

Factors influencing Internet users' perceived credibility of news-related blogs in Taiwan

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Abstract

This study investigates factors influencing Internet users' perceived credibility of news-related blogs in Taiwan. First, this paper identifies Taiwanese Internet users' beliefs about news-related blog credibility. Secondly, it examines whether these belief factors can predict their perceived credibility of news-related blogs. Thirdly, it explores whether Internet users' individual characteristics, Internet use motivations, Internet use behavior, and innovative characteristics can predict their perceived credibility of news-related blogs.

Four belief factors about news-related blog credibility were extracted from 13-item five-point Likert questions and account for 57.565% of the variance. Two out of four belief factors contributed significantly to the prediction of Taiwanese Internet users' perceived credibility of news-related blogs. These predictor factors altogether explained 18.3% of the variance in Internet users' perceived credibility of news-related blogs.

To determine if belief factors were still predictive of Taiwanese Internet users' perceived credibility of news-related blogs after controlling demographic, Internet use behavior, Internet use motivations, and users' innovative characteristics, several hierarchical regression analyses were undertaken. The full model explained 29.1% of total variance in Taiwanese Internet users' perceived credibility of news-related blogs. After controlling all possible confounding variables, the predictive impacts of credibility factors on Taiwanese Internet users' perceived credibility of news-related blogs remained powerful and stable.

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1. Introduction

In December 2002, Trent Lott resigned as the U.S. Senate majority leader because of backlash to his inflammatory comments that he made at Senator Strom Thurmond's 100th birthday party (Drezner and Farrell, 2004; Grossman et al., 2004). In 2004, long-respected CBS News anchor, Dan Rather, relied on some ments

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about U.S. President George W. Bush's Texas Air National Guard service records (Wasserstein, 2004). Both incidents turned into week-long media frenzy when bloggers and news-related blogs employed the real-time and massive information-distributing power of the Internet to challenge the judgment and credibility of the established and mainstream news media. In the case of Trent Lott, the renewed interests of mainstream media were due to many intense commentaries on blogs (Drezner and Farrell, 2004). Similarly, the first few people to question the authenticity of Dan Rather's documents purportedly written by Lt. Col. Jerry B. Killan were found in Right-wing blogs and forums such as Power Ling, Little Green Footballs, and Free Republic (Wasserstein, 2004).

Although both incidents seem to support the influence of blogs on traditional journalism, they demonstrate the growing influence of blogs on journalistic practices around the world. Mainstream news media have increasingly been drawn to the potential of blogs by featuring bloggers on the cover of *Time*, *New York Time*, and *New York Time Magazines* (McIntosh, 2005). While the influence of blogs on media establishments and professionals has yet to be scrutinized (McIntosh, 2005), a more crucial question is how Internet users respond to the contents of news-related blogs on the Internet. More specifically, I examined how Taiwanese Internet users perceive the credibility of news-related blogs. I also investigated factors influencing these Internet users' perception of credibility and variables moderating the relationships between Internet users' beliefs about news-related blog credibility and perceived credibility of this emerging news medium.

2. Literature review and research question development

2.1. News-related blogs and online journalism

Blogs, short from Weblogs, began to emerge as “a remarkable artifact of the Web” in the late 1990s (Kumar et al., 2004). In 1999, the total number of blogs worldwide was estimated to be about 50 (Drezner and Farrell, 2004). Nevertheless, the number grew astronomically from 2.4 to 4.1 million by 2004 (Drezner and Farrell, 2004). An estimated 10 million blogs will be created by 2005, according to the Perseus Development Corporation (Drezner and Farrell, 2004). The global distribution of bloggers can be found in major industrialized countries as well as developing countries (Kumar et al., 2004).

Blogs, a term coined in 1997 are often defined as “periodically updated journals, providing online commentary with minimal or no external editing” (Drezner and Farrell, 2004, p. 32). Blogs are often presented as a set of “individual entries of news or commentary, in reverse chronological order. The posts often include hyperlinks to other sites enabling commentators to draw upon the content of the entire World Wide Web” (Drezner and Farrell, 2004, pp. 32–33). The functions of blogs include political analyses, personal diaries, posts on computer advice, money, romance, and other topics (Drezner and Farrell, 2004). Technically, blogs are made possible by free or cheap software available on the Internet for users to create their own posts without the requirements of technical expertise (Matheson, 2004). Entries created by bloggers are often in HTML format and rich in hyperlinks to link to other texts, hyperlinks, images, audio and video files (Matheson, 2004).

The rapid growth of blogs has challenged both the organizations and professional practices of journalism (McIntosh, 2005). Grossman et al. (2004) pointed out that, unlike major news organizations, bloggers often focus on narrow topics that interest a unique group of users. As such, bloggers often become “de facto watchdogs and self-proclaimed experts” on a specific topic (Grossman et al., 2004). For example, “Salam Pax,” a Baghdad-based blogger on the Iraq War, has offered new perspectives about the war and even written for England's “Guardian” newspaper (Wasserstein, 2004). Furthermore, according to Matheson (2004), many of the news-related blogs are not maintained by bloggers employed by news organizations. The lack of professional affiliation with mainstream news organizations has created free-lance and more anti-establishment characteristics of news-related bloggers, which also fits the mentality of many bloggers who treat the Internet “as a democratic space in which all social actors' voices may be heard, and where audiences can become active publics” (Matheson, 2004, p. 452). Nardi et al. (2004, p. 42) concluded that blogs have “a strong sense of the author's personality, passions, and points of view”.

Since the emergence of the Internet, its potential impact on journalism and news organizations has attracted increasing attention among communication scholars (Bardoel, 2002; Dessauer, 2004; Deuze, 2003;

Garrison, 2001; Matheson, 2004). One of the areas that have been examined more thoroughly deals with the blurred line between journalism and news-related blogs (Matheson, 2004). Matheson (2004) concludes that, in the U.S. context, the discussion of blogs centers around their challenge of mainstream journalism. Many of these news-related blogs can be seen as a form of online journalism because bloggers serve one of the same functions as professional journalists: to instantly critique news reported in newspapers and television (Sullivan, cited in The Economist, 2002), to report and record the latest events such as tsunami or earthquakes faster than news organizations or networks (Walker, 2001, cited in Matheson, 2004), or to provide in-depth and up-to-the-moment information about latest news events (Matheson, 2004; Nardi et al., 2004). Blogs sometimes become a catalyst for grassroots journalism (e.g., Dan Gillmor's blog on this emerging journalism), or an online community for newspeople to share insights (e.g., TVNewer blog) (McIntosh, 2005).

Deuze's (2003) typology of online journalism, four distinct online journalism practices were discussed on a continuum from purely editorial content to public connectivity-based websites (Odlyzko, 2001, cited in Deuze, 2003, p. 205). According to Deuze (2003), the typology consists of (1) mainstream news sites; (2) index and category sites; (3) meta- and comment sites; (4) share and discussion sites. News-related blogs can be categorized as either meta- and comment sites or share- and discussion sites, depending on the level of participatory communication and moderation. Nevertheless, in spite of the large number of studies on online journalism, or blogs published recently (Deuze, 2003; Matheson, 2004; McIntosh, 2005), the foci of these studies mainly concentrates on diffusion (Garrison, 2001; Massey, 2000), public policy implications (Bardoel, 2002; Drezner and Farrell, 2004), content/media characteristics (Massey and Levy, 1999), and impacts on journalistic practices (Deuze, 1999, 2003; Matheson, 2004; Wasserstein, 2004). None of these aforementioned studies have dealt with how the audience or media users, perceive blogs in general, or news-related blogs in particular.

The failure to better understand Internet users' perception of news-related blogs is likely to lead journalism organizations and professionals to overestimate the potential impacts of this emerging news medium. Therefore, to fill the gap in the literature, the present study examines Internet users' perception of news-related blogs. More specifically, as Pavlik (2001) has once argued the importance of online journalism credibility in assessing the effects of this emerging new medium application. Given the importance of credibility perception and its effect on news-related blogs, the present study focuses on Internet users' beliefs about and perceived credibility of news-related blogs.

2.2. Perceived credibility of news-related blogs

Metzger et al. (2003) have argued that credibility research is one of the most developed areas of media studies. Although the earlier credibility studies often examined inter-media differences in credibility perception (Bentele, 1998; Westley and Severin, 1964), recent studies not only continued the study of media credibility (Taylor and Napoli, 2003) and inter-media credibility synergy (Bucy, 2003), but also have extended to the study of perceived credibility of emerging media outlets (Schweiger, 2000; Warnick, 2004), as well as contents delivered through these media (Sundar, 1998, 1999, 2000).

Credibility is a concept that has been explored from various perspectives (Bucy, 2003; Schweiger, 2000; Sundar, 1998; Warnick, 2004). Among these different dimensions, source credibility has been researched most extensively (Berlo et al., 1969; Sundar, 1998). Schweiger (2000) further elaborated the source credibility concept and proposed his six-level credibility attribution framework. The first level refers to the *presenter/author* that recipients first associated the messages. Some examples in this level included the anchorperson of a news program, or the author of a comment appearing in the media. The second level refers to "the news report of the actions or statements of certain people, the *actors* or *authors* of messages" (Schweiger, 2000, p. 39). The third level refers to the credibility of *editorial units*, defined as single news item on radio or television, an article printed in newspapers, or an entry posted in the Internet (e.g., blogs) (Schweiger, 2000). The fourth level refers to *media products* such as vehicles/channels (e.g., ABC, CBS, The New York Times, MSNBC Interactive) (Schweiger, 2000). The fifth level is labeled as *subsystem of media type*, defined as media products similar in institutional contents and background, but competing with each other for commercial success. Some examples include Public TV system and tabloids (Schweiger, 2000). The sixth level referred to a general perception of credibility about specific media (such as television, newspaper, or magazine).

Schweiger's (2000) framework is useful to study Internet users' perception of news-related blogs in the present research. Blog posts often constitute several levels of credibility discussed in this framework. For example, a blog post is usually associated with an author who uploads the article to a blog and identifiable by a nickname or email address associated with a posted message (Level 1). The article/comment is often about a news event in news-related blogs, although not every post is about an actor (such as a politician or a news anchor) (Level 2). An article/comment is considered an editorial unit (Level 3) while different blogs can represent either a media product (Level 4) or a subsystem of media type (e.g., a cluster of blogs commenting on the same or similar topics) (Level 5). Compared with other existing media such as television, newspaper, or magazine, blogs can be considered as a new media type. On the basis of the above-mentioned typology of credibility, the following research questions were proposed:

Research Question 1: What are beliefs and beliefs factors underlying Internet users' perceived credibility of news-related blogs?

Research Question 2: What are belief factors that can predict Internet users' perceived credibility of news-related blogs?

The first two levels of Schweiger's (2000) typology should be categorized as source/individual credibility for the sake of conceptual clarity. Sundar (1998, p. 55) pointed out that source can be operationalized as "a person or institution quoted within a news story". However, a source can also be defined as site sponsorship (Lynch et al., 2001). In the case of news-related blogs in the present research, a source will refer to a person who writes the story. The study of source credibility has been traditionally viewed as trustworthy and competent attributes of a communicator/source (Fritch and Cromwell, 2001; Hovland et al., 1982; Warnick, 2004). Based on previous research on factors leading to credibility perception, Lynch et al. (2001) also argued that site authorship and sponsorship are two of the three most important criteria of web site credibility. Therefore, the following hypotheses were proposed:

Research Hypothesis 2-1: Presenter/source factor is positively related to Internet users' perceived credibility of news-related blogs.

The comparison of perceived credibility among media has been extensively studied in past decades to examine differences in credibility perception among various media. Based on the regularly conducted Roper study of people's attitudes toward various media, television has surpassed newspapers, magazines, or radio in terms of its relative credibility among Americans (Bentele, 1988, p. 411, cited in Schweiger, 2000, p. 42). In general, previous studies have concluded that media type affects people's perceived media credibility. For example, Johnson and Kaye (2000) found that Internet users evaluated online political information to be more credible than other traditional media. Flanagin and Metzger (2000) also found that Internet information is judged as credible as television, magazine, and radio, but not as credible as newspaper information. Although these studies compared perceived media credibility among new and traditional media, Schweiger (2000) pointed out that the study of media credibility tends to be problematic in methodology because respondents cannot differentiate personal and particular use experience from abstract evaluation of the media. Furthermore, a medium is also composed of different vehicles. In other words, the credibility perception of a medium is dependent on aggregate perception of vehicles. For example, television as a medium is composed of network, cable, and video-on-demand televisions. Similarly, the Internet as a medium also is made up of text-based computer bulletin boards and graphic-rich World Wide Web sites. To avoid the methodological problems discussed above and to achieve more accurate observation of perceived credibility of news-related blogs, researchers need to better define the format of information available in blogs. Thus, I hypothesized the effects of media type on perceived credibility of news-related blogs:

Research Hypothesis 2-2: Media type factor is related to Internet users' perceived credibility of news-related blogs.

Although credibility is often associated with the channel where a message is delivered or the source/presenter that creates a message, recent studies (Sundar, 1998, 1999) have begun to examine the importance of message characteristics. However, whether message characteristics can influence perceived credibility of messages has not been studied thoroughly. The construct of message characteristics has been extensively studied in communication literature (Refer to Sundar, 1999, pp. 381–382 for a review). For example, message characteristics are measured by the perception of quality of news story (Sundar (1999, p. 381), defined as "the degree of overall excellence of a news story). Although the effect of message quality perception on perceived

credibility of a message has not been explored, I would argue that message quality will influence credibility perception because the close relationships between perceived credibility, source credibility, and message quality. Hovland et al. (1982) associated credibility with expertness and trustworthiness. Furthermore, Fritch and Cromwell (2001) also argued that credibility has been viewed as related to a source's competence and trustworthiness. As Warnick (2004) concluded, the source should be perceived as trustworthy and competent, so that his/her credibility can be established. Therefore, I would argue that a blog will not be perceived as credible if it is full of grammatical and writing mistakes. As many news-related blogs claim to be an expert in a specific area, I thus hypothesized that the quality of blog posts as demonstrated by their writing styles would influence Internet users' credibility perception of news contents as well as news-blogs themselves.

Research Hypothesis 2-3: The stylistic quality factor is positively related to Internet users' perceived credibility of news-related blogs.

Most studies that involve users' perception of credibility have not examined the effects of individual factors. Credibility is often treated as a media attribute which has effects on perception of online news stories (Sundar, 1998) and attitude change seen in classical Elaboration Likelihood Model studies (Dutta-Bergman, 2004). A few exceptions have studied credibility as a dependent variable (Dutta-Bergman, 2004; Sundar, 1999; Treise et al., 2003; Warnick, 2004). For example, scholars have examined variables leading to various credibility perception of online news (Sundar, 1999), online science information (Treise et al., 2003), and website credibility (Warnick, 2004).

Nevertheless, what is lacking in the present credibility research is the study of personal relevance and its impact on credibility perception. Personal relevance, as defined by Rucinski (2004, p. 474), refers to an individual's "interest in a topic or the significance of a topic to one's personal situation". Internet users' personal relevance with blog posts is likely to mediate individual criteria to evaluate credibility and reported credibility perception. Personal relevance may contribute to individual's involvement level that is derived from perceived risks associated with credibility assessment. For example, Kamins et al. (1997) found that personal relevance of information influenced people's affective and behavioral responses to rumor type information. Therefore, I proposed the following hypothesis:

Research Hypothesis 2-4: The level of personal relevance factor is positively related to Internet users' perceived credibility of news-related blogs.

2.3. Internet use motivations

Motivations to use the Internet are a well-researched area (Kaye, 1998; Parker and Plank, 2000; Stafford et al., 2004). While earlier attempts mainly provided a typology of use motivations by extending the uses and gratifications framework to study this new medium (Kaye, 1998; Morris and Ogan, 1996; Parker and Plank, 2000; Stafford et al., 2004), recent studies (Dutta-Bergman, 2004) have begun to examine the effects of use motivations on information processing of online political information (Kaye and Johnson, 2002), on the relationships between e-health information completeness and perceived credibility (Dutta-Bergman, 2004), and processing of Internet advertising (Putrevu and Lord, 2003).

Most uses and gratifications research has identified motivations to use media as diversion/entertainment, personal identity, personal relationships, social interactions, and surveillance/information (Parker and Plank, 2000). Eighmey and McCord (1998) outlined the similarities between traditional and Internet media in terms of users' motivations of media use. They identified two web-specific motivations: personal involvement and continuing relationships, in addition to entertainment and information motivations. Similarly, Kaye (1998) also identified website preference and habit as two important Internet use motivations. Due to the popularity of blogs, Nardi et al. (2004) identified five major motivations for blogging: documenting one's life, providing commentary and opinions, expressing deeply felt emotions, articulating ideas through writing, and maintaining community forums.

As Internet users actively control the communication process by interacting with news-related blog contents, we argue that users' motivations to use the Internet are likely to affect their perception of news-related blogs. Dutta-Bergman's (2004) study investigated the effects of Internet use motivations on the credibility perception of e-health information and observed significant motivation effects. Internet users' motivations to surf

(i.e., entertainment purposes) or to search (i.e., information purposes) were found to interact with the completeness of website contents and lead to different perception of e-health information credibility. It is likely that Internet users' motivations will affect their perceived credibility of news-related blogs. Thus, I proposed the following two research questions:

Research Question 3: Do Internet use motivations predict Internet users' perceived credibility of news-related blogs?

Research Question 4: Which Internet use motivation predicts Internet users' perceived credibility of news-related blogs?

2.4. *Demographics*

Demographic variables have been found to affect credibility perception of the media in general (Johnson and Kaye, 2000, p. 867). Johnson and Kaye (2000) reported that male users with a high income and educational background tend to evaluate media credibility more critically. They also found the similar patterns among Internet users. They also found that young and less educated females tend to evaluate various online media as credible. It is likely that these users are more vulnerable and less critical of information posted on the Internet. However, are all demographic variables useful predictors of Internet users' credibility perception? Previous studies fail to provide a systematic examination of their impacts. Because the Internet population has grown to represent various demographic profiles, thus, the following research question was proposed:

Research Question 5: Do Internet users' demographic variables predict Internet users' perceived credibility of news-related blogs?

2.5. *Innovativeness*

Individual characteristics such as innovativeness tendency were included in this study because this variable was expected to influence their perception of news-related blogs, which is an innovative media application on the Internet. Innovative individuals were also found to be dynamic, communicative, curious, venture-some, and stimulation-seeking. In addition, Internet users were often considered to be innovators (Wood and Swait, 2002). Based on these studies about this important variable, I thus proposed the following research question:

Research Hypothesis 5-1: Internet users' innovativeness is positively related to Internet users' perceived credibility of news-related blogs?

2.6. *Internet usage behavior*

Credibility studies have also found that experience with the Internet is positively related to the perception of the Internet as a credible source of information (Flanagin and Metzger, 2000). The Pew Research Center also found that, among 1993 users surveyed, the more individuals used online news, the higher they rated the Internet as a credible news source (Flanagin and Metzger, 2000, p. 520). Nevertheless, Flanagin and Metzger (2000) reported a seemingly contradictory finding that higher consumption of online news often led to more scrutiny of information quality. Because news-related blogs are very similar to online news, I would expect the same patterns among users of news-related blogs. Although Flanagin and Metzger (2000) did not report whether increased scrutiny of information quality would lead to less credibility perception, I would assume that increasing user's information processing is likely to affect their credibility perception. In other words, more Internet usage experience leads to more scrutiny of posts on the blogs. Based on these studies, I thus proposed the following research hypotheses:

Research Hypothesis 5-2: Internet experience is positively related to Internet users' perceived credibility of news-related blogs.

Research Hypothesis 5-3: Knowledge about the Internet is positively related to Internet users' perceived credibility of news-related blogs.

3. Methodology

3.1. Sampling method

The sample was recruited, through a convenience sampling method, from two metropolitan areas of Taiwan where there were the highest Internet penetration rates. Research assistants were trained and dispatched to locations (such as train stations, bus terminals, and department stores) that often attracted a large crowd. Taiwan has been ranked as one of the most wired nations in Asia. As of September, 2004, the Internet penetration was 40% of the island population of 23 million (Find, 2004/11/29). The Internet users reached 9.05 million of the population (Find, 2004/11/29). The number of host computer ranked number 10 worldwide and number 2 in Asia (Find, 2004/4/30).

3.2. Sample characteristics

Total valid respondents for the study were 1492. Over 47.7% ($n = 711$) of our sample was male, while 52.3% ($n = 781$) was female. Those whose ages were between 15 and 19 years old account for 15.2% ($n = 227$), while those who fall between 20 and 24 years old account for 77.2% ($n = 1163$). Overall, younger respondents (aged between 15 and 29 years old) account for 98.9% of the sample. This was partially reflective of current Internet population in Taiwan, but showed a younger profile. Yam's survey (2004) reported that over 52% of the Taiwanese Internet users fall between 15 and 29 years old.

In terms of respondents' educational levels, those with university and post-graduate degrees accounted for 90.7% ($n = 1348$) of the sample. This also reflected demographic similarities to many Internet population surveys that indicated higher education levels lead to higher Internet usage. Yam (2004) (s)survey showed 48% of the Internet users have the university and post-graduate degree.

Most of the respondents in the sample have used the Internet for less than 3 years (69.8%, $n = 1036$). Over 30.2% ($n = 448$) in this survey have used the Internet for over 3 years. In terms of their knowledge about the Internet, the average rating is 4.52 (SD = 1.858) on a scale of 10, with 1 representing novice and 10 representing expert (Refer to Table 1).

3.3. Instrumentation

The survey instrument consisted of multi-item scales to measure: (1) Internet users' motivations to use Internet (17 five-point Likert statements); (2) beliefs about news-related blog credibility (13 five-point Likert statements); (3) perceived credibility of news-related blogs (3 five-point Likert statements); (4) control variables including demographics, Internet use behavior, and innovative (8 five-point Likert statements) characteristics of the Internet users.

Internet use motivation scales were adapted from Joines et al. (2003), Kaye (1998), Parker and Plank (2000), and Stafford et al. (2004) that measure Internet use motivations. These scales were based on uses and gratifications research that measured media use motivations. A total of 17 five-point Likert scales were designed, with 1 representing "strongly disagree" and 5 representing "strongly agree." These scales included items such as (I use the Internet) "Because it relaxes me," "Because it's enjoyable," "So I can chat with my friends," "So I can feel less lonely," "Because it helps me learn about myself," "Because it helps me learn about others," "So I can forget about what happens at work," "So I can forget about what happens at home," "So I can get away from what I'm doing," and "I make a habit of using the Internet."

Perception of news-related blogs credibility scales were adapted from Sundar (1998, 1999, 2000) and included three five-point Likert statements. Similar to past media credibility studies, Sundar (1998) operationalized credibility perception as accurate, believable, biased, fair, objective, and sensationalistic. On the basis of Sundar's studies (1998, 1999, 2000), credibility scales included "News-related blogs are accurate," "News-related blogs are believable," and "News-related blogs are objective." Cronbach alpha coefficient for these scales was 0.708.

Previous media credibility studies often measured audience's perceptions, but failed to address antecedents leading to these perceptions. Therefore, I explored belief factors influencing media users' overall perception of

Table 1
Demographic profiles of the sample

| | | Cases | % |
|-------------------------------------|---|-------|------|
| Gender | Male | 711 | 47.7 |
| | Female | 781 | 52.3 |
| Age | 15–19 years old | 227 | 15.2 |
| | 20–24 years old | 1163 | 77.2 |
| | 25–29 years old | 97 | 6.5 |
| | 30 years old and Above | 10 | 0.9 |
| Educational levels | Post-graduate level | 25 | 1.7 |
| | University level | 1323 | 89.0 |
| | Junior college level | 129 | 8.7 |
| | Senior high and vocational school level | 10 | 0.7 |
| Income | Below NTD\$5,000 | 585 | 39.3 |
| | NTD\$5,001–10,000 | 630 | 42.3 |
| | NTD\$10,001–15,000 | 159 | 10.7 |
| | NTD\$15,001–20,000 | 61 | 4.1 |
| | NTD\$20,001–25,000 | 42 | 2.8 |
| | NTD\$25,001–30,000 | 3 | 0.2 |
| | NTD\$30,001–35,000 | 2 | 0.1 |
| | Above NTD\$35,001 | 7 | 0.5 |
| Years of using the Internet | Below 6 months | 105 | 7.1 |
| | 6 months to 1 year | 241 | 16.2 |
| | 1–3 years | 690 | 46.5 |
| | 3–5 years | 316 | 21.3 |
| | Above 5 years | 132 | 8.9 |
| Knowledge about the Internet | 1 (Novice) | 88 | 5.9 |
| | 2 | 127 | 8.5 |
| | 3 | 239 | 16.0 |
| | 4 | 264 | 17.7 |
| | 5 | 250 | 23.5 |
| | 6 | 210 | 14.1 |
| | 7 | 128 | 8.6 |
| | 8 | 64 | 4.3 |
| | 9 | 14 | 0.9 |
| | 10 (Expert) | 8 | 0.5 |
| Mean = 4.52, SD = 1.858, Median = 5 | | | |

media credibility. Credibility factors were adapted from [Schweiger's \(2000\)](#) credibility typology. [Schweiger's \(2000\)](#) typology proposed antecedents leading to credibility perceptions of media. Therefore, the scales included 13 five-point Likert statements that covered four dimensions of credibility factors. These items included “News-related blogs endorsed by a celebrity are more credible,” “News-related blogs endorsed by experts are more credible,” “News-related blogs in text format are more credible,” “News-related blogs on the computer bulletin boards are more credible,” “Credibility is important if news-related blogs have personal relevance,” and “Language employed reduces news-related blogs credibility.”

Furthermore, to control for individual characteristics and Internet use behavior, respondents were asked to indicate their experience with Internet, knowledge about the Internet, and innovativeness. Finally, demographics variables such as gender, education, income, and age were also included.

Previous studies have predicted innovative consumers to be curious, communicative, dynamic, venture-some, stimulation-seeking, and cognitive ([Wood and Swait, 2002](#)). Because blogs are viewed as a relatively new Internet application, Internet users' perception of the technology may be influenced by their innovativeness. In other words, individual innovative characteristics are included because the variable was expected to affect Internet users' perceived credibility of news-related blogs. The innovative scale was measured by eight

5-point Likert items (e.g., “I like taking risks,” “I feel comfortable in a strange environment,” “I always try something new and unique,” “I have a strong desire to be successful”) and had a Cronbach’s alpha value of 0.720. Individual items were aggregated for later analyses.

Cronbach’s coefficient alpha was employed to estimate the internal consistency of the multi-item scales used in the present study (Alsawalmeh and Feldt, 1999). The reliability coefficient helped assess the internal consistency for each of the scales identified by the factor analysis procedure. Nunnally (1967, p. 226) suggested a reliable instrument for a preliminary research needs to attain a Cronbach’s alpha value between 0.50 and 0.60. Davis (1964, p. 24) concluded that the recommended Cronbach’s alpha value for research predicting a group over 50 subjects can fall below 0.5. In this study, scales employed had attained the minimum reliability requirement for an exploratory study (Nunnally, 1967). Cronbach’s alpha values of Internet use motivations ranged from 0.820 (Factor 5) to 0.580 (Factor 2). Similarly, Cronbach’s alpha values of credibility factors ranged from 0.785 (Factor 2) to 0.678 (Factor 4). Cronbach’s alpha values were equal to 0.720 for innovativeness scales and 0.708 for credibility perception scales.

4. Findings

4.1. Internet use motivations

Exploratory factor analysis was employed to uncover the dimensions of users’ motivations to use the Internet. This analysis yielded five orthogonal factors with eigenvalues greater than 1.0. Despite a potential problem of overestimating or underestimating the number of factors retained for later statistical analysis, the eigenvalue criterion is one of the commonly used standards in the factor analysis procedure (Tucker et al., 1969; also see Park et al., 2002). A screen test was also employed to supplement the identification and selection of factors (Park et al., 2002). Both procedures generated the same number of factors to be retained for later analyses. In the end, five motivation factors were extracted, including “Entertainment Factor,” “Habit Factor,” “Social Factor,” “Information Factor,” and “Escapism Factor.” These five factors accounted for 60.426% of the variance within the data. These results were reported with their Cronbach’s alpha values for each factor (Refer to Table 2).

The first research question explored beliefs and belief factors underlying Internet users’ perceptions of news-related blog credibility. Following the same factor analysis procedure, the credibility factors from the data were presented in Table 3. Four factors were extracted from the principal component analysis using varimax rotation. These four factors accounted for 57.565% of variance and were as follows: “Presenter/Source Factor,” “Media Type Factor,” “Personal Relevance Factor,” and “Stylistic Quality Factor.” These results were reported with their Cronbach’s alpha values for each factor.

Three statements were used to measure respondents’ perceived credibility of news-related blogs on the Internet. Table 4 reported factor loadings, eigenvalues, variances accounted for, and Cronbach’s alpha coefficient.

4.2. Predictors of Internet users’ perceived credibility of news-related blogs

The second research question examined what credibility factors can be used to predict Internet users’ perceived credibility of news-related blogs. Four research hypotheses were also proposed to investigate whether belief factors predict users’ perception of credibility. Regression analyses were used to determine the relationships between these belief factors and respondents’ perceived credibility of news-related blogs.

Mansfield and Helms (1982) argued that multicollinearity test should be performed before any multiple regression analyses. Therefore, we conducted the variance inflation factors (VIF) procedure to assess this problem in the regression models. None of the VIF values surpassed the threshold of 5, as proposed by Bernstein (2001) which he suggested as a general rule of thumb is that 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.

Two out of four belief factors contributed significantly to the prediction of users’ perceived credibility of news-related blogs (Refer to Table 5). These predictor factors altogether explained 18.3% of the variance in

Table 2

Results of factor analysis of Internet use motivations

| | |
|---|-------|
| <i>Factor 1: Entertainment Factor (Eigenvalue = 2.666, Variance explained = 14.813%, alpha = 0.801)</i> | |
| Because it relaxes me | 0.805 |
| Because it's enjoyable | 0.750 |
| Because it allows me to unwind | 0.749 |
| Because it entertains me | 0.727 |
| <i>Factor 2: Habit Factor (Eigenvalue = 1.872, Variance explained = 10.402%, alpha = 0.580)</i> | |
| I feel restless if I do not use the Internet | 0.784 |
| I make a habit of using the Internet | 0.775 |
| Because it gives me something to occupy my time | 0.568 |
| <i>Factor 3: Social Factor (Eigenvalue = 1.820, Variance explained = 10.111%, alpha = 0.590)</i> | |
| So I can chat with my friends | 0.730 |
| So I can feel less lonely | 0.711 |
| So I can make new friends | 0.560 |
| <i>Factor 4: Information Factor (Eigenvalue = 1.552, Variance explained = 8.620%, alpha = 0.675)</i> | |
| Because it helps me learn about myself | 0.809 |
| Because it helps me learn about others | 0.789 |
| <i>Factor 5: Escapism Factor (Eigenvalue = 2.966, Variance explained = 16.480%, alpha = 0.820)</i> | |
| So I can forget about what happens at work | 0.806 |
| So I can forget about what happens at home | 0.805 |
| So I can forget about what happens at school | 0.774 |
| So I can get away from the rest of the family or others | 0.707 |
| So I can get away from what I'm doing | 0.577 |

Table 3

Results of factor analysis: belief factors

| | |
|--|-------|
| <i>Factor 1: Presenter/Source Factor (Eigenvalue = 2.830, Variance explained = 18.864%, alpha = 0.762)</i> | |
| News-related blogs endorsed by a celebrity are more credible | 0.799 |
| News-related blogs endorsed by experts are more credible | 0.733 |
| News-related blogs endorsed by someone I know are more credible | 0.722 |
| News-related blogs supported by government statistics are more credible | 0.644 |
| News-related blogs authenticated by an individual are more credible | 0.576 |
| <i>Factor 2: Media Type Factor (Eigenvalue = 2.538, Variance explained = 16.919%, alpha = 0.785)</i> | |
| News-related blogs in text format are more credible | 0.835 |
| News-related blogs on the computer bulletin boards are more credible | 0.778 |
| News-related blogs in multimedia format are more credible | 0.759 |
| News-related blogs on the World Wide Web are more credible | 0.673 |
| <i>Factor 3: Personal Relevance Factor (Eigenvalue = 1.695, Variance explained = 11.298%, alpha = 0.738)</i> | |
| Credibility is important if news-related blogs have personal relevance | 0.824 |
| Credibility is important if news-related blogs interest me | 0.813 |
| <i>Factor 4: Stylistic Quality Factor (Eigenvalue = 1.573, Variance explained = 10.484%, alpha = 0.678)</i> | |
| Language employed reduces news-related blog credibility | 0.864 |
| Misspellings reduce news-related blog credibility | 0.844 |

Table 4

Results of factor analysis: Internet users' perceived credibility of news-related blogs

| | |
|---|-------|
| <i>Eigenvalue = 1.896, Variance explained = 63.20%, alpha = 0.708</i> | |
| News-related blogs are fair | 0.809 |
| News-related blogs are unbiased | 0.805 |
| News-related blogs are objective | 0.771 |

users' perceived credibility of news-related blogs. These factors are: Presenter/Source Factor ($\beta = -0.006$, $t = 0.838$, $p > 0.05$), Media Type Factor ($\beta = 0.032$, $t = 0.196$, $p > 0.05$), Personal Relevance Factor ($\beta = 0.384$, $t = 15.954$, $p < 0.001$), and Stylistic Quality Factor ($\beta = 0.119$, $t = 4.933$, $p < 0.001$). Therefore, RH2-1 and RH2-2 were not supported, while RH2-3 and RH2-4 were supported by the data.

Two significant predictor factors show positive signs in β coefficients, meaning that higher credibility scores predict higher positive users' perceived credibility of news-related blogs. In other words, those who emphasize personal relevance factors of blogs place more importance on the credibility of blogs and vice versa. Similarly, respondents who believed in the importance of stylistic quality tend to emphasize the perceived credibility of news-related blogs. Nevertheless, the regression analyses found that Presenter/Source Factor and Media Type Factor had no effects on users' perceived credibility of news-related blogs. Overall, the findings supported the linkage between belief factors and users' perceptions of news-related blog credibility.

To determine if belief factors predict respondents' perceived credibility of news-related blogs after taking into consideration other confounding variables, hierarchical regression analyses were conducted. The results of hierarchical regression were used to estimate the incremental and total variance associated with the variable groups and were reported in Table 6. The final betas for individual variables from final regression equation were also reported in Table 6.

A total of sixteen independent variables were selected and grouped into four blocks separately. Demographic variables (e.g., gender, education, income level, age, and innovativeness), Internet use behavior (e.g., Internet usage history and knowledge about Internet), and Internet use motivations were entered in the first three blocks. Belief factors were entered in the last block. This approach offered the most conservative test possible and ensured that any effects attributed to users' perceived credibility of news-related blogs would not be due to their relationship with other factors included in the model.

Demographic variables as a group only accounted for 4% of the variance in users' perceived credibility of news-related blogs. As indicated in Table 6, variables such as educational level ($\beta = -0.022$, $t = -0.878$, $p > 0.05$) and age ($\beta = 0.027$, $t = 1.069$, $p > 0.05$) were not significant in the final model. However, gender ($\beta = -0.147$, $t = -6.106$, $p < 0.001$), income level ($\beta = -0.229$, $t = -9.409$, $p < 0.001$), and innovativeness ($\beta = 0.290$, $t = 12.038$, $p < 0.001$) were significant in the first model. Findings suggested that not all demographic variables predicted Internet users' credibility perception (RQ 5). Two of these three significant predictor factors had shown negative signs in β coefficients, meaning that female respondents perceived the credibility of news-related blogs more negatively. Furthermore, those who had a lower educational level also perceived news-related blogs as less credible than those with a higher educational level. The positive sign in β coefficient in the innovativeness variable also suggested that the more innovative respondents were, the more likely they would perceive news-related blogs credible. Therefore, RH5-1 was supported by the empirical data.

Table 5
Regression of credibility factors

| | | | |
|--|-------------------------------------|-----------------------------------|-------------|
| Multiple R: 0.428 R square: 0.183 Adjusted R square: 0.181 Standard error: 0.630 F-value: 83.643*** Durbin-Watson = 1.774 | | | |
| | df | Sum of squares | Mean square |
| Regression | 4 | 132.752 | 33.188 |
| Residual | 1490 | 591.202 | 0.397 |
| Total | 1494 | 723.953 | |
| Credibility factors | Unstandardized coefficients β | Standardized coefficients β | t |
| Presenter/Source Factor | -0.006 | -0.005 | -2.04 |
| Media Type Factor | 0.035 | 0.032 | 1.292 |
| Personal Relevance Factor | 0.389 | 0.384 | 15.954*** |
| Stylistic Quality Factor | 0.109 | 0.119 | 4.933*** |

Notations: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 6

Hierarchical regression predicting Internet users' perceived credibility of news-related blogs

| | <i>R</i> square | Standardized β^a | <i>t</i> |
|---|-----------------|------------------------|-----------|
| <i>Model 1: F</i> = 59.104, <i>df</i> = 5/1456, <i>p</i> < 0.001 | | | |
| <i>Demographics</i> | | | |
| Gender ^a (male) | | −0.147 | −6.106*** |
| Education level ^b | | −0.022 | −0.878 |
| Age ^c | | 0.027 | 1.069 |
| Income ^d | | −0.229 | −9.409*** |
| Innovativeness | | 0.290 | 12.038*** |
| <i>R</i> after step 1 | 0.411 | | |
| <i>R</i> square after step 1 | 0.169 | | |
| <i>Model 2: F</i> = 47.456, <i>df</i> = 7/1454, <i>p</i> < 0.001 | | | |
| <i>Internet use behavior</i> | | | |
| Internet usage history ^e | | 0.077 | 3.026** |
| Knowledge about Internet | | 0.091 | 3.513*** |
| Incremental <i>R</i> square for Group 2 | 0.017 | | |
| <i>R</i> after step 2 | 0.431 | | |
| <i>R</i> square after step 2 | 0.186 | | |
| <i>Model 3: F</i> = 33.268, <i>df</i> = 12/1449, <i>p</i> < 0.001 | | | |
| <i>Internet use motivations</i> | | | |
| Entertainment Factor | | 0.166 | 6.171*** |
| Habit Factor | | −0.039 | −1.419 |
| Social Factor | | 0.065 | 2.412* |
| Information Factor | | −0.081 | −3.100** |
| Escapism Factor | | −0.039 | −1.498 |
| Incremental <i>R</i> square for Group 3 | 0.030 | | |
| <i>R</i> after step 3 | 0.465 | | |
| <i>R</i> square after step 3 | 0.216 | | |
| <i>Model 4: F</i> = 36.994, <i>df</i> = 16/1445, <i>p</i> < 0.001 | | | |
| <i>Credibility factors</i> | | | |
| Presenter/Source Factor | | 0.014 | 0.566 |
| Media Type Factor | | 0.004 | 0.156 |
| Personal Relevance Factor | | 0.268 | 10.931*** |
| Stylistic Quality Factor | | 0.090 | 3.903*** |
| Incremental <i>R</i> square for Group 4 | 0.075 | | |
| <i>R</i> after step 4 | 0.539 | | |
| <i>R</i> square after step 4 | 0.291 | | |

^a Coded as 0 = female, 1 = male.^b Coded as 0 = less educated (from senior high school to junior college level), 1 = more educated (from university to post-graduate level).^c Coded as 0 = young (15–19 years old), 1 = old (above 20 years old).^d Coded as 0 = less affluent (below NTD\$10,000), 1 = affluent (above NTD\$10,000).^e Coded as 0 = less experienced (below 1 year), 1 = more experienced (more than 1 year).* *p* < 0.05.** *p* < 0.01.*** *p* < 0.001.

Variables related to Internet use behavior were considered next. The incremental *R* square is 0.017. Internet usage history ($\beta = 0.077$, $t = 3.026$, $p < 0.05$) and knowledge about Internet ($\beta = 0.091$, $t = 3.513$, $p < 0.05$) were significant. Therefore, RH5-1 and RH5-2 were supported. Apparently, since blogs are distributed through the Internet, users' Internet usage history and knowledge about Internet would have effects on their perceived credibility of news-related blogs, as indicated in Fig. 1. The result also suggested that the greater amount of experience and experience that users spent on the Internet, the more positive their perceived credibility of news-related blogs. Thus, both RH5-2 and RH5-3 were supported by our data.

Incremental *R* square for Internet use motivation factors was 0.030. Among five Internet use motivation factors, three motivation factors, Entertainment Factor ($\beta = 0.166$, $t = 6.171$, $p < 0.001$), Social Factor

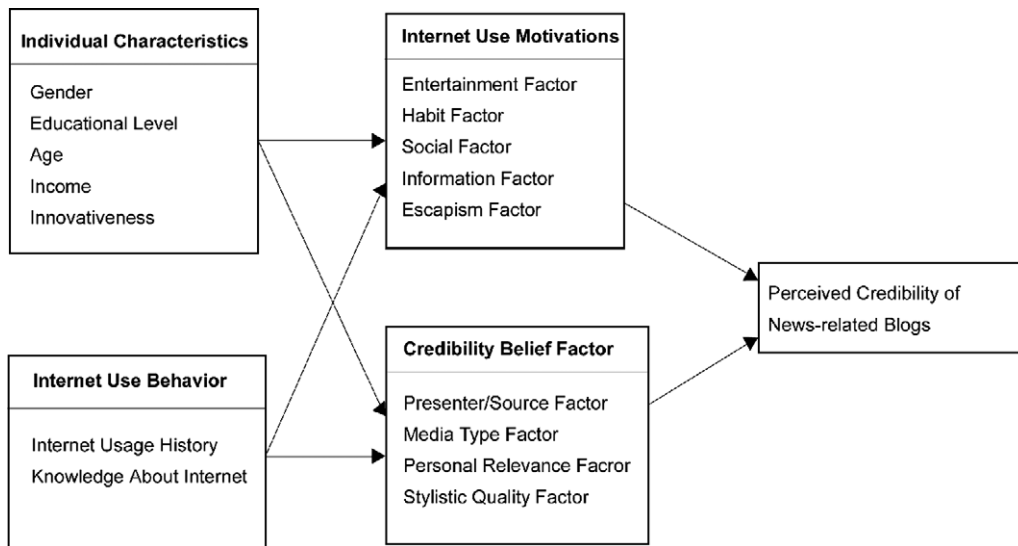


Fig. 1. Theoretical model.

($\beta = 0.065$, $t = 2.412$, $p < 0.05$), and Information Factor ($\beta = -0.081$, $t = -3.100$, $p < 0.001$) were significant predictors of users' perceived credibility of news-related blogs. However, two other motivation factors were not significant: Habit Factor ($\beta = -0.039$, $t = -1.419$, $p > 0.05$) and Escapism Factor ($\beta = -0.039$, $t = -1.498$, $p > 0.05$). The findings suggested that two out of four motive factors predicted Internet users' credibility perception. Furthermore, the positive signs in β coefficient in Entertainment and Social factors also suggested that the more respondents used the Internet for entertainment and social reasons, the more likely they would perceive news-related blog credible. On the other hand, the negative sign in β coefficient in Information Factor suggested that respondents who used the Internet for information-seeking purposes would perceive the news-related blogs less credible.

Incremental R square for belief factors was 0.075. Belief factors explained the greatest amount of the variance in all four blocks of variables included in the regression model. Two out of four belief factors were significant in the final model. While Personal Relevance and Stylistic Quality factors were significant predictors, Presenter/Source and Media Type factors were not significant.

The full model explained 29.1% of total variance in individual's perceived credibility of news-related blogs. After controlling all possible confounding variables, the predictive impacts of belief factors on users' perceived credibility of news-related blogs remained stable. The findings suggested the robustness of the theoretical link between belief factors of news-related blogs and users' perceived credibility of news-related blogs.

5. Discussions and conclusion

5.1. Belief factors affecting news-blog credibility

A study conducted by [Princeton Survey Research Associates \(2002\)](#) for Consumer WebWatch found that, among 1,500 Internet users interviewed, only 29% of respondents said they trusted the websites, while 33% said they trusted advices given in these sites. As perceived credibility of media leads to the trust of media, it is likely that Internet users will not trust news-related blogs and their postings if they do not think these blogs are credible. Furthermore, [Tsftati and Cappella \(2003\)](#) found that media use is related to the level of perceived trust with the media. Their study concluded that the less people trust the mainstream media, the less they will choose to expose to contents delivered through these media. Therefore, perceived credibility of news-related blogs and their contents is critical to the future development of news-related blogs to become an influential alternative medium.

According to the 2003 Pew Research Center's survey, only 4% of online users in America rely on blogs for opinions and information (Drezner and Farrell, 2004). The PEW Internet & American Life Project (Rainie, 2005) reported that 9% of U.S. Internet users read political blogs. Although both studies did not report what leads to users' lukewarm responses to blogs despite the media frenzy, it is likely that users' perceived credibility of these blogs as a reliable source of information may play an important factor. In particular, for news-related blogs, the credibility perception among Internet users about the quality of information will influence whether Internet users believe what they have read in the news-related blogs. Nevertheless, for news-related blogs to become alternative and credible online news sources, the present study represents the first exploratory attempts to examine factors influencing Internet users' perceived credibility of news-related blogs.

This study identified stylistic quality and personal relevance factors as two important beliefs that predict Internet users' credibility perception of news-related blogs. On the other hand, presenter/source and media type factors were not useful predictors. Some of the results may seem contradictory to previous studies that examine the importance of source factor (Sundar, 1998, 1999) or media factor (Newhagen and Nass, 1989) in determining users' credibility evaluation of the online news. Nevertheless, as Burbules (2001, cited in Warnick, 2004, p. 259) pointed out, credibility judgment of a website will depend on social and normative factors that are associated with the nature of the Internet environment as well as values and priorities related to community values and context. While the source/presenter factor was found to be important among earlier Internet/online news information studies (Sundar, 1998, 1999), its perceived importance may decrease due to the new Internet environment where author identity and site sponsorship are not clearly indicated (Warnick, 2004). Furthermore, news-related blogs do not have experienced editors functioning as a gatekeeper as in traditional news media to control the quality of the news and the identity of news sources. Therefore, even if the author identity is provided in a blog, it is less likely for the readers to evaluate its authenticity. Internet users in this study reflect the changing beliefs about the importance of source/presenter factor in assessing credibility of news-related blogs. Furthermore, factors moderating Internet users' beliefs about credibility warrant more extensive and systematic research.

The lack of significance in the media type factor raises an interesting question. Newhagen and Nass (1989) suggested that audience may use different evaluative criteria to assess the credibility of information on the basis of the medium. They also argued that audience may evaluate Internet media differently from traditional media. Although the present study is not a cross-media study, the empirical finding demonstrated that Internet users' evaluation of various Internet-related media does not predict their credibility perception of news-related blogs. This finding is similar to Sundar's study (1999) that shows great similarities between factor structures that underlie audience's perception of online and print news. Therefore, it is likely that Internet users do not distinguish various Internet media because all news-related blogs demonstrate the following features: (1) interactivity; (2) hypertextuality; (3) multimodality; (4) asynchronicity (Bardoel, 2002).

The importance of stylistic quality supports previous credibility research emphasizing the importance of message attribution (Sundar, 1998, 1999). The message factor is very similar to message quality concept that affects audience's overall evaluation of news content in different media (Sundar, 1999). Slater and Rouner (Sundar, 1999) also argued that message quality assesses the stylistic quality of the message. The empirical finding from this study supports the importance of stylistic quality factor in affecting users' credibility perception. These findings also concur with what Flanagan and Metzger (2000) found that Internet users judge credibility on the basis of content quality, rather than media per se.

While Internet use motivations can predict Internet users' perceived credibility of news-related blogs, not all motivations are useful predictors. Information, entertainment, and social factors are related to perceived credibility, while habit and escapism factors are not. Interestingly, information factor negatively predicts perceived credibility of news-related blogs, while entertainment and social factors positively predict their perceived credibility. The negative credibility perception of news-related blogs among information-seeking Internet users concurs with previous studies that reported in Dutta-Bergman (2004). One explanation for this finding is that information-seeking users are more involved with the information quality. News-related blogs, as an emerging news medium, still lack the credibility that mainstream news media have. Therefore, information-seeking Internet users tend to be more critical, thus rating their perceived credibility lower. On the other hand, people who use the news-related blogs for entertainment and social purposes may not place much emphasis on the perceived credibility of news-related blogs. Regression analyses also demonstrated a bipolar judgment pattern

of perceived credibility between information-seeking (with a negative β coefficient) and entertainment/social (both with a positive β coefficient) factors. This study further extends the uses and gratifications framework to study the effects of users' gratifications on perceived credibility of the Internet and blogs.

Among five demographic variables included in the hierarchical regression model, gender, income, and innovativeness were found to predict perceived credibility of news-related blogs. The data also show that female, lower income, and less innovative users tend to perceive news-related blogs less credible. Previous media credibility studies (Johnson and Kaye, 2000, p. 867) found that males and those with higher education and income levels tend to be more critical of the media contents. Nevertheless, the media in their study refer to traditional newspaper and magazine that have been widely adopted. On the other hand, the news-related blog is still a relatively new Internet application. Although Internet users are considered to be innovative, the rapid growth of Internet population is likely to encompass users with diverse profiles. Therefore, among heterogeneous Internet population, it is likely less innovative Internet users (often represented by lower income and educational level and less innovative) will be more critical of news-related blogs.

Flanagin and Metzger (2000) found that the experience of Internet users influences their perceived credibility of the Internet as a source of information. Their findings suggested that more experienced users tend to judge the Internet as a credible source of information. In this study, Internet usage behavior is positively related to perceived credibility of news-related blogs. The amount of time spent on the Internet positively predicts their perceived credibility. Similarly, the more knowledgeable Internet users are, the more likely they will perceive news-related blogs as credible. Similarly, Kim et al. (2000) also established the positive relationships between online poll experience and its perceived credibility. These findings are consistent with previous credibility studies that demonstrate positive correlations between perceived credibility and usage (Flanagin and Metzger, 2000).

This study intends to extend the theoretical frameworks and measurements previously developed for the study of traditional as well as Internet media. The study suggests a model that can be used to predict Internet users' perceived credibility of news-related blogs. While belief factors are useful predictors, the study found that the criteria to assess credibility are also affected by use motivations and demographic variables. Further studies should be conducted to examine the interactions among these factors. Moreover, De Mooij (2005) and Hofstede (2001) have studied the effects of consumer cultural values on issue perception differences and adoption of new technologies. Therefore, it is likely that users' cultural values, along with macro-level factors (e.g., government control of information, journalistic practices, and credibility of media institutions), are likely to play a crucial role in researching Internet users' credibility perception of news-related blogs. Therefore, future cross-national research should broaden our understanding of the potential of news-related blogs.

5.2. Limitations

Several limitations of this study should be taken into account in evaluating the results reported in this study. Although the sample in this study is comparable to the characteristics of Internet users as presented in other national survey (Yam, 2004), a convenience sample of Internet users has limited the generalizability of these findings. Furthermore, a tilt toward college students has made the findings of the present study more appropriate to future research focusing on student population. Non-random sample also lacks the representativeness of a cross-sectional population. In addition, the convenience sampling method fails to achieve the randomness that enables us to generalize our findings to general Internet population. In addition, self-reported data on Internet usage are less than ideal. However, Ferguson (1994) and Bellamy and Walker (1996) pointed out self-report scales provide a conservative and acceptable measure of actual media behavior.

Another limitation is the approach employed to measure credibility assessment. Warnick (2004) critiqued that many Internet credibility studies often treated the evaluation process as field independent and employed global standards to measure different websites. Nevertheless, criteria and the process of evaluation should be treated as field dependent, in that users' judgment of credibility will rely on the purposes and function of the website (Warnick, 2004). Similarly, Schweiger (2000) also pointed out that the study of media credibility tends to be problematic because the failure among respondents to differentiate between personal and particular use experience from abstract evaluation of the media. The present study did not ask participants to differentiate between various types of news-related blogs. Instead, participants were asked to evaluate news-related blogs as a whole. This may pose problems in data interpretation.

In spite of these limitations, this research has contributed to our understanding of Internet users' perceived credibility of news-related blogs. Findings for this study have implications for theoretical model trying to explain factors influencing users' perceived credibility of this emerging applications on the Internet. In addition, the present study addresses Internet users' general perception of news-related blog credibility. As a result, vehicle/format-specific issue that refers to a specific blog is not dealt with in this paper. Other characteristics related to news-related blogs could include interactivity, personalization, customization, and multimedia information formats. Future research should explore different characteristics of news-related blogs and their impacts on users' perceived credibility of news-related blogs.

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