



Examining the role of beliefs and attitudes in online advertising

A comparison between the USA and Romania

87

Ying Wang

Youngstown State University, Youngstown, Ohio, USA, and

Shaojing Sun

Fudan University, Shanghai, People's Republic of China

Examining the
role of beliefs
and attitudes

Received October 2008
Revised December 2008,
March 2009,
May 2009, June 2009
Accepted July 2009

Abstract

Purpose – The purpose of this paper is to investigate online advertising across different cultures such as Romania and the USA. In the meantime, this paper attempts to examine the relationships among beliefs about online advertising, attitudes toward online advertising (ATOA), and consumer responses to online advertising.

Design/methodology/approach – Surveys are conducted among 577 internet users from both Romania and the USA structural equation modeling was used to examine the relationships among variables.

Findings – Belief factors (i.e. information seeking, entertainment, economy, credibility, and value corruption) are statistically significant predictors of ATOA; ATOA is a significant predictor of consumer responses to online advertising; as compared to Americans, Romanians tended to hold a more positive ATOA and are more likely to click advertisements, whereas Americans are more likely to buy online than do Romanians.

Research limitations/implications – Convenient sampling technique and the operationalization of culture are main limitations associated with the paper.

Practical implications – Findings may help businesses and organizations employ online advertising more effectively and efficiently in their global marketing endeavors.

Originality/value – Currently little is known about online advertising in developing countries, particularly eastern European countries such as Romania. The current paper extends research on ATOA to a cross-cultural context.

Keywords Advertising, Advertising media, Internet, Consumer behaviour, United States of America, Romania

Paper type Research paper

Introduction

Recent years have witnessed growing interest in examining the mechanism and influence of online advertising. Along the line of research, an intensely debated topic is about the roles of consumers' beliefs and attitudes toward online advertising (ATOA). A host of studies (Ducoffe, 1996; Russell *et al.*, 1994) have suggested that individuals' ATOA is an important measure of advertising effectiveness. Past research on online advertising has provided insight into global marketing and commerce. However, the foci of most studies have been on the USA or developed countries. Little is known about online advertising in developing countries, particularly Eastern European countries such as Romania.



This research project is supported by a grant from the State Innovative Institute for the Studies of Journalism and Communication and Media Society at Fudan University.

International Marketing Review
Vol. 27 No. 1, 2010
pp. 87-107

© Emerald Group Publishing Limited
0265-1335
DOI 10.1108/02651331011020410

The goal of current study is to investigate online advertising across different cultures such as Romania and the USA. Scholars and practitioners alike have explored the relationship between culture and advertising extensively in the traditional media environment, but rarely do so in the online context. Nonetheless, as Roberts and Ko (2001) stressed, cultural differences and adaptations are as relevant to online advertising as to traditional advertising. Moreover, the internet affords companies of different sizes nearly equal opportunities to market themselves globally, and hence examining the role of culture in online advertising may provide useful implications about expanding business across nations.

There are two major objectives of this study: first, the study attempts to model the relationships among three groups of factors including beliefs about online advertising, ATOA, and consumer behavioral responses toward online advertising. Second, the study seeks to explore the influence of culture on the aforementioned three factors. In the past, the booming Asian markets such as China and India have garnered enormous attention from the academia and marketers. In contrast, research on Eastern European countries such as Romania is sparse. As a country bordering between the east and the west, Romania has much in common with its Central and Eastern European neighbours such as Russia and Poland. The economic transition and internet development in Romania are also representative of this region. The USA, on the other hand, is a highly developed market and represents a typical Western culture. A comparison between Romania and the USA can enhance the understanding of online advertising audiences around the globe, and thus help businesses and organizations employ online advertising more effectively and efficiently in their global marketing endeavors.

This study contributes to the international marketing literature in several ways. First, examining beliefs and ATOA in Romania and the USA extends current research on online advertising to a cross-cultural context. Second, modeling the relationships among beliefs, attitudes, and behaviors deepens the understanding of advertising hierarchy effects in an international setting. Specifically, the forming process from beliefs, through attitudes, to behaviors, has rarely been inspected in the aforementioned context. Third, with the internet functioning as an integrated marketing tool, the present study provides insight into the uniqueness and effectiveness of the new advertising medium as opposed to traditional media.

This paper is organized in the following manner: first, the authors review relevant literature on consumers' beliefs, attitudes, and behavior toward online advertising, as well as a brief introduction to Romanian and American cultures, particularly in regard to Hofstede's cultural dimensions; second, based on the literature review, hypotheses are proposed to address the relationships among culture, individuals' beliefs, attitudes and consumer behavioral responses; third, sampling, measurement, and data analysis are presented; finally, the authors discuss implications of significant findings, research limitations, and future directions.

Literature review

Beliefs about online advertising

Consumers' beliefs and attitudes towards advertising are important indicators of advertising effectiveness (Mehta, 2000). To date, there exist two typical views about the relationship between consumers' beliefs and their general attitudes towards advertising. The first treats the two constructs as equivalent and interchangeable both

conceptually and operationally (Mehta, 2000; Schlosser and Shavitt, 1999), whereas theBrackett and Carr, 2001; Ducoffe, 1996; Pollay and Mittal, 1993). In the later research on the subject, the second perspective seems to be gaining popularity. Pollay and Mittal (1993), for example, argued that beliefs are specific statements about the attributes of objects and attitudes are summative evaluations of objects. Emanating from beliefs, attitudes operate at different levels of cognitive abstraction. Specifically, ATOA is the aggregation of weighted evaluations of perceived attributes and consequences of products (Brackett and Carr, 2001).

Consistently, researchers have argued that ATOA has both cognitive and affective antecedents (Ducoffe, 1996; Shimp, 1981). Belief about advertising, as a result of the benefit and cost that consumers derive from advertising, primarily serves as a cognitive predictor of ATOA. Moreover, one's belief plays a more important role in forming ATOA when the person is engaged in central processing (i.e. more deliberate, effortful, and thoughtful) advertising information than in peripheral processing (low involvement, less thoughtful, and more emotional) (Petty and Cacioppo, 1986).

Prior studies have shown that one's belief about advertising is a multidimensional construct. For instance, Bauer and Greyser (1968) identified two dimensions underlying consumers' beliefs: economic and social. Later on, Pollay and Mittal's model (1993) presented seven belief factors underlying consumers' beliefs, and classified those factors into two categories. The first category, labeled as personal use, consists of factors including product information, social role and image, and hedonic/pleasure. The second category, labeled as social effect, includes value corruption, falsity/no sense, good for the economy, and materialism.

Among the seven factors, product information describes advertising's role as an important information purveyor, which contributes to marketplace efficiencies. Social role and image reflects the belief that advertising influences people's lifestyle and formation of social status and image. Hedonic/pleasure refers to the view that advertising can be fun, pleasant, and entertaining. Good for the economy reflects the viewpoint that advertising accelerates consumers' adoption of new goods and technologies, fosters full employment, lowers the average cost of production, promotes healthy competition between producers, and raises the average standard of living (Belch and Belch, 2007). Notwithstanding its benefits for consumers and the whole society, advertising is often criticized for promoting materialism, corrupting values, and misleading audiences. Particularly, advertising is accused of providing people with an unending razzle-dazzle of high-end products and preoccupying consumers with commercial concerns at the expense of social, political, philosophical, and cultural scruples. As a carrier of cultural and social values, advertising can contradict or even compromise the values that a society cherishes.

Beliefs, ATOA, and consumer responses to online advertising

With the rapid adoption of the internet as a powerful advertising medium, research on attitudes toward advertising has naturally extended to the online environment. As discussed before, one's belief about advertising is regarded as an antecedent of ATOA. Ducoffe (1996), for example, found that informativeness and entertainment were positively related to ATOA, whereas irritation was negatively related to advertising value. Wolin *et al.* (2002) tested Pollay and Mittal's (1993) belief model and showed that several belief factors influenced web users' ATOA which in turn had an impact on users' behavioral intention. They reported belief factors, such

as product information, hedonic pleasure, and social role and image, were positively related to ATOA, whereas materialism, falsity/no sense and value corruption were negatively associated with ATOA. In addition, the more positive attitudes one held toward online advertising, the greater the likelihood that person would respond favorably to web advertisements.

Research has supported that beliefs and attitudes are precursors of consumers' responses toward online advertising and their online shopping behavior. Mehta (2000), for example, found that consumers with a more favorable attitude towards advertising were more likely to recall the brand and be persuaded by advertising. Stevenson *et al.* (2000) found that poor ATOA was associated with poor attitude toward the web site and weak purchase intention. Similarly, Korgaonkar and Wolin (2002) found that a positive ATOA is more likely to result in frequent online purchasing and high online spending.

In this study, two outcome variables were considered including ad clicking and reported online shopping frequency. The later has been widely used in traditional advertising research as a measure for advertising effectiveness and therefore was extended to the online world. Ad clicking or clickthrough (the number of times that a banner advertisement is clicked upon) is an important measure of evaluating the effectiveness of online advertising (Dreze and Zufryden, 1998). Compared with another commonly used measure, ad impression, ad clicking is viewed to be more relevant and performance-based (*(The) Economist*, 2001). In Gong and Maddox (2003)'s study, ad clicking was a significant predictor for advertising recall among Chinese internet users. Wolin *et al.* (2002) also included ad clicking as one of the consumer behavioral responses toward online advertising.

Above, the literature suggests that beliefs about online advertising have an impact on consumers' ATOA, which in turn influences consumers' behavioral responses to online advertising. Such an argument echoes Lavidge and Steiner's (1961) conceptual model, indicating that one's belief is a precursor of attitude, which by default is an antecedent of behavior.

Cultural dimensions and online advertising

Culture and advertising are intrinsically linked. Hall (1976) defined culture as the way people live in accordance with their learned behavior patterns, attitudes, and material possessions. According to Schudson (1984), advertising constitutes and reflects a common symbolic culture that connects an assemblage of buyers.

The effects of advertising on society and culture have been extensively examined by scholars from various disciplines. International marketing researchers and practitioners, however, have demonstrated special interest in how culture influences advertising. The long-standing debate of standardization vs specialization reflects two main views on the issue. On the one hand, it is argued that, with the emergence of a global marketplace, consumers around the globe have become more homogenized and thus are satisfied with similar products and advertising messages. To that end, a standardized advertising strategy should be effective and efficient. On the other hand, proponents of specialization contend that consumers' cultural background has a profound impact on their attitudes and beliefs, which in turn influence how they respond and/or interpret advertising messages and, accordingly, their purchasing behavior. Therefore, advertisers must consider cultural differences when marketing

goods and services across cultures and tailor their strategies and messages to local markets.

A large amount of empirical research has lent support to the specialization school of thought. Frith and Sengupta (1997) identified significant differences in magazine advertisements across the USA, the UK, and India. They asserted that consumers' cultural values may temper the influence of international marketing. Belk and Pollay (1985) argued that Americanization was clearly increasing in Japanese advertisements; however, deep-seated Japanese cultural values remained strong in those messages. Mueller (1992) studied advertising appeals used in Japanese and US magazines, and concluded that Japanese advertising may be becoming increasingly Japanese-culture-oriented instead of being Westernized.

Attitude toward advertising has also been inspected in a cross-cultural context. For example, Duvasula and Lysonski (2001) systematically compared consumers' attitudes toward advertising in five countries located on four different continents, and deduced that attitudes toward advertising vary across culture in general. In a recent study, La Ferle *et al.* (2008) examined attitudes toward advertising across China, Taiwan, and the USA. The study showed that Chinese and Taiwanese consumers exhibited more favorable attitudes toward advertising than did American consumers. Petrovici and Marinov (2007) extended Pollay and Mittal's model to two Central and Eastern European countries, Romania, and Bulgaria. The results indicated that Romanian consumers held the most favorable opinions about advertising and seemed to appreciate the role of advertising in a free market economy. Specifically, the Romanian consumers tended to view advertising as informative, entertaining, and fulfilling a social role.

Romania. Romania is a relatively small country with a population more than 22 million people. Located in Southeastern Europe between Bulgaria and the Ukraine, Romania also borders on Serbia, Hungary, and Moldova. Romania achieved a longstanding goal on January 1, 2007 when the country officially became a member of the European Union. Romania is commonly viewed as lagging behind in its efforts to transition from a centrally planned economy into a modern free market and democratic system. In spite of various developmental barriers associated with transitional economies, Romania has resources for facilitating the adoption of e-commerce, including a high level of general education, a rapidly growing number of internet users, consumers with good computer literacy and English skills, and an abundance of human capital in the information technology (IT) field (Guarău, 2007). Its entry into the European Union has provided the country with great incentive to undertake needed regulatory and economic reform, as well as an influx of funds aiding in the development of its infrastructure.

Over past years, the internet has diffused rapidly in Romania. According to the Internet World Stats (2008), during 2000-2008, Romanian internet usage increased as much as 1,400 percent. As of March 2008, its 12 million internet users make up 53.9 percent of the country's entire population. Nearly, one-third of Romanian internet users access online stores or auction portals as a place for purchasing various goods.

Along with the rapid diffusion of personal computers and the internet in Romania, the internet advertising expenditures have also grown significantly. The Romanian internet advertising sales was estimated to have been €8.4 million in 2007, up 52.8 percent from €5.5 million in 2006 (ARBOMedia, 2007). Major advertisers encompass banking,

personal care/beauty, IT, auto, telecoms, real estate, and insurance. According to a recent survey conducted by Gemius SA (2006), an online research company, most Romanians believe that advertising on the internet is efficient and informative. However, Romanians are cautious and reserved about online shopping in part because of their concern of high risks associated with financial transactions on the internet.

USA. Online advertising has become a rather mature industry in the USA. Consumers have become more familiar with online promotional tools. A well-established credit card system helps making online shopping easy and safe. According to American Marketing Association, in 2007, online advertising in the USA grew 18.9 percent to reach \$21.2 billion. A continuous phenomenal growth has been predicted in this market as advertisers aggressively pursue various opportunities with the internet. The Yankee Group, for example, predicted that the US online advertising market will reach \$50.3 billion in revenue by 2011, more than double the amount of 2007.

The internet is quickly gaining primacy as an important advertising medium in the USA. However, privacy remains as a concern for many users in online advertising. Despite its fast growing rate, online advertising only accounts for a small percentage of advertisers' overall budget. Advertisers currently spend 7.5 percent of their budget online, even though the internet accounts for 20 percent of overall media consumption in the USA (The Yankee Group, 2008).

Over the next few years, the driving forces for the US online advertising market will be the increasing size of the audience, the development of new types of advertising, and the creation of new publisher business models that will help sell interactive advertisements (The Yankee Group, 2008). The Yankee Group (2008) predicted that revenue from advertisements linked to online search will increase, as will as animated advertisements. Social networks will become a part of the online advertising mix, but it is still too early to tell whether they will evolve into the hot buy for advertisers.

It might be enlightening to employ Hofstede's (2001) framework of cultural dimensions to analyze cultural differences. The individualism/collectivism dimension speaks to the dialectical relationship between individuals and groups. The power distance dimension refers to the degree of hierarchical power distribution in a society. Uncertainty avoidance explains the degree to which people are tolerant of uncertainties. The masculinity/femininity dimension describes the gender role in a society. Table I shows the scores of the USA, Romania, and Russia on these cultural dimensions (Hofstede, 2001).

Compared to the USA, Romanian culture is higher in uncertainty avoidance and power distance, lower in individualism and masculinity (Table I). The data also suggested a significant level of similarity between Romania and Russia, which supports our argument that Romania is culturally similar to its European neighbours.

Country/cultural dimensions	Individualism	Power distance	Masculinity	Uncertainty avoidance
USA	91H	40L	62H	46L
Romania	30L	90H	42M	90M
Russia	39	93	36	95

Source: Data adapted from Hofstede (2001)

Table I.
A comparison of cultural dimensions scores of the USA, Romania, and Russia

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, etc.) influence ATOA, which in turn affects consumers' online behavior and intention to buy. The model also posits that culture influences belief factors, ATOA, and online behavior (Figure 1).

As discussed above, past research suggests consumers' beliefs about online advertising are associated with their ATOA. In particular, the information, entertainment, economy, and credibility beliefs are positively associated with ATOA whereas the value corruption belief is negatively related to ATOA. Accordingly, the following hypotheses are proposed:

- H1a.* The information belief about online advertising positively affects ATOA.
- H1b.* The entertainment belief about online advertising positively affects ATOA.
- H1c.* The economy belief about online advertising positively affects ATOA.
- H1d.* The credibility belief about online advertising positively affects ATOA.
- H1e.* The value corruption belief about online advertising negatively affects ATOA.

Furthermore, the literature also suggests a positive ATOA further has a positive influence on consumer responses. Therefore:

- H2.* The stronger positive ATOA, the more likely one will click on advertisements.
- H3.* The stronger positive ATOA, the more likely one will shop online.

Prior research has suggested that cultural differences exist in consumers' beliefs, attitudes, and behaviors (Duvasula and Lysonski, 2001; La Ferle *et al.*, 2008). Particularly, the aforementioned cultural dimensions may have an impact on consumers' beliefs and ATOA, as well as online behaviors. For example, people in individualistic cultures tend to emphasize individual goals and freedom, and thus may seek a variety of experiences. In contrast, members of collectivistic cultures tend to exhibit more conformity to group thinking and acting (Hofstede, 1983). Therefore, people in collectivistic cultures may have more unified beliefs and attitudes whereas individuals in individualistic cultures may have a variety of opinions and attitudes due to the desire of being unique.

Power distance is another dimension that may contribute to the understanding of consumers' beliefs and attitudes. Individuals from high power distance cultures tend to accept the reality of social hierarchy and not question the authorities. Higher power distance may indicate that consumers are easier to persuade by marketing communication messages (Littrell and Valentin, 2005). On the other hand, people in low power distance cultures do not tend to accept authorities' orders at face values; rather, they are more analytical and critical, and hence could hold more doubts about advertising claims. Therefore, the following hypothesis is proposed:

- H4.* Romanians will hold more positive belief and ATOA than Americans.



Figure 1.

Uncertainty avoidance may speak to consumers' cautiousness for purchases (Marinov *et al.*, 2001). Uncertainty avoidance captures the cultural pattern of seeking stability, predictability, and low stress rather than change and new experiences (Hofstede, 1983). People in high uncertainty avoidance cultures are risk averse, resistant to change, and have a low tolerance for ambiguity. In contrast, in low uncertainty avoidance cultures, consumers are more willing to take risks and open to variety and novelty behaviors (Hofstede, 1983, 2001). E-commerce is a relatively new phenomenon and may involve risks for consumers, especially in Romania. Therefore, it is reasonable to argue that Romanian consumers may exhibit more cautiousness in online shopping than do Americans. Therefore, the following hypothesis is proposed:

H5. Americans will purchase more online than Romanians.

Method

Procedure and sampling

A questionnaire was developed first in English and then translated into Romanian. Back-translation was conducted by bilingual third parties to improve the translation accuracy. Research participants were students enrolled in universities in Romania and the USA. The primary reason for using a student sample is based on the assumption that college students have easy access to the internet in Romania, and hence are more likely to be exposed to online advertising.

Overall, 384 questionnaires were collected in Romania and 196 were collected in the USA. Three surveys were excluded from the Romanian sample because of the large amount of missing data. For the rest questionnaires, missing data, treated as missing completely at random, were inputted with the mean. A total of 577 questionnaires (196 for the US sample; 381 for the Romanian sample) were subjected to data analysis. For the Romanian sample, 190 were male (49.9 percent) and 191 were female (50.1 percent). For the American sample, 107 were male (54.6 percent) and 89 were female (45.4 percent). Romanian culture was coded as 1 and American culture was coded as 2 to formulate a dichotomous variable culture.

On average, American respondents ($M = 9.95$ years) had a longer history of internet use than Romanians did ($M = 5.35$ years). About 30.6 percent of American participants reported using the world wide web for less than an hour, whereas 61.7 percent reported spending 1-3 hours per day on the web and the remaining 7.7 percent reported spending more than 3 hours per day on the web. About 17 percent of Romanian participants reported using the world wide web for less than an hour, whereas 70.5 percent reported spending less than 3 hours per day on the web and the remaining 29.5 percent reported spending 3-5 hours per day on the web. The magnitude of familiarity with online advertising is similar between two cultures (Romanian: $M = 3.64$, SD = 0.95; the USA: $M = 3.65$, SD = 1.00).

Measurement

Beliefs about online advertising. To measure subjects' beliefs about online advertising, a 33-item scale was adapted from previous studies (Pollay and Mittal, 1993; Yang, 2004). The scale consisted of items culled 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. "online advertising persuades people to buy things they should not buy"), and distort value (e.g. "online advertising promotes undesirable values in our society"). Responses were measured on a five-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 two loadings (60/40 loadings) per factor were referenced for extracting factors. For the American sample, the retained five factors explained about 62.57 percent of the total variance. For the Romanian sample, the retained five factors explained about 57.1 percent of the total variance. Items that were retained in both samples were used for confirmatory factor analysis. Descriptive statistics of the belief items were presented in Table II, and factor loadings were presented in Table III.

Factor 1, entertainment (eigenvalue = 10.60, Cronbach alpha = 0.87, Romania; eigenvalue = 3.75, Cronbach alpha = 0.95, the USA). This factor consisted of four items and reflected 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 seeking (eigenvalue = 3.57, Cronbach alpha = 0.83, Romania; eigenvalue = 1.44, Cronbach alpha = 0.83, the USA). The factor consisted of three items, and reflected the belief of using online advertising to seek for information. High scores on this factor mean that online advertising is informative.

Factor 3, credibility (eigenvalue = 2.04, Cronbach alpha = 0.92, Romania; eigenvalue = 12.65, Cronbach alpha = 0.89, the USA). The factor consisted of three items and revealed one's view on whether online advertising is believable. High factor scores refer to high credibility of online advertising.

Factor 4, economy (eigenvalue = 1.25, Cronbach alpha = 0.69, Romania; eigenvalue = 1.19, Cronbach alpha = 0.80, the USA). This factor consisted of three

		USA		Romania	
		M	SD	M	SD
<i>Online advertising [...]</i>					
1. Is a good source of product/service information	3.11	1.08	3.53	1.09	
2. Supplies relevant information	2.88	1.01	3.12	1.07	
3. Provides timely information	3.28	1.08	3.51	1.09	
4. Is entertaining	3.20	1.23	2.97	1.22	
5. Is enjoyable	2.85	1.22	2.90	1.31	
6. Is pleasing	2.74	1.21	2.91	1.05	
7. Is interesting	3.05	1.17	3.04	1.11	
8. Is credible	2.66	1.00	2.94	1.05	
9. Is trustworthy	2.35	0.93	2.93	1.10	
10. Is believable	2.52	0.97	2.93	1.10	
11. Has positive effects on the economy	2.99	0.87	3.29	1.13	
12. Raises our standard of living	2.55	0.86	3.03	1.12	
13. Results in better products for the public	2.65	0.86	2.81	1.06	
14. Promotes undesirable values in our society	2.96	0.89	2.37	1.03	
15. Distorts the values of youth	3.05	1.02	2.71	1.29	

Table II.
Items of belief factors

Belief items	INFO	ENTE	Belief factors		
			CRED	ECON	VALU
<i>Factor loadings of beliefs (USA)</i>					
<i>Information</i>					
Item 1	0.54	0.20	0.16	0.03	-0.04
Item 2	0.59	0.09	0.31	-0.02	0.01
Item 3	0.42	0.31	0.04	0.12	0.05
<i>Entertainment</i>					
Item 4	-0.11	10.04	-0.16	0.03	-0.09
Item 5	-0.17	10.01	0.05	-0.05	0.01
Item 6	-0.06	0.88	0.10	-0.02	-0.00
Item 7	-0.03	0.79	0.11	0.04	0.04
<i>Credibility</i>					
Item 8	-0.08	-0.08	0.77	-0.00	0.06
Item 9	-0.06	-0.06	0.79	-0.06	-0.04
Item 10	0.02	0.02	0.69	-0.04	0.01
<i>Economy</i>					
Item 11	-0.04	0.00	0.24	0.73	-0.08
Item 12	-0.30	0.04	0.34	0.71	0.02
Item 13	-0.11	0.07	0.17	0.72	-0.02
<i>Value</i>					
Item 14	-0.16	0.00	0.07	-0.18	0.56
Item 15	-0.03	-0.09	-0.08	-0.11	0.80
<i>Factor loadings of beliefs (Romania)</i>					
<i>Information</i>					
Item 1	0.66	-0.12	0.20	0.11	-0.06
Item 2	0.57	-0.06	0.29	-0.07	-0.02
Item 3	0.60	0.16	0.13	0.01	0.05
<i>Entertainment</i>					
Item 4	0.21	0.82	-0.17	-0.04	0.04
Item 5	0.07	0.88	0.05	-0.07	0.13
Item 6	0.09	0.83	-0.10	-0.09	-0.03
Item 7	0.35	0.61	-0.07	0.02	0.03
<i>Credibility</i>					
Item 8	-0.04	-0.04	0.97	-0.06	0.09
Item 9	0.05	0.05	0.93	-0.02	0.12
Item 10	-0.13	-0.13	0.90	-0.10	-0.03
<i>Economy</i>					
Item 11	0.22	-0.10	-0.22	0.79	0.07
Item 12	0.05	-0.04	0.02	0.62	-0.11
Item 13	-0.00	0.37	0.07	0.38	0.15
<i>Value</i>					
Item 14	-0.10	-0.07	0.17	0.08	0.79
Item 15	-0.22	0.06	0.00	0.17	0.50

Table III.

Notes: INFO, information; ENTE, entertainment; CRED, credibility; ECON, economy; VALU, value

items and referred to 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 = 1.40, Cronbach alpha = 0.76, Romania; eigenvalue = 1.62, Cronbach alpha = 0.70, the USA). 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 and Bentler, 1999; Kline, 2005; Loehlin, 1998). Among a range of fit indices, the following were those often reported in published research: χ^2 , 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 χ^2 is sensitive to sample size, χ^2/df is recommended and the ideal cutoff is three (Kaplan, 1990). Kline (2005) recommended the following cutoff criteria for good model fit: SRMR < 0.10, CFI > 0.90, GFI > 0.90, IFI > 0.90, RMSEA < 0.08. Hu and Bentler (1999) suggested that a strict rule with SRMR < 0.08 and RMSEA < 0.06 would result in a lower type II error rate of model rejection.

Based on the typical cut-off criteria of model fit, results indicated that the measurement model of belief factors fit both the American sample and the Romanian sample satisfactorily (Table IV). A graphical measurement model is shown in Figure 2.

Reliability and convergent validity of the retained factors were estimated by composite reliability and average variance extracted (AVE) (Fornell and Larcker, 1981; Steenkamp and Baumgartner, 1998). In light of the computing procedures illustrated by Fornell and Larcker (1981), the results were presented in Table V. Composite reliabilities and values of AVE for all the factors were above 0.70 and 0.50 (recommended), respectively, except for the economy factor in the Romanian sample. The problem with the economy factor could be due to the relatively poor validity of the item "online advertising results in better products for the public," as shown in a low loading in principal factor analysis. In addition, translation of the item could also cause the measurement error. Nonetheless, for the purpose of model identification, this item was retained. In general, the factors in the measurement model had adequate reliability and convergent validity.

To examine discriminant validity, the shared variance between factors was compared with the AVE (Fornell and Larcker, 1981). In general, the shared variance was lower than the AVE, and thus confirming discriminant validity of the measurement model (Table V).

Attitudes toward online advertising. Five items were used to measure ATOA on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For the Romanian sample, deletion of the aforementioned item increased α from 0.74 to 0.92.

	χ^2	df	χ^2/df	SRMR	GFI	IFI	CFI	RMSEA
USA	114.74	79	1.452	0.044	0.931	0.983	0.983	0.048
Romanian	234.43	79	2.967	0.054	0.926	0.951	0.950	0.072
Ideal value			<3	<0.08	>0.90	>0.90	>0.90	<0.08

Table IV.
Measurement model
fit of belief factors

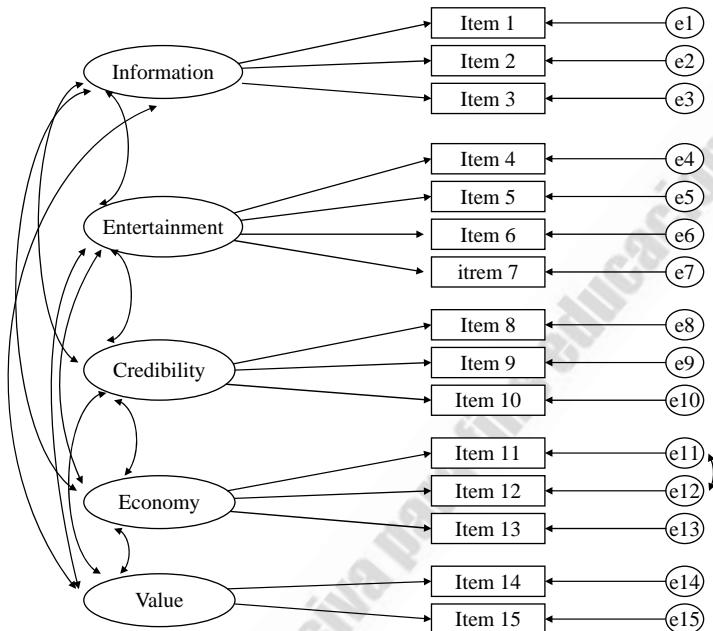


Figure 2.
Measurement model
of the belief factors

	CR	Information	Entertainment	Credibility	Economy	Value
<i>Factor (USA)</i>						
Information	0.82	0.61				
Entertainment	0.93	0.54	0.76			
Credibility	0.90	0.57	0.47	0.75		
Economy	0.82	0.44	0.43	0.57	0.62	
Value	0.72	0.01	0.00	0.01	0.00	0.57
<i>Factor (Romania)</i>						
Information	0.82	0.60				
Entertainment	0.86	0.28	0.61			
Credibility	0.90	0.43	0.26	0.76		
Economy	0.51	0.19	0.37	0.15	0.28	
Value	0.70	0.17	0.14	0.12	0.00	0.54

Notes: CR, composite reliability; diagonal elements are the AVE; off-diagonal elements are the shared variance

Table V.
Composite reliability,
AVE, and discriminant
validity

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.

Consumer responses to online advertising. Behavioral responses toward online advertising were conceptualized as a combination of ad clicking and online shopping frequency. Ad clicking was measured by the frequency of subjects’ clicking on

online advertisements. Online shopping frequency was assessed by the question, "How often have you bought products or services online from the Internet during the past 12 months?"

Results

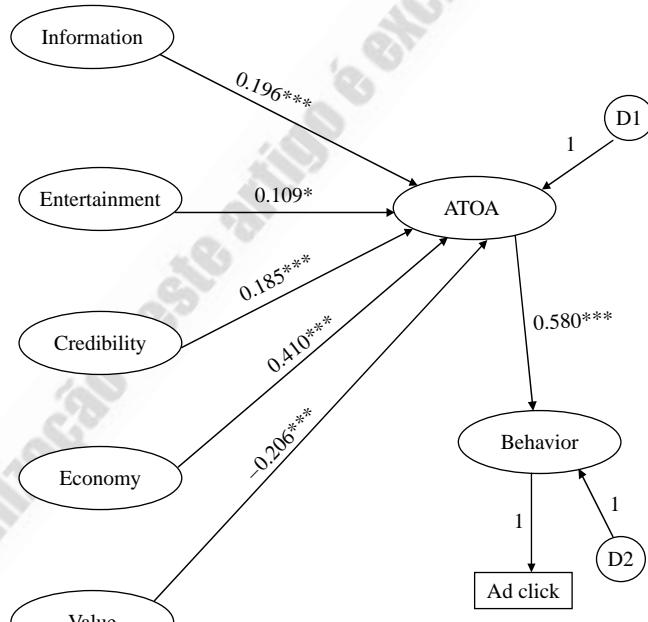
Two structural models were fitted to the pooled data of American and Romanian participants. For Model I, the indicator of consumer response was ad clicking, whereas frequency of online buying was the indicator of consumer response for Model II. Hence, in both models, consumer behavioral response was treated as a single-indicator construct. The sample size was 577. Results in Table VI show that both structural models fitted the pooled data well. Structural Models I and II are shown in Figures 3 and 4 graphically.

H1-H3

Regression coefficients of structural models are presented in Tables VII and VIII. It was shown that all five-belief factors were statistically significant predictors of ATOA.

	χ^2	df	χ^2/df	SRMR	GFI	IFI	CFI	RMSEA
Model I	629.41	308	2.044	0.039	0.927	0.966	0.966	0.037
Model II	630.30	308	2.046	0.038	0.926	0.965	0.965	0.037
Ideal value			<3.84	<0.08	>0.90	>0.90	>0.90	<0.08

Table VI.
Structural model fit



Notes: * $p < 0.05$; ** $p < 0.001$

Figure 3.
Structural Model I

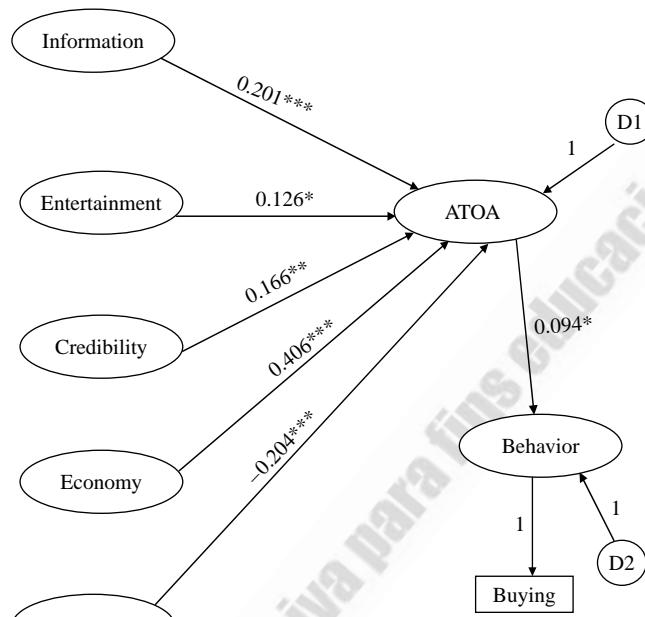


Figure 4.
Structural Model II

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table VII.
Regression weights
of structural Model I

Regression path	B	SE B	β	CR
Information → ATOA	0.187	0.055	0.196*	3.412
Entertainment → ATOA	0.095	0.049	0.109**	1.962
Credibility → ATOA	0.173	0.050	0.185*	3.457
Economy → ATOA	0.763	0.150	0.410*	5.089
Value → ATOA	-0.225	0.050	-0.206***	-4.526
ATOA → ad click	0.801	0.054	0.580*	14.819

Notes: * $p < 0.001$; ** $p < 0.05$; *** $p < 0.01$

Table VIII.
Regression weights of
structural Model II

Regression path	B	SE B	β	CR
Information → ATOA	0.193	0.056	0.201*	3.468
Entertainment → ATOA	0.111	0.049	0.126**	2.253
Credibility → ATOA	0.156	0.051	0.166***	3.084
Economy → ATOA	0.762	0.151	0.406*	5.409
Value → ATOA	-0.225	0.050	-0.204*	-4.465
ATOA → buying	0.092	0.043	0.094**	2.164

Notes: * $p < 0.001$; ** $p < 0.05$; *** $p < 0.01$

H1a-H1e were supported. Value corruption belief negatively influenced ATOA, and the other four beliefs positively predicted ATOA. That is, consumers hold more positive ATOA 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 was a statistically significant predictor 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.

H4, H5 and RQ1

A host of independent-samples *t*-test was conducted to examine the difference of beliefs across the two nations. Before conducting the mean comparisons, it was advisable to examine the metric invariance of the measurement instruments (Brown, 2006; Steenkamp and Baumgartner, 1998). First, the configural invariance was tested. Second, full metric invariance (i.e. all the factor loadings constrained equal across groups) were tested. As compared to the configural invariance model, χ^2 change was statistically significant ($\Delta\chi^2 = 36.00$, $\Delta df = 10$, $p < 0.001$). In light of the modification indices, factor loadings of the item “online advertising is pleasing” were set free across groups. Doing so significantly improved the fit of the partial metric invariance model ($\Delta\chi^2 = 11.06$, $\Delta df = 9$, NS). Next, a partial scalar invariance model was examined (Brown, 2006; Steenkamp and Baumgartner, 1998). The difference between partial metric invariance model and partial scalar invariance model was statistically significant ($\Delta\chi^2 = 140.88$, $\Delta df = 14$, $p < 0.001$). However, after setting the intercept of three items free across groups, the fit was greatly improved and rendered a final partial scalar invariance model. As discussed in Steenkamp and Baumgartner’s article, a minimum of two items per factor should show intercept invariance so as to ensure the meaningfulness of comparing means. Following this rule, the present study retained a final partial scalar invariance model. As compared to the partial metric invariance model, the difference in terms of χ^2 was statistically significant ($\Delta\chi^2 = 72.98$, $\Delta df = 11$, $p < 0.001$). However, all other fit indices (e.g. TLI, CFI) indicated the final partial scalar invariance model fit the data satisfactorily. Therefore, it can be argued that the partial invariance was supported (Steenkamp and Baumgartner, 1998, pp. 85-6). Correspondingly, it is legitimate to compare the factor means across groups (Table IX).

Results indicated, compared to Americans, Romanians had stronger beliefs in informativeness of online advertising (Δ mean = 0.30, $t = 3.65$, $df = 575$, $p < 0.001$), credibility (Δ mean = 0.43, $t = 5.07$, $df = 575$, $p < 0.001$), economy (Δ mean = 0.31, $t = 4.36$, $df = 575$, $p < 0.001$), and value corruption (Δ mean = -0.47, $t = -5.43$, $df = 575$, $p < 0.001$). Put differently, Romanians viewed online advertising as more informative, credible, economy-beneficial, and less immoral as compared to Americans.

Model	χ^2	df	$\Delta\chi^2$	SRMR	TLI	IFI	CFI	RMSEA
1. Configurable	349.16	158		0.042	0.951	0.963	0.963	0.046
2. Full metric	385.16	168	36.00* (vs 1)	0.042	0.953	0.958	0.958	0.047
3. Partial metric	360.22	167	11.06 (vs 1)	0.041	0.953	0.963	0.963	0.045
4. Partial scalar	501.10	181	140.88* (vs 3)	0.045	0.938	0.939	0.938	0.055
5. Final partial scalar	433.20	178	72.98*(vs 3)	0.044	0.942	0.951	0.951	0.050

Note: * $p < 0.001$

Table IX.
Tests of measurement
invariance

Romanians also held stronger positive ATOA than did Americans (Δ mean = 0.51, $t = 7.29$, df = 575, $p < 0.001$). Hence, H4 was supported.

H5 was supported too. Americans were more likely to buy online than did Romanians. Interestingly, Romanian participants were more likely to click on advertisements than did Americans.

Discussion

Links among belief factors, ATOA, and behaviors

This study identified five common belief factors across the US and Romanian samples: entertainment, information seeking, credibility, economy, and value corruption. Results showed that all five factors were significant predictors of ATOA, which was consistent with previous studies (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 ATOA. The results supported the basic view that advertising stimulates competition and contributes to economic development.

Information was the second strongest predictor of ATOA. One of the most important functions of advertising is to provide information. It is logically sound that those who perceive online advertising to be informative are more likely to favor it. Such a finding is consistent with past research on online advertising. 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 a crucial 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 so as to hold audiences' attention. Furthermore, as the word "infotainment" suggests, 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.

Credibility is another belief factor that affects people's ATOA. Specifically, when consumers believe online advertising is credible and trustworthy; they tend to have a positive ATOA. Wolin *et al.*'s (2002) finding that falsity/no sense negatively predicted ATOA squared with current result.

Regarding value corruption belief, people tend to view online advertising negatively when they believe that online advertising undermine the 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 (Dyer, 1982; Frith, 1995). Advertising has been criticized for promoting materialism, insecurity, and greed in the society. It creates needs and desire that consumers may never recognize.

Findings also suggest that ATOA positively and significantly predicted ad clicking and reported online shopping frequency. This is consistent with the attitude-behavior link exhibited in the literature. For example, Wolin *et al.* (2002) found that respondents' favoring ATOA 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 culture

One major objective of the current study was to explore the cultural impact on one's beliefs and ATOA. Results demonstrated significant differences between Romanian and American cultures. Compared with Americans, Romanians held a more favorable general ATOA and tended to view online advertising as more informative, credible, economically beneficial, and less value corruption. These results are consistent with the findings by Petrovici and Marinov's (2007) study.

Romania is a country recently transited from a centrally planned economy to a free market system. Advertising has become a major marketing communication instrument in this market. After living in a rigid and highly controlled social economic environment for decades, Romanian consumers crave for information. According to Marinov *et al.* (2001), facing the new market reality, consumers in Central Eastern European countries are confused by the excessive supply and substantial price variations. They often expect advertising to help them find their way in the unfamiliar free market system. As discussed earlier, in a high power distance culture such as Romania, people are less critical and tend to not question authority. The low individualism of Romanian culture may also enhance conformity to group attitudes and lessen variety of opinions. As a result, Romanians perceive online advertising as more believable and credible. In contrast, in the individualistic and low power distance American culture, consumers value independent thinking and are suspicious and cynical of advertising in general. For example, past research has shown that Americans tend to conceive advertising as irritating, misleading, deceiving, and promoting a materialistic society (Belch and Belch, 2007).

Furthermore, advertising, especially online advertising is still a relatively new phenomenon in Romania. In the initial development stage, people often hold a one-sided view about it. In the case of online advertising in Romania, the focal point is the link between advertising and economic development. As the economy is the dominant issue in developing countries, Romanians are likely to link advertising with the free market system, competition, and economic growth. As such, it is possible that Romanians had a more positive ATOA as opposed to their American counterparts.

A seemingly surprising result is that Romanian consumers perceived online advertising as less value corruption than did Americans, which is contradict to the claim of cultural imperialism. An explanation is that the interaction between the developed and developing countries is more complex today than ever. The reality is that in the global marketplace, social and cultural values are often considered as secondary when compared with the economy. In addition, the particular sample comprised of young consumers used in this study may contribute to such as result. The younger generation of Romanians tends to be more open to the Western values such as materialism. Accordingly, they may hold weak perception regarding the value corruption function of online advertising, measured by items such as "promotes undesirable values in our society" and "distort values of youth."

Results indicated that Romanian consumers were more likely to click on advertisements but shopped less online than did Americans. According to the hierarchy of effect theory, attitude is likely to have a positive impact on behavior. Naturally, Romanians' high ATOA further led to frequent clickthroughs, which is in accordance with prior research (Wolin *et al.*, 2002). The online shopping comparison between the two countries, however, seems to contradict the theory. The cultural dimension

of uncertainty avoidance may provide an explanation in this regard. As discussed before, compared with the USA, high uncertainty avoidance in Romanian culture indicates that Romanians are less willing to take risks, especially financial risks as spending money is still scare for many Romanians. Meanwhile, the perceived risk associated with e-commerce transactions is much higher in Romania than in the USA. The infrastructure for e-commerce such as the credit card system in Romania is not as well-developed as that in the USA. Naturally, many Romanians feel uneasy about using credit cards and remain cautious in terms of purchasing online (Gemius, 2006). In addition, people in high uncertainty avoidance culture have a greater need for formal rules and less tolerance for people or groups with deviant behaviors (Hofstede, 1983). A lack of regulation and a high rate of online frauds in Romania further discourage Romanians from buying online.

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 cultural dimensions and economic development between the two countries may be more influential. Simply put, compared with Americans, Romanians may be more risk averse and less financially sufficient.

Considering little research has been conducted in the new markets of the Central and Eastern European countries, findings from this study have important implications for global marketers. Internet users in Romania reported distinct perceptions of online advertising and vastly different online behavior. With such a discrepancy, global marketers may need to be cautious when employing a centralized e-marketing approach around the globe. As Wells (1994, 1997) stated, global marketers should treat advertising to post-communist economies as cultural communication and interaction between social and economic realities. Consequently, incorporating more cultural specific considerations may be beneficial for achieving the maximum effect of online advertising. For example, to increase the frequency of online shopping in developing countries such as Romania, marketers need to focus on the improvement in the security of financial transaction and delivery.

Also, marketers should take full advantage of the overall positive ATOA among Romanian consumers. Favorable attitudes are likely to translate into interest and a high rate of ad clicking. On the other hand, marketers need to position online advertising as a credible information source for consumers and dig out its potential for stimulating economy. Security is a primary concern of Romanian consumers when shopping online. Reinforcement of credibility of online advertising will alleviate such a concern. To establish credibility of online advertising, researchers have suggested advertisers consider strategies such as money-back guarantees, improved customer services, and affiliations with credible organizations and "seal of approval" (Wolin *et al.*, 2002).

Limitations and future directions

The study explored the influence of culture on consumers' beliefs and ATOA and the relationships between different components in consumer response sequence. Research findings may help enhance the understanding of ATOA in a cross-cultural context and offer valuable information to global marketers.

There are several limitations and future directions. First, the student sample used in this study may limit the generalizability of research findings. Future research could examine a broader profile of online consumers, and compare online advertising across different consumer profiles. Second, due to a short history of online advertising,

consumers' beliefs and ATOA may still be evolving and changing (Karson *et al.*, 2006). Hence, 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. Third, the relatively low reliability and validity of some measurement items (e.g. items measuring the economy factor) could pose threat to the findings and interpretations. These items have been used frequently in previous studies. Nonetheless, their metric invariance across culture merits further examination in future studies. Lastly, following the parsimony rule of modeling, in this study, we operationalized the concept of culture as cultural background of participants, which may not be as robust as desired. Individual differences could exist within a cultural 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 and Wolin, 2002; Yang, 2004). Future investigation could focus on how the aforementioned factors conspire to influence online advertising.

Examining the
role of beliefs
and attitudes

105

References

- ARBOMedia (2007), "Internet ad market: 14-15 million euros in Romania, 2008", available at: www.comanescu.ro/2008/02/25/internet-ad-market-14-15-million-euros-in-romania-2008/ (accessed June 5, 2008).
- Bauer, R. and Greyser, S. (1968), *Advertising in America: The Consumer View*, Harvard University Press, Boston, MA.
- Belch, G. and Belch, M. (2007), *Advertising and Promotion: An Integrated Marketing Communication Perspective*, 7th ed., McGraw-Hill, Irwin, CA.
- Belk, R.W. and Pollay, R.W. (1985), "Materialism and status appeals in Japanese and US print advertising: a historical and cross-cultural content analysis", *International Marketing Review*, Vol. 2, pp. 38-47.
- Brackett, L. and Carr, B. (2001), "Cyberspace advertising vs other media: consumer vs mature student attitudes", *Journal of Advertising Research*, Vol. 41, pp. 23-32.
- Brown, T.A. (2006), *Confirmatory Factor Analysis for Applied Research*, The Guilford Press, New York, NY.
- Dreze, X. and Zufryden, F. (1998), "Is internet advertising ready for prime time?", *Journal of Advertising Research*, Vol. 38 No. 3, pp. 7-18.
- Ducoffe, R. (1996), "Advertising value and advertising on the web", *Journal of Advertising Research*, Vol. 36, pp. 21-35.
- Duvasula, S. and Lysonski, S. (2001), "Are there global dimensions of beliefs toward advertising in general: a multicultural investigation", in Rao, C.P. (Ed.), *Globalization and Its Managerial Implications*, Quorum Books, Westport, CT, pp. 184-202.
- Dyer, G. (1982), *Advertising as Communication*, Methuen, New York, NY.
- (The) Economist (2001), "Business: banner ad blues", *The Economist*, Vol. 358 No. 8210, p. 63.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. XVIII, pp. 39-50.
- Frith, K.T. (1995), "Advertising and mother nature", in Valdivia, A.N. (Ed.), *Feminism, Multiculturalism, and the Media: Global Diversities*, Sage, Thousand Oaks, CA, pp. 185-96.
- Frith, K.T. and Sengupta, S. (1997), "Individualism and advertising: a cross-cultural comparison", *Media Asia*, Vol. 18, pp. 191-4.

- Gemius (2006), "Online advertisement accessed by 83% of Romanian internet users", available at: www.gemius.com/pl/archives/2006-12-06/01 (accessed March 2, 2008).
- Gong, W. and Maddox, L. (2003), "Measuring web advertising effectiveness in China", *Journal of Advertising Research*, Vol. 19, pp. 34-49.
- Guarău, C. (2007), "Digital B2B interactions in Romania", *International Journal of Emerging Markets*, Vol. 2 No. 1, pp. 39-52.
- Hall, E.T. (1976), *Beyond Cultures*, Anchor Press/Doubleday, Garden City, NY.
- Hofstede, G. (1983), "Dimensions of national culture in fifty countries and three regions", in Deregowski, J., Dzuirawiec, S. and Annis, R. (Eds), *Explication in Cross-Cultural Psychology*, Swets & Zeitlinger, Lisse.
- Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd ed., Sage, Thousand Oaks, CA.
- Hu, L. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6 No. 1, pp. 1-55.
- Internet World Stats (2008), "Europe internet usage", available at: www.internetworldstats.com/stats4.htm (accessed December 10, 2008).
- Kaplan, D. (1990), "Rejoinder on evaluating and modifying covariance structure models", *Multivariate Behavioral Research*, Vol. 25, pp. 197-204.
- Karson, E., McCloy, S. and Bonner, G. (2006), "An examination of consumers' attitudes and beliefs towards web site advertising", *Journal of Current Issues & Research in Advertising*, Vol. 28, pp. 77-91.
- Kline, R.B. (2005), *Principles and Practice of Structural Equation Modeling*, 2nd ed., Guilford Press, New York, NY.
- Korgaonkar, P. and Wolin, L. (2002), "Web usage, advertising, and shopping: relationship patterns", *Internet Research: Electronic Networking Applications and Policy*, Vol. 12, pp. 191-204.
- La Ferle, C., Edwards, S. and Lee, W. (2008), "Culture, attitudes, and media patterns in China, Taiwan, and the US: balancing standardization and localization decisions", *Journal of Global Marketing*, Vol. 21, pp. 191-205.
- Lavidge, R. and Steiner, G. (1961), "A model for predictive measurements of advertising effectiveness", *Journal of Marketing*, Vol. 25, pp. 59-62.
- Littrell, R.F. and Valentin, L.N. (2005), "Preferred leadership behaviours: exploratory results from Romania, Germany, and the UK", *Journal of Management Development*, Vol. 24 No. 5, pp. 421-42.
- Loehlin, J.C. (1998), *Latent Variable Models: An Introduction to Factor, Path, and Structural Analysis*, 3rd ed., Lawrence Erlbaum, Mahwah, NJ.
- Marinov, M.A., Marinova, S.T., Manrai, L.A. and Manrai, A.K. (2001), "Marketing implications of communist ideological legacy in culture in the context of central and eastern Europe: a comparison of Bulgaria, Romania, and Ukraine", *Journal of Euromarketing*, Vol. 11 No. 1, pp. 7-36.
- Mehta, A. (2000), "Advertising attitudes and advertising effectiveness", *Journal of Advertising Research*, Vol. 40, pp. 67-72.
- Mueller, B. (1992), "Standardization vs specialization: an examination of westernization in Japanese advertising", *Journal of Advertising Research*, Vol. 32, pp. 15-24.

- Petrovici, D.A. and Marinov, M. (2007), "Determinants and antecedents of general attitudes toward advertising: a study of two EU accession countries", *European Journal of Marketing*, Vol. 41, pp. 307-26.
- Petty, R.E. and Cacioppo, J.T. (1986), *Communication & Persuasion: Central and Peripheral Routes to Attitude Change*, Springer, New York, NY.
- Pollay, R. and Mittal, B. (1993), "Here's the beef: factors, determinants, and segments in consumer criticism of advertising", *Journal of Marketing*, Vol. 57 No. 3, pp. 99-114.
- Roberts, M. and Ko, H. (2001), "Global interactive advertising: defining what we mean and using what we have learned", *Journal of Interactive Advertising*, Vol. 1, available at: <http://jiad.org/vol1/no2/robert> (accessed April 6, 2002).
- Russell, H., Staffaroni, J. and Fox, A. (1994), "The missing measures of copy testing", *Journal of Advertising Research*, Vol. 34 No. 3, pp. 46-56.
- Schlosser, A. and Shavitt, S. (1999), "Survey of internet users' attitudes toward internet advertising", *Journal of Interactive Marketing*, Vol. 13 No. 3, pp. 34-54.
- Schudson, M. (1984), *Advertising, the Uneasy Persuasion: Its Dubious Impact on American Society*, Basic Books, New York, NY.
- Shimp, T. (1981), "Aad as a mediator of consumer brand choice", *Journal of Advertising*, Vol. 10 No. 2, pp. 9-15.
- Steenkamp, J.E. and Baumgartner, H. (1998), "Assessing measurement invariance in cross-national consumer research", *Journal of Consumer Research*, Vol. 25, pp. 78-90.
- Stevenson, J.S., Bruner, G.C. and Kumar, A. (2000), "Webpage background and viewer attitudes", *Journal of Advertising Research*, Vol. 20, pp. 29-34.
- Wells, L.G. (1994), "Western concepts, Russian perspectives: meaning of advertising in the former Soviet Union", *Journal of Advertising*, Vol. 23 No. 1, pp. 84-94.
- Wells, L.G. (1997), "A new world order: the role of advertising in Russia and the NIS", *International Journal of Advertising*, Vol. 16 No. 2, pp. 104-17.
- Wolin, L., Korgaonkar, P. and Lund, D. (2002), "Beliefs, attitudes and behavior towards web advertising", *International Journal of Advertising*, Vol. 21, pp. 87-113.
- Yang, K. (2004), "A comparison of attitudes towards internet advertising among lifestyle segments in Taiwan", *Journal of Marketing Communications*, Vol. 10, pp. 195-212.
- (The) Yankee Group (2008), "US online ad market expected to double in four years", available at: www.informationweek.com/news/internet/ebusiness/showArticle.jhtml?articleID=205901515 (accessed June 5, 2008).

About the authors

Ying Wang received his PhD in Kent State University and is an Assistant Professor in the Williamson College of Business Administration at Youngstown State University.

Shaojing Sun received his PhD in Kent State University and PhD in University of Virginia. He is an Associate Professor in the School of Journalism at Fudan University, Shanghai, PR China. Shaojing Sun is the corresponding author and can be contacted at: sunshaojing76@hotmail.com

Fonte: International Marketing Review, v. 27, n. 1, p. 87-107, 2010. Disponível em: <www.emeraldinsight.com>. Acesso em: 26 nov. 2010.

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints