

SURVEY OF INTERNET USERS'

ATTITUDES TOWARD INTERNET

ADVERTISING

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ABSTRACT

Many have speculated about the current state of Internet advertising (IA), how it compares to advertising in general (GA), and its implications for traditional marketing models and practices. Although many estimates exist regarding who uses the Internet as well as guidelines about how best to design IA, little is known about Internet users' attitudes toward IA, much less what characterizes these attitudes. To test this, a national sample of over 400 participants with at least some exposure to the Internet was surveyed. The results revealed no majority opinion of IA: approximately a third of respondents liked, disliked, and felt neutrally toward IA, respectively. A regression analysis indicated that enjoyment of looking at Internet advertisements, its informativeness, and its utility for making behavioral (purchasing) decisions

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Direct Marketing Educational Foundation, Inc.
CCC 1094-9968/99/030034-21



JOURNAL OF INTERACTIVE MARKETING
VOLUME 13 / NUMBER 3 / SUMMER 1999

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contributed to participants' attitudes toward IA. Enjoyment of looking at IA contributed the most to attitudes toward IA, yet at the same time appears to be one of IA's weakest features. In order to assess whether attitudes toward and perceptions of IA might reflect attitudes toward advertising in general by this demographic group, rather than attitudes toward IA per se, responses were compared to those of a demographically weighted-to-match national sample of over 1,000 who answered similar questions in regard to advertising in general. The results indicate that more respondents found IA to be informative and trustworthy than a demographically similar sample found GA. Even though the attitudes and perceptions of IA and GA were significantly different, the structure of GA and IA attitudes was the same. Implications for the design of IA are discussed.

The Internet as a marketing medium offers many unique challenges to marketers. To assist marketers in their venture on-line, comparisons and contrasts to existing marketing theory have been used to build a conceptual understanding of the current state of the Internet and its implications for consumer transactions (cf., Hoffman and Novak, 1996a; Hoffman, Novak and Chatterjee, 1995; Schlosser and Kanfer, forthcoming). To further understand the commercial possibilities of the Internet, several internet usage surveys have been conducted to document consumers' behavior online (the most notable being GVU, 1999 and the HERMES project by Gupta, 1995; see Hoffman, Kalsbeek, and Novak, 1996, for a review). Yet, in terms of assessing the commercial effectiveness of the Internet and the value of Internet advertising, most research has concentrated upon the company's rather than consumers' point of view (Berthon, Pitt, and Watson, 1996). As a result, many decisions regarding Internet advertising (IA) are being made with relatively little specific

knowledge about consumers' attitudes toward IA and how the structure of these IA attitudes compare to the structure of attitudes toward advertising in traditional media. The aim of the current research is to examine consumers' perceptions and judgments of IA.

Consumers' attitudes toward advertising have been considered important to track because they likely influence consumers' exposure, attention, and reaction to individual ads (cf. Alwitt and Prabhakar, 1992) through a variety of cognitive and affective processes (Lutz, 1985). One fundamental difference between Internet and traditional advertising is the degree to which the consumer versus the company has control over advertising exposure. With traditional advertising, consumers play a relatively inactive role in exposure. Advertisements interrupt or intercept consumers' attention to other information (e.g., a television program, a radio show, or traffic signs). In essence, advertisements are "pushed" at them. With many forms of IA, however, the consumer has a great deal of control over advertising exposure. The company may request the consumers' attention (e.g., through banner ads on others' Web sites or through hyperlinks), but it is up to the consumer to seek additional commercial content. Consumers can select whether, when, and how much commercial content they wish to view. That is, consumers "pull" for electronic advertising content. Because IA exposure is largely under the consumer's volition, it is particularly important to understand the valence and structure of one important driver of advertising exposure: attitudes toward IA.

WHAT IS IA?

According to consumers, IA includes many forms of commercial content—from electronic advertisements that are similar to traditional advertisements (e.g., billboards, banner ads) to formats that are different from traditional advertisements, such as corporate Web sites (Ducoffe, 1996). Thus, it appears that there are idiosyncratic differences in consumers' perceptions of what constitutes IA such that any specific definition of IA is likely to be a bad fit for

measuring IA perceptions. Because the goal of the present research is to assess consumer perceptions of IA, IA is described broadly as any form of commercial content available on the Internet that is designed by businesses to inform consumers about a product or service. Hence, IA can be delivered via any channel (e.g., video clip, print or audio), in any form (e.g., an e-mail message or an interactive game), and provide information at any degree of depth (e.g., a corporate logo or an official Web site).

BACKGROUND ON IA

Despite the limited understanding of how consumers judge IA, there has been substantial commercial growth on the Internet of many forms of advertising, resulting in an estimated 1996 revenue of \$301 million, with a projected growth to \$7.7 billion by 2002 (Jupiter Communications, 1997). Indeed, spending on IA totaled an estimated \$129 million in the first quarter of 1997 (Cyberatlas, 1997), with an estimated 92% increase in IA spending for top 25 industries during the first quarter of 1998 (Cyberatlas, 1998). In addition to anticipating the monetary growth of the Internet, the majority of on-line businesses believe the Internet is here to stay and will generate sales in the future (Grant Thornton, 1997). Furthermore, the adoption curve for the Internet is quite steep, especially in comparison to other media introduced in this century (radio, television, cable; Morgan Stanley Technology research cited in Internet Advertising Bureau, 1997). Thus, as many have predicted, investment in IA is likely to escalate into the billions as we enter the next millennium (cf. Cyberatlas, 1997).

Studies of consumers' reactions to IA typically have quantified customers' judgments of Web sites in terms of consumers' behavioral traces at the site (i.e., counting the number of "clicks" and "hits" [cf. Berthon, Pitt, and Watson, 1996]). These measures have been shown to both overestimate and underestimate the number of visitors and exposures, however (cf. Internet Advertising Bureau, 1997; Riphagen and Kanfer, 1997). Moreover, the indirect

nature of these methods makes it difficult to ascertain the meaning behind the results (e.g., whether clicking on a link was an accident or intended behavior, and whether the loaded site satisfied the consumer's expectations).

Coinciding with the growth in IA, there has been a plethora of guidelines about how to best reach and persuade the consumer market with the Internet (see, for review, Schlosser and Kanfer, 1999a). Many of these recommendations have been based upon assumptions (rather than actual assessments) of how consumers react to IA relative to GA. Relatively little is known about how consumers judge Internet advertising and which components make up these attitudes.

ATTITUDES TOWARDS ADVERTISING IN GENERAL

Public attitudes toward advertising in general have long been a focus of research (see Mittal, 1994; O'Donohoe, 1995; Pollay and Mittal, 1993; Zanot, 1984; Zanot, 1984 for reviews). According to Zanot (1981, 1984), the first large-scale, national surveys of public opinion about advertising date back to the 1950s and 1960s (Bauer and Greysier, 1968; *Gallup*, 1959). Many recent studies have also been conducted (e.g., Alwitt and Prabhakar, 1992; Alwitt and Prabhakar, 1994; Andrews, 1989; Mittal, 1994; Muehling, 1987; O'Donohoe, 1995; Reid and Soley, 1982; Sandage and Leckenby, 1980; Shavitt, Lowrey and Haefner, 1998) but most of these have been more focused upon investigating the structure of advertising attitudes rather than the generalizability of overall attitude favorability.

Although the studies on advertising attitudes have varied widely in the types of samples used and the data collection methods employed, they have focused upon many of the same dimensions of judgment. Respondents typically have been asked not only about their overall attitudes toward advertisements but also their perceptions of advertising's trustworthiness, offensiveness, informativeness, entertainment value, and effect on product prices and value, as well as attitudes toward regulatory issues.

Early surveys of advertising attitudes yielded somewhat favorable, albeit mixed, results. Gallup (1959) found that a majority of their respondents generally liked advertising and that most of those respondents liked it because they felt it was informative. They also found that a majority of respondents preferred advertised products over unadvertised products, although most also felt that advertising increased the cost of things they buy. Bauer and Greyser (1968) found that more people held favorable attitudes toward advertising than unfavorable attitudes and that a majority of respondents felt advertising was essential. Still, a majority of their respondents felt that advertisements were misleading and that they resulted in higher prices.

Zanot (1981, 1984) argued that, beginning in the 1970s, attitudes toward advertising were becoming increasingly negative. For example, Harris and Associates (1976) found that a majority of respondents felt that most or all of television advertising was seriously misleading and favored a new federal government agency for consumer advocacy. More recent studies have generally focused on attitude structure and, thus, have used smaller and less nationally representative sampling frames to investigate specific hypotheses. These results have typically provided a rather unfavorable assessment of public attitudes toward advertising (e.g., Alwitt and Prabhaker, 1992; Alwitt and Prabhaker, 1994; Andrews, 1989; Mittal, 1994; but see Shavitt et al., 1998, for a more favorable picture of public sentiment from a large, national sample). Although some of these studies have provided information about attitudes toward advertising in a particular medium (e.g., television: Alwitt and Prabhaker, 1992; Alwitt and Prabhaker, 1994; Mittal, 1994), none of them specifically addresses attitudes toward advertising on the Internet.

CONSUMER RESPONSE TO INTERNET ADVERTISING

Most of the direct-response measures administered to consumers have assessed consumers' perceptions and usage of the Internet and its

services. For instance, research has explored consumers' attitudes toward on-line services (Miller, 1996) and purchasing online (Gupta, 1995; GVU, 1999); Web usage (Gupta, 1995; GVU, 1999; Hammonds, 1997; Hoffman, Kalsbeek and Novak, 1996) and recall of the sites visited (Diaz, Hammond and McWilliam, 1996); actions taken toward intrusive advertising or SPAM (GVU, 1999); effect of banner ads on brand judgments (Briggs and Hollis, 1997); attitudes toward Internet advertising policies (Gordon and De Lima-Turner, forthcoming); and awareness of the Internet itself (Fawcett, 1995). Yet, relatively less is known about consumers' evaluations of IA specifically.

In an important exception, Mehta and Sivasdas (1995) assessed Internet user's attitudes toward advertising on newsgroups and through e-mail. They found that consumers held negative attitudes toward newsgroup and e-mail advertising, even when the message was directly relevant to the special interests of the group. However, their sample was limited to those who posted messages to the group. Those who merely read messages were not included in the sample. As a result, it is possible that these unfavorable attitudes are due to this vocal sample's perception that they are competing with electronic advertisements for the group's attention. In addition, attitudes toward newsgroup/e-mail advertising may not generalize to all forms of IA, including less intrusive ads (such as Web sites). Consequently, it is unclear whether the results would generalize to the entire Internet population's attitudes toward IA in its many forms.

Another notable exception is research conducted by Ducoffe (1996) studying the antecedents of consumer's attitudes toward Web advertising. It was found that a sample of 318 business executives in New York City perceived Web advertising to be generally informative and entertaining, although more informative than entertaining. This is consistent with findings regarding people's perceptions of the Web in general (Diaz et al., 1996). Furthermore, in contrast to attitudinal findings toward e-mail advertising (Mehta and Sivasdas, 1995), the interviewed executives found Web advertising to be

useful, valuable and important. Although these previous findings on attitudes toward e-mail and Web advertising shed light upon the Internet population's attitudes toward specific types of IA, a larger and more representative sample as well as an examination of IA in general would be useful. Indeed, both Ducoffe (1996) and Mehta and Sivadas (1995) call for broader sampling frames.

Understanding the factors that underlie IA attitudes would also be important for both theory development and applied goals. Ducoffe demonstrated that entertainment, informativeness, and irritation influenced attitudes toward Web advertising. The idea that affective (entertainment, irritation) and cognitive (informativeness) experiences with Web advertising contribute to people's judgments of Web advertising is consistent with other attitudinal models such as the tripartite theory of attitudes. Yet the tripartite theory proposes a third factor, behavioral experiences, which may contribute to people's attitudes (Katz and Stotland, 1959; Rosenberg and Hovland, 1960; see Eagly and Chaiken, 1993, for a theoretical and historical overview of this model). Hence, the utility of IA for making decisions (a behavioral experience) may also drive people's attitudes toward IA.

Some have assumed that the underlying structure of IA attitudes reflects the structure of attitudes toward advertising in general (Ducoffe, 1995; Eighmey, 1997). Yet it is also plausible that the unique characteristics of the Internet might cause the underlying structure of attitudes toward IA and GA to differ. For instance, because it is used primarily as an information-providing medium (see Schlosser and Kanfer, 1999), IA might elicit attitudes that are mostly comprised of cognitive factors—especially in comparison with attitudes toward advertising in general. Such variations have implications for how practitioners alter Internet ads (as opposed to traditional advertising) in order to improve IA attitudes. Thus, one goal of the present research is to determine which dimensions underlie (and to what degree they explain variance in) attitudes toward IA.

INTERNET USER DEMOGRAPHICS AND CONSUMER RESPONSE TOWARD IA

Despite the lack of consistency across reports of the Internet population's demographic profile, there appears to be consensus that the Internet population is predominantly male, young, well-educated, and affluent (for a longitudinal study of Internet user demographics beginning in 1994, see GVU, 1999). Such demographic characteristics also appear to affect attitudes toward advertising. That is, previous research has demonstrated that gender, age (Shavitt, et al., 1998), education and income (Alwitt and Prabhaker, 1992; Shavitt et al., 1998) impact consumers' judgments of and beliefs about advertising. For instance, according to a recent survey, better-educated, wealthier consumers hold less favorable attitudes toward advertising than less-educated, lower-income consumers do (Shavitt, et al., 1998). Based on demographics alone, this would suggest that the Internet population would judge advertising (in general and on the Internet) relatively unfavorably.

In order to gauge whether attitudes toward IA can be attributed to the unique demographic profile of Internet users rather than advertising on the Internet per se, IA judgments will be compared to the GA judgments of a sample weighted to match the demographics of the Internet respondents. If the results are due to the demographic composition of Internet users rather than how IA is uniquely perceived relative to traditional advertising, then the judgments and perceptions of IA and GA should be similar across these demographically matched samples.

RESEARCH OBJECTIVES

The objectives of the present research are to address three questions: (1) What are consumers' attitudes toward IA? (2) How does this compare to a demographically similar samples' perceptions of advertising in general? and (3) Which dimensions underlie and to what degree do they contribute to IA attitudes? We address these issues with a large and representative (of an Internet population) national sample.

METHODOLOGY

Sampling Procedures

The survey was conducted in the summer of 1996. Two nationally representative samples were drawn from a list balanced by estimated telephone households. The survey was conducted via a computer-assisted telephone interviewing (CATI) system. Prospective respondents were called back up to three times if they could not be reached initially. CATI technology provides a number of advantages in survey data collection, enabling the use of randomly ordered questions and complex skip patterns in the survey protocol (Sudman and Bradburn, 1982).

Prospective respondents were screened for age and for media usage. Only those between the ages of 18 and 64 were surveyed. The samples were screened for their Internet access and usage. Prospective respondents in Sample 1 ($N = 201$) were included if they indicated that they personally had access to and used the Internet or World Wide Web. In order to assure a substantial representation of regular Internet users, prospective respondents in Sample 2 ($N = 201$) were included only if they further indicated that they frequently or regularly used the Internet or Web. Because there were no significant differences between the two samples in terms of how often they look at IA, how often they have used the computer in the week prior to the survey and whether they subscribe to an online service (all t s < 1.10 , n.s.), the two samples were combined for all analyses ($N = 402$).

While all respondents reported having access to and using the Internet, prospective respondents were not screened based on reported exposure to Internet ads. Thus, some survey respondents reported never looking at IA (12% of the sample).

Survey Content

Respondents were queried about their IA-related attitudes, their media exposure patterns, and their demographic classifications. The questions asked of the two samples were identical with the exception that respondents in Sam-

ple 2, after being screened for their Internet usage, were asked two additional questions about which browsers and search engines they use.

The attitudinal questions were next, and were prefaced with a statement defining the types of advertising to which the questions referred. The statement read:

This is a survey of your thoughts and feelings about the advertisements you encounter every day. Many of these advertisements include ads you might see on the Internet or World Wide Web when you use a computer. When we ask you about 'advertising' in this survey, we are only referring to what you see in these electronic ads on the Internet, and not to any other forms of advertising.

Following this statement were 17 attitudinal questions. The first asked respondents about their overall evaluation of IA. The rest asked for their views about: (1) the enjoyment and the indignity they associate with IA, (2) the trustworthiness or usefulness of IA content, (3) IA effects on product prices and product value, and (4) the regulation of IA. The items covered several of the evaluative dimensions addressed in previous research, and the content of many of these items was adapted from previously published surveys (see especially Bauer and Greyser, 1968). In an attempt to tap personal attitudes toward and confidence in IA, most of the attitudinal questions were worded to emphasize personal experiences with and reactions to IA. Thus, respondents were asked, for example, to consider how confident they generally feel using IA information to make a purchase decision, or how often they have felt misled by IA.

The 17 attitudinal questions began with a query about respondents' overall IA attitude in a two-part question (asking whether they generally like or dislike IA, and then assessing the degree of liking/disliking). After this two-part question came a block of nine attitudinal questions which were in five-point Likert-type format (strongly agree/disagree). The order of these nine items was randomized. The wording of six items was varied to be either favorable or unfavorable toward IA (e.g., "In general, I feel that I

TABLE 1
Sample Demographic by Exposure to Internet Advertising

	How Often Look at Internet Advertising							Total
	Never	Less Than Once a Month	Once a Month	Several Times a Month	Once a Week	Several Times a Week	Every Day	
Gender								
Male	18 (37.5%)	7 (30.4%)	23 (41.8%)	14 (30%)	46 (62.2%)	63 (67%)	45 (71.4%)	216 (54.4%)
Female	30 (62.5%)	16 (69.6%)	32 (58.2%)	26 (65%)	28 (37.8%)	31 (33%)	18 (28.6%)	181 (45.6%)
Age								
18–24	4 (8.3%)	5 (21.7%)	15 (27.3%)	7 (17.5%)	20 (27%)	19 (20.2%)	10 (16.1%)	80 (20.2%)
25–34	10 (20.8%)	7 (30.4%)	16 (29.1%)	18 (45%)	23 (31.1%)	27 (28.7%)	20 (32.3%)	121 (30.6%)
35–44	14 (29.2%)	8 (34.8%)	11 (20%)	9 (22.5%)	14 (18.9%)	29 (30.9%)	19 (30.6%)	104 (26.3%)
45–54	11 (22.9%)	2 (8.7%)	6 (10.9%)	5 (12.5%)	14 (18.9%)	12 (12.8%)	10 (16.1%)	60 (15.2%)
55–64	9 (18.8%)	1 (4.3%)	7 (12.7%)	1 (2.5%)	3 (4.1%)	7 (7.4%)	3 (4.8%)	31 (7.8%)
Education								
Less than high school	1 (2.2%)	1 (4.3%)	2 (3.6%)	0	1 (1.4%)	5 (5.3%)	1 (1.6%)	11 (2.8%)
High school graduate	5 (10.9%)	2 (8.7%)	11 (20%)	4 (10%)	9 (12.2%)	15 (16%)	7 (11.1%)	53 (13.4%)
Some college	11 (23.9%)	6 (26.1%)	9 (16.4%)	9 (22.5%)	26 (35.1%)	26 (27.7%)	12 (19%)	99 (25.1%)
College graduate	15 (32.6%)	5 (21.7%)	19 (34.5%)	17 (42.5%)	20 (27%)	32 (34%)	23 (36.5%)	131 (33.2%)
Postgraduate	14 (30.4%)	9 (39.1%)	14 (25.5%)	10 (25%)	18 (24.3%)	16 (17%)	20 (31.7%)	101 (25.6%)
Income								
Less than \$15,000	0	1 (4.5%)	2 (4.1%)	3 (8.1%)	8 (12.5%)	2 (2.4%)	1 (1.8%)	17 (4.9%)
\$15,000–\$24,999	1 (2.9%)	3 (13.6%)	6 (12.2%)	3 (8.1%)	6 (9.4%)	6 (7.3%)	4 (7.1%)	29 (8.4%)
\$25,000–\$34,999	9 (25.7%)	3 (13.6%)	9 (18.4%)	7 (18.9%)	10 (15.6%)	13 (15.9%)	8 (14.3%)	59 (17.1%)
\$35,000–\$49,999	7 (20.0%)	8 (36.4%)	8 (16.3%)	8 (21.6%)	11 (17.2%)	16 (19.5%)	8 (14.3%)	66 (19.1%)
\$50,000–\$74,999	9 (25.7%)	5 (22.7%)	15 (32.7%)	7 (18.9%)	15 (23.4%)	26 (31.7%)	19 (33.9%)	97 (28.1%)
\$75,000–\$99,999	2 (5.7%)	1 (4.5%)	5 (10.2%)	7 (18.9%)	5 (7.8%)	11 (13.4%)	8 (14.3%)	39 (11.3%)
More than \$100,000	7 (20%)	1 (4.5%)	3 (6.1%)	2 (5.4%)	9 (14.1%)	8 (9.8%)	8 (14.3%)	38 (11%)

can [cannot] trust Internet advertising”). Respondents heard only one version of these items. From item to item the favorable/unfavorable versions were selected randomly. Analyses indicated that question version had only a slight effect on responses (see Note 1 in Appendix). Thus, responses on the dual-version items were collapsed after recoding in the direction of favorable attitudes toward IA.

Sample for Attitudes Toward IA

In order to match the GA sample to the IA sample according to pertinent IA demographic characteristics, we begin by examining the representativeness of our IA sample relative to other survey’s demographic profiles of Internet users, looking in particular at demographic variables shown in previous research to influence attitudes toward advertising (see Shavitt et al.,

1998). The demographics of the current sample are consistent with the demographics of other Internet studies: the sample predominantly comprises young, white, male adults who are well educated and of high socioeconomic status (see Table 1 for the demographics of the current sample). Before describing more specifically the sample’s representativeness, it is important to note the difficulty in precisely assessing the representativeness of an Internet sample due to the lack of consensus across Internet reports about the *exact* demographics of the Internet population (cf. Cyberatlas, 1997; Layton and Kanfer, 1996). Hence, in addition to evaluating the representativeness of this sample with the range of demographic estimates provided by other studies of who is on the Internet, we also took into account (1) the timing of these studies in relation to ours and (2) the

effect of Internet usage on demographic estimates. The results indicate that the sample demographics are quite similar to those of other studies of Internet demographics.

With regard to the proportion of males versus females on the Internet, internet studies conducted from 1995 to 1997 suggest that 30-45% of Internet users are female (Cyberatlas, 1997; Layton and Kanfer, 1996). In our sample, 45.6% of respondents were female—an estimate similar to that obtained in a study conducted around the same time (45%, IntelliQuest, 1996). Some have argued that the difference in reported proportions of females using the Internet may be due to differing definitions of a user: That is, samples of active users have lower proportions of females (30%-35%), whereas samples of more casual users have higher proportions (40+%) of females (GVU, 1999). Our data support this postulate: examining exclusively those who look at IA several times a week or more (i.e., active Internet users), only 31% are female. Indeed, the proportion of females to males increases as the frequency of exposure to IA decreases, suggesting that Internet experience/exposure plays an important role in the female-to-male ratio of one's sample (see Table 1).

In past Internet demographic studies, the average age of Internet users has ranged between 32 and 35 years old, with this average age of the Internet population increasing over time (GVU, 1999). In addition to the problems cited for analyzing the representativeness of gender across studies, difficulties in comparing ages across studies is compounded by the problem that many studies group respondents into different age brackets. Comparing the current survey to one using similar age brackets (the Internet user sample of the 1997 American Internet User Survey by FIND/SVP Inc. Emerging Technologies Research Group, 1997), we find that the percentage of respondents within these age brackets are quite similar. In the current sample, approximately 8% of the sample is over the age of 55 compared to the 1997 American Internet User Survey's sample of 9%; 41.5% of the current sample is 35-54 years old compared to 43%; and 50.8% of the current sample is 18-34 years old compared to 48%.

At the time of the current survey, the Internet population was also very well educated and affluent. The majority of Internet users had obtained a college degree (56.1% according to GVU, 1999; 64% according to Nielsen Media Research, see Layton and Kanfer, 1996) and, on average, earned over \$50,000 yearly (GVU, 1999; Layton and Kanfer, 1996). The education level of the current sample is similar: 58.8% of respondents had obtained their college degree. Furthermore, the percent of individuals earning \$50,000 or more (50.4%) is similar to Internet demographics information collected at a similar time (48.1% earning over \$50,000 [GVU, 1999]). With regard to race, the vast majority of the Internet population is white, both in this sample (84%) and in other studies conducted at a similar time (87%; see Layton and Kanfer, 1996).

Gender, age, education, income, and race are the primary demographic variables used by Internet usage surveys to describe and assess the approximate representativeness of an Internet sample (cf. FIND/SVP, 1997; GVU, 1999; Hoffman, et al., 1996). Thus, the present Internet sample is demographically comparable to information emerging from other Internet demographic and usage surveys.

Sample for Attitudes toward GA

To compare the present sample's attitudes toward IA with a demographically similar population's attitudes towards advertising in general (GA), a data set of 1,004 participants nationwide answering questions about GA was compared to the present IA data set (for a description of the GA sample, see Shavitt, et al., 1998). Respondents in the GA sample answered the same questions using the same formats as did the IA sample, but the prefatory instructions indicated that the questions referred to ads in all media (television, print, radio, Internet, etc.). To draw comparisons between the IA and GA samples, it was necessary to identify and match the samples along the demographic variables influencing attitudes towards advertising. Because gender, age and education have been shown to influence attitudes towards advertising in general (see Shavitt, et al., 1998), the general

advertising sample was weighted along these demographics to match the IA sample (see Appendix, Note 2). Hereafter, references to a demographically matched sample refer to this sample whose data were weighted to match the demographics of the IA sample.

RESULTS

Responses to Attitudinal Items

Respondents' overall impressions of Internet advertising were assessed with the question, "In general, do you like or dislike Internet advertising?" The results indicated that respondents are approximately equally divided in their perceptions of IA: 38% liked IA, 35% disliked IA, and 28% felt neutrally towards it. Hence, there is little consensus among those who have had at least some Internet experience about evaluations of IA. See Table 2 for results for all attitudinal items.

To examine whether the attitudinal results might be due to the demographic characteristics of the Internet population rather than IA itself, responses toward IA were compared to a demographically matched sample's responses toward advertising in general (GA). From this comparison, we found that a higher proportion of participants liked GA (46%) and fewer disliked GA (25%) compared to those who evaluated IA. It appears, therefore, that significantly fewer respondents liked IA than a demographically similar sample liked GA ($\chi^2 = 16.02$, $p < .0001$). This contrasts previous speculation that IA would be judged as more valuable (thereby, more likeable) than GA (Ducoffe, 1995). Possible reasons why proportionally fewer people liked IA than liked GA are discussed in the section, "Variables Contributing to IA Attitudes."

To assess the relationship of the remaining 16 IA items with overall attitudes toward IA, the relatedness of these items was analyzed using principal components factor analysis (with varimax rotation) and hierarchical cluster analysis using the centroid method. Both analyses yielded the same 5 factors: (1) advertising utility (informative, entertaining, useful for making

decisions); (2) indignity; (3) trust; (4) price perceptions; and (5) regulation. The results for each item within each factor (for both the IA and weighted GA sample) are described below and in Table 2. How these items contribute to respondents' IA attitudes follow.

Advertising utility. The first factor consisted of items related to the value or effectiveness of advertising in meeting consumers' needs—that is, how informative and entertaining the advertising is and how useful it is for making purchase decisions. Indeed, informativeness and entertainment have been identified as positively contributing to the perceived value of IA and advertising in general (cf. Ducoffe, 1995; Ducoffe, 1996; Eighmey, 1997). The informational item loading on this factor was, "Most Internet advertising is informative." The majority of participants agreed either somewhat or strongly that IA is informative (62%). However, they did not hold such a favorable view of IA's enjoyableness. In response to the entertainment item, "I like to look at most of the advertisements on the Internet that I am exposed to," nearly half of the respondents disagreed either somewhat or strongly (49%; see Note 3 in Appendix). Only a little over a third enjoyed looking at IA (38%).

This demographic group does not find all advertising to be informative yet unentertaining. Compared to respondents' perceptions of IA, a higher proportion of a demographically matched sample found GA to be *uninformative* (31% vs. 19%). Furthermore, among these demographically matched samples, significantly fewer respondents enjoyed looking at IA than GA (38% vs. 50%). Thus, it appears that within this demographic group, IA is perceived as informative but not entertaining, especially in comparison to advertising in general.

One of the behavioral (purchase) items was "How often do you use information from Internet advertising to help you make your purchase decisions?" That is, how often they have used IA information to make purchases either online or offline (in stores, mail order, etc.). Only a third reported using IA information to make a purchase decision—a small percentage compared to a demographically matched sample's usage

TABLE 2
Internet Users' Attitudes Toward IA: Comparison with a Demographically Matched Sample's Attitudes Toward GA

<i>Attitude</i>				
	<i>Like</i>	<i>Neutral</i>	<i>Dislike</i>	χ^2 (<i>p</i> -value)
In general, do you like or dislike advertising?				
Sample with IA question version	<u>38%</u>	28%	<u>35%</u>	16.02 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>46%</u>	29%	<u>25%</u>	
<i>Advertising Utility</i>				
	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	χ^2 (<i>p</i> -value)
Most advertising is informative				
Sample with IA question version	62%	<u>19%</u>	<u>19%</u>	33.38 (<i>p</i> = .000)
Sample ¹ with GA question version	59%	<u>10%</u>	<u>31%</u>	
I like to look at most advertisements that I am exposed to				
Sample with IA question version	<u>38%</u>	13%	<u>49%</u>	18.44 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>50%</u>	13%	<u>38%</u>	
	<i>Sometimes/Often</i>		<i>Never/Seldom</i>	
How often do you use advertising to help make your purchase decisions?				
Sample with IA question version	<u>33%</u>		<u>67%</u>	132.49 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>67%</u>		<u>33%</u>	
	<i>Somewhat/Very</i>		<i>Not at All/Not Very</i>	
In general, how confident do you generally feel using information you see in an ad to make a purchase decision?				
Sample with IA question version	70%		30%	8.98 (<i>p</i> = .003)
Sample ¹ with GA question version	62%		<u>38%</u>	
<i>Indignity</i>				
	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	χ^2 (<i>p</i> -value)
Most advertising insults my intelligence				
Sample with IA question version	<u>54%</u>	<u>22%</u>	<u>24%</u>	62.75 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>46%</u>	<u>15%</u>	<u>39%</u>	
	<i>Sometimes/Often</i>		<i>Never/Seldom</i>	
How often do you feel offended by advertisements?				
Sample with IA question version	<u>29%</u>		<u>71%</u>	2.55 (<i>p</i> = .000)

TABLE 2
Continued

	<i>Sometimes/Often</i>		<i>Never/Seldom</i>		
Sample ¹ with GA question version	<u>48%</u>		<u>52%</u>		
How often have you felt misled by advertisements? ²					
Sample with IA question version	<u>33%</u>		<u>67%</u>		135.66 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>67%</u>		<u>33%</u>		
<i>Trust</i>					
	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	χ^2 (<i>p</i> -value)	
In general, I feel I can trust advertising					
Sample with IA question version	<u>48%</u>	<u>21%</u>	<u>31%</u>		52.18 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>38%</u>	<u>11%</u>	<u>50%</u>		
* Products that I have used usually live up to the promises of quality and performance made in their advertisements					
Sample with IA question version	<u>37%</u>	<u>51%</u>	<u>12%</u>		179.09 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>51%</u>	<u>17%</u>	<u>31%</u>		
	<i>Somewhat/Very</i>		<i>Not at All/Not Very</i>		
How comfortable are you about purchasing an item directly through an address or phone number in an advertisement—for example, by using a 1-800 number?					
Sample with IA question version	<u>42%</u>		<u>58%</u>		7.68 (<i>p</i> = .006)
Sample ¹ with GA question version	<u>34%</u>		<u>66%</u>		
<i>Price Perceptions</i>					
	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	χ^2	(<i>p</i> -value)
* In general, advertising results in lower prices for the products I buy					
Sample with IA question version	<u>34%</u>	<u>35%</u>	<u>30%</u>	143.59	(<i>p</i> = .000)
Sample ¹ with GA question version	<u>25%</u>	<u>12%</u>	<u>62%</u>		
* I usually get better value for my money in advertised brands of products than in unadvertised brands					
Sample with IA question version	<u>22%</u>	<u>50%</u>	<u>28%</u>	144.09	(<i>p</i> = .000)
Sample ¹ with GA question version	<u>35%</u>	<u>19%</u>	<u>47%</u>		

TABLE 2
Continued

	<i>Increases</i>	<i>No Effect</i>	<i>Decreases</i>	
What effect do you think advertising has on the prices of advertised products?				
Sample with IA question version	<u>28%</u>	<u>56%</u>	<u>15%</u>	242.50 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>73%</u>	<u>20%</u>	<u>7%</u>	
<i>Regulation</i>				
	Agree	Neutral	Disagree	χ^2 (<i>p</i> -value)
* I think the government should put less effort into regulating the content of advertising I see				
Sample with IA question version	<u>60%</u>	11%	<u>28%</u>	19.99 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>39%</u>	13%	<u>48%</u>	
* Advertising regulation should be done by the advertising industry through its member associations rather than by the government				
Sample with IA question version	<u>67%</u>	10%	<u>22%</u>	18.26 (<i>p</i> = .000)
Sample ¹ with GA question version	<u>55%</u>	13%	<u>32%</u>	
	<i>Too Much</i>	<i>Just Right</i>	<i>Too Little</i>	
How do you feel about the amount of regulation which the government currently places on advertising				
Sample with IA question version	<u>24%</u>	54%	<u>22%</u>	14.69 (<i>p</i> = .001)
Sample ¹ with GA question version	<u>17%</u>	55%	<u>28%</u>	

Note: The GA (general advertising) question versions are those given in the table. The IA question versions are the same but in regard to Internet advertising rather than advertising in general.

¹ This sample is weighted to match the demographics of the Internet sample and as such do not represent Internet users per se.

* These were dual version items. Half of the participants were asked the question phrased favorably toward advertising, while the other half were asked the question phrased unfavorably toward advertising.

Underlined percentages are those pairwise comparisons (between the two samples) that are significantly different at *p* < .05.

The chi-square results represent whether the samples differed in how people responded to the question. The top and bottom two boxes of the 5-point Likert-type items were collapsed into agree and disagree respectively for analysis of those questions involving statements of agreement.

of advertising in general to make a purchase decision (33% vs. 67%). It is unlikely that the perceived informativeness of IA contributes to this lack of using IA for purchasing decisions. Indeed, as previously mentioned, a high percentage of respondents (62%) found IA to be informative. Nor does confidence in using IA to make a purchase decision appear to be impeding consumers' usage of IA for purchase decisions. In response to the other behavioral item, "In general, how confident do you generally feel about using information you see in an Internet ad to make a purchase decision?" 70% of the Internet sample responded that they felt somewhat or very confident about using IA. Perhaps instead, there is a lack of opportunity to directly use information from the Internet to make a purchase decision (e.g., a lack of sales announcements, store locators, price listings on the Internet [see Schlosser and Kanfer, 1999a]).

In sum, over half of internet users find IA informative and are at least somewhat confident in using the information for purchase decisions. The weakest aspects of IA's utility are its ability to deliver entertainment and to encourage purchase.

Indignity. Overall, relatively few respondents felt insulted, offended, and misled by IA. Again, this is not a global view of advertising by this demographic group: fewer felt indignant toward IA than a demographically similar sample felt about GA. For instance, only a quarter of participants (24%) agreed that "Most Internet advertising insults my intelligence" compared to nearly half of respondents who agreed that GA insults their intelligence (46%). In addition, few felt at least sometimes offended (29%) or misled by IA (33%), whereas nearly half or more of a demographically similar sample felt at least sometimes offended (48%) or misled by GA (67%). This is consistent with Ducoffe's (1996) speculation that IA would be less irritating than GA because the interactivity of IA allows consumers to tailor the ad to meet their individual needs. Because consumers are in control of the IA viewed, they may perceive the self-selected IA to be appropriate for them—

essentially, less insulting, offensive, and misleading.

Trust. In addition to confidence in using IA to make a purchase decision, more participants felt they could generally trust IA than felt they could not trust IA (48% vs. 31%; see Note 4 in Appendix). In fact, a higher percentage felt they could trust IA than liked IA (38%). This contrasts with a demographically similar sample's views of GA: whereas only 31% felt IA could not be trusted, 50% felt that GA could not be trusted. In fact, nearly a third of GA respondents (31%) felt that the products they use "usually fail to live up to the promises of quality and performance made in [general] advertisements." Only 12% of IA respondents agreed that the products they use generally fail to live up to IA promises. This small percentage, however, is likely due to consumers' lack of experience (or association) between IA and their purchase behavior. Indeed, over half (51%) neither agreed nor disagreed with this statement.

To test whether actual experience in using IA to make purchasing decisions affected consumers' responses to this question, the responses of those who reported they had (at least seldom) used IA to make a purchase decision ($n = 283$) were compared to those who reported they had never used IA to make a purchase decision ($n = 119$). The results indicated that most of those who have never used IA neither agreed nor disagreed that the products they use live up to IA promises (75% compared to 41% who have used IA; see Table 3). Thus, lack of experience appears to partly account for the neutral responses. Of those with some experience using IA, more agreed that the products live up to IA promises (45%) than disagreed (13%).

Consistent with the findings for trustworthiness, 42% of the IA sample reported feeling somewhat or very comfortable purchasing an item directly through an address or phone number in an Internet ad compared to only 34% of a demographically similar sample feeling comfortable about purchasing through an address or phone number available in GA (see Table 2). Overall, therefore, it appears that the

TABLE 3
Effect of Experience Using IA to Make Purchase Decisions on Perceptions of IA

Promises and Product Prices

	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	χ^2 (<i>p</i> -value)
* Products that I have used usually live up to the promises of quality and performance made in their Internet advertisements				
Never used IA	18%	75%	8%	
Have used IA	45%	41%	13%	37.95 (<i>p</i> =.000)
* In general, Internet advertising results in lower prices for the products I buy				
Never used IA	14%	50%	35%	
Have used IA	43%	28%	28%	32.05 (<i>p</i> =.000)
* I usually get better value for my money in brands advertised on the Internet than in unadvertised brands				
Never used IA	14%	61%	25%	
Have used IA	25%	46%	29%	10.07 (<i>p</i> =.006)
	<i>Increases</i>	<i>No Effect</i>	<i>Decreases</i>	
What effect do you think Internet advertising has on the prices of advertised products?				
Never used IA	33%	59%	8%	
Have used IA	27%	55%	18%	6.77 (<i>p</i> =.034)

* Dual version items.

Internet population finds IA to provide relatively trustworthy information.

Price Perceptions. For advertising in general, advertising is perceived to increase product prices, a view that the public appears to have held for decades (e.g., see Bauer and Greyser, 1968; Gallup, 1959). This persistent and commonly-held perception is likely due to consumers' (1) awareness that advertising is expensive and/or (2) experience in price comparisons between advertised and unadvertised brands. It is unlikely to be due to the perception that advertised brands are of higher quality—only 35% of the GA sample agreed that they get better value in advertised brands.

The responses for Internet advertising, however, were quite different. Most did *not* perceive IA to increase prices. In fact, 35% stated that IA has no effect on the prices of products they buy and 34% stated that IA lowers prices of the products they buy. The relatively high percentage of neutral responses again may be due to lack of experience in using IA to make purchase decisions. Indeed, comparing those who have versus have not used IA to make a purchase decision (see Table 3), half of those who have never used IA neither agreed nor disagreed that IA lowers product prices (50%). Surprisingly, 43% of those who have used IA believe it *lowers* prices for the products they have purchased.

When asked whether IA in general increases,

decreases or has no effect on product prices, the majority of the sample said that IA has no effect (56%, see Table 2). This was true for both those who have and have never used IA to make a purchase decision (55% and 59% respectively, see Table 3). This may appear contradictory to the previously mentioned agreement that "In general, [IA] results in lower prices for the products I buy." However, it may be due to the difference in focus between "products I buy" and products in general. For instance, perhaps respondents have used IA primarily to find the least expensive product. Or perhaps wording the question in terms of "products I buy" may have triggered thoughts about their own proficiency in using the Internet to locate good bargains. Respondents may believe that the Internet, if used effectively, can result in lower prices. However, they may believe that IA itself does not necessarily have any impact on product prices. Overall (and in sharp contrast to perceptions of GA), consumers do not feel that IA increases product prices.

In terms of value, half of the respondents neither agreed nor disagreed that they get better value in brands advertised on the Internet than unadvertised brands (see Table 2). Not surprisingly, this was especially true among those who have never used IA to make a purchase decision (61%; see Table 3). Yet, even among those who have used IA to make a purchase decision, more responded neutrally (46%) than agreed (25%) or disagreed (29%). This common neutral response may be due to consumers' lack of awareness of whether the brands they have purchased are also advertised on the Internet.

Regulation. The majority of the IA sample (60%) wanted less government regulation of the IA that they view (vs. 28% wanting more). Most felt that IA regulation should be done by the advertising industry (67%; 55% felt the same way about GA regulation). The finding that most IA respondents wanted less government involvement in IA regulation is particularly noteworthy given the results of a demographically similar sample: there was a leaning toward more government regulation of the GA

content respondents themselves viewed rather than less (48% vs. 39% respectively).

The majority view that industry (rather than government) should regulate IA content may be due to media coverage centering around the Communications Decency Act. During the time of this survey, respondents may have been exposed to the black Web pages with blue ribbons—indicators of people's protests against the government's regulation of Internet content. Yet, sentiment against government regulation of IA seems to apply mainly to ads that respondents themselves view; when rating government regulation of IA in general terms, most respondents were satisfied (54% say the amount of government regulation is just right).

Variables Contributing to Attitudes Toward IA

The previous section was devoted to examining respondents' impressions of specific aspects of IA, and as such, focused upon the pattern of results *within* each questionnaire item across individuals. In this section, the relation *between* the different questionnaire items within individuals is examined.

In order to examine which factors contributed to respondents' judgments of IA, the items within each of the five factors were averaged and then regressed on overall IA attitudes (i.e., the degree to which respondents liked or disliked IA) using stepwise regression procedures. The results indicated that 43% of the variance in overall IA attitudes could be explained by the advertising utility factor alone. The next relevant factor, the indignity factor, led to an additional 2% explanation of the variance ($R^2 = .45$ with the advertising utility and indignity factors in the model). With all of the factors in the model, an additional 4% of the variance was explained beyond what the advertising utility factor could explain ($R^2 = .47$), indicating that the advertising utility factor alone accounted for much of the variance in overall IA attitudes.

To examine which specific items contributed (and to what degree contributed) to respondents' IA attitudes, the 16 attitudinal items were separately regressed on overall attitudes towards IA using stepwise regression procedures. The

results indicated that 42% of the variance in attitudes toward IA could be accounted for by responses to three of the four items in the advertising utility factor: how informative IA is (standardized $b = .23$), how enjoyable it is to look at (standardized $b = .38$), and how often it is used to make a purchase decision (standardized $b = .22$). Entering additional items into the regression model explained little incremental variance (5%) in attitudes toward IA ($R^2 = .47$ when the probability of F-to-enter at .05 was reached). Hence, even when the questionnaire items were entered separately into the regression equation (rather than aggregated into their respective factor and then regressed), the majority of the advertising utility items contributed most to IA attitudes. More importantly, the enjoyment item contributed most to IA attitudes and the behavioral item contributed nearly equally to the informativeness item. However, recall that the enjoyment and behavioral ratings are those on which IA is suffering (see Table 2), suggesting that these are areas in which IA needs to be particularly improved.

To assess the structure of a demographically similar sample's overall attitudes toward GA, the 5 factors were regressed on GA attitudes using stepwise regression procedures. Like IA attitudes, the advertising utility factor explained the majority of variance in attitudes toward GA ($R^2 = .33$), with the indignity factor contributing an additional 3% explanation in variance ($R^2 = .36$). Entering all of the factors into the regression model contributed little beyond what these two factors could explain ($R^2 = .38$ with all variables in the model). Also like attitudes toward IA, when all 16 attitudinal items were regressed on overall GA attitudes, responses to three of the four items in the advertising utility factor accounted for much of the variance ($R^2 = .35$). Similar to the relative weightings of IA attitudes, how enjoyable respondents found GA to look at had the highest weighting in respondents' attitudes toward GA (standardized $b = .38$). Respondents' ratings of how informative GA is (standardized $b = .20$), and how often it is used to make a purchase decision (standardized $b = .19$) were similarly weighted. Overall, it appears that the structure

and relative weightings of the factors influencing attitudes toward GA and IA are similar.

DISCUSSION

A representative sample of Internet users (according to recent demographic estimates) answered questions centering around five themes in addition to overall attitudes toward IA: (1) advertising utility, (2) feelings of indignity toward advertising, (3) trust of advertising, (4) advertising's effect on product prices and (5) advertising regulation. The results suggest that Internet users' perceptions of IA are generally positive. Although Internet users were equally divided in the favorability of their IA attitudes, over half found IA informative, were not insulted by IA, and felt confident in using IA for purchase decisions. Furthermore, of those with experience using IA for purchase decisions, more appeared to be satisfied than dissatisfied with IA: over 40% believed that products lived up to the IA promises and that IA *lowers* product prices (less than 30% of respondents disagreed).

Given these favorable responses, it may seem surprising that so few (38%) reported an overall favorable attitude toward IA. One might propose that this demographic group (young, highly educated and affluent males) may have a general dislike of advertising, both on the Internet and in traditional forms. Indeed, recent research would support this notion with regards to traditional advertising (cf. Alwitt and Prabhakar, 1992; Shavitt et al., 1998). However, comparisons of the IA sample with a sample who answered the same questions in regards to advertising in general (and whose data were weighted to match the demographics of the IA sample) yielded significant differences in attitudes and perceptions of IA versus GA. Although fewer respondents liked IA than a demographically matched sample liked GA, for several specific, key dimensions, perceptions of IA were more favorable than perceptions of GA. For instance, fewer respondents felt indignant toward IA or felt that IA was untrustworthy compared to respondents' perceptions of GA. Moreover, contrasting the common perception that

advertising increases product prices, few people felt that IA increases product prices. Still, despite these favorable impressions, fewer Internet users liked IA than a demographically similar sample liked GA. This does not imply that Internet users perceive GA and IA differently but that samples demographically characteristic of the Internet population (a higher proportion of well-educated, young, affluent males than the national average) perceive GA and IA differently. That is, the unique demographic characteristics of Internet users cannot account for the nature of their attitudes toward IA.

In order to gauge the components contributing to attitudes toward IA, a stepwise regression analysis was conducted. The results indicated that consumers' IA attitudes were largely comprised of perceptions regarding the informational, entertainment, and behavioral utility of advertising (i.e., the advertising utility factor). This is consistent with theorizing that information and entertainment are crucial to advertising effectiveness from the consumer's point of view (Ducoffe, 1995; Ducoffe, 1996; Eighmey, 1997). By drawing upon the tripartite theory of attitudes (Katz and Stotland, 1959; Rosenberg and Hovland, 1960), it was further proposed that behavioral utility would also be related to attitudes toward advertising. Supporting this notion, the perceived utility of advertising for making purchase decisions (behavior) was found to be a significant predictor of overall attitudes toward IA.

Although IA attitudes may be considered "new" relative to GA attitudes, the results indicated that the structure of attitudes toward IA is the same as that for GA attitudes. The consistency in attitudinal structure in these samples supports recent speculation that traditional assessments of advertising effectiveness (i.e., the information and entertainment value) would apply to advertising on the Web (Ducoffe, 1995; Eighmey, 1997). However, not only do these respondents appear to judge IA and GA advertising by the same criteria, but also these criteria have a relatively similar influence on attitudes toward IA and GA. In the case of both IA and GA, entertainment contributed more to advertising attitudes than the informativeness or be-

havioral utility of advertising did. Hence, entertainment appears to figure prominently in these respondents' attitudes toward traditional and Internet advertising.

Despite the similar structure of attitudes toward both IA and GA, the favorability of those attitudes differed: fewer participants liked IA than GA. This does not appear to be due to perceptions of the informativeness as much as the entertainment value of IA. In comparison with GA, a similar proportion of respondents found IA to be informative but fewer found it to be entertaining. Indeed, current commercial Web sites appear to include features that would allow users to benefit from the information richness of the medium while ignoring those features that would engage the consumer (e.g., role-playing and interactivity, Schlosser and Kanfer, 1999a). Moreover, enjoyment associated with the advertisement contributes most to consumers' attitudes toward IA (and GA), suggesting that on-line businesses should invest in creating sites that consumers enjoy visiting, just as they invest in creating traditional advertisements that are enjoyable.

This is not to suggest that Internet advertisements should include more features that have been found to be entertaining in the mass media (e.g., attractive visuals, humor), but rather features that have been found to be entertaining on the Internet. Such features include those unique to the Internet such as interactive product demonstrations (Schlosser and Kanfer, 1999b).

Contributing nearly as much as perceived informativeness to IA attitudes is the perceived behavioral (purchasing) utility of advertising. Currently most consumers report that they rarely if ever use IA to make a purchase decision, in spite of the consensus among Internet users that IA is informative and relatively trustworthy for making purchasing decisions. Perhaps few people acknowledge using IA to make offline purchasing decisions (e.g., via phone or at a local store) because the relation between IA and purchasing is less clear than the relation between GA and offline purchasing. Compounding this problem may be the fact that most commercial Web sites lack features that would facilitate online and offline

purchasing, such as a store locator or 800-number listed online (see Schlosser and Kanfer, 1999a).

It is perhaps not surprising that price and regulation perceptions contributed little to overall advertising attitudes—this replicates previous GA findings from a sample representative of the U.S. population as a whole (Shavitt et al., 1998). What is somewhat surprising is that trust and indignity (affective variables) contributed so little to IA (and GA) attitudes. It is possible that the advertising utility items already captured the effect of trust and indignity on attitudes toward advertising. For instance, trust is likely reflected in usage of advertising to make a purchase decision (the behavioral utility of advertising). Indeed, reported usage of IA for making purchase decisions was related to the items within the trust factor ($.24 < r < .27$). However, none of the items within the advertising utility factor were consistently related to all of the indignity items, suggesting that the effect of the indignity items on advertising attitudes was not entirely accounted for by the advertising utility factor.

Another possibility is that this highly educated sample has relatively complex schemas for advertising, comprising perceptions of advertising at different levels of specificity. Consequently, the different question items may have tapped attitudes at these different levels. When asked for their overall attitudes toward advertising and their responses toward the advertising utility items, respondents may have answered in terms of their perceptions of IA or GA generally. However, the indignity and trust questions may have activated specific advertising exemplars or instances in which they felt advertising insulted them or tested their trust. As a result, the advertising utility items may have been more predictive of attitudes toward IA and GA overall, whereas the indignity and trust factors may have been more reflective of attitudes toward specific IA and GA campaigns.

It appears that there is significant commercial potential for IA to facilitate sales transactions. Indeed, in terms of trusting the commercial content, more people feel comfortable purchasing from a phone number listed in an Internet advertisement than a demographically

similar sample felt about purchasing from a number listed in advertising in general. As mentioned earlier in the discussion, more of those who have used IA to make a purchase decision had favorable rather than unfavorable impressions of IA's effects on product quality and prices for the products they purchased (>40% vs. <30%). Of those with no experience using IA, most held a neutral stance regarding IA's effect on product quality and prices, which contrasts the common perception that traditional advertising increases product prices. At the time of the survey, therefore, it appeared that a sizeable proportion of Internet users have confidence in the content of IA and in making purchases based on that content, or at least are willing to give IA the benefit of the doubt, especially compared to the number of people with confidence in GA.

In addition, the results are consistent with previous speculation that the interactive, "pull" nature of IA makes it less irritating to consumers than the "push" nature of GA (Ducoffe, 1996). Compared to a demographically similar sample's perceptions of GA, fewer respondents felt insulted, offended, and misled by IA. Perhaps because Internet consumers play an active role in selecting the advertisements they view, they feel that the advertising content is more appropriate and suitable to their needs. Indeed, in the dawn of Internet marketing, it was proposed that Internet users would accept commercial content only if it was requested rather than intruded upon their attention (Hawkins, 1994). This would suggest that efforts to employ a *push* technology to IA (Andrews, 1989; Bank, 1996) might increase consumers' feelings of discontent toward IA.

CONCLUDING REMARK

Audience members play an active role in advertising exposure on the Internet. In addition the potential clash between Internet culture and marketing goals creates a situation where consumers may respond more negatively to IA than to GA. (Schlosser and Kanfer, forthcoming) Therefore, it is important to understand the structure and favorability of their attitudes

toward IA. This paper builds upon previous IA research (Ducoffe, 1996; Mehta and Sivadas, 1995) in addressing this topic and like previous research, serves as a building block in our understanding of consumer response in an online commercial environment. However, because U.S. Internet demographics are constantly changing in the direction of reflecting the general U.S. demographics (GVU, 1999), more surveys will be needed to assess attitudes and the structure of attitudes in this changing population.

APPENDIX: NOTES ON THE TEXT

1. For four of the six questions, there were no significant differences between responses to the question worded favorably versus unfavorably toward advertising, $\chi^2 < 5.65$, $p > .05$. The question wording affected participants' responses to the perceived effect of advertising on prices for the products they buy ($\chi^2 = 15.39$, $p < .0001$) and the amount of effort the government should put into regulating the IA they view. For the latter item, however, there was little difference in the pattern of results: the majority of respondents agreed that the government should put less effort into regulating advertising content that they view (53% and 68%). For the former item, question wording affected the pattern of results. When the question was worded favorably towards IA (it lowers product prices), 44% of respondents agreed and 31% responded neutrally. When the question was worded unfavorably towards IA (it increases product prices), 25% perceived IA to decrease prices and 40% responded neutrally. It is possible that question wording influenced participants' responses regarding prices of products they buy because consumers may not believe strongly that IA increases (or decreases) prices. Indeed, question wording strongly influenced responses of those within the sample who reported never using IA to make a purchase decision ($n = 119$; $\chi^2 = 15.43$, $p < .0001$). For those who have had some experience using IA to make a purchase decision ($n = 283$), the pattern of results appeared to be less affected by question wording ($\chi^2 = 9.09$, $p < .05$). In contrast, GA is commonly perceived to increase product prices. Indeed, in a sample representative of the U.S. population, question wording had little effect on consumers' perceptions of the effect of GA on product prices (Shavitt et al., 1998).
2. Although there were also income and race differences in attitudes toward advertising in general, there were not enough individuals per cell in the 2 (*gender*) \times 3 (*age*) \times 2 (*education*) \times 2 (*income*) \times 2 (*race*) demographic breakdown to weight the sample according to all five demographic variables. More specifically, there were not enough non-white participants within each cell to weight the samples by race (white/non-white). Furthermore, education and income were highly correlated, resulting in some of the *income* \times *education* cells being nearly empty. Analyses were conducted weighting for gender, age and either education or income. The results were nearly identical between the weightings for education and for income. Because several respondents refused to divulge salary information, the results of the sample weighted by gender, age, and education are reported here.
3. The "like to look at" question in the GA questionnaire tapped the entertainment value of GA and for comparability is used in the IA questionnaire similarly to assess the entertainment value of IA. While the term is relatively broad and may be interpreted as a utility factor, the correlation between this item and reported usage of IA for making purchase decisions is $r = .39$, suggesting that the entertainment item is distinct from "behaviorial utility."
4. One might expect parents to be particularly distrustful of IA given media cover-

age regarding the suitability of Internet content for children (cf. Miller, 1997) and the inability of computer programs to effectively shield children from inappropriate Internet content (*Consumer Reports*, 1997). Interestingly, however, there were no differences in reported level of trust in IA between those respondents with versus without young children.

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