Deceptiveness Cases,” *Journal of Public Policy & Marketing*, 11 (Fall), 57–67.
- Quincy, Lynn (2011), “Making Health Insurance Cost-Sharing Clear to Consumers: Challenges in Implementing Health Reform’s Insurance Disclosure Requirements,” The Commonwealth Fund report, (accessed February 21, 2011), [available at <http://www.commonwealthfund.org/Publications/Issue-Briefs/2011/Feb/Making-Health-Insurance-Cost-Sharing-Clear.aspx>].
- Richards, Jef I. and Ivan L. Preston (1992), “Proving and Disproving Materiality of Deceptive Advertising Claims,” *Journal of Public Policy & Marketing*, 11 (Fall), 45–56.
- Rotfeld, Herbert Jack and Charles R. Taylor (2009), “The Advertising Regulation and Self-Regulation Issues Ripped from the Headlines with (Sometimes Missed) Opportunities for Disciplined Multidisciplinary Research,” *Journal of Advertising*, 38 (4), 5–14.
- Stewart, David W. and Ingrid M. Martin (1994), “Intended and Unintended Consequences of Warning Messages: A Review and Synthesis of Empirical Research,” *Journal of Public Policy & Marketing*, 13 (Spring), 15–28.
- and —— (2004), “Advertising Disclosures: Clear and Conspicuous or Understood and Used?” *Journal of Public Policy & Marketing*, 23 (Fall), 183–92.
- Tangari, Andrea Heintz, J. Craig Andrews, Scot Burton, and Jeremy Kees (2010), “Can Corrective Ad Statements Based on *U.S. v. Philip Morris USA Inc.* Affect Consumer Beliefs About Smoking,” *Journal of Public Policy & Marketing*, 29 (Fall), 153–69.

- Wansink, Brian (2003), "How Do Front and Back Package Labels Influence Beliefs About Health Claims?" *Journal of Consumer Affairs*, 37 (2), 305–316.
- and Pierre Chandon (2006), "Can 'Low-Fat' Nutrition Labels Lead to Obesity?" *Journal of Marketing Research*, 43 (November), 605–617.
- Wilkie, William L. (1985), "Affirmative Disclosure at the FTC: Objectives for the Remedy and Outcomes of Past Orders," *Journal of Public Policy & Marketing*, 4, 91–111.
- , Dennis L. McNeill, and Michael B. Mazis (1984), "Marketing's 'Scarlet Letter': The Theory and Practice of Corrective Advertising," *Journal of Marketing*, 48 (Fall), 11–31.
- Wogalter, Michael S. and Kenneth R. Laughery (1996), "WARNING! Sign and Label Effectiveness," *Current Directions in Psychological Science*, 5 (2), 33–37.

Copyright of Journal of Public Policy & Marketing is the property of American Marketing Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.