

## The Effects of Social Influence on Blog Advertising Use

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### Abstract

Blogs emerged in the late 1990s as a technology that allows Internet users to share information. As an emerging advertising medium, blog advertising still faces challenges related to lukewarm consumer responses and unclear regulations governing commercial blog speeches. In this study, the concept of social influence was employed to examine its effects on consumer's use of blog advertising. A questionnaire survey was designed and executed among 200 college student participants in a large Southwestern university. The survey instrument has a good reliability for this exploratory study. Regression analysis found that the social influence factor predicted blog advertising use. The factor accounted for 31% of variance in explaining consumer's blog advertising use. To examine if the social influence factor continued to predict how consumers use blog advertising after taking into consideration consumer's attitudes toward blog advertising and demographics, hierarchical regression analyses were also used. The statistical analyses found that the social influence factor remains a powerful and consistent predictor of blog advertising use.

**Keywords:** Blog advertising, social influence, attitudes toward Blog advertising, Regression Analysis, survey

### Introduction

Blogs, a term abbreviated from Weblogs, began to surface as “a remarkable artifact of the Web” in the late 1990s (Dearstyne, 2005; Kumar, Novak, Raghavan & Tomkins, 2004). Technically speaking, blogs often referred to “a website comprising blog posts, or content written by a blogger, which are typically organized into categories and sorted in reverse chronological order” (Wright, 2005, p. 7). Kahn and Kellner (2004) defined blogs as “hypertextual web logs which people use for new forms of journaling, self publishing and media/news-critique” (p. 93). Blogs are often conceptualized as “a frequently updated personal or collaborative website in the form of a diarized journal containing opinions, information and weblinks that reflect the interests and personality of the author(s)” (Corcoran, Marsden, Zorbach, & Röthlingshöfer, 2006). Gillett (2007) similarly characterized weblogs as published individual or collaborative websites, “akin to ongoing online memoirs” (p. 28). In general, blogs can be categorized into the following content types: 1) Individuals' personal views and news; 2) News/journalism/commentaries; 3) advertising/ marketing/ promotional/customer service; 4) Business/professional issue insights and commentaries; 5) Knowledge management applications/Internal information sharing (Dearstyne, 2005). In addition to its civic engagement function (Kerbel & Bloom, 2005; Lawson-Borders & Kirk, 2005), blog, or blogging, has been claimed to be a

communication and marketing tool to interact with Internet users and customers on a global scale (Wright, 2005).

Commercial newsletter publishers have begun to develop their own blogs to take advantage of this growing advertising opportunity (*Economist*, 2006). Microsoft has promoted blogs “as frequently updated personal web journals that can dramatically help both small and large companies communicate their product messages” to share ideas and information globally (Dearstyne, 2005, p. 39). Corcoran et al. (2006) summarized that the marketing application of blogs have the following advantages: viral potential (i.e., a term referring to marketers being able to spread advertising messages like a virus to intended audiences), measurable results, adding human faces, credibility, and interactivity into marketing. As a result, many businesses have ventured into blog marketing. For example, *Dr. Pepper* provided incentives for a group of young bloggers to discuss its new product, Raging Cow (Corcoran et al., 2006). However, the blog campaign backfired because the blogging community was outraged with the undisclosed commercial application of blogs posted by these paid bloggers (Corcoran et al., 2006). Although blog advertising potential has attracted a lot of hype among advertising practitioners, systematic and programmatic study on factors leading to consumer’s acceptance, use, and continual use of blog advertising still remains to be conducted. Given that blog advertising is a relatively new application, this exploratory study intends to provide some understanding about how consumers use this emerging advertising format.

## Literature Review

### An Overview of Blog Advertising

Corcoran et al. (2006) defined blog marketing as “the use of weblogs to promote a brand, company, product or service, event or some other initiative” (p. 148). Blog advertising is a commercial application of blogs, an emerging Internet application that has gained attention among marketers and advertisers with mixed reactions (Fitzgerald, 2007). Blog advertising is sometimes labeled as “blogad” (Lerma, 2005). Marketers have also envisioned blog advertising as a new tool to help companies to generate awareness, visibility, and attention (Wright, 2005). Some practitioners have labeled blog (or blog advertising) as “conversational media” that invite Internet users to converse with each other on a variety of topics (Fitzgerald, 2007; Smudde, 2005). Major media companies have begun selling blog advertising created by their well-liked media personalities (Fitzgerald, 2007). Levi’s, Nokia, Audio, and Budget car rental have advertised on the blogs (Holliday, 2006). *The New York Times* has also attracted a lot of advertising for its “DealBook” and David Carr’s “The Carpetbagger” from interested marketers such as Deutsche Bank, Intel Corp., Paramount Pictures, and Skyy vodka (Fitzgerald, 2007). In the same way, travel site Orbitz, has bought the first three quarters of CNN’s Anderson Cooper’s blog (Fitzgerald, 2007). General Motors Corporation has also spent its advertising expenditure on blogs through Google’s AdSense (Fitzgerald, 2007).

Thorson and Rodgers (2006) equated advertising blogs as e-WOM, or electronic word of mouth, which provides positive or negative statements about a product or a service. Their study found that perceived interactivity and actual interactivity have an effect on the effectiveness

of political blog advertising in shaping participants' voting behaviors. Furthermore, the relationships were mediated by parasocial interaction with the political candidates (Thorson & Rodgers, 2006). Although parasocial interaction only offers an illusionary intimate relationship with the candidate, their study supported the importance of social-level factors in affecting blog advertising use.

Because of the attractiveness of blog advertising, advertisers have begun to develop units that can be used to purchase blog advertising. For example, Blogads (2010) has employed seven blog advertising units to fit individual blog designs. Interested advertisers can purchase a blog ad unit ranging from the following technical specifications:

1. Hi Rise jpg/gif 150x600 35KB + 300 characters of text
2. Hi Rise flash 150x600 70KB + 300 characters of text
3. Standard jpg/gif 150x200 16KB + 300 characters of text
4. Standard flash 150x200 32KB + 300 characters of text
5. Mini jpg/gif 150x100 5KB + 100 characters of text
6. Mini flash 150x100 10KB + 100 characters of text
7. Classified 500 characters of text (no HTML and no edits after it's been purchased)

Despite these budding industry standards and increasing practitioners' interest, blog advertising still faces several fundamental questions; that is, will blog advertising be effective to justify the cost? What makes this new advertising format effective? This study explores factors explaining and predicting the use of blog advertising, as detailed below.

### **Social Influence and Blog Advertising**

The potential to socialize and to form social contacts with others online has been among their most popular uses of many Internet-based technologies (Baym & Zhang, 2004). Internet-based blogs are also capable of forming and organizing a virtual community regardless of geographical and temporal boundaries (Dholakia et al., 2004; Haythornthwaite, 2005; Wright, 2005). Many scholars have even argued that a virtual community is capable of influencing community members' purchase behavior, disseminating product knowledge and awareness, and collaborating with customers in a marketing context (Dholakia, Bagozzi & Pearo, 2004; Rothaermel & Sugiyama, 2001). Dholakia et al.'s (2004) social influence model includes several social influence variables, such as mutual agreement, group norms, mutual accommodation, and social identity, that influence an individual's decision-making and participation behaviors.

Similar to other social networking media (such as Facebook, MySpace, and Friendster), blogs rely on the formation of a large virtual community that is fascinated by reading blog postings. Blogs allow people with related interests to come together to exchange ideas and information, as well as to learn from other community members (Rothaermel & Sugiyama, 2001). In addition to the size of audience that can be reached, Hart and Blackshaw (2005) pointed out Internet users were found to trust contents generated by consumers more than marketer-controlled advertisements. Thus it is likely that people have faith in information from their virtual community members to whom they have close social ties.

The social network approach to examining social ties and computer-mediated communication (CMC) has postulated that social ties formed among Internet community members will interact with the availability of media, the patterns of connectivity among group members, and the strength of ties (Haythornthwaite, 2005). Studying blog advertising from a social network perspective can be approached from two directions. First, I argue that a consumer's decision to use blog advertising is affected by social influence factors. This line of research is well-documented in Extended Technology Acceptance Model (i.e. TAM2) studies, in which subjective norm and image have been considered as two important social level variables affecting people's decision to adopt new technologies (Venkatesh & Davis, 2000). Venkatesh and Davis (2000) pointed out that "subjective norm," is similar to reference group norms, since "people may choose to perform a behavior, even if they are not themselves favorable toward the behavior or its consequences, if they believe one or more important referents think they should, and they are sufficiently motivated to comply with the referents" (p. 187). Venkatesh and Davis (2000) further theorized that an individual would decide to adopt a technology because of the perceived importance of group membership and social status that reflected their image. In other words, an individual will use technology as a means of identification with a group and to obtain social status (Venkatesh & Davis, 2000). Because blog advertising is a relatively novel technology and is still at its early diffusion stage, users are likely to adopt this technological innovation due to its image enhancement potential (Venkatesh & Davis, 2000). As Markus (1990) argued, other people's opinions may play an important role in determining an individual's adoption of new communication technologies. Recommendations from friends and colleagues were found to influence people's perception of technology use and information quality (Klobas, 1997).

Secondly, the nature and strength of social ties are a well-researched topic in social network analysis (Licoppe & Smoreda, 2005; Haythornthwaite, 2005). Networking technologies such as the Internet and blog are often used by social network researchers to examine their effects on social ties (Licoppe & Smoreda, 2005). For example, Licoppe and Smoreda (2005) studied emerging communication technologies (e.g., mobile phone, short-message system) and their effects on maintaining interpersonal relationships. Social ties formed among friends, close friends, co-workers, and teammates are thought to be strong ties, while those ties formed among acquaintances and casual contacts in an organization are considered to be weak ties (Haythornthwaite, 2005). Internet users with strong social ties tend to use more communication tools with a higher frequency than those with weak social ties (Haythornthwaite, 2005).

Because consumer's use of blog advertising also involves their responses to commercial information presented in blog advertisements, it is important for researchers to understand whether social ties can have any influence on the effectiveness of blog advertising. Social influence generated from social ties with colleagues and friends has been found to predict consumer's use and information quality perception of an Internet-related library application (Klobas, 1997). Therefore, given the relationships among social ties, technology adoption, and blog advertising effectiveness, it is logical to hypothesize that a stronger social tie will lead to more positive responses to blog advertising as measured by their use behaviors. On the basis of the above discussion, the following hypothesis was proposed as shown in Figure 1.

Hypothesis 1: Strong social influence will affect a consumer's blog advertising use.

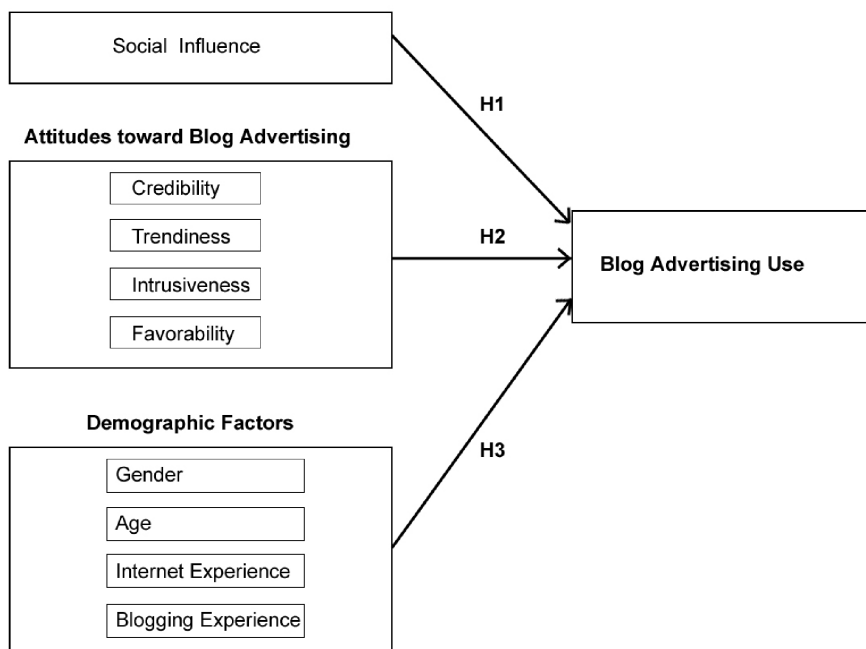


Figure 1. Theoretical Model

### Attitudes toward Blog Advertising

Latest studies of blog advertising have often taken a practitioner's perspective (Lerma, 2005; McIntosh, 2005). Like many other interactive advertising formats, the effectiveness of blog advertising depends on whether consumers choose to read the information. Therefore, a consumer's decision to use blog advertising becomes essential to the success of any campaigns using blog advertising.

Consumer attitudes toward advertising are likely to influence their willingness to accept blog advertising. Mehta (2000) found that those who have more positive attitudes toward advertising are more likely to be persuaded by advertising. Due to the lack of systematic research in blog advertising, this paper relied on mobile and Internet advertising research. For example, Tsang, Ho & Liang (2004) found that antecedents of consumer attitudes toward mobile advertising included entertainment, informativeness, irritation, and credibility. Previous research exploring consumer attitudes toward Internet advertising has also identified factors leading to positive consumer attitudes. Moreover, Ducoffe (1996) found that irritation, entertainment, and informativeness influence consumers' overall attitudes toward Internet advertising. Schlosser, Shavitt and Kanfer (1999) further argued that affective (e.g., irritation and entertainment) and cognitive (e.g., informative) factors might not be sufficient to explain the complexity of consumer attitudes toward Internet advertising. On the basis of the above discussion, the following hypotheses were proposed:

- Hypothesis 2: Consumers’ attitudes toward blog advertising will influence their use of blog advertising.
- Hypothesis 2-1: Credibility of blog advertising will influence their use of blog advertising.
- Hypothesis 2-2: Trendiness of blog advertising will influence their use of blog advertising.
- Hypothesis 2-3: Intrusiveness of blog advertising will influence their use of blog advertising.
- Hypothesis 2-4: Favorability of blog advertising will influence their use of blog advertising.

**Internet Use Behavior**

Consumers’ demographic and Internet use behavior variables often led to diverse results in terms of predicting mobile advertising (Tsang et al., 2004) and Internet advertising (Yang, 2003). For example, Yang’s (2003) study found that consumers’ age, gender, and Internet experience did not predict their attitudes toward Internet advertising. However, because these variables were used to assess the effects of the social influence variable, the following hypotheses were still proposed, in spite of mixed results. Based on these studies, I thus proposed the following research hypotheses:

- Hypothesis 3: Demographics will influence consumers’ use of blog advertising.
- Hypothesis 3-1: Gender will influence their use of blog advertising.
- Hypothesis 3-2: Age will influence their use of blog advertising.
- Hypothesis 3-3: Internet experience will influence their use of blog advertising.
- Hypothesis 3-4: Blogging experience will influence their use of blog advertising.

**Methodology**

**Sampling Method and Sample Characteristics**

The sample was recruited, through a convenience sampling method, from a large public Southwest university in the United States. Total valid respondents for the study were 199. Over 46.2 % (n=92) of our sample was male, while 53.8% (n=107) was female. Those whose ages were between 15 and 19 years old account for 25.6% (n=51), while those who were between 20 and 24 years old account for 52.8% (n=105). Overall, younger respondents (aged between 15 and 29 years old) accounted for 95.5% of the sample. This was reflective of the majority of college students in the sample. Most of the respondents in the sample have used the Internet for less than 4 hours per day (73.5%, n=145). Over 26.1% (n=20) in this survey used the Internet for over 4 hours per day. About 80% (N=132) of the respondents have made a purchase online (Refer to Table 1).

Table 1. Demographic Profiles of the Sample

		Cases	%
Gender	Male	92	46.2
	Female	107	53.8
Age	15-19 years old	51	25.6
	20-24 years old	105	52.8

	25-29 years old	34	17.1
	30 years old and above	9	4.5
How much time spent online daily	0-2 hours	57	28.6
	2-4 hours	88	44.9
	4-5 hours	45	23.0
	6 hours and above	6	3.1
Ever Purchase online	Yes	132	79.5
	No	34	20.5

The profiles of the survey participants were also representative of blog users. Surveys by com.Score Network and IDG found that blog users have a tendency to be wealthy (11% are more likely to have an income of over \$75,000), young, often purchase online (30% more likely than netizens), use broadband connection, use twice as many webpages as ordinary netizens, and spend 10 more hours online (cited in Communications of the ACM, 2005). The sample in this study reflected comparable age, online purchase, and usage behaviors.

### Instrumentation and Scale Reliability

The data reported in this study were taken from a larger dataset containing other variables and scales. The survey instrument pertinent to the focus of the present study consisted of multi-item scales to measure: (1) demographics, Internet use, and online shopping experience (8 statements); (2) social influence (3 five-point Likert statements); (3) attitudes toward blog advertising (12 five-point Likert statements); 4) blog advertising use (one five-point Likert statement measuring actual reading of blog advertising).

Social influence scales were modified from scales reported in Haythornthwaite (2005), Klobas and Clyde (2001), Licoppe and Smoreda (2005) that measured the effect of social influence on human behaviors. The present study extended the social influence measures. A total of 3 five-point Likert scales were designed, with 1 representing “strongly disagree” and 5 representing “strongly agree.” These scales included items such as (I will read blog advertisements from) “my family and friends,” “from someone I knew,” and “from someone with similar interests.” The Cronbach’s alpha coefficient for these scales was 0.73. Because these items were correlated, a composite index was computed and used for later statistical analyses.

The measures of attitudes toward blog advertising were tailored from studies by Yang (2005) and Tsang et al. (2004) that researched consumers’ attitudes toward mobile advertising. A total of 12 five-point Likert scales were designed, with 1 representing “strongly disagree” and 5 representing “strongly agree.” These scales were grouped into four attitudinal dimensions: Credibility (3 items) (Cronbach’s alpha=0.87), Trendiness (2 items) (Cronbach’s alpha=0.87), Intrusiveness (3 items) (Cronbach’s alpha=0.83), and Favorability (4 items) (Cronbach’s alpha=0.70). Because these items within each factor were correlated, a composite index was computed for individual factors and used for later statistical analyses. Furthermore, to control for individual characteristics and Internet use behavior, respondents were asked to indicate

their experience with the Internet, online shopping, and other demographic variables (such as gender, education, income, and age) (Table 2).

Table 2. Descriptive Statistics of Study Variables

Factor	Mean	S.D.
Social Influence Factor (Cronbach's alpha=0.73)		
I will read blog advertisements from my family and friends.	3.36	1.29
I will read blog advertisements from someone I knew.	2.48	1.30
I will read blog advertisements from someone with similar interests.	3.05	1.16
Composite Index	2.85	0.96
Attitudes toward Blog Advertising		
Credibility (Cronbach's alpha=0.87)		
Blog advertisements are credible.	2.75	1.04
Blog advertisements are convincing.	2.80	1.14
Blog advertisements are believable.	2.97	1.09
Composite Index	2.85	0.96
Trendiness (Cronbach's alpha=0.87)		
Using blogs is a fashionable thing to do.	3.03	1.18
Using blogs is a trendy thing to do.	3.13	1.20
Composite Index	3.08	1.11
Intrusiveness (Cronbach's alpha=0.83)		
Blog advertisements are intrusive.	2.53	1.29
Blog advertisements are irritating.	2.48	1.36
Reading blog advertisements is a waste of time.	2.60	1.21
Composite Index	2.56	1.12
Favorability (Cronbach's alpha=0.70)		
Blog advertisements are attractive.	3.12	1.14
Blog advertisements are creative.	3.35	1.17
My general opinion of blog advertisements is favorable.	3.41	1.08
I use blog advertisements as a reference for purchase.	2.60	1.21
Composite Index	3.13	0.85

Furthermore, Cronbach's alpha coefficient was employed to estimate the internal consistency of the multi-item scales used in the present study (Alsawalmeh & Feldt 1999). This reliability coefficient helped assess the internal consistency for each of the scales identified by the factor analysis procedure. According to this assessment, in this study, the scales employed attained the minimum reliability requirement for an exploratory study like this (Nunnally, 1967).

### Findings and Discussion

Blogs are categorized as a form of social media (Comm, 2009). Like other social media such as Facebook, Twitter, and Myspace, their effectiveness relies on the size of social network

and bloggers' perceptions. The following analysis and discussion aims to examine the role of bloggers' perceived social influence of message senders on blog advertising effectiveness.

### Effects of Social Influence Factor

The first research hypothesis explored whether the factor of social influence affected consumer's blog advertising adoption. Regression analysis was used to determine the relationships by examining how social norms predict consumers' blog advertising use. Mansfield and Helms (1982) argued that a multicollinearity test should be executed before a multiple regression analysis procedure. A multicollinearity test helps detect if predictor variables in a regression model are already highly correlated with each other. Therefore, the variance inflation factors (VIF) procedure was conducted to assess this problem in the regression models. The computed VIF equaled one and did not surpass the threshold of 5, as proposed by Bernstein's (2001) suggestion that as a general rule of thumb, severe multicollinearity exists if a VIF is larger than 5. All VIFs ranged from 1.019 to 1.414. As a result, the initial analysis indicated that multicollinearity was not a problem for the regression model.

The regression analysis established that the social influence factor contributed significantly to the prediction of consumer's uses of blog advertising (Refer to Table 3). The factor altogether explained 31 percent of the variance in consumer's use of blog advertising. The positive beta coefficient also demonstrated that the stronger the social influence, the more likely that consumers will use blog advertising ( $\beta=0.55$ ,  $t=9.23$ ,  $p<0.001$ ). Therefore, Hypothesis 1 was supported by the empirical data (Table 3).

Table 3. Regression Analysis: The Effect of Social Influence on Blog Advertising Use

Multiple R: 0.55			
R Square: 0.31			
Adjusted R square: 0.30			
Standard Error: 0.99			
F Value: 85.27***			
Durbin-Watson= 1.47			
VIF=1.00			
	df	Sum of Squares	Mean Square
Regression	1	83.35	83.35
Residual	194	189.65	0.98
Total	195	273.00	
Factor	Unstandardized Coefficients $\beta$	Standard- ized Coefficients $\beta$	t
Social Influence	0.66	0.55	9.23***
Notations: * $p<0.05$ ** $p<0.01$ *** $p<0.001$			

As predicted, the social influence factor is critical to consumer's use of blog advertising. Similar to Klobas and Clyde's (2001) findings that social influence affects people's evaluation of information quality and technology adoption, the empirical data from this study also supported the importance of the social influence factor. The results demonstrated that consumers are more likely to read blog advertising sent from someone who has a strong social tie (either through common interests or kinship). Given that the Internet and blog are networking technologies leading to the formation of a virtual community, the findings from this study suggested that blog advertising sent by other consumers with strong social ties is likely to generate more positive responses among targeted consumers. The results also concurred with Dholakia et al.'s (2004) thesis about the importance of virtual community, social influence, and participation in a marketing context. Because consumers tend to trust information disseminated from someone socially close to them, past studies have found that trust and respect generated from interpersonal relationship and network (Brooks, 1957; Morrison & Firmstone, 2000) can enhance the effectiveness of marketing activities. Therefore, the present study lent further support to the importance of the social influence factor in predicting blog advertising use.

### Effects of Attitudes toward Blog Advertising and Demographics

To determine if the social influence factor will continue to predict consumer's blog advertising use after taking into consideration other variables, hierarchical regression analyses were conducted. The results of hierarchical regression analyses were used to estimate the incremental and total variance associated with the variable groups and are reported in Table 4. The final betas for individual variables from the final regression equation are also reported in Table 4.

Table 4. Hierarchical Regression Analysis: The Effect of Social Influence on Blog Advertising Use

	R square	Standardized $\beta$	t
Model 1: $F=4.66$ , $df=4/173$ , $p<0.01$			
Demographics			
Gender <sup>a</sup> (female)		0.01	0.13
Age <sup>b</sup>		-0.04	-0.55
Internet Experience <sup>c</sup>		0.20	2.64**
Blogging Experience <sup>d</sup>		0.23	3.01**
R after step 1	0.31		
R square after step 1	0.10		
Model 2: $F=11.54$ , $df=8/169$ , $p<0.001$			
Demographics			
Gender <sup>a</sup> (female)		-0.01	-0.12
Age <sup>b</sup>		-0.10	1.49
Internet Experience <sup>c</sup>		0.17	2.66**

Blogging Experience <sup>d</sup>	0.06	0.85
Attitudes toward Blog Advertising		
Credibility	0.29	3.78***
Trendiness	-0.07	-1.04
Intrusiveness	-0.06	0.72
Favorability	0.32	3.75***
Incremental R square for Group 2	0.26	
R after step 2	0.59	
R square after step 2	0.35	
Model 3: F=15.44, df=9/168, p<0.001		
Demographics		
Gender <sup>a</sup> (female)	0.01	0.24
Age <sup>b</sup>	-0.05	-0.89
Internet Experience <sup>c</sup>	0.15	2.44*
Blogging Experience <sup>d</sup>	0.01	0.14**
Attitudes toward Blog Advertising		
Credibility	0.21	2.86**
Trendiness	-0.14	-2.17*
Intrusiveness	-0.04	-0.62
Favorability	0.22	2.75**
Social Influence Factor		
Social Influence	0.39	2.52***
Incremental R square for Group 3	0.10	
R after step 3	0.68	
R square after step 3	0.45	

Coded as 1=female, 0=male.

Coded as 0=young (15-24 years old), 1=old (above 25 years old)

Coded as 0=light users (below 4 hours), 1=heavy users (above 4 hours)

Coded as 0=no, 1=yes

\* p<0.05    \*\* p<0.01    \*\*\* p<0.001

A total of ten independent variables were selected and grouped into three blocks separately. Demographic variables (e.g., gender, age), Internet use behavior, and blog experience were entered in the first two blocks. Social influence factor was entered in the last block. This approach offered the most conservative test possible and ensured that any effects attributed to consumers' blog advertising use would not be due to their relationship with other factors included in the model.

Demographic, Internet experience, and blog experience variables as a group only accounted for 1% of the variance in consumers' blog advertising adoption. As indicated in the first block (Model 1) in Table 4, variables such as gender ( $\beta=-0.01$ ,  $t=-0.13$ ,  $p>0.05$ ) and age ( $\beta=-0.04$ ,  $t=-$

0.55,  $p > 0.05$ ) were not significant in the model. However, Internet experience ( $\beta = 0.20$ ,  $t = 2.64$ ,  $p < 0.001$ ) and blogging experience ( $\beta = 0.23$ ,  $t = 3.01$ ,  $p < 0.01$ ) were significant in the first model. Findings suggested that all demographic variables did not predict consumers' blog advertising use, while Internet and blogging experience were predictive. Thus, Hypotheses 3-1 and 3-2 were not supported, while Hypotheses 3-3 and 3-4 were. Both of the two significant predictor factors showed positive signs in beta coefficients, meaning that the more experience that consumers have in blogging and Internet use, the more likely they will use blog advertising. Apparently, since blog advertising is distributed through the Internet, consumers' Internet experience would have effects on their blog advertising adoption.

Variables related to consumers' attitudes toward blog advertising were considered next, as shown in the second block (Model 2) in Table 4. The incremental R square was 0.26. Credibility ( $\beta = 0.29$ ,  $t = 3.78$ ,  $p < 0.001$ ) and Favorability ( $\beta = 0.32$ ,  $t = 3.75$ ,  $p < 0.001$ ) were significant predictors of consumers' blog advertising use. Therefore, Hypotheses 2-1 and 2-4 were supported. The positive beta coefficients also showed that the more credible and favorable consumers perceive blog advertising to be, the more likely they will use the technology. On the other hand, the remaining two attitudinal dimensions (i.e., trendiness and intrusiveness) were not found to be significant predictors of consumer's blog advertising use.

The full model, as shown in the third block (Model 3) in Table 4, explained 45.3% of total variance in consumers' blog advertising use. After controlling all possible confounding variables, the predictive impacts of the social influence factor remained stable and consistent. The positive beta coefficient of this factor ( $\beta = 0.39$ ,  $t = 2.52$ ,  $p < 0.001$ ) demonstrated that the stronger social influence, the more likely consumers will use blog advertising. The empirical findings suggested the robustness of the social influence factor even when other confounding variables were built into the model. Despite the complexity of factors leading to consumers' use decision of technology (Venkatesh & Davis, 2000), the study established that the social influence factor remained as the most powerful and consistent determinant. The robustness of predictors, as demonstrated in Table 4, showed that two other attitudinal dimensions (e.g., favorability and credibility) can also predict consumers' use behavior of blog advertising. The usefulness of attitudinal factors was previously supported by various studies by advertising scholars (Li, Edwards & Lee, 2002; Mehta, 2000; Tsang et al., 2004; Yang, 2003). Unfortunately, only two of the demographic variables predicted consumers' blog advertising use; that is, blogging experience and Internet experience. On the other hand, gender and age did not predict consumers' use behavior. The mixed results of demographic variables concurred with previous studies using these variables (Yang, 2003) and suggested the limitations of these variables in future research.

To summarize, blog and its variations (such as moblogs for audio-visual contents, and blogger communities) have been categorized as one type of consumer-generated media (CGM) (Hart & Blackshaw, 2005). CGMs are found to be a communication vehicle that is trusted by consumers more than other advertising/marketing media (Hart & Blackshaw, 2005). One of the main reasons is that CGM contents (blogs included) are often generated and recommended by friends, family members, and colleagues of the consumers. The present study provided empirical examination of the influence of these social-level factors in predicting consumers' attitudes toward and use of blog advertising.

## **Conclusion**

The total number of blogs worldwide was estimated to be only about 50 in 1999 (Drezner & Farrell, 2004). About 32 million Internet users in the United States were reported to read blogs, in 2004 (McIntosh, 2005; Rainie, 2005). In another Pew Research Project, 10% of the Internet users had owned blogs, while 20% of younger Internet users with broadband Internet at home had owned blogs (Horrigan, 2005). Over 37% of the broadband younger users (below 35 years old) had read blogs, while 27% of all Internet users had read blogs (Horrigan, 2005). Nielsen/NetRatings also reported that traffic to newspaper blog sites has risen 210% in 2006 (Fitzgerald, 2007). The popularity of blogs is primarily attributed to free or cheap software available on the Internet for users to create their own posts without the requirements of technical expertise (Kahn & Kellner, 2004).

According to the 2003 Pew Research Center's survey, only 4% of online users in America rely on blogs for opinions and information (cited in Drezner & Farrell, 2004). Pew Research Center also found that 20% of Internet users younger than 35 years old and with a high speed broadband at home said they used blogs to obtain political news information (Horrigan, 2005). This recent rapid diffusion of blogs has led to enthusiastic forecast about the advertising and marketing potential of this medium (Fitzgerald, 2007; McIntosh, 2005). The market research firm, Technorati has tracked over 66 million blogs. While the application of blogs in advertising and marketing has grabbed practitioners' attention (Fitzgerald, 2007; Wright, 2005), the effectiveness of blog advertising is still dependent on many factors. Among them are consumer and market factors. For example, although many marketers and advertisers have viewed blogs as highly engaging in specific topics, many are still reluctant to advertise in blogs whose contents are not fully controlled by the marketers (Fitzgerald, 2007). The present exploratory study has found that the social influence factor remains a stable and powerful factor in predicting consumers' blog advertising use. Advertising practitioners have continued to claim that a good blog written by non-profit organizations can attract more attention than announcements made by CEOs (Scott, 2009). It is likely that consumers perceive these blogs more positively than commercially-oriented CEO statements. Similarly, blog advertising made by an individual or an organization exerting greater social influence than media advertising can generate comparably powerful advertising messages.

Furthermore, consumers' attitudes toward blog advertising also partly predict their blog advertising use. In particular, positive attitudes led to increased use of blog advertising, while intrusiveness did not. In conclusion, with the attractiveness of blogs and blog advertising as alternative and economical communication vehicles in advertising, journalism (Lowrey, 2006), public relations (Smudde, 2005), political communication (Lawson-Borders & Kirk, 2005) etc., it is vital to examine what predicts and explains blog advertising effectiveness.

## **Limitations and Future Research Directions**

Several limitations should be taken into account in evaluating the results reported in this study. First, a convenience sample of Internet users from a college campus has limited the generalizability of these findings to a larger Internet population. Furthermore, despite the fact

that many college students tend to be bloggers, a tilt toward college students in the sample has made the findings of the present study more appropriate to future research focusing on the student population. Non-random sampling also lacks the representativeness of a cross-sectional Internet population that is composed of various demographics and Internet use behaviors. The convenience sampling method is limited in terms of achieving the randomness that enables us to generalize our findings to the general Internet population. Therefore, future research should recruit a more diverse and heterogeneous sample to examine if the predictability of the social influence factor continues to be strong.

Another limitation is that the approach employed to measure social influence was limited to three Likert statements and to measuring family, friendship, and common interests. However, Dholakia et al. (2004) have established a social influence model of consumer participation in a virtual community by integrating group norms and social identity. Furthermore, in TAM2 model, Venkatesh and Davis (2000) proposed social norm and image as two critical determinants in consumers' use behavior. Therefore, the construct of social influence definitely requires more in-depth and thorough conceptualization and operationalization to better capture the complexity of this important construct. This may create problems in data interpretation. Future research should explore various dimensions of the social influence concept to examine how each dimension accounts for consumers' blog advertising use.

In spite of these limitations, this research has contributed to our understanding of consumers' blog advertising use. The findings of this study have implications for the use of theoretical models to try to explain social influence factors predicting consumers' blog advertising use. In addition, the present study addresses the social influence factor and its interaction with other blog advertising factors to predict consumers' blog advertising use. The effects of social influence are likely to be moderated by culture. Derived from Hofstede's five-dimension cultural framework, consumers who live in a culture where a high power distance index exists are more likely to be influenced by bloggers perceived to be powerful, authoritarian, and a leader in the social hierarchy than those where small power distance exists (Hofstede, 1991). Similarly, consumers who live in a more collectivistic culture are more likely to be influenced by bloggers who are perceived to be closely tied to the consumers than those who are not. The present study is limited to participants from a single country. However, future studies should be expanded to cover participants from multiple countries, so the influence of culture can be examined empirically. More systematic research on various aspects of social reference and network influence should help evaluate the validity and robustness of this variable in blog advertising research.

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