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Advertising repetition and quality perception

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Abstract

Nelson [J. Polit. Econ. 78 (1970) 311; J. Polit. Econ. 81 (1974) 729; Nelson P. The economic value of advertising. In: Brozen Y, editor. Advertising and society. New York: New York Univ. Press, 1974. pp. 43–66] has argued that advertising spending is a signal of product quality for experience goods because consumers can rationally infer that high-quality products would advertise more than low-quality products. In this paper, we compare Nelson's view of advertising with marketing views of advertising using ad repetition as a surrogate for ad spending. Our results show limited support for Nelson's theory but substantial support for ad repetition influencing perceived quality through attitude toward the ad.

Keywords: Advertising; Spending; Quality

1. Introduction

In a seminal paper nearly 30 years ago, Nelson (1970) proposed a distinction between two types of goods, search goods and experience goods, and offered a new theory of advertising based on that distinction. Search goods were defined as products whose quality consumers can verify before purchasing (e.g., clothing, furniture, and jewelry). Experience goods were defined as products whose quality the consumer cannot determine until after buying and experiencing the product (e.g., foods, books, and detergents). Nelson argued that advertising claims for experience goods are uninformative because consumers cannot verify such claims before purchasing the product. Advertising spending, however, is informative because consumers can rationally infer that products that advertise more are of higher quality than products that advertise less. By contrast, for search goods, advertising claims are informative, and no further information is needed from, or provided by, the spending level.

Nelson's view of advertising for experience goods is radically different from "the marketing view." Whereas Nelson minimizes the importance of the ad itself—for example, it is not even necessary for the firm to advertise as long as it has other ways of "burning money"—the marketing literature emphasizes it (Batra et al., 1996). In marketing, it is taken as a given that ad design and ad claims have significant effects on product perceptions—regardless of the nature of the product. In fact, the work of Hoch and Ha (1986) suggests that, if anything, advertising claims might be even more effective in shaping perceptions for experience goods because the experience itself is likely to be ambiguous. Marketing textbooks are replete with examples of how the same physical product (e.g., 7-Up) has been "positioned" in different ways through different ad campaigns.

In this paper, we test the Nelson theory against the "marketing view." We use the term "marketing view" to refer to three theories: learning, ad attitude, and mere exposure. Each of these theories points to a different type of advertising effect, and multiple effects may coexist in an ad campaign. So it is not a matter of picking one of these theories and ruling out the rest. Rather, because these theories as a group have much in common and contrast sharply with the Nelson view, we examine whether the data support the marketing view or the Nelson view.

There are potentially many ways to test Nelson's theory, depending on the myriad ways in which advertising moneys can be spent—repetition (frequency), reach, "large" versus "small" ads, color versus black-and-white ads, TV versus print, etc.—and whether the researcher uses observational or experimental methods. This paper uses experimental methods and advertising repetition as the spending variable.

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Much of the existing literature uses observational data. The papers by Rotfeld and Rotzell (1976), Kotowitz and Mathewson (1986), Tellis and Fornell (1988), Davis et al. (1991), and Caves and Greene (1996) examine the correlation between some measure of objective quality (e.g., Consumer Reports rankings), or managers' perceptions of their customer's perceptions of quality (PIMS data), and advertising spending across brands. In general, these papers find limited support for Nelson's theory. For example, Caves and Greene's (1996) comprehensive study of 196 product categories concludes: "These results suggest that quality-signaling is not the function of most advertising of consumer goods."

In contrast to these generally negative results are the generally positive results in the experimental literature. Unlike the observational literature where the focus is on the advertising spending-objective quality correlation, here the focus is on the advertising spending-perceived quality correlation. Kirmani and Wright (1989) cue advertising spending via size, vehicle (reach), production elements, and frequency in some experiments, and in others advertising spending information is simply given to subjects. Their strongest results in support of Nelson are obtained with size, vehicle, production elements, and spending levels. With frequency, their results contradict Nelson: ad campaigns described as high frequency were found to correlate negatively with perceived quality.

A common feature of the Kirmani and Wright (1989) experiments is that subjects are not given the opportunity to infer advertising spending from a real advertising campaign—the common situation in the real world. Instead, campaign elements are artificially highlighted and in some cases advertising spending levels are given in dollars. The highlighting of advertising expense information in these experiments raises the possibility of demand effects driving the reported advertising spending-perceived correlation. It also raises the question of whether consumers can spontaneously pickup advertising spending information under naturalistic conditions. If they do not, then Nelson's theory—even if it is internally valid—would have limited applicability. Kirmani (1990) partially corrects for these deficiencies by exposing subjects to fictional ads of different sizes. Kirmani (1997) goes further, exposing subjects to real ads at different frequencies. Kirmani (1997) finds an inverted U-shaped relationship between ad spending and quality perceptions. The upward sloping part of the curve is consistent with Nelson's theory; the downward-sloping part is not.

In this paper, we manipulate advertising spending via advertising repetition and measure its effect on consumers' perceptions of quality. A key feature of our experiment is that it is explicitly designed to compare Nelson's theory to the marketing view. The comparison is important because with ad repetition serving as a surrogate for ad spending, both views can predict the same overall relationship between perceived quality and advertising spending. Nevertheless, the mechanisms underlying the two approaches and their implications for advertising practice are completely different.

Our experiment exploits these differences to discriminate between Nelson's theory and the marketing view. In the process, it differs from Kirmani and Wright (1989) and Kirmani (1990) in several important ways. First, we use real ads. Not only does this increase the external validity of our results, but it also increases their internal validity. To adequately test Nelson's theory, consumers must be assured that money was actually spent on advertising—otherwise, they would not be able to rule out the possibility of a low-quality product masquerading as a high-quality product. With fictitious products and fictitious advertising, this is hard to do (for example, in Kirmani, 1990, the ads were in a black-and-white magazine, and the cover page of the magazine was a set of instructions that asked the subjects to "look through the magazine as they naturally would if they were reading it at home." Real magazines are generally in color and do not have reading instructions on their cover pages).

Second, we experimentally manipulate whether respondents have to spontaneously pick up advertising frequency by actual exposure to an advertising campaign or frequency information is provided to them. By contrast, Kirmani and Wright (1989) only provided the summary information, and Kirmani (1990, 1997) only varied the physical exposure. For Nelson's theory to have any external validity, of course, consumers ought to be able to pick up advertising spending information spontaneously while an advertising campaign unfolds. But for Nelson's theory to have internal validity, it ought not to make a difference how the spending information is given to subjects. By contrast, the theories comprising the marketing view are explicitly theories about physical exposure to advertising.

Finally, we examine four product categories, two of which are classifiable as search goods and the other two as experience goods. Nelson makes different predictions depending on whether the product is a search good or an experience good; but for the marketing view, it makes no difference.

2. Background

2.1. Nelson's theory

The essence of Nelson's (1970, 1974a,b) theory is the idea that for experience goods, consumers should rationally infer that only high-quality products would spend much in advertising. This is because only high-quality brands can count on obtaining a significant number of repeat purchases. Low-quality brands pretending to be high quality will be "discovered" to be poor values after the first purchase, will not generate repeat purchases, and so cannot justify matching the high-quality firm's advertising expenditures. For