

Perception towards Internet Advertising: A Study With Reference to Three Different Demographic Groups

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Abstract

Purpose - This paper discusses internet marketing relevance and investigates antecedents of consumer attitudes toward IA. The analysis is based on a consumer survey conducted in India. For this purpose, a representative quota sample of Internet users in India has been interviewed. The finding of this study provides marketers with an understanding of consumers, their attitude toward advertising, so as designers and marketers can better strategize their advertising designs.

Design/methodology/approach - Data for this survey was collected from Internet users among students, employees and entrepreneurs in India in summer 2011. A purposive sample was recruited with the assistance from professional survey research companies. Overall, 190 questionnaires were collected in employees, 192 from entrepreneurs, and 196 from the students. This sample is considered a representative of the population. Pilot study was also conducted to test the validity and reliability of the research.

Findings - The present paper has provided thorough information on the impact of various factors on internet advertising and the distinction of internet advertising effectiveness among three demographically different variables. This study was also able to give the insight of the various dimensions and their extent of influence on internet advertising.

Practical implications - This study provides with an insight based on which it is understood that the five factors which are entertainment, information credibility, economy and value are significant predictors of attitude towards internet advertising. With internet gaining the prominence among direct marketers on the globe, this research provides managers with the valuable findings that can be applied to integrate direct business with global customers.

Originality/value - India has the third largest internet population in the world that makes it a good fit for doing research on the topic of internet advertising. The large number of internet population of this country also gives this research a greater generalizability and acceptance.

Research limitations - The recommendations and managerial implications presented in the above section were based on the primary data collected and analyzed for this research. The generalizability of the findings of this research should be taken with caution as the research bears little limitation; firstly, the resources and the limited sample size that can not be considered as an absolute representative of the whole population of India. This research has been undertaken in India, a broader research scope is there where a multinational sample can be taken to make research findings more general. The perception of consumers may vary from country to country due to various personal and environmental factors which also hinder in absolutely generalizing the research findings.

Keywords: Online Advertising, Attitude, Entrepreneurs, Credibility, Value

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Introduction

While much research has been done on the topic of internet advertising but there is hardly any research focused on understanding the attitude towards online advertising in comparison to demographic variable (profession). The purpose of this paper is to investigate beliefs and attitudes toward online advertising among Employees Consumers and Entrepreneurs and the relationship between belief factors, attitude towards online advertising, and consumers' behavioral responses to online advertising.

Since the Internet magazine Hotwired and 14 sponsors placed the first advertising graphics on the Web in 1994, banners and buttons have become a prevalent form of promotion on the web. The main goal of Web banners is to inform users about the existence of particular Web sites, products/services and to persuade customers to visit the advertised sites. Thus, banners should attract the users' attention, and they need to appeal to them to trigger the desired user reaction. Normally, this is realized by animation and interactive features. Since advertisements began appearing on the Internet, the user reaction to banners has been disappointingly low. Williamson reported an average click-through rate of 2.1%. According to Nielsen (1997; 2000), click-through rates have since then constantly decreased from 2% (1995) to 0.5% (Oct. 1998), and reached 0.2% in May 2000. Sutherland (1999) also found that click-through rates had declined to 0.5% in 1999. Search engines like Infoseek and WebCrawler were found to have lower click-through rates (1.1% and 0.7%, respectively) than content providers like Hotwired (2.8% according to Williamson, 1996). A study by Double-click (1996) revealed that banners have a substantial "burnout rate": The probability of clicking on a banner drops from a maximum of 2.7% to less than 1% at the fourth exposure.

Some studies found advertising banners to be reasonably successful in terms of acceptance, however, an internet survey by market researcher COBUS with 1178 German internet users showed that banners with an appealing design do attract the users' attention (Leest 1996; Belz 1997). Nearly half the respondents reported that they looked at advertising banners if they were well designed. Less than 25% felt that banner advertisements were disruptive; only a third of the respondents said they ignored banners altogether. The Internet advertising Bureau (1998) found similar results: 60% to 70% of the respondents of this survey approved advertisement on the internet. Using two matched samples, Schlosser et al. (1999) compared attitudes to Internet advertising and to advertising in general. Although their results showed that, overall, Internet advertising was more disliked than advertising in general, Internet advertising was found to be superior in terms of customer trust. Wong (2001) surveyed 80 internet users on their attitudes towards Internet advertising banners and found that 80% had a favorable opinion towards banners on the Web.

Furthermore, it was shown that banner advertisements can have an impact on the purchase intentions of customers and a positive influence on their assessment of the advertised products (Briggs and Hollis 1997). Likewise, a study by Gruner-Jahr Electronic Media Service and Media Transfer (1999) with 2000 internet users revealed that brand names were rated more positively after users had looked at advertisement banners for those brands. What might be the reason for the contradictory results concerning the (non-)perception of banners on the Web? An important difference between Benway's and Bachofer's studies is the difference in their instructions. While Benway asked the subjects to locate specific information on a Web site, Bachofer's subjects were instructed to visit single Web pages on a bookmark list and to investigate them as they liked. Thus, the two studies induced opposing navigational behaviors. The task in Benway's study was to find short items of information such as prices for products, phone numbers or names. This task most likely triggered a navigation style known as "searching" (Canter et al. 1986), "search browsing" (Cove and Walsh 1988) or "directed browsing" (Kuhlen 1992; Tergan 1995). When users have a precise image of the information they are looking for and of its supposed form (e.g. numbers or single words), they tend to navigate in a very directed and structured manner to find

the target as quickly as possible. In Bachofer's study, on the other hand, subjects did not search for information. In fact, they did not even really navigate; they only called up individual Web pages one after the other. This activity can best be characterized as "associative browsing" (Tergan 1995) or "undirected browsing" (Kuhlen 1992): users do not have a concrete plan to find a particular object but instead are guided by the appeal of the information offered and respond to those stimuli that catch their attention first.

Literature review

Informativeness

The quality of information placed on a company's web site shows a direct influence on the customers' perceptions of the company and the company's products. Accordingly, information delivered to them via online media also needs to show qualitative features, such as accuracy, timeliness and usefulness for the consumer (Siau and Shen, 2003). Apart from this, the user needs quick access to the information(s) he is looking for his/her current content of use. There is even the possibility that information may be delivered automatically to the consumer (Kaasinen, 2003). In any event, consumers want the content of e-mail services to be tailored to their interest (Robins, 2003). On top of this, they are interested in getting messages that are relevant for them (Milne and Gordon, 1993). Information is thus considered a very valuable incentive in online marketing because recipients react very positively to ad that transfers incentives (Varshney, 2003). Not surprisingly, informativeness of advertising information is therefore strongly related to the advertising value when it is transferred via traditional media vehicles (Ducoffe, 1995).

Entertainment

Entertainment of advertising information is significantly related to advertising value of traditional advertising (Ducoffe, 1995). A high degree of pleasure and involvement during interaction with computer-based media leads to concurrent subjective perceptions of positive affect and mood of the consumer (Hoffman and Novak, 1996). People's feeling of enjoyment associated with ads play the greatest role in accounting for their overall attitudes toward them (Shavitt *et al.*, 1998). Entertainment denotes its full ability to fulfill consumers' needs for 'escapism, diversion, aesthetic enjoyment or emotional release' (McQuail, 1983).

Entertainment is also a crucial factor for internet marketing. It is essential that the message is concise and funny, and thus immediately captures consumers' attention (Katterbach, 2002). Entertainment services can increase customer loyalty and add value for the customer. As most people have a natural playfulness, providing games and prizes via internet yields high participation. Delivering games and prizes to the customer's through internet ads is successful way to attract and keep customers. Interactive games for example can also be played via Internet. These features can be used to involve customers more deeply and make them more familiar with the advertised service or product (Lehmkuhl, 2003). Therefore, we conclude that an entertaining advertising message is being perceived more positive by the recipient.

Credibility

Advertising credibility turned out to be significantly relevant to advertising value of web advertising (Brackett and Carr, 2001). Mackenzie and Lutz (1989, p. 51) define advertising credibility as 'consumers' perception of the truthfulness and believability of advertising in general', whereas Pavlou and Stewart (2000) refer to it as 'predictability and fulfillment of implicit and explicit requirements of an agreement' (online document). Credibility of an ad is influenced by different factors, especially by the company's credibility and the bearer of the message (Goldsmith *et al.*, 2000; Lafferty *et al.*, 2002). But, it is also influenced by the advertising medium. It has been found out that a message on the Internet achieves less credibility than a printed message unless the message is communicated by strong brand. There is no

empirical evidence on the overall credibility of messages transferred to e-mails and their influencing factors. Considering the findings cited above, we conclude that the credibility of an online advertising message has a positive influence on consumers' attitude toward online advertising via e-mails and on the perceived advertising value of the consumer. Adler and Rodman (2000) define credibility as the believability of the addressor and its perception in the listener's mind. In the context of advertising industry, MacKenzie and Lutz (1989) identify advertising credibility as consumers' general perception towards the truthfulness, reliability, trustworthiness and believability of an advertisement. Credibility of an advertisement is affected by various factors, particularly by the company's credibility and the person who brings a message (Goldsmith, Lafferty and Newell, 2000).

Economy

Based on extant literature, determinants such as hedonic, good for economy, product information, values corruption, and materialism and consumer benefits consistently indicate strong relationship with consumers' attitude towards advertising (Yang, 2000; Ramaprasad & Thurwanger, 1998; Pollay & Mittal, 1993; Bauer & Greyser, 1968). Belch and Belch (2008) suggest that the concept of 'good for economy' reflects the point of view that advertising speeds up the adoption of new goods and technologies by consumers', fosters full employment, reduces the average costs of production, elevates producers about healthy competition, and increases the standard of living on average. In addition, an essential view of advertising supporters is that advertising is the lifeblood of business. Thus it gives consumers' information about products and services and supports them to improve customer's standard of living (Belch & Belch, 2008). Galbraith (1967, p.45) states that "advertising and its related arts thus help develop the kind of man (people) the goals of the industrial system require one that reliably spends his income and works reliably because he is always in need of more." Galbraith's argument is supported by Bauer and Greyser (1968). In their study, Bauer and Greyser (1968) found that over 70 percent of their sample believed that advertising increases the standard of living and led to good products. The economics of information theory as cited in Stigler (1961) and Telser (1964) suggests that advertising can provide information and/ or reduce cost of searching. This argument is also supported by a few prominent researchers (Nelson, 1974; Eskin & Baron, 1977; Chiplin and Sturgess, 1981; Bharawaj, Varadarjan, and Fahy, 1993). Therefore, it may be said that 'good for economy' addresses the concrete economic effects of advertising for consumers' (Munusamy and Wong, 2007). The economic benefit of advertising is the ability of the advertisers to provide accurate and reliable information about their products to the audience (Petrovici et al., 2007). Therefore, Munusamy and Wong (2007), Tan and Chia (2007), Wang et al. (2009) conclude that 'good for economy' is positively related to consumers' attitude towards advertising. In other words, the more positive the credence in 'good for economy', the more positive are customers' attitude towards advertising.

Value

Literature in advertising and Information Systems suggests that advertising in both traditional media and the Internet is either easily ignored by the audience or is perceived to have little value. The understanding of directional advertisings, given that they are used by actively engaged users (Briggs and Hollis, 1997) rather than passively received audiences (Stewart 1992), could improve the effectiveness of Internet-based advertising strategies and streamline the interaction between users and interactive media. A characteristic of online advertising is that it can combine the functions of communicating with the audience and provides a channel for commercial transaction by implementing a hyperlink between the two. With a few clicks, a piece of online ads transforms into the market place of online business transactions. This characteristic provides value to the users who would otherwise place an order by phone or by a visit to the store (Stone,

1999). Ducoffe (1995, 1996) identifies entertainment, informativeness, and irritation as factors contributing to consumers' evaluations of ad values and thus attitudes toward ads. Brackett and Carr (2001) further validate Ducoffe's model and extend the model to include credibility and consumer demographics. Credibility is shown to be directly related to both advertising value and attitude towards advertising.

Demographics

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 online advertising can be attributed to the unique demographic profile of Internet users rather than advertising on the Internet per se, online advertising 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 online advertising and general advertising should be similar across these demographically matched samples.

A Conceptual Model, Hypotheses, and Research Question

This study tests a proposed model of ATOA in a cross-cultural context. The following graph presents the conceptual model underlying the study. The model posits that belief factors (e.g., information, entertainment) influence ATOA, which in turn affects consumers' behavioral responses. Culture exerts a broad and profound impact on people's beliefs, attitudes and behaviors. Cultural background is included in the conceptual model. The model also posits that culture influence belief factors, ATOA, and consumer responses.

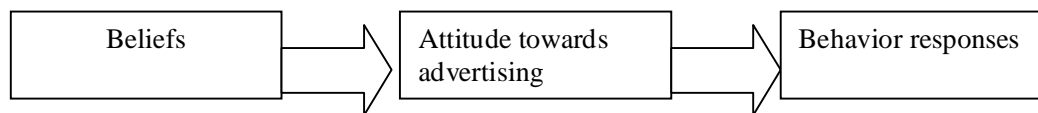


Figure 1: Conceptual Model

As discussed above, past research suggests consumers' beliefs about online advertising are positively associated with their ATOA. A positive ATOA further has a positive influence on consumer responses. Accordingly, the following hypotheses are proposed:

- H1.** Consumers' beliefs about online advertising have a positive effect on their ATOA.
- H2.** The stronger positive attitudes toward online advertising, the more likely one will click on advertisements.
- H3.** The stronger positive attitudes toward online advertising, the more likely one will shop online.

Literature does suggest professional differences exist in consumers' beliefs, attitudes and behaviors. However, due to the limited research on comparing online advertising among the students, employees and entrepreneurs, it is premature to predict how profession influence those variables. Therefore, the following research question is proposed:

RQ: How do consumers' beliefs and attitudes toward online advertising and consumer responses vary across the Students Entrepreneurs and Employees?

Method

Procedure and Sampling

Data were collected from Internet users among students, employees and entrepreneurs in India in summer 2011. A purposive sample was recruited with the assistance from professional survey research companies. Overall, 190 questionnaires were collected in employees, 192 from entrepreneurs, and 196 from the students. About 80.2 % of Employees participants reported spending less than 3 h/day on using the Internet and the remaining 19.8 % reported spending 3–4 h/day. About 30.2 % of the Entrepreneurs participants reported using the World Wide Web for less than an hour, whereas 50.1 % reported spending 1–3 h/day on the Web, and the remaining 19.7 % reported spending 3–5 h/day on the Web. About 42.1 % of Students participants reported using the World Wide Web for less than an hour, whereas 41.3% reported spending 1–3 h/day on the Web, and the remaining 16.7 % reported spending more than 3 h/day on the Web. Students respondents ($M = 3.65$, $SD = 1.00$) and Entrepreneurs respondents ($M = 3.64$, $SD = .95$) reported a higher level of familiarity with online advertising than did Employees respondents ($M = 2.85$, $SD = .94$).

Measurement

Beliefs about online advertising

To measure subjects' beliefs about online advertising, a 33-item scale was adapted from previous studies (Pollay & Mittal, 1993; Yang, 2004). The scale consisted of items pulled from different dimensions of beliefs including informative (e.g., "the Internet is a valuable source of information"), materialistic (e.g., "Online advertising promotes a materialistic society"), irritating (e.g., annoying), good for consumers (e.g., "Online advertising is essential"), hedonic (e.g., "Online advertising is entertaining and enjoyable"), credible (trustworthy and believable), manipulative (e.g., "Internet advertising persuades people to buy things they should not buy"), and distort value (e.g., "Internet advertising promotes undesirable values in our society"). Responses were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Principal axis factor analysis with promax rotation was conducted to examine the underlying structure of those 33 items measuring beliefs about advertising. The rules of a minimum eigenvalue of 1.0 and at least 2 loadings (60/40 loadings) per factor were referenced for extracting factors. The retained five factors explained about 62.6%, 53.5%, and 57.1% of the total variance for the Students, Employees and Entrepreneurs samples respectively. Items that were retained in all three samples were used for confirmatory factor analysis. Descriptive statistics of the belief items are presented in Table 1, and factor loadings are presented in Table 2a, 2b and 2c.

Factor 1, Entertainment (eigenvalue = 8.84, Cronbach's $\alpha = .75$, employees; eigenvalue = 3.75, Cronbach's $\alpha = .95$, students; eigenvalue = 10.60, Cronbach's $\alpha = .87$, entrepreneurs). This factor consisted of three items and reflect individuals' belief that advertising can bring fun and enjoyment to their lives. High scores on this factor refer to a strong belief that online advertising is entertaining.

Factor 2, Information (eigenvalue = 2.33, Cronbach's α = .80, employees; eigenvalue = 1.44, Cronbach's α = .83, students. eigenvalue = 3.57, Cronbach's α = .83, entrepreneurs). The factor consisted of three items and reflected the belief of online advertising provides valuable information about products, services and organizations for Internet users. High scores on this factor mean that online advertising is informative.

Factor 3, Credibility (eigenvalue = 3.12, Cronbach's α = .86, employees; eigenvalue = 12.65, Cronbach's α = .89, students. eigenvalue = 2.04, Cronbach's α = .92, entrepreneurs the factor consisted of three items and revealed one's view of whether online advertising is believable. High factor scores refer to high credibility of online advertising.

Factor 4, Economy (eigenvalue = 1.72, Cronbach's α = .64, employees; eigenvalue = 1.19, Cronbach's α = .80, students. eigenvalue = 1.25, Cronbach's α = .69, entrepreneurs). This factor consisted of two items and referred to an individual's belief about the influence of online advertising on the economy. High factor scores indicate a strong belief that online advertising is beneficial for the economy.

Factor 5, Value corruption (eigenvalue = 1.65, Cronbach's α = .82, employees; eigenvalue = 1.62, Cronbach's α = .70, students eigenvalue = 1.40, Cronbach's α = .76, entrepreneurs). This factor consisted of two items and revealed one's belief about the impact of advertising on people's outlook of life. High factor scores mean that online advertising has a strong negative effect on moral values and social justice.

A confirmatory factor analysis was conducted to examine the goodness-of-fit of the measurement model for belief factors. AMOS version 5.0 was used for the structural modeling analysis. Over the past decades, there has been a large body of research and debate on the cutoff criteria of fit indices for assessing model fit (Hu & Bentler, 1999; Kline, 2005; Loehlin, 1998). Among a range of fit indices, the following were those often reported in published research: the Chi-square, comparative fit index (CFI), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), the goodness-of-fit index (GFI), and the incremental index of fit (IFI). Researchers tend to agree that it is not advisable to rely on one fit index to assess the model fit. Instead, using a combination of different fit indices may be more reliable. Because Chi-square is sensitive to sample size, χ^2/df is recommended, and the ideal cutoff is less than 3 (Kline, 2005; Loehlin, 1998). Kline (2005) recommended the following cutoff criteria for good model fit: SRMR <.10, CFI >.90, GFI >.90, IFI >.90, RMSEA <.08. Hu and Bentler (1999) suggested that a strict rule with SRMR <.08 and RMSEA <.06 would result in a lower type II error rate of model rejection.

Based on the typical cutoff criteria of model fit, results indicated that the measurement model of belief factors fit all three samples satisfactorily (see Table 3). In addition, further analysis of the factor model demonstrated full factorial metric invariance across culture.

Table 1

Items of belief factor						
ONLINE ADVERTISING						
	STUDENTS		EMPLOYEES		ENTREPRENEURS	
	M	SD	M	SD	M	SD
Information	2.08	.91	3.11	1.08	3.54	1.08
Supplier information	3.21	.90	2.88	1.01	3.13	1.06
Up to date information	2.98	1.01	3.26	1.08	3.52	1.08
Entertaining	3.12	1.06	3.20	1.23	2.96	1.22
Enjoyable	2.92	1.03	2.86	1.22	2.90	1.31
Pleasing	2.25	.95	2.74	1.21	2.92	1.05
Interesting	2.69	.95	3.05	1.17	3.04	1.11
Credible	2.24	.80	2.67	1.00	2.94	1.05
Trustworthy	2.14	.78	2.35	.94	2.93	1.10
Believable	2.47	.82	2.52	.96	2.93	1.10
Good for economy	3.22	.74	2.99	.86	3.29	1.13
Standard of life	2.78	.76	2.55	.86	3.03	1.22
Better products for public	2.81	.81	2.65	.86	2.81	1.05
Undesirable social value promotion	3.08	.78	2.96	.90	2.37	1.02
Value distortion among youth	3.04	.77	3.05	1.02	2.71	1.30

Attitudes toward online advertising

Five items were used to measure ATOA on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The item “in general, I think that online advertising increases the cost of products” was deleted to increase Cronbach’s α (from .71 to .77 for the Employees sample, from .65 to .68 for the student sample, and from .74 to .92 for the Entrepreneur sample). The remaining four items were “overall, I consider online advertising a good thing”; “overall, I like online advertising”; “I consider online advertising very essential”; and “I would describe my overall attitude toward online advertising very favorably.” The mean of the four items served as the index of attitudes toward advertising. The higher the index score, the more positive attitude one holds toward online advertising.

Table 2a

Beliefs of loading after EFA and correlations among the factors separated for each sample

Employee Sample						
	Items	information	entertainment	credibility	economy	value
Info.	1	.55	-.10	.11	.20	.03
	2	.65	.04	.12	-.04	-.05
	3	.95	.00	-.05	-.12	.06
Ent.	4	.20	.73	.03	-.11	-.07
	5	-.19	.79	.09	.01	-.08
	6	-.03	.51	.11	-.06	.12
	7	.06	.76	-.00	.10	.04
Cred.	8	.03	.00	.85	-.05	.02
	9	-.13	.06	1.1	.04	.01
	10	.04	.13	.66	.06	-.06
Econ.	11	.03	-.10	.12	.56	-.10
	12	-.05	-.02	-.02	.74	-.13
	13	-.06	.07	-.06	.84	-.06
Valu.	14	-.01	-.05	-.00	-.12	.75
	15	-.04	-.04	-.07	.03	.09
Correlations						
Info	-					
Ente		.49	-			
Cred		.54	.36	-		
Econ		.47	.36	.35	-	
Valu		-.06	-.03	.23	.08	-

Table 2b

Beliefs of loading after EFA and correlations among the factors separated for each sample

Student Sample						
	Items	Information	Entertainment	Credibility	Economy	Value
Info.	1	.54	.20	.16	.03	-.04
	2	.59	.09	.31	-.02	.01
	3	.42	.31	.04	.03	.09
Ent.	4	-.11	1.04	-.16	.03	-.09
	5	-.17	1.01	.05	-.05	.01
	6	-.06	.88	.10	-.02	-.00
	7	-.03	.79	.11	.04	.04
Cred.	8	-.08	-.08	.77	-.00	.06
	9	-.06	-.06	.79	-.06	-.04
	10	.02	.02	.69	-.04	.01
Econ.	11	-.03	.10	.12	.56	-.09
	12	-.30	.04	.34	.71	.02
	13	-.11	.07	.17	.72	-.02
Valu.	14	-.16	.00	.07	-.18	.11
	15	-.03	-.09	-.08	-.11	.80
Correlations						
Info	-					
Ente		.67	-			
Cred		.66	.27	-		
Econ		.27	.32	.35	-	
Valu		.09	.11	.02	.14	-

Table 2c

Beliefs of loading after EFA and correlations among the factors separated for each sample

Entrepreneur Sample						
	Items	Information	Entertainment	Credibility	Economy	Value
Info.	1	.66	-.12	.20	.11	-.06
	2	.57	-.06	.29	-.07	-.02
	3	.60	.16	.13	.01	.05
Ent.	4	.21	.82	-.17	-.04	.04
	5	.07	.88	.05	-.07	.13
	6	.09	.83	-.10	-.09	-.03
	7	.35	.61	-.07	.02	.03
Cred.	8	-.04	-.04	.97	-.06	.09
	9	.05	.05	.93	-.02	.12
	10	-.13	-.13	.90	-.10	-.03
Econ.	11	.22	-.10	-.22	.79	.07
	12	.05	-.04	.02	.62	-.11
	13	-.00	.37	.07	.38	.15
Valu.	14	-.10	-.07	.17	.08	.79
	15	-.22	.06	.00	.17	.50
Correlations						
Info	-					
Ente		.49	-			
Cred		.57	.55	-		
Econ		.25	.44	.30	-	
Valu		-.38	-.38	-.48	-.08	-

Table 3

Measurement model fit of belief factor

	X ²	df	X ² /df	SRMR	GFI	IFI	CFI	RMSEA
Employees	98.61	55	1.793	.050	.929	.957	.956	.063
Students	114.8	55	1.456	1.452	0.044	.931	.983	.048
Entrepreneurs	157.6	55	2.865	.051	.943	.961	.961	.070
Ideal value			<3	<.08	>.90	>.90	>.90	<.08

Consumer behavioral responses

Behavioral responses toward online advertising were conceptualized as a combination of ad clicking and shopping experience. Ad clicking was measured by the frequency of subjects' clicking on online advertising. Online shopping experience was assessed in terms of the frequency of online purchases. The survey question was phrased as "How often have you bought products or services from the Internet during the one year?" Respondents were assessed on a 5-point Likert scale ranging from 1 (not at all) to 5 (very often).

Results

Two structural models were fitted to the pooled data of Employees, Students, and Entrepreneurs participants. For model I, the indicator of online behavior was ad clicking, whereas frequency of online buying was the indicator of online behavior for model II. Hence, in both models,

behavioral response was treated as a single-indicator construct. The sample size for model I was 578. For model II, surveys missing on the item of online shopping frequency were excluded from data analysis, and a sample size of 560 was retained. Results presented in Table 4 showed that both structural models fitted the pooled data well Fig. 1.

Hypotheses 1-3

Regression coefficients of structural models are presented in Tables 5 and 6. It was shown that all five belief factors were statistically significant predictors of ATOA. H1 was supported. Value corruption belief negatively influenced ATOA, and the other four beliefs positively predicted ATOA. That is, consumers hold more positive attitudes toward online advertising when they believe online advertising is beneficial for the economy, informative, credible, entertaining, and pro-value. Among them, economy belief was the strongest predictor. ATOA were statistically significant predictors of both online ad clicking and frequency of online shopping. Therefore, H2 and H3 were supported. In addition, ATOA mediated the relationship between belief and behavioral response.

Research Question

To examine professions' influence on consumers' beliefs, attitudes, and behavioral responses, we first conducted multiple group comparison to assess the measurement invariance of beliefs and ATOA, separately, with all the measurement weights constrained equally. The measurement model of belief factors did not show measurement invariance. Therefore, the five factors were examined respectively for measurement invariance. With measurement weights constrained equally, the information factor was invariant across three groups ($Dx 2 = 8.11$, $Ddf = 4$, $p > .05$), and so was the credibility factor ($Dx 2 = 4.20$, $Ddf = 4$, $p > .05$). The entertainment factor did not show measurement invariance ($Dx 2 = 31.79$, $Ddf = 6$, $p < .001$), neither did the economy factor ($Dx 2 = 27.30$, $Ddf = 4$, $p < .001$) and the value factor ($Dx 2 = 47.29$, $Ddf = 4$, $p < .001$). For belief factors demonstrating measurement invariance, separate ANOVA were conducted to examine differences across the three countries. Results indicated that there existed a significant difference of information belief ($F(2, 774) = 15.92$, $p < .001$). Scheffe's post hoc test showed that Entrepreneurs ($M = 3.39$, $SD = .94$) scored higher on information belief factor than did students ($M = 3.09$, $SD = .91$) and Employees ($M = 2.98$, $SD = .80$). There was no statistically significant difference of information belief between Employees and Students. There existed a significant difference of credibility belief ($F(2, 774) = 37.99$, $p < .001$). Scheffe's post hoc test showed that all three groups differed with each other on the credibility factor [Entrepreneurs ($M = 2.93$, $SD = 1.00$), students ($M = 2.51$, $SD = .88$), Employees ($M = 2.28$, $SD = .70$)]. Regarding ATOA, with all the measurement weights constrained to be equal, the fit of the constrained model did not differ significantly from the unconstrained one ($Dx 2 = 10.83$, $Ddf = 6$, $p > .05$). Hence, the mean of the four items served as an index of ATOA. High score refers to a high positive attitude toward online advertising. ANOVA indicated that there was a statistically significant difference of ATOA among the three countries ($F(2, 774) = 61.77$, $p < .001$). Schaffer's post hoc test showed that Entrepreneurs ($M = 3.36$, $SD = .92$) scored higher on ATOA than did students ($M = 2.71$, $SD = 1.08$) and Employees ($M = 2.59$, $SD = .61$). There was no statistically significant difference in ATOA between Employees and Students. ANOVA showed that respondents in three groups differed significantly in online shopping ($F(2, 774) = 28.11$, $p < .001$) and ad clicking ($F(2, 774) = 125.61$, $p < .001$). Schaffer's post hoc test showed that Entrepreneurs ($M = 2.80$, $SD = 1.18$) clicked online advertisements more frequently than did Students ($M = 1.61$, $SD = .84$) and Employees ($M = 1.69$, $SD = .77$). There was no statistically significant difference in ad clicking between Employees and Students. Students ($M = 2.21$, $SD = .91$) shopped online more frequently than did Employees ($M = 1.85$, $SD = .79$) and

Entrepreneurs ($M = 1.67$, $SD = .78$). There was no statistically significant difference of online shopping between Employees and Entrepreneurs.

Table 4

Structure of model fit								
	χ^2	df	χ^2/df	SRMR	GFI	IFI	CFI	RMSEA
M-I	479.21	154	3.112	.034	.941	.963	.9562	.052
M-II	464.85	154	3.018	0.018	.933	.943	.9630	.051
Ideal value			<3	<.08	>.90	>.90	>.90	<.08

Table 5

Regression weights of SM-I				
Regression Path	<i>B</i>	<i>SB B</i>	β	<i>C.R.</i>
Information---A _{OA}	.221	.046	.238	4.772
Entertainment--- A _{OA}	.108	.041	.118	.2722
Credibility--- A _{OA}	.206	.041	.225	5.126
Economy--- A _{OA}	.619	.105	.336	5.961
Value--- A _{OA}	.205	.037	.206	5.640
A _{OA} -ad-click	.834	.047	.606	18.02

** $p < .01$

*** $p < .001$

Table 6

Regression weights of SM-II				
Regression Path	<i>B</i>	<i>SB B</i>	β	<i>C.R.</i>
Information---A _{OA}	.226	.048	.242	4.77
Entertainment--- A _{OA}	.122	.041	.134	3.011
Credibility--- A _{OA}	.186	.041	.201	4.55
Economy--- A _{OA}	.630	.105	.339	5.952
Value--- A _{OA}	-.210	.039	.205	5.582
A _{OA} -ad-click	.085	.039	.085	2.27

* $p < .05$

** $p < .01$

*** $p < .001$

Discussion

Links between Belief Factors, ATOA, and Behaviors

This study identified five common belief factors across the students, Employees and Entrepreneurs samples: entertainment, information, credibility, economy, and value corruption. The results showed that all five factors were significant predictors of ATOA, which was consistent with previous research (e.g., Ducoffe, 1996; Wolin et al., 2002). Among the five

factors, the economy belief played the most important role in predicting ATOA. People who believe online advertising has a positive impact on the economy tend to have a positive attitude toward online advertising. A basic view of advertising proponents is that advertising is the lifeblood of business – it provides consumers with information about products and services and encourages them to improve their standard of living. Advertising has been linked to producing jobs and helping new firms enter the marketplace. Companies employ people who make products and provide the services that advertising sells (Belch & Belch, 2009). Advertising, therefore, stimulates competition and contributes to economic development. Credibility factor is the second strongest predictor for ATOA. Specifically, when consumers believe online advertising is credible and trustworthy, they tend to have a more positive attitude toward online advertising. This result is consistent with Wolin et al.'s (2002) findings that falsity/no sense negatively predicted ATOA. Due to the immaturity of the market and a lack of regulation systems, consumers in developing markets often hold deep concern about the trustworthiness of online advertising. To establish credibility of online advertising, researchers have suggested that advertisers consider strategies such as money-back guarantees, improved customer services, and affiliations with credible organizations for a “seal of approval” (Wolin et al., 2002). Information has been a common belief about advertising identified by previous studies. One of the most important functions of advertising is to provide information. Past research on Internet use motives has revealed that searching for information is the primary reason why people use the Internet (e.g., Rubin, 2002). It is logically sound that those who perceive online advertising to be informative are more likely to favor it. For instance, Wolin et al. (2002) found that product information was positively related to ATOA. Ducoffe (1996) also identified a strong correlation between informativeness and Internet advertising value.

Entertainment is another component influencing the effectiveness of advertising by establishing an emotional link between consumers and a brand message. With the marketplace cluttered with advertising messages vying for people's attention, an advertisement needs to be interesting and enjoyable in a creative way to attract audiences' attention. Furthermore, as the word “infotainment” suggested, information and entertainment are often intertwined with each other in an information society. Online advertising is just another exemplar of infotainment in the new technological world. Regarding value corruption belief, people tend to view online advertising negatively when they believe that online advertising undermines their social value system. Past literature has established that advertising is not only a marketing tool but also a social actor and a cultural artifact that conveys social and cultural values and beliefs (e.g., Dyer, 1982; Frith, 1995). Advertising has been criticized for promoting materialism, insecurity and greed in society. It creates needs and desire that consumers may never recognize on their own. In summary, the above discussion suggests that all five belief factors play significant roles in predicting consumers' ATOA. That is, consumers hold more positive attitudes toward online advertising when they believe online advertising is beneficial to the economy, informative, credible, entertaining, and pro-value. Findings also suggested that ATOA positively and significantly predicted ad clicking and online shopping experience. This is consistent with the attitude-behavior link exhibited in the literature. For example, Wolin et al. (2002) found that respondents' favorable attitude toward online advertising significantly influenced their Web advertising behavior such as clicking online advertisements. Korgaonkar and Wolin (2002) further observed that heavy Internet users with positive ATOA were more likely to purchase online.

Effects of Profession

One main objective of the current study was to explore the demographic (profession) impact on one's beliefs and attitudes toward online advertising. The results showed significant differences of beliefs and ATOA among the three demographic variables. Entrepreneurs reported more

positive attitudes toward online advertising than those of Students and Employees. Furthermore, Entrepreneurs tended to believe that online advertising was more informative and credible than did Students and Employees. These results may be attributed to both professional differences. As mentioned earlier, the students are representative of a matured advertising market. Consumers have been bombarded by marketing messages for decades. Information overflow is a prominent feature among students. With the pervasiveness of advertising, people's perceptions of advertising have become more comprehensive and cynical. That is, the views on advertising are likely to be comprised of both positive and negative aspects.

Employees share some commonalities with entrepreneurs in terms of social life and economic independency. However, Employees exhibited more negative ATOA than did Entrepreneurs and the lowest trust toward online advertising among the three groups. This may be mainly due to the influence of traditional Indian Employees culture which emphasizes cautiousness toward new things and frugality. Logically, Employees reservations about the Internet may lead to their low trust toward online advertising. Finally, one's evaluation of the credibility of information and its informativeness are closely linked together. Hence, less credible information is more likely to be viewed as less informative. Demographics has a significant impact on consumers' behavioral responses to online advertising among the three groups. Results indicate that Entrepreneurs were more likely to click on online advertisements than were Students and Employees. Students shopped online more than did Employees and Entrepreneurs consumers. According to the hierarchy of effect theory, attitude is likely to have a positive impact on behavior. The framework of consumer response sequence theories states that even though beliefs and attitudes tend to influence behavior, there exists a gap between attitudes and actual purchasing behavior. To that end, differences in economic status among the three groups may be more influential than attitudes in online shopping. Both employees and entrepreneurs are economically self reliant people. By default, consumers in these two groups have more spending money than do students, which may result in less frequent online purchases and more frequent offline one. Furthermore compared with the students, e-commerce in employees and entrepreneurs is less mature. Many employees and entrepreneurs feel uneasy about using credit cards when making purchases.

The perceived risk associated with e-commerce transactions is much higher in employees and entrepreneurs than in the students. As such, overall online purchases made by Employees and Entrepreneurs are quite limited. Results have suggested that Internet users in different groups report vastly different perceptions of the efficacy of online advertising. While such a discrepancy is expected, it should be noted that, even between two financially related groups (employees and entrepreneurs), significant differences in online advertising across cultures are evident. Global marketers may need to be aware of such differences when employing a centralized e-marketing approach around the globe, even within the developing country segment.

Limitations and Future Directions

This study explored consumers' beliefs and attitudes toward online advertising and the relationships between different components of consumer responses in a cross-demographic context. Research findings may help enhance our understanding of ATOA in a cross-demographic context and offer valuable information to global marketers. The study has several limitations. First, in this study, we operationalized the concept of profession as demographic background of participants, which may not be as robust as desired. Individual differences could exist within a demographic group. In particular, past research has demonstrated a close link between ATOA and other social and individual factors such as economic development level, demographics, lifestyle, and Internet experience (Karson et al., 2006; Korgaonkar & Wolin, 2002; Yang, 2004). Future investigation could focus on how the aforementioned factors conspire to influence online advertising. In addition, future research could include other important variables that influence consumer online shopping behaviors in the model. For example,

convenience and trust toward a Web site have been identified as factors that affect online shopping. Second, due to a short history of online advertising, consumers' beliefs and attitudes toward online advertising may still be evolving and changing (Karson et al., 2006). Nonetheless, a cross-sectional design is far from enough to capture that change or evolution. To that end, a longitudinal study may provide more insights into the relationships among different factors. Lastly, future research could examine a broader profile of online consumers, and compare online advertising across different consumer groups.

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