

# **Media Influences on Marketing Communications**

**by**

**David W. Stewart, Paulos Pavlou and Scott Ward<sup>1</sup>**

**Forthcoming in Jennings Bryant and Dolf Zillmann (Eds.), Media Effects: Advances in Theory and Research, Revised Edition (Hillsdale, N. J.: Erlbaum, 2001).**

---

<sup>1</sup>David W. Stewart is Deputy Dean of Faculty and the Robert E. Brooker Chair in Marketing in the Marshall School of Business at the University of Southern California. Paulos (Paul) Pavlou is a doctoral student in information systems in the Marshall School. Scott Ward is Professor of Marketing at The Wharton School at the University of Pennsylvania. Comments regarding this manuscript should be directed to the first author c/o the Office of the Deputy Dean, Marshall School of Business, HOH700B, University of Southern California, Los Angeles, California 90089-1421. Telephone: (213) 740-5037. FAX: (213) 740-6465. E-mail: David.Stewart@Marshall.USC.EDU.

## **Media Influences on Marketing Communications**

In this chapter, we examine research and theory related to the characteristics of media, how these characteristics influence responses to marketing communications, and the processes by which this influence occurs. More specifically, we examine the unique and interactive effects of particular media types and vehicles on how marketing communication affects individual consumers and markets. In an earlier review of this area (Stewart and Ward 1994) we examined relatively traditional effects of media in the context of advertising. We only briefly introduced the then nascent new media and the potential changes these new media suggested in both the characteristics of media and the influence of such media on advertising practice. We also suggested that the continuing rapid evolution of media presented new opportunities for research, but that such research would require a change of focus from the stimulus -- media characteristics -- to the individual -- the purposes and functions served by various media for individuals. Much that we suggested about the evolution of media has come to pass with the rise of the Internet, interactive television, and mobile communication. Thus, in the present chapter we will focus less on the effects of traditional media in advertising, and more on the influences of the new media within the broader context of marketing communications.

Our primary concern in this chapter is with media effects on individuals exposed to, interacting with and responding to marketing communications, rather than with the effects of specific media characteristics on managerial decisions about marketing communications. That is, it is not unusual for the characteristics of particular media to influence managerial decisions: whether to advertise or not, how much to spend on it, what particular media types and/or vehicles to use.

Nonetheless, it is necessary that we address some issues related to the way in which perceptions of media effects influence marketing communications decisions, if only to distinguish these issues from our primary mission. In addition, the increasing interactivity of various media, ranging from the World Wide Web to mobile telephones and digital assistants has tended to blur the boundaries among various types of marketing communication. Advertising, personal selling, service before and after a sale, distribution, and even the product being acquired have all become difficult to clearly and cleanly differentiate within the context of interactive media. Thus, we will examine the broader topic of media influence on marketing communications rather than focus only on media effects in advertising.

Most research on media effects within marketing has tended to focus on advertising effects and this research has focused on traditional mass media: television, radio and print. It is an empirical question whether or not results of past research applies to new media forms, and, in any case, the changing and more complex media environment requires that findings from earlier research be assessed in light of this new environment. Nevertheless, it is likely that much of what exists in the extant empirical and theoretical literature on media still holds within the context of traditional, non-interactive mass media. Interactivity and mobility have added new dimensions to media and the influence of media in marketing communications, however. We will examine these new dimensions in the present chapter as well as summarize what is known about the influence of traditional media in a marketing context.

## **Defining Media for Marketing Communications**

At the most general level, a "medium" refers to any transmission vehicle or device through which communication may occur. In the context of marketing communication, the term advertising has traditionally been applied to mass communication media, to distinguish advertising from personal selling, which occurs through the medium of interpersonal communication, and from sales promotion activities which can occur through various media forms. Advertising media have traditionally been characterized as "measured" media, to refer to the availability of quantitative information to assess the number of viewers or readers potentially exposed to advertising messages. In addition, advertising has traditionally been conceptualized as one-way communication from an advertiser to a recipient. Personal selling and direct response marketing have more typically been characterized as interactive.

Both the practice of marketing management--the organizational domain in which advertising decisions are generally made--and the technological environment, have made traditional conceptions of advertising media open to discussion. Several scholars have argued that the increasing availability of information, and the sophistication of the technology for obtaining, processing, and analyzing this information, are blurring the boundaries of the several elements of the marketing mix (Glazer 1989, Ray 1985). There have also been calls for changes in the organization of both the marketing function and the firm itself to accommodate this blurring of the traditional functional lines within marketing and between marketing and other functional disciplines within and external to the firm (Glazer 1989, Webster 1989). Organizations are increasingly aware that there are more opportunities for controlled communications with consumers and other corporate stakeholders advertising alone, and that many marketing

communication decisions must be coordinated and rationalized within the context of the organization's objectives. For example, the choice of retail outlets represents a kind of "communications medium" decision. Whether a good is sold through Tiffany's or through discount merchandisers is an issue that is conceptually similar to whether an advertisement has the same impact in The New Yorker as it does in Tennis magazine. Similarly, a sales person is a communications medium in the same sense as an ad in a weekly newsmagazine, although the characteristics of the medium are quite different.

In addition to the trend toward an expanded view of organizational communications media, trends and developments have extended the traditional definition of advertising and marketing communications media beyond the mass media. For example, sponsorships and place-based communication have become an important means for reaching consumers with marketing messages. The logos of well-known brands covered the bicycle and athletic wear of Scott Armstrong as he won the Tour-de-France. Such sponsorships, along with cable television, computer-based information services, facsimile machines, mobile telephones, and Web enabled personal digital assistants now allow marketers to reach much more concentrated and focused audiences than with traditional mass media. Many of these communication technologies have also made it increasingly easy for the consumer to respond to the marketer's communications and even initiate communication with the marketer.

Consumers have accepted the Internet as a communication medium with marketers; hence, a new type of marketing communication, interactive advertising, has emerged mainly as a result of traditional advertising embracing interactive technologies. Consistent with the view that the

boundaries of the marketing mix are indeed blurring, interactive advertising shares some characteristics with personal selling, direct response marketing, and even distribution channels. Expenditures for online advertising, only a single form of interactive communication, are estimated to have reached more than \$5 billion in the year 2000, and are expected to exceed \$45 billion by 2005 (Stone 2000). Although this will still be only about 10% of all advertising expenditures, there is reason to believe that this figure will dramatically increase as both consumers and marketers recognize the benefits of interactive advertising.

The communication objectives associated with the use of non-traditional media tend to be similar to those for traditional mass media. For example, sponsorship of an athlete, such as Scott Armstrong, may influence attitude formation and change because an advertiser is associated with the athlete or a particular sporting event. At the very least, marketers hope for very high levels of brand name exposure, as event audiences, as well as audiences that may witness the event on television, are repeatedly exposed to the sponsor's brand name, via messages during the event, billboards at the event, or attachment of the brand name to the object of the event (such as a sports clothing company's logo appearing on players' uniforms). On the other hand, interactive media greatly expand the potential objectives for marketing communication. For example, in contrast to traditional advertising, an interactive medium not only provides information, it can take the order and, in cases where products and services can be digitized, even deliver the product. As we noted above, we believe that much of what is known about the influence of more traditional media on response to marketing communication is generalizable to the "new media" under appropriate circumstances, although the new media will alter traditional uses of mass media by both the consumer and the marketer. Thus, we will consider the extant body of

empirical and theoretical literature regarding more traditional media before turning to a discussion of the new media.

### **The Nature of Media Effects on Marketing Communications**

It is probably safe to say that the early advertisers were less concerned with media choices and effects than they were with simply initiating communication. Mass communications historians tell us that the earliest models of communication effects posited that communications were very powerful: the early "bullet" or "hypodermic needle" models of mass communication (Katz and Lazarsfeld 1955, p. 16) that gave rise to the earliest conception of communication effects: Who says What to Whom through What Medium with What Effects. Very quickly, marketers learned that advertising and other types of marketing communications are not so powerful. Virtually all advertising textbooks recall John Wanamaker's lament, after witnessing the failure of advertising to stimulate sales in his department store chain: "I know that half of my advertising budget is wasted; the trouble is, I don't know which half." The problem, of course, is that the effects of marketing communications are due to a myriad of factors, some related to the characteristics of the communication itself (and, therefore, under the control of the marketer), and some to relatively uncontrollable factors, such as consumer characteristics, marketing communications of competitors, and so forth. Further complicating the problem is the fact that the effects of marketing communications are not necessarily direct. That is, it is exceedingly difficult to separate the effects of media from message variables effects, both in the day-to-day practice of communications management and in empirical research on media effects. Communications and consumer characteristics also interact: it is difficult to partial out the unique effects of communication from the prior attitudes and experiences of consumers who see or hear it.

### Managerial Approaches to Understanding Media Effects: Media Planning Models.

With the advent of commercial television, and printing technologies to make narrow, segment-specific magazines possible, advertisers came to believe that individual media have unique capabilities and effects. Marketing communications managers evolved rules of thumb to account for these effects, e.g., print media are better to explain complex products, television is better because it can show product demonstrations, etc. There was an evolving idea that there are "qualitative" media factors, but generally these were--and are today--relegated to the subjective judgment of media influences. Similarly, the advent of interactive technologies such mobile telephones and the Internet has given rise to efforts to individualize communications or, at the very least, customize marketing communications for very small but especially relevant audiences for the marketer's messages.

Early rules of thumb about media effects evolved into attempts to explicitly model these effects. This evolution was stimulated at least as much by the availability of large databases on the media habits of individuals, and by computer technology, as by communication or psychological theory. Generally, media models contain information concerning readership, viewership, listenership, Web browsing among households, and data about household purchasing behavior among other things. Armed with such information, a planner can quickly identify the characteristics of heavy users of a brand or product category, and determine the media habits of such buyers. Models employing such demographic and behavioral analysis merely offer insight into which media particular consumers use, and by implication, which media are most likely to reach the intended audience of the marketer.

The Advertising Response Function. At the heart of most media planning models is an "advertising response function." This is the hypothesized relationship between the cumulative number of exposures of an individual (or aggregate of individuals) to communication for a product (within the same medium or across different media), and some dependent variable, such as purchase probability, product knowledge, etc. The specific form of this response function has been the subject of considerable debate. In general, however, one of two functions is thought to apply (Stewart 1989): (1) a gentle S-curve indicating that advertising requires a few exposures to have any impact at all (hence a threshold for any effect at all), a few more exposures to reach its maximum impact, and then a declining marginal impact and (2) a simple ogive function that also consists of a rapidly rising level of effectiveness with each additional exposure, followed by diminishing marginal impact of each subsequent exposure, but no threshold. Both functions have been documented extensively in the literature, which suggests that the specific form of the function may be contingent on other factors. Consistent with this contingency perspective is the suggestion by Burke and Srull (1988) that the threshold portion of the model is observed under conditions of competitive advertising. Their reasoning is consistent with a long tradition of research on interference effects in the learning literature. Simply put, Burke and Srull (1988) argue that the threshold effect represents the minimal advertising for a product to overcome the interference created by the advertising for competitive products. Thus, the threshold is likely to be most prominent in heavily advertised product categories and may disappear altogether when competitive advertising is relatively modest. This suggests that at least one dimension of the broader media context, the density of competing messages, may influence the very shape of the advertising response function.

Media Impact. Finally, most media planning models include a capability for the media planner to specify "impact" factors. These are subjective weights that the planner can assign to certain factors, such as media types and vehicles, and types of consumers that will influence the model to select particular media types and/or vehicles that reach specified audience segments. There is a general consensus among advertisers and media planners that media do differentially impact the effectiveness of communications embedded within them (Stewart and Ward 1994). General recognition that there exist qualitative difference among media that may influence response to advertising has not brought with it substantial skill in identifying and accommodating to these differences, however. Not only is there some debate about how to characterize different media across various dimensions, rather little is actually known about how people interact with different media. Media planners have tried to capture these effects through the use of subjective judgments. Unfortunately, subjective media judgments have not proven very reliable, even in simple cases (Haley 1985).

This discussion of computer-based models actually used by media planners provides an overview of how advertisers estimate the nature of media effects, and the knowledge advertisers use in accounting for variance in media effects. Variants of such models have been employed in making decisions about almost all media used in marketing communications, including such traditional media as television and magazines, non-traditional media such as event sponsorship, and newer forms of advertising such as banner ads on the Internet. Despite years of experience with such models there is little empirical evidence to indicate with much precision the unique effects of media types and vehicles. Again, this is largely the result of media vehicle effects interacting with a variety of other effects and the difficulty of isolating unique media effects

from the total "gestalt" of message characteristics, repetition effects, consumer characteristics and the like, on consumer responses. The models do require subjective judgments about receivers of advertising messages in different media. For example, media vehicle weights demand that the media planner weight characteristics of individuals who attend to particular media vehicles. However, these characteristics are normally only understood in terms of demographic characteristics, or, in some cases, "psychographic" characteristics, that attempt to characterize individuals in terms of attitudes, opinions, beliefs, and lifestyle habits. In contrast, academic research has focused on individual characteristics that may be correlated with demographics, but are oriented more toward processes by which individuals interact with communication media. We turn now to these research streams.

### **Theoretical and Empirical Approaches to Understanding Media Effects**

Marshall McLuhan is well known for his "Medium is the Message" statement, implying that a medium communicates an image or generates effects independent of any single message it contains (McLuhan and Fiore 1967). In fact, as the preceding discussion makes clear, media effects can only be understood in the context of consumer characteristics that influence the effectiveness of marketing communications in particular media. While there are many such consumer characteristics, five factors have received considerable attention in empirical research and theory development:

1. Attitudes toward the medium;
2. Uses of the medium;
3. Involvement while using the medium;
4. Mood states affecting media usage; and
5. Interactivity of the medium.

In addition to these five factors, media effects are also conditional on media scheduling decisions, which result in differences in repetition of the same message, and the frequency of exposure to marketing communication in the medium.

### Attitudes Toward Media

The attitude of a consumer toward a specific medium can radically alter how that media affects the consumer and any marketing communications it carries. In an early landmark study, the Politz Research Organization compared the vehicle effects of McCall's with that of Look and Life magazines (Politz Research, Inc. 1962). Matched samples of readers were shown the same sets of advertisements, controlling for copy effects, but were told that they appeared in one magazine or the other. There were no differences in brand awareness and knowledge of brand claims, but there were significant differences in brand quality rating and in brand preference. For example, the gain attributed to one advertised brand as the "very highest quality" was 3.8% when the advertisement was said to run in McCall's magazine, but only 1.0% when the ad was said to run in the other two magazines. In a similar vein, Aaker and Brown (1972) examined the interaction of media vehicle types ("prestige" versus "expert" magazines) and copy appeals ("image" advertisements versus "reason-why" advertisements). The dependent variables were consumers' expected price, quality, and reliability. The results showed strong interaction effects among respondents who had not used the advertised products previously. Image advertisements performed better in prestige magazines than did reason-why advertisements. However, reason-why advertisements did not perform better in expert magazines than in prestige magazines in terms of the dependent variables. These studies provide some empirical basis for the notion that

individual attitudes toward media vehicles condition their responses to marketing communications in those vehicles.

The Role of Relationship and Trust. One particularly important attitude toward a medium is related to its perceived credibility or trustworthiness (Shimp 1990). There is considerable consistent with the conclusion that marketers' relationships with consumers plays an important role in how consumers respond to marketing communications (Fontenot and Vlosky 1998, Hoffman and Novak 1996). Perhaps the most important element of a successful marketer-consumer relationship is the notion of trust. Research has shown that trust reduces transaction costs (Ganesan 1994), lowers the risk of transacting (Mayer et al. 1995), increases future interaction intentions (Doney and Cannon 1997), and brings more favorable pricing terms (Pavlou and Ba 2000). Moreover, Keen (2000) posited that the very foundation of electronic commerce rests on trust. While consumers may decide to interact with the marketer in a variety of contexts, any collaboration will always be limited by the extent of mutual trust among consumers and marketers. Thus, for media that are interactive, the perceived trustworthiness of the medium is likely to play an especially important role in determining its influence on consumers.

Although trust has long been recognized as an extremely important element of every interaction (Dwyer, Schuur, and Oh 1987), traditional advertising media provide the marketer with limited ability to raise the level of consumers' trust since one-way communication is unlikely to produce trust (Mayer et al. 1996). Reciprocal interaction, communication, and cooperation, however, facilitate trust building and commitment (Anderson and Weitz 1989, Anderson and Narus 1990).

Hoffman, Novak, and Peralta (1999) noted that consumers do not trust most Internet marketers enough to engage in “relationship exchanges” involving money and personal information.

Trust is a subjective evaluation of another entity's characteristics based on limited information (Beccera and Gupta 1999). In the context of marketing, limited information about products' attributes and the intent of the marketer to provide a fair transaction can give rise to the need for consumers either to trust the marketer, rely on third parties for additional information, or take other actions to reduce risk. Consumers' trust towards a marketer can be defined broadly as the subjective probability with which consumers believe that the marketer will perform a particular interaction in a manner consistent with their expectations. While it is generally agreed that trust has an economic value (Hill 1990) and can be a source of competitive advantage (Barney and Hansen 1994), traditional advertising has not necessarily been focused on building trust, despite the fact that trust has an important influence on the behavior of consumers (Schurr and Ozanne 1985). On the other hand, interactive media have the potential to promote consumers' trust towards the advertiser and product through reciprocal information exchange, customer support and technical assistance, reciprocal communication, operational linkages, and other specific adaptations by the marketer to the needs of the consumer (Forrest and Mizerski 1996).

It is certainly clear that audiences have different perceptions of and attitudes toward different media. Knowing that consumers of various media perceive them differently and have different attitudes toward them still does not tell us how people interact with a given medium or how this interaction influences response. Chook (1983) made just this point when he stated that "the attitudinal approach is simple and relatively inexpensive, but at the same time is one that raises a

number of critical questions. For one thing, measures of media interest, confidence, and enjoyment have no proven bearing on the performance of advertising. For another, such measures are too generalized for application to specific types of advertising." (p. 250).

### Uses of Mass Media

In a broader sense, media effects may be considered in the context of the stream of research examining uses and gratifications individuals obtain from using mass media. This paradigm holds that social and psychological needs generate expectations of the mass media which lead to differential patterns of exposure, need gratification, and other outcomes (Rubin 1986, Atkin 1985, Katz, Blumler and Gurevitch 1974). While this research approach has been criticized on many grounds (see O'Guinn and Faber 1991), the notion that people have uses for and obtain gratifications from, exposure to marketing communications in different media is appealing. There is also some empirical support for the notion. For example, research has found that "social utility" motives influence the viewing of commercials on television. O'Guinn and Faber (1991) suggest that uses and gratification approaches may be most usefully applied to media such as special interest magazine readership.

Evidence for different uses and gratifications from mass media is seen in studies of differential loyalty among consumers of media types and vehicles. In addition, there are selective patterns of exposure or preferential attitudinal dispositions toward certain kinds of media and vehicles within media that are not constant across all viewers (Gunter 1985). How people think and feel about various vehicles or the extent to which the audience flows toward or across certain programs varies between demographic divisions of the population. More significant, however,

are findings that indicate differences in viewing patterns or attitudinal preferences for programs associated with enduring psychological characteristics of viewers (Gunter 1985).

The Role of Selective Exposure. There is also strong evidence that people selectively attend to information based on its relevance to them at a given point in time (Broadbent 1977, Greenwald and Leavitt 1984, Krugman 1988, Pechmann and Stewart 1988, Tolley 1991). Research is rather clear on the point that characteristics of consumers directly influence media effects. For example, in her review of consumer processing of advertising, Thorson (1990) identifies such individual difference factors as motivation (involvement), ability, prior learning, and emotion, among others that influence how, and even whether, consumers process advertising. The theoretical foundation for these effects is selective exposure: the proposition that consumers tend to see and hear communications that are favorable, congenial, or consistent with their predispositions and interests (Zillman and Bryant 1994).

For our purposes, the key issue is whether these findings are in some way related to the effectiveness of marketing communications in different media. It may be that the effects of commercial messages will differ substantially depending on the use a particular consumer is making of a given medium. For example, readers of certain publications and viewers of certain programs indicate that advertising content is an important reason for selecting a given vehicle, and in some cases is the sole reason for using a particular medium. On the other hand, it is likely that some commercial messages will not even gain an individual's attention, if they are inconsistent with the individual purpose in using a mass medium, i.e., they may spoil the mood,

distract from the flow, etc. Evidence on these hypotheses stems from research on the concept of "involvement," which we address below.

### Involvement

The concept of involvement has become a key construct in a number of theories of attitude formation and change (see Greenwald and Leavitt 1984, Petty and Cacioppo 1986, Chaiken 1980, Chaiken, et al 1989). Involvement has generally been conceptualized in terms of how consumers interact with a given medium or message. Messages and media are conceived of as more or less involving for a particular consumer, and such involvement is posited to influence the amount and type of information processing in which a consumer engages. Involvement has also been one of the more frequently researched and controversial constructs within the disciplines of social psychology, advertising, and communication (see Zaichowsky 1985). One problem with an examination of the research on the effects of involvement is the lack of a generally accepted definition for the construct. Researchers have used the term to mean a number of distinctly different things. For example, Schwerin (1958) defined involving programs as "tense" programs. Kennedy (1971) defined involvement as interest in the program storyline, while Soldow and Principe (1981) interpreted involvement as suspense. More recently, Thorson, et al (1985) used liking for a television program and an assessment of cortical arousal as measures of involvement.

Related to these differences in the operationalization of the involvement construct is the issue of where to measure involvement. Marketing researchers have defined involvement in terms of the medium (or specific vehicle), in terms of the message, and in terms of the product that is the

focus of the message. It is likely that the general inconsistency of research findings regarding involvement is due to differences in the way involvement has been defined and operationalized across studies (see Singh and Hitchon 1989 for a review of this literature). With these caveats in mind, research in this area has yielded important findings on media effects.

In early work on the subject, Krugman (1965, 1966) posited the concept of involvement to counter the prevalent model of mass communications effects in the late 1950's and early 1960's, the so-called "transactional model." In contrast to the earlier "hypodermic needle," or "bullet" model that posited strong communications effects, the essential notion of the transactional model is that mass media effects are quite limited. Individual characteristics, attitudes, experiences, predispositions, etc., all mediate mass media effects. As some have put it, the conceptual shift was to change the focus from "what media do to people," to "what people do to mass media." Contemporary versions of the transactional model are still popular among attitude researchers today under the general rubric of cognitive response theory.

Cognitive response theory posits that the receivers of communications actively process information as it is received by generating thoughts (Greenwald 1968). Cognitive response theory, of which there are a number of variations, suggests that people are not so much persuaded by communication as they persuade themselves through their own idiosyncratic thoughts in response to communications. The best known cognitive response theory in advertising research is the elaboration likelihood model (ELM) associated with Petty and Cacioppo (1986). ELM posits a number of specific characteristics of receivers of communication that influence the likelihood of cognitive response (hence the name, elaboration likelihood). The

two characteristics that have received the most attention from researchers are the ability of the receiver to use the information and the involvement of the receiver.

Krugman suggested that early transaction models were flawed because mass media "effects" are most often viewed as attitude changes regarding important issues--the focus of most empirical research in the area. Krugman argued that people are much less involved with content of marketing communications, especially in what he called "low involvement" media, such as television. Cognitive response theory has not, by any means, ignored low involvement situations. It suggests that there are differences between high involvement and low involvement situations. The underlying cognitive response mechanism is the same in both situations, however. What is hypothesized to differ is the content of the thoughts elicited by the communication. More involving situations elicit more thoughts directly related to the message, while less involving situations elicit more thoughts related to such non-message cues as source expertise, liking for the source, and so forth. In both high and low involvement circumstances the message recipient is viewed as an active information processor. What changes as a function of involvement is the nature of the information attended and processed.

Several studies have specifically examined the effect of various kinds of involvement on responses to marketing communication. Lloyd and Clancy (1989) and Audits and Surveys (1986) report large-scale studies that demonstrate that more highly involving media (i.e., print) are better vehicles for delivering product messages. This is true regardless of whether the measure of effectiveness of communication is recall, persuasion, or message credibility. Buchholz and Smith (1991) investigated the effect of the interaction of involvement and type of

medium on a variety of measures. For these authors, involvement is a situational variable, which they induced by instructions that either directed respondents to pay careful attention to an ad or to pay attention to material surrounding the advertisement of interest. Their research demonstrated that in high involvement situations message recipients were equally likely to process and remember advertising messages embedded in radio and television commercials. Under high involvement situations, message recipients tended to generate more thoughts, and especially personally relevant thoughts, about the commercial message. In low involvement situations, television, with its dual channel input (audio and visual) was the superior medium. Cognitive responses and the number of personally-relevant connections were substantially reduced in the low involvement situation. Television was nonetheless superior to radio in low involvement circumstances.

In sum, the involvement notion is an important one for the present topic because it has formed the basis for research that attempts to directly compare media effects. In general, findings show that media differ in the extent to which they invite different kinds of attentiveness and information-processing of advertising. Additionally, despite the ambiguity of the construct, research has directly examined the complex interactions between effects of the medium itself, viewer characteristics, products, and, perhaps, the situation in which the communication occurs.

### Mood

The term "mood" denotes specific subjective feeling states at the time of exposure to a marketing communication. A rather substantial body of research makes it quite clear that mood influences an array of psychological processes - attention, information processing, decision making,

memory, attitude formation. Srull (1990), Isen (1989), and Gardner (1985) provide reviews of much of this work and its implications for advertising and consumer behavior. Conceptually related to "uses and gratifications" research, discussed earlier, the concept of mood and the related construct of arousal, focus on affective, rather than cognitive factors that link individuals with media. The essential idea is that people use media to maintain or change feeling states (moods) or excitatory states (arousal). Self-report data suggest that people use television to both increase and decrease arousal (Condry 1989), and physiological studies have shown that television viewing can alter blood pressure, heart rate, and other physiological states that presumably reflect arousal states (Klebbber 1985).

There is certainly evidence that moods induced by television programs interact with commercials embedded within these programs to produce differential responses among viewers. For example, Kennedy (1971) found viewers of suspense programs had poorer recall of a brand name in an embedded commercial than viewers of a comedy. However, attitudes toward the advertised brand were more positive among viewers of the suspense program than among viewers of a comedy. Similar results for recall are reported by Soldow and Principe (1981). Goldberg and Gorn (1987) found that, compared to commercials viewed in the context of a sad program, commercials viewed in the context of a happy television program resulted in happier moods during viewing of both the program and commercials, more positive cognitive responses about the commercials, and higher evaluations of commercial effectiveness. They also found that the mood induced by the program had a greater effect on commercials with a greater emotional appeal than commercials with more informational appeals. These investigators did not examine

whether there was an interaction between the emotional tone of the commercials and the programs in which they were embedded.

The potential interaction of the emotional tone of commercials and programs was investigated by Kamins, Marks, and Skinner (1991). They find that a "sad" commercial embedded within a "sad" program was rated by viewers as more likeable and produced higher ratings of purchase intention than a humorous commercial embedded within a "sad" program. Conversely, a humorous commercial embedded within a humorous program performed better than a humorous commercial embedded within a "sad" program. The authors interpret these results in terms of consistency theory, which suggests that viewers seek to maintain a mood throughout a program. Since commercials represent interruptions, Kamins, et al (1991) suggest that commercials that are more consistent in emotional tone with the program will perform better than those that are inconsistent in tone.

In an earlier study, Krugman (1983) also examined the relationship between responses to advertising and the programming context. While he did not explicitly address the question of mood, his hypotheses reflect processes that would seem to be conceptually related to the construct of mood: he tested the convention wisdom that "commercials are particularly objectionable when they interrupt interesting programs." Thus, some reasoned, "the more interesting the program, the less effective the commercial" (Soldow and Principe, 1981). Krugman first distinguishes between viewer opinion, and impact on viewers, as separate phenomena. Then, he examines the impact of advertising in 56 television programs that were determined to vary in interest level. He finds a pattern that is just the reverse of the conventional

wisdom: commercials interrupting interesting programs are more effective. This is consistent with Krugman's earlier hypothesis that involvement with advertising tends to be consistent with interest in the editorial environment. While this study does not make comparisons with other media, and the notion of interest relates as much to message variables as it may relate to media effects, the finding is indicative of the importance of the media viewing context as a mediator of advertising effects.

Finally, a major field experiment (Yuspeh 1977) examined the programming context as a determinant of responses to television advertising. This time, the programming context was manipulated by having viewers watch either situation comedies or action programs. No explanatory concepts are offered to suggest what it is about the different programming types that might account for different effects, but the implicit idea seems to be that linkage between programming stimuli and advertising responses is attributable to variations in mood, or excitatory states experienced while watching (Yuspeh 1977). Individuals were asked to watch particular programs (experimentally manipulated so that half watched three action programs and half watched three situation comedies). Commercials for six products were embedded in the programs, and effects were measured with multiple indicators, such as brand recall, attitudes and buying intention, and commercial element playback. Interestingly, there were only slight differences between the two types of programming contexts on commercial effectiveness. However, there were significant differences among specific episodes with each program type, across products and performance measures. It appears that different episodes of the same program may have different effects on the performance of commercials appearing in those programs. It is likely that such an effect is the outcome of a complex set of interactions between

program type, advertising message, and viewer characteristics, especially programming-induced moods.

None of the studies that explore the relationship between programming context and advertising response clarify whether the effects of prior moods differ from programming-induced moods.

Nor is it clear whether the types of mood effects that occur in a television context occur in other media, although it is certain that other media are capable of creating or changing moods (Gardner 1985, Isen 1989).

### Interactivity

Within the last few years, a new form of marketing communications has emerged. This new form of communication is predominantly electronic, but it has many of the characteristics of other forms of communication: 1) it can be interactive, but without the human touch of personal selling, 2) it provides the opportunity for direct response from and to the consumer, 3) it allows mass communication among consumers without the marketer's intervention, and, 4) it shares some of the characteristics of print and broadcast advertising, at least with respect to the more traditional advertising that appears on it (banner ads, e-announcements). Cutler (1990) defined the "new media" as media that provide the capability to instantaneously advertise, execute a sale, and collect payment. With the advent of the Internet and other technologies (interactive web technologies, streaming media, wireless devices, interactive TV, etc.), these new media go well beyond these basic capabilities to allow a more comprehensive interaction between consumers and marketers and among consumers (Anderson 1996). Therefore, perhaps the most interesting

and novel attribute of the new media is their capability for *interactivity*, which is becoming increasingly more pronounced with the infusion of more advanced communication media.

Using interactive media, consumers can collect and provide information by searching and navigating through commercial Web sites, interact with marketers through interactive web-based software and mobile telephones, post and customize their preferences, communicate with other consumers and product and service providers, and conduct transactions anytime from anywhere. Similarly, marketers can use information obtained from consumers to customize their messages, segment their audiences, facilitate consumer search for selected types of information and products, and collect information about consumers' preferences to improve future products and services. Moreover, marketers can potentially provide consumers with a more enjoyable and informative experience by offering such services as personalized information, live messaging and entertainment, and quick customer service and technical support through e-mail, 'smart' websites, live operators, streaming media and video-conferencing. Thus, interactive media provide new capabilities (Burke 1997) not found in more traditional media.

The notion of interactivity has tended to be associated primarily with the Internet, but this is a limiting conceptualization in an era that is providing increasing opportunities for interactivity through a variety of different media ranging from interactive television to mobile telephones. Moreover, the concept of interactivity will strongly influence the conceptualization and practice of relationship marketing (Thirkwell 1997) and change the way marketers think about communication. Leckenby and Li (2000) define interactive advertising as the presentation and

promotion of products, services, and ideas by an identified sponsor through mediated means, involving mutual interaction between consumers and marketers.

The use of interactive media also draws attention to the theoretical differences between traditional conceptualizations on advertising and its applications to today's marketplace. Traditional approaches to advertising practice and research have implicitly assumed that advertising is something the marketer does to the consumer. In contrast, interactive advertising makes it clear that what advertising does to the consumer is only one limited dimension of advertising, highlighting the need to understand what consumers do to advertising (Cross and Smith 1995), and how interactive media affect this two-way interaction. The reasons consumers seek, self-select, process, use and respond to information are critical for understanding interactive marketing communication. Moreover, communication among multiple consumers over interactive media (e.g. portals, chat-rooms) has the potential to alter the way in consumers respond to marketers' communications. Interactive media of various types not only opens new opportunities for communication with and among consumers (Spalter 1996), it also creates opportunities for creating new measures of consumer response to such communications, as well as to product offerings and other marketing initiatives. Interactive media highlight the importance of the consumer in marketing communication.

Benefits of Interactive Media. Interactive media will soon achieve the reach of television, the selectivity of direct marketing, and the richness of interaction rivaled only by an expert salesperson (Braunstein and Levine 2000). Interactive media combine the dynamic delivery of broadcast media to send targeted streaming ad messages to consumers, while attracting new

audiences that may not respond to traditional non-interactive media. Moreover, interactive media can offer communications that provide consumers with the ability to complete a transaction instantaneously (McKenna 1997), while simultaneously monitoring results, analyzing consumer preferences, and adjusting the message and promotions to increase performance. This allows advertisers to target advertisements to consumers with different content type based on past online behavior, geographical location, and demographic information. Keeney (1999) has suggested a variety of ways in which the Internet might create value for consumers. These include minimizing errors in transactions, lowering costs of products and services, designing optimal products or product bundles, minimizing shopping time, and increasing the enjoyment of shopping, among others. These outcomes are undoubtedly valuable to consumers; nevertheless, the effects of interactive advertising go well beyond cost and convenience benefits to include satisfaction, customization, participation and involvement, better understanding and decision quality, and mutual confidence and trust.

By using interactive media, marketers can create profiles of consumers by either direct self-reporting or by tracking behavior. Consumers can also generate their own profiles preferences, provided they see a benefit from doing this. For example, Mypoints.com ([www.mypoints.com](http://www.mypoints.com)) promises to send personalized messages to consumers for products and services they care about if they reveal their preferences. In this sense, consumers receive value by learning about goods they are interested in on a timely manner. Apart from self-reporting, data mining is a powerful approach that allows marketers to learn about consumer preferences by tracking patterns of behavior such as the clickstream and purchase history data. For example, 'cookies' are widely used software programs that keep track of consumers' web behavior. Therefore, depending on the

'expertise' of the system, web tracking helps marketers learn more about their consumers and improve and target their messages and product offerings. Interactive advertising can also act as a 'product simulator', providing a substitute for physical on-site selling. As bandwidth limitations become less restrictive, marketers can advertise their products by employing virtual showrooms where consumers can view products in 360-degree views. Furthermore, 'live consultation' can also be employed by the power of interactive media that can help marketers to respond to consumer inquiries in a manner similar to live consultation without employing human salespeople. In sum, interactive advertising offers a variety of benefits to both consumers and marketers, enabling a better and more fruitful interaction among consumers and marketers (Wikstrom 1996).

While interactive media may never achieve the human touch of personal interaction and might not translate the tone and body language of an expert salesperson, they can still offer an opportunity for a form of personal selling, one-to-one marketing (Burke 1997). Since the interactive media can provide customized solutions to mass markets, they may enable marketing communication to enter areas where the 'high-touch' of a human salesperson is required. Indeed, Stewart, Frazier, and Martin (1996) argue that the Internet is merging traditional advertising and personal selling into a new integrated form of marketing communication. According to Lovelock (1996), interactive media can establish a channel of communication among consumers and marketers and give rise to better relationships. Customized and personalized media also have the potential to improve customer service after the sale (Berry 1987, 1995, Peterson, Balasubramanian and Bronnenberg 1997).

The concept of 'build-to-order' products is a possible consequence of employing interactive media. For example, Helper and MacDuffie (2000) proposed a hypothetical scenario where consumers can actively participate in a form of personal selling through interactive media to order custom-configured automobiles. In addition, *automatic replenishment* is a form of one-to-one marketing where the consumer is automatically notified about reordering new products. Automatic replenishment can be considered as another form of personal selling that adds value to the consumer experience, brings back existing customers, delivers new sales, and enhances customer relationships. Interactivity is a key element for the success of automatic replenishment since this form of advertising needs a customer-marketer relationship.

Despite such enormous possibilities arising from the use of interactive media in advertising, e-mail communication is still the most common form of personal selling using interactive media. For example, coolsavings.com ([www.coolsavings.com](http://www.coolsavings.com)) sends personalized e-mails to targeted consumers asking them to visit a site and purchase certain products. The ability to reach individual users immediately and reliably without significant costs makes e-mail communication more efficient than the traditional letter, telephone or even broadcast medium. Consumers are also more likely to respond to e-mail offers that are personalized to their interests than to the mass media.

Interactive media can replace personal selling when the marketer knows enough about the consumer to provide knowledgeable and personalized ad messages. While marketers could ideally use any information to benefit the consumer in terms of tailoring a message based on the consumers' preferences, collecting personal information could practically result in an invasion of

the consumers' privacy. Online profiling is the practice of collecting information, often secretly, about consumers' web-surfing habits and other personal purchasing preferences. One of the unique dimensions of the Internet is anonymity; hence, consumers are rightfully concerned over privacy of their personal information gathered by marketers during their web surfing. Whereas web tracking can have an enormous potential for marketers, concerns over loss of the consumer's privacy may hinder the marketers' efforts to understand consumers better. Similar to traditional forms of personal selling, interactive advertising can achieve a legitimate one-to-one communication when consumers are intentionally seeking such interaction.

Word-of-Mouth Communication in Interactive Media. Word of mouth (WOM) communication has long been regarded as the most credible, unbiased, and effective form of marketing communication (Kiely 1993, Cafferky 1996, Rosen 2000, Hoyer and Macinnis 2001). Many Internet portals allow consumers to actively communicate through e-mail group discussions, message boards, and chat-rooms without marketer intervention, providing a viable form of mass WOM communication. Whereas consumers have always had the ability to spread information to other consumers (word-of-mouth), this 'pass-it-on' phenomenon has become a prominent use of the new interactive media. For example, the term 'viral marketing' describes the fact that consumers spread a marketers' message to other consumers with little or no effort by a marketer. For example, websites offering virtual greeting cards (e.g. [www.bluemountain.com](http://www.bluemountain.com)) spread information about the availability of such cards when consumers send each other greeting cards.

A new venue for third-party driven form of interactive communication has emerged in among interactive media. Independent portals such as yahoo.com ([www.yahoo.com](http://www.yahoo.com)) host virtual

communities, message boards, and chat-rooms, and e-mail group discussion, which offer convenient ways to connect consumers who share the same interests and ideas. For example, eGroups.com ([www.egroups.com](http://www.egroups.com)) is an email group service that allows consumers to easily create and join email groups. This provides a form of dynamic WOM communication among millions of consumers. While WOM communication is usually not marketer-driven, advertisers can monitor and perhaps influence what information is communicated among consumers. Monitoring WOM communication in public venues not only it does not violate consumer privacy, it can also provide valuable information about what information consumers find most important. Rather than copiously track consumer preferences, marketers can use publicly available information to understand how consumers form their preferences. Moreover, marketers can influence WOM communication by "seeding" sites (Rosen 2000). In sum, consumer-to-consumer communication over interactive media can provide e a form of a dynamic WOM communication that can complement marketer driven communications.

The availability of interactive media on a large scale is a very recent phenomenon. Thus, the full implications of these media in the context of marketing communications remain to be identified and explored. Nevertheless, interactivity fundamentally changes the nature of marketing communication. The traditional paradigm in marketing practice and research implicitly has assumed that communication is something the marketer does to the consumer. As we have pointed out, this is a very limited view. The traditional paradigm for research on marketing communication has served the profession well, but it is incomplete in an increasingly interactive context (Pavlou and Stewart 2000). The future of interactive communication highlights the need for a new paradigm that focuses on what consumers do to marketing communications and how

they respond to it. The focus of this new paradigm must also be the consumers' active participation in marketing communication, not merely their responses to it (Roehm and Haugtvedt 1999).

This new paradigm requires that the focus of research on the influence and effects of marketing communications will need to shift from a focus on outcomes to a focus on both process and outcome. The role of the consumer in selecting opportunities for communication, in choosing when and how to interact (if at all), and the goals and purposes of consumers involved in the interaction will be especially important dimensions of marketing communications that will require new measures and new conceptualizations of how communication works. It is also likely that as the marketing mix becomes increasingly integrated and the same vehicles assume multiple functions (communication, distribution etc.), it will become increasingly difficult to conduct relevant research on marketing communications without consideration of the larger context of the full marketing mix. In addition, the consumers' use of other information sources, especially the consumers' interaction with other consumers, will be important for understanding how and why consumers respond as they do to marketing communications.

### **Media Context As A Mediator of the Influence of Marketing Communications**

In the broadest sense, the five consumer characteristics discussed to this point form a complex context for media exposure. That is, attitudes toward media types and vehicles, uses and gratifications from media, involvement, mood states motivating and characterizing media use, and interactivity all form the context that influences consumers' decisions about whether or not to attend to particular media and consumers' cognitive and affective states while attending to

media. However, a few studies focus more on media stimuli themselves than on consumer characteristics that determine communication effects in different media. We refer to these studies as focusing on the "media context." Studies in this area seek to explain relatively immediate outcomes of exposure to advertising, such as cognitive responses, attention behavior, and physiological responses, in terms of exposure to different media types. Other studies examine longer-term responses to advertising as a function of frequency and timing of exposure, and these will be reviewed in the next section.

Krugman's involvement construct, discussed earlier, suggests that the inherent characteristics of media, in addition to consumer characteristics and product characteristics, interact in order to determine one's "involvement" with media. Terms such as "hot" (broadcast media) or "cool," (print media), however, do not tell us much about particular media characteristics that may be functionally related to different effects on individuals. A first question is whether the media context affects consumer responses to marketing communications, and, if so, what is the nature of these responses? Research that addresses these questions fall into several types: studies of cognitive response, observational studies, studies employing physiological measures, studies of "priming", and research on the mediating effects of various situational or environmental factors.

Cognitive Response. A classic study by Wright (1973) examined the interaction of media and receiver involvement on a range of cognitive responses. Drawing heavily on previous research in psychology, Wright argued that individuals may experience an array of responses when exposed to marketing communications, and the nature and intensity of these responses is directly related to degree of involvement. These cognitive responses include counterarguments, source

derogation, support arguments, and, in other research, "connections," -- a construct very similar to Krugman's discussion of "bridging" that may occur, as individuals relate what they see in advertising to some aspect of their personal lives.

Wright was interested in the mediating role these cognitive response variables might play in determining consumer responses to marketing communications in different media, under different involvement conditions. Receiver involvement was manipulated by telling some subjects they would have to make a short-term decision after viewing advertising for a new soybean-based product (high involvement). Other subjects were not told of the impending decision (low involvement). Messages were transmitted by either audio means, similar to radio advertising, or by print means, similar to newspaper or magazine advertising. Wright found significantly more total cognitive responses, less source derogation, and more support arguments for a print version of an advertisement than for a radio version. Although acceptance of the ad message was not affected by the medium, buying intention was higher for the print condition than for the radio condition. In addition to the immediately measured cognitive response activity, delayed responses were elicited two days later; among the more highly involved subjects, supportive responses to the radio ad increased, but not for the print ad. Initially, the rapid transmission rate of broadcast media, compared to the more audience-controlled input of print, probably inhibits both the amount and variability of response activity. Over time, relatively more opportunity exists for increases in cognitive responses to broadcast media; the responses may, in turn, be related to different amounts of persistence of attitude change and behavior.

Observational Studies. Other studies also directly examine consumer responses while viewing marketing communications in different media contexts. While Wright examined self-reports of cognitive responses while viewing marketing communications in different media, some researchers have examined actual behaviors while attending to media. For example, Ward, Levinson, and Wackman (1972) and Anderson and his colleagues (Bryant and Anderson 1983), among others examined actual behavior while watching television. Tolley (1991) used a unique lamp-like device to unobtrusively track the eye-movements of readers of newspapers.

Rothschild and others (Rothschild and Hyun 1990, Rothschild, Hyun, Reeves, Thorson and Goldstein 1988) have measured physiological responses among individuals exposed to television commercials. Unfortunately, most of these behavioral studies do not compare responses across media, unlike Wright's study that compared responses to print and audio advertising.

In the Ward, et al research, mother's observed one of their children watching television, and coded attention behavior. Results show a great deal of activity while watching television generally, ranging from not attending to the television set at all, to full attention. During strings of commercials, children's attention initially increased when commercials interrupt programming, but decreased steadily over the "pod" of commercials. Interestingly, there was some tendency for attention to increase later in commercial pods, apparently because children anticipate the return of programming. Anderson's (Bryant and Anderson 1983) work has sought to identify those attributes of television programs that attract the attention of children. Attention was operationalized as visual selection, that is, the time the child's eyes were directed toward the television screen. Program characteristics most likely to draw attention to the television screen included movement, high levels of physical activity, and auditory changes in the program. Such

findings have not been lost on the creators of children's advertising. Most such advertising routinely includes those elements that draw attention. Simply focusing on a television screen does not, however, assure that information is processed by the viewer.

Tolley (1991) found that readers of newspapers scan pages to decide whether and to what they will attend. Most individual newspaper pages received virtually no attention. Debriefings with readers suggested that they were using the quick scan as a means for identifying those items, editorial matter, ads, etc., that were personally relevant. Such findings are consistent with research that suggests there exists a pre-attentional process that acts to filter irrelevant information and helps the individual determine those environmental elements for which information processing is worth the effort (Broadbent 1977, Greenwald and Leavitt 1984). Tolley also observed that individuals appear to have consistent, but idiosyncratic styles of reading.

Physiological Measures. Rothschild, et al examined physiological (EEG: electroencephalographic) responses of individuals watching television commercials, and examined the relationship between EEG responses and memory for components of TV commercials (Rothschild and Hyun, 1990). They found significant EEG activity during commercial exposure, and some differences in hypothesized directions for greater dominance by one brain hemisphere or the other. The latter is the topic of "hemispheric lateralization," referring to specialization of the right and left sides of the brain in information-processing (Hellige 1990). Some advance the idea that the right side of the brain is "better" at processing stimuli such as pictures and music, while the left side of the brain is better at processing words and numbers.

Priming. Another stream of research on the effects of media context has examined the degree to which media "prime" attention to specific elements of advertising and other types of marketing communications (Higgins and King 1981, Wyer and Srull 1981, Herr 1989, Yi 1990 a & b). Research in contexts other than advertising (Berkowitz and Rogers 1986) suggests the presence of such an effect. The notion of priming suggests that the media context may predispose an individual to pay more attention to some elements of a communication message than others and may influence the interpretation that a viewer gives a complex or ambiguous stimulus. For example, the presence of an older model in an advertisement could be interpreted in terms of maturity, experience, conservatism, sophistication, steadfastness, or any of a number of other more or less positive attributes. Depending on the product, some of these interpretations would be more desirable to the marketer than others. For a perfume product, associations of experience and sophistication might be appropriate, while conservatism and steadfastness would be less appropriate (though they might be appropriate for a different "product" such as a bank). The media context might serve to prime one or more of these interpretations. For example, if the advertising were embedded in a program about a sensuous older woman, the associations elicited by an older female model in an ad might well include sophistication and experience. On the other hand, if the program in which the advertising was embedded dealt with the struggle of an older woman to adjust to a near fatal illness, rather different associations might be elicited.

Several empirical studies demonstrate that such priming does occur. Further, this priming may occur for both cognitive and affective responses. For example, Yi (1990a) showed that a media context that emphasized one particular interpretation of an automobile attribute (size) resulted in

greater salience for the primed interpretation. Similar effects have also been identified in other studies (Yi 1990b, Herr 1989) and are consistent with Wyer and Srull's (1981) model of cognitive accessibility and with recent research on framing effects (Bettman and Sujan 1987). Yi (1990a) also demonstrated affective priming. Affective priming is a type of mood effect in that a mood is induced by the media context, in contrast to a mood that the individual brings to the medium. Yi found that the more positive the tone of the editorial matter the more effective the ad (as measured by attitude toward the brand and purchase intention). He further demonstrated that this effect appeared to be mediated by more positive attitudes toward the ad.

Research on priming has generally assumed that priming is unidirectional, that is that the effect is induced by media context on response to a message. This is probably not an unreasonable assumption under most circumstances given the embeddedness of commercials within the more dominant media environment. It may be possible for the effect to work in the opposite direction, however, with a commercial (say prior to the beginning of a television program) serving to prime response to the medium. Another related question is the degree to which advertisements in the same medium or the same "pod" of commercials, or page in a magazine, might prime response to other advertisements. The role of priming in an interactive media context also poses an array of interesting questions. For example, the context in which a banner ad occurs on a web site may influence both the propensity to respond to the ad as well as the nature of the response that follows.

## **Effects of Media Scheduling**

Evidence suggests that there are different effects of marketing communication in different media, depending on media scheduling, that is, how often individuals are exposed to advertising in a given time frame (frequency and repetition effects). Pechmann and Stewart (1988), after reviewing the substantial literature on advertising wearout suggest that three "quality" exposures to a communication are probably sufficient for a message to have its effect, but note that it may take many exposure opportunities to produce the effect of three quality exposures. This is because potential message recipients may elect not to attend to a message even when it is present or may see or hear only a portion of the total message. It is also likely that marketing communications for competing products, as well as marketing communication in general, may interfere with the processing of a commercial message at any given point in time.

Several studies tend to support the view that there are rapidly diminishing returns to repeated exposures. Blair (1987/1988) and Blair and Rabuck (1998) report tests of television commercials that demonstrate that increased spending on advertising (with a concomitant increase in the average number of exposures and gross rating points) in a market increased sales in those cases where the commercial scored well on a measure of persuasion. Spending differences seemed to make no difference when persuasion was low. In other words, if an ad was not persuasive to begin with, even an infinite number of exposures was insufficient to produce a response. More relevant to the current discussion is the finding that the persuasive effect of advertising took place quickly and this effect was in direct proportion to the number of gross rating points purchased for the commercial. Further, once commercials had reached their targeted consumers, there was no further effect of additional exposures. Once consumers were exposed to the

advertising and had been persuaded or not that was the end of the matter. Consumers did not become "more persuaded" with additional exposures.

While Blair studies examined television advertising, a study carried out in the early 1980's by Time, Inc. in collaboration with Joseph E. Seagram & Sons, Inc., examined repetition and frequency effects of print advertising. While this study was restricted to one product category, liquor, and only two magazines, Time and Sports Illustrated, the study was well controlled and extended over a 48-week period. The results of this study found that measures of brand awareness, brand attitude, and willingness to buy increased sharply after the very first "opportunity to see" the advertising. All measures tended to level off, then remain constant, in the latter weeks of the campaign for brands that had a high level of awareness at the beginning of the campaign. However, for brands that began with a low level of initial awareness, all measures tended to show a steady increase over the 48 weeks of the campaign. The influence of greater advertising frequency was greater for low awareness brands than for high awareness brands. These results are consistent with a learning view of marketing communication (Pechmann and Stewart 1988). Thus, it is useful to compare processes of learning and forgetting marketing communication with basic research in memory processes.

Learning and Memory Effects. Most studies of media scheduling on advertising effects examine recall and other variables (especially attitude change) as a function of the frequency of exposure and/or repetition of advertising stimuli. This is quite similar to the methods of research on the psychology of learning. One of the pioneers of learning research, Ebbinghaus (1902), identified three basic memory processes:

- (1) A negatively accelerating forgetting curve. After 20 minutes, Ebbinghaus observed that subjects forgot one third of what was learned: after six days, about one fourth, and a full month later, about one fifth.
- (2) Serial position effects. Items at the beginning or end of a series were most easily learned: items in the middle were learned most slowly and forgotten most rapidly.
- (3) Overlearning. Overlearning or repetition beyond the point of repetition made very long conscious memory possible (for example: Things go better with \_\_\_\_\_").

The processes of learning and forgetting marketing communications and marketing-related stimuli are considerably more complex than learning simple stimuli in the laboratory, of course. Consumer characteristics, such as prior experiences, shape these processes, as well as such communications factors as message characteristics and media effects. Nevertheless, much of the laboratory research on verbal learning and forgetting appears to generalize well to a marketing communications context. Unlike the laboratory setting, the marketing communications context provides less control over the frequency of repetition. Media in which marketing communications appear are often defined by their frequency of appearance - nightly news, monthly magazine, daily newspaper, regularly updated Web pages. These characteristics of media limit the advertiser's flexibility for scheduling repetitions. Further, as noted earlier in this chapter, an exposure opportunity (the placement of a communication in a particular medium) is not the same as an actual exposure. It is likely that there are many more exposure opportunities than actual exposures to any particular marketing communication. This fact, coupled with the temporal characteristics of various media, create problems for the marketer that are not present in the laboratory. Thus, a considerable body of research has addressed the issue of scheduling.

Advertising Scheduling. Strong (1974, 1977) examined the scheduling and repetition effects of print advertising and found that greater advertising recognition occurred when consumers were exposed to weekly intervals of magazine advertising than to monthly or daily intervals. Another "classic" study used direct mail advertising. Zielske (1959) found that repetition was very effective in increasing advertising recall, both when repetitions occurred over a relatively short period of time, and when repetitions occurred in a "pulsed" fashion, over one year. Shortly after the thirteenth exposure, 63 percent of the people who had been mailed ads weekly recalled some of the content, as did 48 percent of those receiving monthly ads. After the monthly ads stopped, that group showed decay of recall, similar to the negatively accelerating forgetting curve observed by Ebbinghaus. In a later study, Zielske and Henry (1980) demonstrated similar effects for television advertising. Ray and Sawyer (1971) found that the percentages of subjects recalling an ad increased from 27 to 74 percent as the number of repetitions increased from one to six. Although recognition and recall increased as the number of repetitions increased, there were diminishing returns: additional repetitions resulted in decreasing magnitudes of gains in recall and recognition. Similar results have been found by other a number of other researchers (see Pechmann and Stewart 1988 for a review of this research).

There may be circumstances in which repetitions have a negative effect on recall and recognition. When consumers have negative attitudes toward a product, increased repetitions may result in more negative attitudes. Negative effects may also result from very high levels of repetition, regardless of consumer attitudes due to irritation (Pechmann and Stewart 1988). As in many other areas of communication research, most studies of media scheduling effects do not

compare effects across various media, and they do not isolate media effects from interactions. Few longitudinal studies have been conducted that would provide a basis for definitive statements about repetition and frequency effects of advertising in different media. In addition, scheduling and repetition factors cannot be separated from message variables. Particularly compelling or particularly dreary messages may accelerate or hamper the kinds of results found in studies reviewed here. Greenberg (1988), for example, suggests that "critical images" in television programming may have profound affects, in contrast to the view that television effects occur slowly and incrementally. He calls these strong effects the "drench" hypothesis:

"The drench hypothesis, in its current, primitive form, asserts that critical images may contribute more to impression-formation and image-building than does the sheer frequency of television and behaviors that are viewed. The hypothesis provides an alternative to the no-effects hypothesis and to the view that the slow accretion of impressions cumulate across an indefinite time period. Finally, it also suggests that striking new images can make a difference—that a single character or collection of characters may cause substantial changes in beliefs, perceptions, or expectations about a group or a role, particularly among young viewers. (pp. 100-101).

Finally, the advent of interactive media creates new and interesting issues with respect to media scheduling. Much of the work on media scheduling to date revolves around the question of how best to reach consumers who may not be actively seeking information, at least at the time of message exposure. Increasingly, consumers are becoming active users of interactive media in the quest for information, products, and services. The rapid growth of interactive media and specific

vehicles within these media, e.g., Web sites, confront the consumer with the need for assistance in finding the information they need. Thus, there is increasing reliance on such tools as search engines, portals, virtual communities to locate sites and sources of additional information. Assuring prominence for an organization, product or service within these tools has become the latest challenge in scheduling media.

In addition, consumers are increasingly integrating different media, making the use of some media complementary rather than substitutes for other media. For example, consumers have already begun to provide evidence that they have integrated the Internet experience into their broader media use. Almost half of all personal computers are in the same room as the television set, and simultaneous viewing of television and access to the Internet are common (Cox 1998). Web site addresses are now common in television and print advertising. Traditional media now routinely encourage consumers to seek out additional information on Web sites or via telephone. These traditional media are not simply offering advertising that is extended to another media environment. Entertainment programs on broadcast media and editorial content in print media may refer consumers to additional information about the program or editorial content. However, the site of this additional information may include marketing communications that was not present in the original broadcast or print medium. In addition, outdoor advertising or voice yellow pages may refer users of mobile telephones to Web sites or telephone numbers that provide information or opportunities for product or service purchase. As consumers integrate their own use of various media it will become more difficult to separate passive media from interactive media. Such integration will also raise interesting issues with respect to the scheduling of marketing communications in complementary media.

## **Media-Related Outcomes of Exposure to Marketing Communications**

To this point, we have related results from a number of studies, focusing more on independent variables than on dependent variables. Our focus has been on the independent and joint effects of marketing communications in various media types and vehicles on a variety of outcomes. Selection of dependent variables in many of these studies have been driven by the interests of marketing, consumer and advertising researchers. Therefore, dependent variables usually pertain to effects having to do with consumption, such as "hierarchy of communication" effects (McGuire 1969) thought to lead up to purchase behavior, cognitive processes mediating advertising effects, and learning outcomes (effects on long- and short-term memory). These variables include various recognition and recall measures, measures of product knowledge, interest and attitude, and purchase intention and brand choice (see Stewart, Furse and Kozak 1983 and Stewart, et al 1985 for a review of the use of these measures for assessing the effectiveness of advertising). In addition, traditional measures of the effects and effectiveness of marketing communication have tended to focus on the response of a relatively passive consumer responding to an action by a marketer. Although there has been recognition of a reciprocal relationship between marketer-driven communications and actions and consumer responses, this reciprocity has generally been safely ignored because it has occurred over very long time periods. The advent of interactive media has changed all of this and produced a need to reconsider how the effects and effectiveness of marketing communications are measured.

### Measuring the Effectiveness of Marketing Communication

The rise of interactive media poses new and difficult challenges related to the measurement of the success of marketing communication. Traditional measures of advertising effectiveness, such

as recall, attitude change, and brand choice, while still useful, are only a subset of the potential measures of the effectiveness of marketing communications employing interactive media (Pavlou and Stewart 2000). These traditional measures focus on the influence of communication on the consumer, offering limited insight into what the consumer does to and with advertising. This perspective views marketing communication as a causal independent variable and the consumer's response as the dependent variable. The typical research paradigm involves a forced exposure to some marketing message followed by some measure of consumer response. Assuming that consumers interact with marketing messages, the simple relationship between the independent and the dependent variables becomes obsolete. Therefore, in the interactive media environment this relationship becomes reciprocal and contingent on a host of other factors. When consumers actively decide to interact, their actions become powerful determinants of response to marketing communication.

Whereas advertising in the interactive media can take many forms, the most common method has been the *display banner ad* that occupies a small portion on a computer monitor and through clicking on it redirects the consumer to the marketer's own website. Whereas many studies have examined where ad banners should be located to increase click-through (see a summary at [webreference.com](http://webreference.com) 2000), a universal measure of effectiveness for this popular advertising form has not yet been established. Click-through is only one of many proposed measures of the effectiveness interactive communications. Another proposed measure of online advertising is the *eyeball* method, or the number of unique visits into a given website. An additional measure of the quality of online relationships is the metric of *stickiness*, or the length of time viewers remain attached to a marketer's website. In general, these metrics, like the measures of

traditional media that preceded them, measure the quantity of viewing, nor the quality. None of these measures has been widely adopted.

Fundamental to any discussion of interactive marketing communications is the question of how different it is from marketing communications using more traditional media. Although interactive media have been touted as more powerful, responsive, and customizable than traditional media (Port 1999, Hoffman and Novak 1996), the empirical evidence suggests that consumers respond to interactive advertising in the same ways they respond to advertising in more traditional media, at least with respect to traditional measures of advertising effectiveness. For example, Drèze and (1999) found response to advertising on the Internet to be similar to response to advertising in other media, except that advertising on the Internet appeared to be easier to ignore. Similarly, Lynch and Ariely (2000) found that consumers are less price sensitive when providers on the Internet offer different rather than identical products, a finding that directly parallels findings in more traditional retail settings.

Despite the potential importance of interactive media in the future, very few studies have examined the interactivity of marketers, consumers, and ad messages (Oh, Cho, and Leckenby 1999). Rodgers and Thorson (2000) have propose a new model for conceptualizing the ways in which users perceive and process online advertising, but little empirical research exists to inform such a model. Interactive media place the consumer at the center of the study of marketing communication because effectiveness of marketing communications in such media hinges not only on how the marketer's message influences the consumer, but also on how the consumer shapes and responds to the message. Therefore, research on interactive media will need to focus

on the consumer and the marketer in order to maximize the reciprocal gains of interaction and collaboration (Pavlou and Stewart 2000). This will give rise to the need for measures of the effectiveness of marketing communication that go beyond traditional measures. These new measures will focus on process as well as outcome and are likely to include measures of effectiveness that have previously been regarded as mediating variables.

Involvement. Consumer involvement refers to a subjective psychological state of the consumer and defines the importance and personal relevance that consumers attach to an advertisement. While involvement has long been considered an important variable mediating the influence of communication, it has been poorly defined and operationalized, as noted above. It has long been possible to obtain self-reports of consumers' involvement, but interactive media have the potential to provide a direct measure of consumers' involvement through examination of the frequency and type of interaction with the marketer. Interactive media can involve the consumer in the communication process in a significant way. Indeed, enhanced consumer involvement can be an important benefit arising from the use of interactive media. For example, many commercial websites focus on involving consumers in the communication process by allowing them to actively search and collect information. The amount of time spent on a particular interactive medium, as well as the frequency of return to the medium may be particularly useful measures of consumer involvement.

Comprehension. Comprehension refers to the recall of the message intended by the marketer in response to a product category and brand cue (Stewart and Furse 1986, Stewart and Koslow 1989). For marketing communication to be effective, both the marketer and the consumer must

mutually agree that the consumer has understood the message (Clark and Wilkes-Gibbs 1986, Clark and Brennan 1991). Given the anonymous and ambiguous nature of much of the marketing communication on the Internet and interactive shopping (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, and Wood 1997), consumers may have difficulty comprehending the messages of marketers and may not fully understand the true characteristics of a product. Thus, comprehension is a vital part of interactive marketing communication, as it is with communication involving more traditional media. Interactive media have the potential advantage of providing a means for obtaining measures of comprehension on a real-time basis.

Feedback. Feedback from the consumer to the marketer plays an important role in marketing, and business more generally, since the consumer should understand what the marketers intends, and the marketer should, in turn, adjust the message so that it is clearly understood. To the extent that marketing communication fails to elicit feedback, of some type, it is by definition not interactive regardless of the marketer's intent and the medium used. Feedback of some type is an objective of most marketing communication, since sales and customer satisfaction are almost always an ultimate objective. Both sales and customer satisfaction have always been measures of business success. Interactive media have the potential to provide such measures of success (feedback) instantaneously.

Persuasion. Persuasion implies an attempt to move, affect, or determine a purchasing decision (Schwerin and Newell 1981). Interactive marketing communication may be a far more powerful persuasive tool than communication using traditional advertising media since it provides opportunities to personalize information presentation, promote trust, identify objections and

points in need of further clarification, and modify the offering itself, much as is the case of personal selling. Therefore, interactive media should further enhance the ability of the marketer to persuade. Indeed, Zigurs, Poole, and DeSanctis (1988) have proposed that the pattern of persuasive behavior should be different depending on the degree to which communication is interactive. For example, resistance to the adoption of new products and services is an especially significant obstacle faced by marketers. Interactive communication may well have the effect of decreasing resistance to new products (Lucas 1974), by reducing the communication of irrelevant or unimportant features of the product and by improving the consumers' understanding of the product (Robey and Farrow 1982, Stewart 1986). On the other hand, interactive media are likely to make much more obvious those consumers who are impervious to the persuasive efforts of marketers. This may prove to be a benefit to both consumers and marketers. Consumers may be spared unwanted communications and marketers may find their communication efforts more effective when focused on consumers who regard the marketer's message as relevant to their needs.

Quality of Decisions. Consumer satisfaction, loyalty, and trust are likely to be by-products of the quality of consumers' decision. Lam (1997) has demonstrated that the quality of decisions is better for complex tasks when interactive communication is involved. As noted earlier, interaction with consumers can provide significant information about the nature of consumers' preferences with respect to products and product features. Such information can provide marketers with the opportunity to modify and improve future products and make better decisions regarding product features that consumers find most useful. Moreover, interactive media can promote marketers' learning about consumers' characteristics and preferences, which should, in

turn, improve customer support, technical assistance, and future promotions. Therefore, an important effect of interactive should be better quality of decisions for future marketing communications and products by the marketer even as it also improves the quality of decisions by consumers. This is a very important and distinctive characteristic of interactive communication. In addition, the satisfaction of consumers with the experience of communication and the subsequent purchase decision (or decision not to purchase) will also be especially important measures of the effectiveness of marketing communication.

Decision Efficiency. Prior research suggests that effective communication reduces the time required to make decisions (Short, Williams, and Christie 1976). Dennis, George, Jessup, Nunamaker, and Vogel (1988) concluded that an important outcome of interactive technologies is reduction in the time required to reach to a decision. As noted earlier, interactive media have the potential to combine the processes of advertising, transacting the sale, and collecting payment (Cutler 1990). Since all of these actions can be performed nearly simultaneously via interactive media, the total time and effort required to communicate a message and sell a product should be substantially reduced. Stated somewhat differently, measures of efficiency are likely to be more important and more useful in the context of interactive media than more traditional media.

### **Emerging Issues in the Use of Interactive Media**

The emergence of interactive media and its adoption as a means for marketing communications highlight a variety of issues related to the characteristics and use of these media that are rather different from the issues associated with the use of traditional media for marketing

communications. Insofar as traditional media continue to play an important role in marketing communications, and they will, issues related to media context and media scheduling will continue to be relevant to marketers. These issues are also important in the use of interactive media, but by definition, interactive media provide consumers with much more control over both the media context and the schedule with which they are exposed (or not exposed) to marketing communications. On the other hand, there are issues that are relevant to all media used for marketing communications that are especially salient in the context of interactive media.

### The Necessity of Content Management

While interactive media can bring wealth of information, most of this information may be irrelevant and meaningless to consumers (Wurman 2000). Tillman (1995) has observed that “within the morass of networked data are both valuable nuggets and an incredible amount of junk.” Given consumers' limited capacity to process information and the enormous amount of information available through the new media, content management will be of fundamental importance. According to Simon (1957), a wealth of information creates a poverty of attention. There is already a realization that interactive media, such as the Internet and mobile communication, have had the effect of increasing consumers' search costs (Stewart and Zhao 2000). Web sites are growing faster than they can be cataloged and a variety of techniques and economic incentives now operate to increase the likelihood that a site will be cataloged and occupy a coveted position near the beginning of a list of sites identified by a search engine or portal.

Content management will play an especially important role in interactive marketing communications. Marketers will need to assure that consumers can readily identify sources of

information and will to focus on what customers want and need to learn (assuming these things may be delivered at a profit), rather than provide an abundance of unnecessary information. Relevant and clear content can accelerate consumers' decision-making process and facilitate transactions. While relevance and clarity have always been important elements of traditional advertising, these elements become essential in interactive advertising. Two content management tools, dynamic content and data mining combined with collaborative filtering already play a role important roles in increasing the efficacy of interactive media in marketing communications.

Dynamic Content. Dynamic content involves changing information over time and in response to interaction with the consumer. The availability of relevant new information and new offerings serves to attract consumers and increase involvement with an interactive medium.

Personalization engines and document management solutions will an especially important role in dynamic content management. In addition combinations of media will play an ever more important role in marketing communications. Thus, e-mail or voice mail may be used to inform consumers of new information and offerings that are available in some other medium (e.g., Web site, physical store location).

Information portals are electronic intermediaries that allow marketers to send their advertising messages and consumers to either respond to them or communicate among themselves. For example, yahoo.com ([www.yahoo.com](http://www.yahoo.com)) is a popular Internet information portal that draws many marketers and consumers. Information portals can be separated into *vertical* ones that focus on specific information, or *horizontal* portals that deal with a variety of issues. While messages

through horizontal portals have the ability to reach the masses, vertical portals reach a targeted audience, which can integrate community building. According to Meckler (2000), the future of content management favors vertical focus and original content as consumers seek greater customization and personalization.

Data Mining and Collaborative Filtering. Interactivity provides opportunities for gathering enormous amounts of information about the behavior of consumers. Although the collection and use of such data raise a variety of issues related to consumer privacy, these data also provide opportunities for marketers to provide more personalized information and more customized assortments of products and services. Data mining tools provide a means for identifying patterns in the behavior of within individual consumers and across groups of consumers that are far more specific than even the most sophisticated segmentation approaches in use today. The results obtained from data mining exercises may be combined with collaborative filtering to improve content management. Collaborative filtering is essentially a 'recommendation engine' that provides consumers with suggestions about products and services that consumers with similar preferences have purchased. For example, Amazon.com ([www.amazon.com](http://www.amazon.com)) uses collaborative filtering to offer consumers information about “Customers who bought this book also bought:”

#### Mobile Commerce: Anytime, Anyplace

The advent of mobile telephone and small wireless digital assistants provides new opportunities for marketing communication and new opportunities for consumers to obtain information when and where they need it. For consumers, these new devices offer the ability to access information on demand, for example, a list of French restaurants in an unfamiliar city. For marketers, these

new devices provide an opportunity to communicate with consumers wherever the consumer might be. For example, a real estate agent might provide information about a specific house a potential purchaser is passing or an automobile manufacturer might provide information about the make of an automobile that the consumer sees in a parking lot. Such communications will tend to be more under the control of the consumer, but not always. Using permission marketing, a marketer might provide a consumer with the opportunity to identify types of information or types of products about which the consumer wished to receive information. The consumer would then receive a telephone call, e-mail, or voice mail message when such information or products are available.

Mobile commerce will place new demands on marketers in terms of responsiveness. Consumers will want to obtain information when they need it, not at the convenience of the marketer. Indeed, the immediate availability of information may be the difference between a customer making a purchase or not. Rather than focusing on the scheduling of media in particular vehicles or time slots, as is the case with traditional media scheduling in advertising, the marketer will need to assure that information is available whenever and wherever the customer needs it.

### **The Future of Research on Media Influence in Marketing Communications**

The media landscape is undergoing profound changes that are creating a need to rethink how marketing communications are managed. These changes are also giving rise to the need for a new and different paradigm for theory and research on the role of media in marketing communications. The very rapid increase in the media options available to consumers and the

greater selectivity exercised by individual consumer with respect to these options means, on the one hand, that it will be more difficult to reach target audiences through traditional mass media. On the other hand, the increase in the number of media vehicles available to consumers and consumers' selectivity in using these vehicles may also provide more opportunities to reach precisely-defined audiences with the "optimal" message for the medium and the media use occasion. Realizing this possibility requires several things: 1) a better understanding of how and when people use and interact with various media, 2) a better understanding of how the mode of interaction with various media influences the processing of commercial messages, and 3) a better understanding of how to create commercial messages and distribution strategies that are appropriate in the context of specific media uses. Note that what is needed is not a better understanding of media, but a better understanding of how people interact with various forms of media and embedded commercial messages. Indeed, the increasing use of interactive media, but marketers and consumers, makes it critical to place the consumer at the center of any theory of marketing communications.

The linking pins between channels of communication and marketing outcomes are the factors that influence the individual's self-selection process and the dimensions of interaction with media. The goals and purposes of the users of media are primary determinant of media effects when users have options. Unfortunately, this is an area that still has received rather little attention from researchers (Becker and Schoenbach 1989, Stewart and Ward 1994, Pavlou and Stewart 2000). We do not believe that this is the result of lack of theory to guide such research. Rather, it appears to be an artifact of the fact that, until recently, there were relatively few

genuinely different media options available. In such situations the behavior of individuals is restricted and largely dwarfed by such differences in media as do exist.

In closing, we suggest that there are numerous candidate theories for guiding future research on the use of media and subsequent effects on advertising response. Control theory (Powers 1973, 1978), with its origins in human factors research and its emphasis on purpose as the link between stimulus inputs and behavioral outcomes, may be particularly appropriate given its emphasis on how people get things done. Bandura's (1986) notion of self-efficacy and Ajzen and Madden's (1986) work on goal-directed behavior are also potential candidates. In any case, theoretical approaches to future studies of "media effects" should surely focus on individual characteristics that determine media usage patterns, factors that influence interactivity, and dependent measures that reflect the diversity of outcomes that may arise when consumers are in control of their information environment.

## References

- Aaker, David A., and Philip K. Brown (1972), "Evaluating Vehicle Source Effects," Journal of Advertising Research, 12 (August), 11-16.
- Ajzen, I. and J. T. Madden (1986), "Prediction of Goal-Directed: Attitudes, Intentions and Perceived Behavioral," Journal of Experimental Social Psychology, 22, 453-474.
- Alba, Joseph, John Lynch, Barton Weitz, Chris Janiszewski, Richard Lutz, Alan Sawyer, and Stacy Wood (1997), "Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces," Journal of Marketing, 61 (July), 38-53.
- Anderson, E. and B. Weitz (1989), "Determinants of Continuity in Conventional Industrial Channel Dyads," Marketing Science, 8, 4, 310-323.
- \_\_\_\_\_ and J. A. Narus (1990), "A Model of Distributor Firm and Manufacturer Firm Working Partnership," Journal of Marketing, 54, 1, 42-58.
- Anderson, Cheri (1996), "Computer as Audience, Mediated Interactive Messages," in Ed Forrest and Richard Mizerski (Eds.), Interactive Marketing: The Future Present, American Marketing Association, NTC Business Books, Illinois.
- Atkin, Charles K. (1985), "Informational Utility and Selective Exposure to Entertainment Media," in Dolf Zillman and Jennings Bryant (Eds.), Selective Exposure to Communication, (Hillsdale, N.J.: Lawrence Erlbaum), 63-92.
- Audits and Surveys, Inc. (1986), A Study of Media Involvement, (New York: Audits and Surveys).
- Bandura, Albert (1986), Social Foundations of Thought and Action: A Social Cognitive Theory, Engelwood Cliffs, N. J. : Prentice Hall.
- Barney, J. B. and Hansen, M. H. (1994) "Trustworthiness as a Source of Competitive Advantage," Strategic Management Journal, 15, Special Issue, 175-190.
- Beccera, M. and A. K. Gupta (1999), "Trust within the Organization: Integrating the Trust Literature with Agency Theory and Transaction Cost Economics," Public Administration Quarterly, 177-203.
- Becker, Lee B. and Klaus Schoenbach (1989), "When Media Content Diversifies: Anticipating Audience Behaviors," in Lee B. Becker and Klaus Schoenbach (Eds.), Audience Response to Media Diversification, Coping with Plenty, (Hillsdale, N.J.: Lawrence Erlbaum).
- Berkowitz, Leonard and Karen Heimer Rogers (1986), "A Priming Effect Analysis of Media Influences," in Jennings Bryant and Dolf Zillman (Eds.), Perspectives on Media Effects, (Hillsdale, N. J.: Lawrence Erlbaum), 57-81.

Bettman, James R. and Mita Sujun (1987), "Effects of Framing on Evaluation of Comparable and Noncomparable Alternatives by Expert and Novice Consumers," Journal of Consumer Research, 14 (September), 141-154.

Berry, Leonard L. (1987), "Big Ideas in Services Marketing," Journal of Services Marketing, 1, 1, 5-9.

\_\_\_\_\_ (1995), "Relationship Marketing of Services - Growing Interest, Emerging Perspectives," Journal of the Academy of Marketing Science, 24, 4, 236-245.

Blair, Margaret Henderson (1987/88), "An Empirical Investigation of Advertising Wearin and Wearout," Journal of Advertising Research, (Dec./Jan.), 45-50.

Blair, Margaret Henderson and Michael J. Rabuck (1998), "Advertising Wearin and Wearout: Ten Years Later – More Empirical Evidence and Successful Practice," Journal of Advertising Research, 38 (October), 7-18.

Braunstein, M. and E. H. Levine (2000), Deep Branding on the Internet, Prima Venture, Roseville, CA.

Broadbent, Donald (1977), "The Hidden Pre-Attentive Processes," American Psychologist, 32 (2), 109-118.

Bryant, J. and D. Anderson (1983), Children's Understanding of Television: Research on Attention and Comprehension, (New York: Academic Press).

Buchholz, Laura M. and Robert E. Smith (1991), "The Role of Consumer Involvement in Determining Cognitive Response to Broadcast Advertising," Journal of Advertising, 20 (1), 4-17.

Burke, Raymond R. (1997), "Do You See What I See? The Future of Virtual Shopping," Journal of the Academy of Marketing Science, 25, 4, 352-360.

\_\_\_\_\_ and Thomas K. Srull (1988), "Competitive Interference And Consumer Memory for Advertising," Journal of Consumer Research, 15 (June), 55-68.

Cafferky, Michael (1996), Let Your Customers Do the Talking, Chicago: Upstart Publishing Company.

Chaiken, Shelly (1980), "Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion," Journal of Personality and Social Psychology, 29 (5), 751-766.

\_\_\_\_\_, A. Liberman, and A. H. Eagly (1989), "Heuristic and Systematic Information Processing Within and Beyond the Persuasion Context," In J. S. Uleman and J. A. Bargh (Eds.), Unintended Thought: Limits of Awareness, Intention and Control, (New York: Guilford), 212-252.

Chook, Paul H. (1983), "ARF Model for Evaluating Media, Making the Promise a Reality," Advertising Research Foundation Transcript Proceedings of the Intermedia Comparisons Workshop (New York: Advertising Research Foundation).

Clark, H. H. and S. E Brennan (1991), "Grounding in Communication in L.B. Resnick, J.M. Levine, and S.D. Teasley (Eds.), Perspectives on Socially Shared Cognition, (Washington, D. C.: American Psychological Association), 127-149.

Clark, H. H. and D. Wilkes-Gibbs (1986), "Referring as a Collaborative Process," Cognition, 22, 1-39.

Condry, John (1989), The Psychology of Television, (Hillsdale, N. J.: Lawrence Erlbaum Associates).

Cox, Beth (1998), "Report: TV, PC Get Equal Time," Advertising Report Archives, InternetNews.com, November 17.

Cross, Richard and Janet Smith (1995), "Internet Marketing That Works for Customers (Part 1)," Direct Marketing, 58, 4, 22-23.

Cutler, Blayne (1990), "The Fifth Medium," American Demographics, (June), 24-29.

Dennis, A.R., J. F. George, L. M. Jessup, J. F. Nunamaker, Jr., and D. R. Vogel (1988), "Information Technology to Support Electronic Meetings," MIS Quarterly, 12 (December), 591-624.

Doney, P. M. and J. P. Cannon (1997), "An Examination of the Nature of Trust in Buyer-Seller Relationships," Journal of Marketing, 61, 2, 35-52.

Drèze, Xavier and Francois-Xavier Husherr (1999), "Internet Advertising: Is Anybody Watching?," Working Paper, Department of Marketing, Marshall School of Business, University of Southern California.

Dwyer, F. R., P. J. Schurr, and S. Oh (1987), "Developing Buyer-Seller Relationships," Journal of Marketing, 52, 1, 21-34.

Herman Ebbinghaus, Herman (1902), Grundzuge der Psychologie, (Leipzig: Viet).

Fontenot, Renee J. and R. P. Vlosky (1998), "Exploratory Study of Internet Buyer-Seller Relationships," American Marketing Association, 169-170.

Forrest, Ed and Richard Mizerski (1996), Interactive Marketing: The Future Present, American Marketing Association, NTC Business Books, Illinois.

Ganesan, S. (1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships," Journal of Marketing, 58, 1-19.

Gardner, Meryl P. (1985), "Mood States and Consumer Behavior: A Critical Review," Journal of Consumer Research, 12 (December), 281-300.

Greenberg, Bradley S. (1988), "Some Uncommon Television Images and The Drench Hypothesis," In S. Oskamp (Ed.), Television As A Social Issue, (Newbury Park, CA: Sage Publications), pp. 88-102.

Glazer, Rashi (1989), "Marketing and the Changing Information Environment: Implications for Strategy, Structure, and the Marketing Mix," Report No. 89-108, (Cambridge, Mass.: Marketing Science Institute).

Goldberg, Marvin E. and Gerald J. Gorn (1987), "Happy and Sad TV Programs: How They Affect Reactions to Commercials," Journal of Consumer Research, 14 (December), 387-403.

Greenwald, Anthony C. (1968), "Cognitive Learning, Cognitive Response to Persuasion, and Attitude Change," in A. G. Greenwald, T. C. Brock, and T. Ostrom (Eds.), Psychological Foundations of Attitudes, (New York: Academic Press), 147-170.

\_\_\_\_\_ and Clark Leavitt (1984), "Audience Involvement in Advertising: Four Levels," Journal of Consumer Research, 11 (June), 581-592.

Gunter, Barrie (1985). "Determinants of Television Viewing Preferences," in Dolf Zillmann and Jennings Bryant (1985), Selective Exposure to Communication (Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc.), pp. 93-112.

Haley, Russell I. (1985), Developing Effective Communications Strategy (New York: John Wiley and Sons).

Helper, S. and J. P. MacDuffie (2000), "E-volving the Auto Industry: E-Commerce Effects on Consumer and Supplier Relationships," in E-Business and the Changing Terms of Competition: A View From Within the Sectors, Working Paper, Stanford University.

Herr, Paul M. (1989), "Priming Price: Prior Knowledge and Context Effects," Journal of Consumer Research, 16 (June), 67-75.

Hellige, Joseph B. (1990), "Hemispheric Asymmetry," Annual Review of Psychology, 41, 55-80.

Hill, C. W. L. (1990), "Cooperation, Opportunism, and the Invisible Hand: Implications for Transaction Cost Theory," Academy of Management Review, 15, 500-513.

Higgins, E. T. and G. King (1981), "Accessibility of Social Constructs: Information Processing Consequences of Individual and Contextual Variability," in N. Cantor and J. Kihlstrom (Eds.), Personality, Cognition, and Social Interaction, (Hillsdale, N. J.: Erlbaum), pp. 69-122.

Hoffman, D. L. and T. P. Novak (1996), "Marketing in Computer-Mediated Environments: Conceptual Foundations," Journal of Marketing, 60 (July), 50-68.

\_\_\_\_\_, T. P. Novak, and M. Peralta (1999), "Building Consumer Trust Online," Communications of the ACM, 42, 4, 80-85.

Hoyer, Wayne D. and D. J. Macinnis (2001), Consumer Behavior, Houghton Mifflin Company, Boston, MA.

Isen, Alice M. (1989), "Some Ways in Which Affect Influences Cognitive Processes: Implications for Advertising and Consumer Behavior," in Patricia Cafferata and Alice Tybout (Eds.), Cognitive and Affective Responses to Advertising, (Lexington, MA: Lexington Books), 91-118.

Kamins, Michael A., Lawrence J. Marks, and Deborah Skinner (1991), "Television Commercial Evaluation in the Context of Program Induced Mood: Congruency Versus Consistency Effects," Journal of Advertising, 20 (June), forthcoming.

Katz, Elihu, Jay G. Blumler, and Michael Gurevitch (1974), "Utilization of Mass Communication by the Individual," in Jay Blumler and Elihu Katz (Eds.), The Uses of Mass Communication (Beverly Hills, Calif: Sage), 19-32.

Katz, Elihu and Paul F. Lazarsfeld (1955), Personal Influence: The Part Played by People in the Flow of Mass Communications, (New York: Free Press).

Keen, P. G. W. (2000), "Ensuring E-trust," Computerworld, 34, 11, March 13, 46.

Keeney, Ralph L. (1999), "The Value of Internet Commerce to the Customer," Management Science, 45 (April), 533-542.

Kennedy, John R. (1971), "How Program Environment Affects TV Commercials," Journal of Advertising Research, 11, 33-38.

Kiely, Michael (1993), "Word-of-Mouth Marketing," Marketing, (Sept.), p. 6.

Klebber, Joanne M. (1985), "Physiological Measures of Research: A Review of Brain Activity, Electrodermal Response, Pupil Dilation, and Voice Analysis Methods and Studies," in James H. Leigh and Claude Martin, Jr. (Eds.), Current Issues and Research in Advertising, (Ann Arbor, MI: University of Michigan), 53-76.

Krugman, Herbert E. (1965), "The Impact of Television Advertising: Learning Without Involvement." Public Opinion Quarterly, 29, 349-356.

\_\_\_\_\_ (1966), "The Measurement of Advertising Involvement," Public Opinion Quarterly, 30, 583-596.

\_\_\_\_\_ (1983), "Television Program Interest and Commercial Interruption: Are Commercials On Interesting Programs Less Effective?," Journal of Advertising Research, 23 (February/March), 21-23.

\_\_\_\_\_ (1988), "Point of View: Limits of Attention to Advertising," Journal of Advertising Research, 28 (Oct./Nov.), 47-50.

Lam, S.S.K. (1997), "The Effects of Group Decision Support Systems and Task Structures on Group Communication and Decision Quality," Journal of Management Information Systems, 13 (4), 193-215.

Lazarsfeld, Paul F. (1948), Bernard Berelson and Hazel Gaudet, The People's Choice (New York: Columbia University Press).

Leckenby, J. D. and H. Li (2000), "From the Editors: Why We Need the Journal of Interactive Advertising," Journal of Interactive Advertising, 1, 1 (Fall). Online: <http://jiad.org/vol1/no1/editors/index.html>

Lloyd, David W. and Kevin J. Clancy (1989), "The Effects of Television Program Involvement on Advertising Response: Implications for Media Planning," Transcript Proceedings of the First Annual Advertising Research Foundation Media Research Workshop, (New York: Advertising Research Foundation).

Lovelock, Christopher H. (1996), Services Marketing, 3<sup>rd</sup> Edition, New Jersey: Prentice Hall.  
Lucas, H. C., Jr. (1974), "Systems Quality, User Reactions, and the Use of Information Systems," Management Informatics, 3, 4, 207-212.

Lynch, John G. and Dan Ariely (2000), "Wine Online: Search Costs and Competition on Price, Quality, and Distribution," Marketing Science, 19, 1, forthcoming.

Mayer, R. C., J. H. Davis, and F. D. Schoorman (1995), "An Integrative Model of Organizational Trust," Academy of Management Review, 20, 3, 709-734.

McLuhan, Marshall and Q. Fiore (1967), The Medium is the Message (New York: Bantam Books).

McGuire, William J. (1969), "The Nature of Attitudes and Attitude Change," in Gardner Lindzey and Elliot Aronson (Eds.), The Handbook of Social Psychology, Volume 3, (New York: Random House).

McKenna, Regis (1997), "Real-time Marketing," Harvard Business Review, July-August, 87-98.

Meckler, A. (2000), "I Want My N-TV," Business 2.0, September 26, 124-126.

O'Guinn, Thomas C. and Ronald J. Faber (1991), "Mass Communication and Consumer Behavior," in T.S. Robertson and H. Kassirjian, Eds., Handbook of Consumer Behavior, (Englewood Cliffs, N.J.: Prentice-Hall).

Oh, K. W., C. H. Cho, and J. D. Leckenby (1999), "A Comparative Analysis of Korean and U.S. Web Advertising," Proceedings of the 1999 Conference of the American Academy of Advertising, 73-86.

Pavlou, P. A. and S. Ba (2000), "Does Online Reputation Matter? An Empirical Investigation of Reputation and Trust in Online Auction Markets," Proceedings of the 6<sup>th</sup> Americas Conference in Information Systems, Long Beach, CA.

\_\_\_\_\_ and D. W. Stewart (2000), "Measuring the Effects and Effectiveness of Interactive Advertising: A Research Agenda," Journal of Interactive Advertising, 1, 1. Online: <http://jiad.org/voll/no1/pavlou/index.html>

Pechmann, Cornelia and David W. Stewart (1988), "A Critical Review of Wearin and Wearout," Current Issues and Research in Advertising, 285-330.

Peterson, R., S. Balasubramanian, and B. J. Bronnenberg (1997), "Exploring the Implications of the Internet for Consumer Marketing," Journal of the Academy of Marketing Science, 25, 4, 329-346.

Petty Richard E. and John T. Cacioppo (1986), Communication and Persuasion: Central and Peripheral Routes to Attitude Change, (New York: Springer-Verlag).

Politz Research, Inc. (1962), A Measurement of Advertising Effectiveness: The Influence of Audience Selectivity and Editorial Environment. November.

Port, Otis (1999), "Customers Move Into the Driver's Seat," Business Week, (October 4), pp. 103-106.

Powers, W. T. (1973), "Feedback: Beyond Behaviorism," Science, 179, (Jan. 26), 351-356.

Powers, W. T. (1978), "Quantitative Analysis of Purposive Systems: Some Spadework at the Foundations of Scientific Psychology," Psychological Review, 85, 417-435.

Ratneshwar, S. and Shelly Chaiken (1991), "Comprehension's Role in Persuasion: The Case of Its Moderating Effect on the Persuasive Impact of Source Cues," Journal of Consumer Research, 18 (June), 52-62.

Ray, Michael L. (1985), "An Even More Powerful Consumer?," in Robert Buzzell (Ed.), Marketing in an Electronic Age, (Cambridge, MA: Harvard University Press).

\_\_\_\_\_ and Alan G. Sawyer (1971), "Repetition in Media Models: A Laboratory Technique," Journal of Marketing Research, 8 (Feb.) 20-29.

Robey, D. and D. L. Farrow (1982), "User Involvement in Information System Development: A Conflict Model and Empirical Test," Management Science, 28, 1, 73-85.

Rodgers, S. and E. Thorson (2000), "The Interactive Advertising Model: How Users Perceive and Process Online Ads," Journal of Interactive Advertising, 1, 1. Online: <http://jiad.org/vol1/no1/pavlou/index.html>

Roehm, H. A. and C. P. Haugtvedt (1999), "Understanding interactivity of cyberspace advertising," In D.W. Schumann and E. Thorson (Eds.), Advertising and the World Wide Web, Mahwah, NJ: Lawrence Erlbaum, 27-39.

Rosen, Emanuel (2000), The Anatomy of Buzz: How to Create Word of Mouth Marketing, New York: Doubleday.

Rothschild, Michael L., and Yong J. Hyun (1990), "Predicting Memory for Components of TV Commercials from EEG," Journal of Consumer Research, 16 (March) 472-479.

\_\_\_\_\_, Yong J. Hyun, Byron Reeves, Ester Thorson and Robert Goldstein (1988), "Hemispherically Lateralized EEG as a Response to Television Commercials," Journal of Consumer Research, 15 (September), 1988, 185-198.

Rubin, Alan M. (1986), "Uses, Gratification, and Media Effects Research," in Jennings Bryant and Dolf Zillman (Eds.), Perspectives on Media Effects, (Hillsdale, PA: Lawrence Erlbaum), 281-302.

Schurr, P.H. and J. L. Ozanne (1985), "Influences on Exchange Processes: Buyers' Preconceptions of a Seller's Trustworthiness and Bargaining Toughness," Journal of Consumer Research, 11, 4, 939-953.

Schwerin, Horace (1958), "Do Today's Programs Provide the Wrong Commercial Climate?," Television Magazine, 15 (8), 45-47, 90-91.

Schwerin, Horace and Henry H. Newell (1981), Persuasion in Marketing, New York: Wiley.

Shimp, Terrance A. (1990), Promotion Management and Marketing Communications, Second Edition, Hinsdale, IL: Drydn Press.

Short, J., E. Williams and B. Christie, B. (1976), The Social Psychology of Telecommunications, New York: John Wiley.

Simon, Herbert (1957), Organizations, McGraw Hill, New York.

Singh, Surendra N. and Jacqueline C. Hitchon (1989), "The Intensifying Effects of Exciting Television Programs on the Reception of Subsequent Commercials," Psychology and Marketing, 6 (Spring), 1-31.

Soldow, Gary F. and Victor Principe (1981), "Response to Commercials as a Function of Program Context," Journal of Advertising Research, 21 (2), 59-65.

Spalter, M. (1996), "Maintaining a Customer Focus in an Interactive Age, the Seven I's to Success," in Ed Forrest and Richard Mizerski (Eds.), Interactive Marketing: The Future Present, American Marketing Association, NTC Business Books, Illinois.

Strull, Thomas K. (1990), "Individual Responses to Advertising: Mood and Its Effects from an Information Processing Perspective," in Stuart J. Agres, Julie A. Edell, and Tony M. Dubitsky (Eds.), Emotion in Advertising, Theoretical and Practical Explorations, (New York: Quorum Books), 19-34.

Stewart, David W. (1989), "Measures, Methods, and Models of Advertising Response," Journal of Advertising Research, 29 (June/July), 54-60.

Stewart, David W. (1986), "The Moderating Role of Recall, Comprehension, and Brand Differentiation on the Persuasiveness of Television Advertising," Journal of Advertising Research, 25 (April/May), 43-47.

\_\_\_\_\_ and David H. Furse (1986), Effective Television Advertising: A Study of 1000 Commercials, (Lexington, Mass.: Lexington Books).

\_\_\_\_\_, David H. Furse, and Randall Kozak (1983), "A Descriptive Analysis of Commercial Copytesting Services," in C. Martin and J. Leigh (Eds.), Current Issues and Research in Advertising, 1983, 6, 1-44.

\_\_\_\_\_ and Scott Koslow (1989), "Executional Factors and Advertising Effectiveness: A Replication," Journal of Advertising, 18, 3, 21-32.

\_\_\_\_\_, C. Pechmann, S. Ratneshwar, J. Stroud, and B. Bryant (1985), "Methodological and Theoretical Foundations of Advertising Copy Testing: A Review," Current Issues and Research in Advertising, 1985, 1-74.

\_\_\_\_\_, Gary Frazier and Ingrid Martin (1996), "Integrated Channel Management: Merging the Communication and Distribution Functions of the Firm," in Esther Thorson and Jeri Moore (Eds.), Integrated Communication: Synergy of Persuasive Voices, (Hillsdale, N. J.: Erlbaum), 185-216.

Stewart, David W. and Scott Ward (1994), "Media Effects on Advertising," in J. Bryant and D. Zillman (Eds.), Media Effects: Advances in Theory and Research, (Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc.), pp. 315-364.

Stewart, David W. and Qin Zhao (2000), "Internet Marketing, Business Models, and Public Policy," Journal of Public Policy and Marketing, forthcoming.

Stone, M. (2000), "Web Ad Spending May Outstrip Broadcast by 2005," Newsbytes.com, March, 28.

Strong, E. C. (1974), "The Use of Field Experimental Observations in Estimating Recall," Journal of Marketing Research, 11 (November), 369-378.

\_\_\_\_\_ (1977), "The Spacing and Timing of Advertising," Journal of Advertising Research, 16 (December), 25-31.

Thirkwell, P. C. (1997), "Caught By the Web: Implications of Internet Technologies For The Evolving Relationship Marketing Paradigm," Proceedings of the Third American Marketing Association Special Conference, New and Evolving Paradigms, Dublin, Ireland, 334-348.

Thorson, Esther, B. Reeves, J. Schleuder, A. Lang, and M. L. Rothschild (1985), "Effect of Program Context on the Processing of Television Commercials," Proceedings of the American Academy of Advertising, R58-63.

\_\_\_\_\_ (1990), "Consumer Processing of Advertising," in James H. Leigh and Claude Martin, Jr. (Eds.), Current Issues and Research in Advertising, Volume 12 (Ann Arbor, MI: University of Michigan), 197-230.

Tillman, Hope (1995), "Evaluating the Quality of Information on the Internet or Finding a Needle in a Haystack" (a presentation delivered at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts, September 6, 1995).

Time Inc. (1981) A Study of the Effectiveness of Advertising Frequency in Magazines, The relationship Between Magazine Advertising Frequency and Brand Awareness, Advertising Recall, Favorable Brand Rating, Willingness to Buy, and Product Use and Purchase (New York: Research Department, Magazine Group, Time Inc.).

Tolley, B. Stuart (1991), "The Search," in E. Clark, T. Brock, and D. W. Stewart (Eds.), Advertising and Consumer Psychology, (Hillsdale, N. J.: Erlbaum).

Ward, Scott, David Levinson and D. Wackman (1972), "Children's Attention to Television Advertising," in G.A. Comstock and J.P. Murray, (Eds.), Television and Social Behavior: Vol. IV, Television in Day-to-Day Life. Washington: Department of Health, Education And Welfare, HSM 70-9059.

Webster, F. E., Jr. (1989), "It's 1990 - Do You Know Where Your Marketing Is?," MSI White Paper, Cambridge, MA: Marketing Science Institute.

Wikstrom, S. (1996), "An Integrated Model of Buyer-Seller Relationships," Journal of the Academy of Marketing Science, 23, 4, 335-345.

Wright, Peter L. (1973), "The Cognitive Processes Mediating Acceptance of Advertising," Journal of Marketing Research, 10, 53-62.

Wurman, R. S. (2000), "Redesign the Data Pump," Business 2.0, November 28, 210-220.

Wyer, Robert S. and Thomas K. Srull (1981), "Category Accessibility: Some Theoretical and Empirical Issues Concerning the Processing of Social Stimulus Information," in E. T. Higgins, C. P. Herman, and M. P. Zanna (Eds.), Social Cognition: The Ontario Symposium, (Hillsdale, N. J.: Erlbaum), pp. 161-197.

Yi, Youjae (1990a), "Cognitive and Affective Priming Effects of the Context for Print Advertisements," Journal of Advertising, 19 (2), 40-48.

Yi, Youjae (1990b), "The Effects of Contextual Priming in Print Advertisements," Journal of Consumer Research, 17 (September), 215-222.

Yuspeh, Sonia (1977), "On-Air: Are We Testing the Message or the Medium," paper delivered to J. Walter Thompson Research Conference, New York, November.

Zaichowsky, J. (1985), "Measuring the Involvement Construct," Journal of Consumer Research, 12, 341-352.

Zielske, Herbert A. (1959), "The Remembering and Forgetting of Advertising," Journal of Marketing, 239-243.

\_\_\_\_\_ and Walter Henry (1980), "Remembering and Forgetting Television Ads," Journal of Advertising Research, 20 (April), 7-13.

Zigurs I., M. S. Poole, and G. L. DeSanctis (1988), "A Study of Influence in Computer-Mediated Group Decision Making," MIS Quarterly, 12 (December), 625-644.

Zillman, Dorf and Jennings Bryant (1994), "Entertainment as Media Effect," in J. Bryant and D. Zillman (Eds.), Media Effects: Advances in Theory and Research, (Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc.), pp. 437-462.