

RESPONDING TO WANTS: DO AD EFFECTS STUDIES MEASURE THE RIGHT PEOPLE?

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ABSTRACT

A review of recently published academic studies of ad effects reveals that authors did not report qualifying subjects as prospects for the product category used in the research and did not include measures to permit examining findings by prospects and nonprospects. The marketing theoretic implications for advertising research of the concept of *prospect* are discussed.

INTRODUCTION

Researchers in marketing conduct their studies in one of three universes—general population, members of a product market, customers of a firm (Fennell, 2001). Each universe has different strategic and behavioral implications. For example, the general population raises the issue of domestic or international marketing and is typically the universe within which management defines its product market—specifying the criterion it uses to qualify some population members as prospects. The product market is a universe one of whose dimensions consists of individuals whom management identifies as predisposed to buy/use some version of its product category, i.e., its prospects. Finally, since no management likely owns a 100% share of its market, a universe of customers fails to include all prospects for management's product category. Given such strategic importance, it becomes a matter of theoretical interest to consider how researchers approach the relevant aspect of

research design. When studying advertising effects, for example, do researchers choose a universe of individuals whom management considers to belong in its product market? Alternatively, do researchers select their subjects from the general population and, within that universe, compare results among prospects and nonprospects? Or, indeed, do they carry the analysis yet farther and, *within* prospects, examine results among brand users/nonusers, respondents in various want segments, and targets/nontargets.

Our purpose is to consider the extent to which academic ad research published in mainstream journals takes cognizance of the relevant universe, whether explicitly or implicitly. In the section immediately following, we review conceptual developments over the past century, which place the issue of a universe predisposed to buy/use the *advertised product category* center front for the marketing discipline. A section on method then follows, in which we describe the journals we examined, and the criteria we employed, followed by our report of findings. Finally, we contrast the concept of prospect with concepts likely more familiar to advertising researchers.

CONCEPTUAL BACKGROUND

For the past 50 years, textbook authors have introduced marketing as a discipline and managerial function charged with the task of ensuring that the productive enterprise is bent on satisfying human wants. According to a version of received wisdom found in

many textbooks, the era of the marketing concept, i.e., 1950s and later, was preceded by selling and production eras that emphasized sales and production, conceived as unrelated to want-satisfaction. Generally overlooked, however, the essence of the marketing concept had been articulated much earlier. Consider, for example, Shaw's (1912) view of the purpose of business and industry, i.e., "a better adjustment of matter to the wants of man" (p. 764). Moreover, for Shaw, as was true later for the marketing concept (e.g., Smith 1956), satisfying human wants is a matter of business survival and return on investment (ROI), e.g., "If the goods advertised are not adapted to satisfy a need, conscious or subconscious, of consumers, the advertising cannot be effective. Attempting to sell a thing that nobody needs is wasted effort" (Shaw 1912, p. 756).

Shaw, in fact, addresses two related aspects of the task of satisfying human wants namely, (1) ensuring that the offering possesses attributes that users find valuable, (2) doing so while recognizing the multiple diverse universes that are present in the context for business.¹ Leaving problems of dealing with diversity identified but unresolved, Shaw mainly focuses on developing the first aspect, i.e., ensuring that the offering possesses attributes that users find valuable. He argues for an orderly approach to investigating the relative appeal of various claims in place of "guesses" about what prospective buyers find valuable—"the ordinary business man is today working by rule of thumb. He *guesses* (original emphasis) at the suitable ideas and forms of expression, and gambles on his guess...he invests tens, even hundreds, of thousands of

dollars in a selling campaign" (p. 755). Shaw makes an early plea for research to guide ad development, when he proposes "a method of practical test that will enable us to try out selling ideas and forms of expression, under laboratory conditions, as it were, before the investment of thousands and hundreds of thousands of dollars is staked on the success of the selling campaign" (p. 756).

Half a century later, Smith (1956) revisited the two-pronged task of responding to wants as found in a context of within-market diversity. He speaks of management's option to "accept *divergent* demand as a market characteristic and to adjust product lines and marketing strategy accordingly ...emphasizing the precision with which a firm's products can satisfy the requirements of one or more distinguishable market segments" (p.4). Going beyond Shaw's idea of testing candidate claims, Smith assumes "marketing programs based upon measurement and definition of market differences" (p. 4); later, he underscores maintaining "a flow of market information that can be provided by marketing research" (p. 7) as essential to the ability of management to plan to be responsive to wants as found. In contrast to a product policy that considers only differentiating management's offering from the competition without regard to the nature of demand, which he dubs "product differentiation," Smith's notion of market segmentation is "based upon developments on the demand side of the market and represents a rational and more precise adjustment of product and marketing effort to consumer or user requirements" (p. 5).

Another half century on, Fennell's recent review (2001) notes that the nature of the universe chosen for a project is generally not an issue of explicit discussion in

¹ Shaw discusses, for example, classes defined in terms of economic and social strata, geographic region (p. 749), and religious affiliation (p. 750).

segmentation research. Researchers conduct segmentation studies in each of three kinds of universe: the general (adult) population in management's geographic region; individuals qualified as predisposed to buy/use some version of management's product category; individuals present in management's database of customers. What this means is that "segmentation" research as found in the recent literature (e.g., Wedel and Kamakura, 1998, 2000) comprises studies conducted in universes that are larger (e.g., the adult population) or smaller (e.g., customers of a single firm) than a market. In the *larger* category, the universe comprises respondents who are not screened for product use, for example, members of the adult population in a focal geographic domain. Moreover, the dependent variable is typically product, not brand, use. In the *smaller* category, the recent availability of scanner data has encouraged researchers to do research in a universe consisting of management's customers—smaller than a product market in that customers do not represent the entire range of prospects for management's brand.² Accordingly, while the dependent variable may be some measure of user wants or brand use, such research is systematically distinct from *market* segmentation. It fails to include the full range of user conditions and (competing) brand use experience, and it likely excludes prospects for whose conditions management's offering may be appropriate but untried, because of communicative and/or distributive mishaps.

A question arises if other streams of research incorporate consideration of the relevant universe. The stream that studies effects of alternative approaches to advertising is one where it is appropriate to consider whether respondents are or are not predisposed to spend to acquire or use some offering in the product category, e.g., whether they are simply members of the general population who may not own a dog and, hence, may have no interest in buying dog-related products or are in fact dog owners who purchase dog food. Similarly, students, while familiar with and regularly using high-ticket items, may not, in fact, be in the market for such items.

A first consideration in any strategic task is clarifying the relevant universe. The outer limit of the relevant universe is prospects, i.e., individuals qualified as ready to spend to acquire or use some version of management's product class. Within that outer limit, a marketing analysis may focus on specific sub universes, e.g., customers, triers, users of major competitors' brands, prospects who are unaware of management's brand or what it claims to offer. A second and distinct issue is the nature of diverse demand with the relevant universe, and the subset of wants that management may choose to serve, i.e., the focus of market segmentation analysis. When management is developing an advertising campaign, it will have decided how it is defining prospects and targets—for the latter, that means the subset of wants within the product class that it plans to address via its brand's attributes. Researchers will want to take such considerations into account as they design and analyze research conducted to study advertising effects. If, for some reason, researchers prefer not to exclude nonprospects from their sample of respondents, a marketing focus dictates including questions that permit analyzing

² Scanner research combined with panel data is yet another variant of segmentation research. The relevant universe may be management's customers, if, for example, the client is a retail outlet doing research on its own customers, or it may approximate market segmentation, if, for example, the client is management of an individual brand doing research on scanner data from retailers that carry a broad or near complete range of the brands of interest.

findings separately for prospects and nonprospects and, for a target/nontarget analysis, *within* prospects by kind of want within the product class that the brand addresses. As the relevant universe has only recently come into focus, it is appropriate to document existing practice in advertising effects research.

METHOD

To assemble a sample of recent academic studies in ad effects, we searched the ABI/INFORM database for all empirical studies of ad effects from 1999 to 2001 in the *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research* and *Journal of Advertising Research*. We found a total of 27 papers (comprising 48 individual studies) that presented advertisements to subjects to study effects of independent variables (see Appendix). We examined the papers for answers to the following questions: 1. Do authors report qualifying subjects as prospects for the product category used in the research, or discuss the issue of screening? 2. Do authors include or discuss measures that are reasonable surrogates of screening for prospects? 3. Based on incidence of use in the adult population, how likely is it that subjects are prospects for the product named in the research? For the last mentioned question, we used data from the 1997 *Survey of Media and Markets (SMM)* conducted annually by Simmons, using a sample of roughly 20,000 US adults, which provides incidence data for about 1700 products and 300 activities. Respondents are asked if they *use*, *own*, or have *bought* (product) or *do* (activity). With some difficulty we tried to match the product names authors used in the ad effects studies with the *SMM* products, which in many cases are more specific. The data are presented in Table 1 (order of the papers as

in the Appendix). Where *SMM* shows multiple products corresponding to a product named in an ad study, we report the product with the highest incidence, and include, within square brackets in the body of the table, the number of products in the group and range of their incidence. If the published study used females only [7, 8], we report incidence for females; in other cases, the product itself suggested showing incidence by gender.

FINDINGS

For the 27 papers and the 48 studies they comprise, the Appendix shows the product named in the study, how researchers described their subjects, and whether or not they discussed the issue of screening for prospects. We copied entries in Appendix verbatim from the papers, in some cases omitting words to save space. Findings for each research question follow.

Qualifying Subjects as Prospects. Authors do not discuss screening or the relevant universe in any papers. Moreover, they do not report qualifying subjects as prospects, or including a question that would permit showing the findings separately for prospects and nonprospects.³

Surrogates of Screening for Prospects? Authors' concern that the products named in

³ A business-to-business study in the set [3] may be an exception. The authors use the term, prospect, in their title and select a specialized mailing list that appears to limit the universe to management's product domain. It is unclear, however, if the authors use the term prospect to include web users and predisposition to spend in the focal product category. Note also one instance where a qualification is mentioned [2—study 3] but the criterion was reported brand use, rather than the market (product category) membership criterion of prospect.

Table 1. Incidence (% of population) of products authors named in ad effects studies (1999-2001)

#	Product authors named in study	SMM category	SMM %	
01	fast-food restaurant	fast food	88	
	retail bank	savings account [3; 39-61]	61	
	beer	beer [7; 7-30]	30	
	oil company	gasoline	87	
02	toothpaste	toothpaste	95	
03	sculpture reproduction artwork Website	II		
04	orange juice	Orange juice	70	
05	state lottery	state lotto ticket	55	
06	brands on sale	II		
07	children's clothes	children's clothing	51-F	
	diet soda	diet cola [2; 35-47]	47-F	
08	automobiles	own/lease car	82-F	
	beauty products	lipstick/gloss [19; 1-80]	80-F	
	telecommunication companies	telephone equipment [9; 7-75]	75-F	
	soft drinks	regular cola [8; 29-57]	57-F	
	food	II		
	movies	II		
09	cleaners	household cleaners	80	
	computers	computers personal-home	40	
	hotels	hotel/motel domestic	57	
	florists	buy flowers	51	
	photos	film processing [2; 14-74]	74	
	pizza	fast food	89	
	restaurants	family restaurant and steak house	80	
	travel agents	domestic travel	65	
	10	bank	savings account [3; 39-61]	61
		electronics	II	
software		word processing software [14; 4-26]	26	
11	single-lens reflex (SLR) camera	own still camera [4;7-67]	67	
	hybrid bikes	own bicycle [4; 2-24]	24	
12	social clothes, i.e., for public situations (e.g., church, work, social gatherings)	men's clothes	81-M	
	VCRs	women's apparel [4;32-90]	90-F	
	radios	II		
	radios	own cd player [45; 1-34]	34	
	telephones	telephone equipment [9; 7-76]	76	
	answering machines	telephone answering machine	42	
13	vacationing in Puerto Rico	foreign travel	23	
14	Heineken	beer [7; 7-30]	30	
	Crest	toothpaste	95	
	Keebler	Chips	82	
	Michelin	Tires[2:20-42]	42	
	fruit bar	nutritional snacks	42	
	chewing gum	chewing gum	59	
	sports sandals	casual shoes/leather/men's [2;19-33]	33-M	
		women's leather casual shoes [2;30-52]	52-F	
	bike tires	own bicycle[4;2-24]	24	
	15	personal computers	computers personal-home	40
computer monitors		computer monitor	23	
16	pens	pens and mechanical pencils	59	
	calculators	Calculators	22	
17	mascara	Mascara	60-F	
	yogurt	Yogurt	43	
	a motion sickness remedy	motion sickness remedy	3	

	almonds	nuts for cooking and snacks	69
18	Keebler Pizzaria Chips	Chips	82
	Sodalicious Fruit Snacks	nutritional snacks	42
	Smarties Chocolate Candy	candy bars, mini	53
	Double Dip Crunch Cereal	cold breakfast cereal	90
19	Crest/Gleem (toothpaste)	Toothpaste	95
	Haagen Dazs/Hood (ice cream)	ice cream and milk/sherbet	87
	McDonald's/Hardee's (fast food)	fast food	89
	Pert/Flex (shampoo)	Shampoo	94
	Nike/Puma (athletic shoes)	sneakers/athletic shoes	63
	IBM/NEC (personal computers)	computers personal-home	40
	Cheerios/Crispix (breakfast cereal)	cold breakfast cereal	90
	Heineken/Lowenbrau (beer)	beer [7; 7-30]	30
	Jergens	hand/body lotion	70
	Motrin	headache/pain relievers	89
	Lysol	household cleaners	80
	Swiss Miss	Instant hot cocoa mix	68
20	pen	pens and mechanical pencils	59
21	Kraft	II	
	Pennzoil	motor oil	62
22	shampoo	shampoo	94
	toothpaste	toothpaste	95
	personal care product (Nivea)	skin care products	56
	soap product (Sunlight)	liquid dishwashing soap	86
23	brands of consumer products	II	
24	fast food	fast food	88
	beer	beer [7, 7-30]	30
	toothpaste	toothpaste	95
	jeans	Jeans	64
	sporting footwear	sneakers/athletic shoes	63
	batteries	batteries	86
25	couch	couch/sofa/loveseat	9
	briefcase	luggage/baggage	18
	laptop computer	computers personal-home	40
	cellular phone	cell phone	32
26	an imported automobile	own/lease car	83
27	state lottery	state lotto ticket	55

Where *SMM* reports multiple products corresponding to a product named in the research papers, the column *SMM* % shows the product with the highest incidence; the number of products in the group and range of their incidence is shown within square brackets in the body of the table.

Key: II – Insufficient information in the article to determine comparable *SMM* product category;

NA – Not available; F – incidence for female respondents; M – incidence for male respondents (see

Method). Source: Simmons, *Survey of Media and Markets*.

the research are *familiar* to the subjects is in evidence in a few papers. It takes different forms including the following: One author states that the product named in the study is one "familiar to the subject population" [19], another states "considering the subject pool's product knowledge and familiarity, ads for personal computers and computer monitors were selected" [15]; yet another mentions that the category is "regularly consumed by college-aged students" [10]. One author [11] measured subjects' familiarity with the product (SLR cameras), reporting it at moderate to low but not differing significantly by condition, without, however, showing findings separately for those with different levels of product knowledge.

Some authors study subjects' *involvement* with the product named, or its *personal relevance* to them. One author [9] likely intended to simulate naturally occurring involvement by giving "participants a goal (e.g., 'you need to develop some film' or 'you need to dry-clean an outfit for a special occasion')," and instructing them to "use the yellow pages directory to locate products or services." Another author [22] included items to assess "the relevance to consumers of grooming and personal care products... Four consumer motivation groups ('very low' to 'very high') were constructed by categorizing the scores into four quartiles...to tap natural differences in enduring involvement...(or) intrinsic sources of personal relevance."

Does SMM Incidence Confirm Prospect Status? Another relevant consideration is the incidence of purchase/use. If authors have not planned to ensure, e.g., by screening, that their subjects are disposed to buy/use some version of the product named, do the products named in the studies have

incidence of purchase/use at a level that confirms subjects' status as prospects? Recall that the products authors named are in many cases fairly general, sometimes extremely so. Turning to *SMM* data, we found that authors' general product names comprise numerous specific product categories. In Table 1 *SMM %* column, for 82 products that authors named, we show incidence for the corresponding *SMM* product category with the highest incidence. Table 2 is a summary of the *SMM %* column of Table 1. It is apparent that the products the authors named span a wide range of incidence levels from highest (95%) to lowest (3%); median = 61.5%.⁴

Table 2. SUMMARY: *SMM*
Incidence of products authors
named in ad effects studies
(1999-2001)

Range of Incidence (<i>SMM %</i> from Appendix 1)	Number of Products (from Appendix 1)
<10	2
10 – 19	1
20 – 29	6
30 – 39	7
40 – 49	10
50 – 59	12
60 – 69	11
70 – 79	5
80 – 89	18
90 – 99	10

⁴ Of the 48 studies, 35 involved college students and 2 involved primary school students. The actual product use incidence for these populations may vary dramatically from the general adult population. For some products (e.g. beer, fast food) college students may have a higher incidence, and for others (e.g. couch, camera, tires) students may have a lower incidence. We report general adult population incidence to serve as a benchmark for future research.

DISCUSSION

Nearly a hundred years ago, Shaw stated a connection between ad effectiveness and the ability to satisfy a want already existing among (some) audience members:

"Attempting to sell a thing that nobody needs is wasted effort" (1912, p. 756). Since the 60s, to guide management's responding to wants as found, industry marketing researchers have used market segmentation research, which is conducted among individuals qualified as prospects. The mainstream marketing literature has tended to neglect the first step, i.e., qualifying individuals for market membership.

Typically, it fails to report the industry practice of qualifying individuals as predisposed to allocate resources to the behavioral domain of management's product category (Fennell and Saegert 1998, 1999; Fennell, Saegert, and Hoover, *in press*). In contrast, the literature discusses the cognate practice of identifying prospects in the domain of personal selling.

Given neglect in the mainstream marketing literature, absence of screening for prospects in ad effectiveness research may not be surprising. The concept of prospect has no close relative among the traditional concepts found in advertising research, e.g., awareness, familiarity, personal relevance, involvement. Such concepts may be suited to understanding brand choice, whereas "prospect" is relevant to product choice. A person may be a prospect without much familiarity with or involvement in the product category. The concept of prospect refers to readiness to spend resources in a particular product category, and comprises all who qualify on that criterion, ranging from those who will buy in a mindless or purely routine manner to those for whom buying some brand in the product category is a matter of high personal significance, whether to solve a current problem, present

a desired image, grasp an opportunity for fun, or indulge a desire for sensory pleasure. Moreover, individuals may qualify as prospects yet buy some version of the product category while disliking certain features, or being less than satisfied with any of the available brands. In sum, the concept of prospect is intended to identify the *outer limit* of likely interest in management's *product category*—in effect it serves to *exclude* individuals in line with a policy of putting resources to best use.⁵ Industry researchers define the concept operationally as a purely behavioral measure, e.g., pursuing a particular task/interest for which some version of the product could conceivably be useful, or reporting current, recent, or planned purchase/use of the product category (Fennell 1985, p. 106).

It is in management's interest to pay heed to how its advertising registers among its prospects as an outer limit, and not to waste resources on nonprospects. In the research reviewed here, the incidence data strongly suggest that respondents included a substantial proportion of nonprospects in many cases. Minimally, when advertising effects are studied among unscreened

⁵ We received some reviewer comment to the effect that qualifying respondents as prospects in advance of conducting research (1) runs counter to various concepts central to communications theory, such as achieving awareness, comprehension, and allowing for residual message encoding, and (2) seems to preempt a later stage of achieving favorable attitude toward the advertiser's brand. Such comments point to our having failed to make clear that qualifying respondents as prospects is an issue of selecting whom management *wants to include* in its intended audience. For example, management of a dog food brand prefers to spend resources studying how best to communicate with prospective customers for dog food, e.g., dog owners/carers, in preference to individuals who do not own/care for a dog. Clarifying the outer limit of likely interest in dog food leaves the full range of communications theory available for use *within* a universe of dog owners/carers.

population members, the findings are clouded by the presence of two systematically distinct classes of respondent, i.e., prospects and nonprospects. The validity of the research is brought into question (cf. Lynch, 1982; Calder, Phillips and Tybout, 1982). Accordingly, if authors, for whatever reason, do not wish to screen for prospects, at least they are well advised to include questions that permit them to analyze their results separately for prospects and nonprospects. We trust that our raising the issue of the relevant universe in the context of recent ad effects studies will contribute to advances in design for this genre of research. A better adjustment of matter to human wants (Shaw 1912, p 764) does not entail trying to persuade people to want what matters to management.

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