Measuring Social Media Credibility:
A Study on a Measure of Blog Credibility

by

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Abstract

As individual members of publics now have greater expectations to have substantial interactions with organizations, especially by using the digital/social media, communication professionals have been looking for ways to enhance these interactions. After reviewing previous literature, this current study intends to show that credibility of social media is one of the key factors initiating and further increasing public engagement and communication effectiveness in the digital/social media. Among various social media, this study limits its scope to blogs, which have been considered to be the most pertinent social medium used in the field of communication management. Previous research on blog credibility has reported limited reliability of measures, partly due to the use of general credibility measures that have been developed to assess credibility of traditional news media. An effective way to measure blog credibility is hard to achieve without a valid, reliable method to insure that measurement. This study has developed and validated a 14-item measure of blog credibility and by the usage of focus groups and a survey. This study also discusses the implications practical aspects of measuring blog credibility.

Key Words: Credibility, Blogs, Social Media, Blog Credibility

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As the "boundary spanner" that mediates an organization and its strategic publics (Cutlip, Center, & Broom, 2000), the public relations function essentially deals with the credibility of the organization and the communicated messages. Therefore, to manage organization-public communication strategically, credibility management is the key. In communication research, the credibility of the communicator has widely been suggested to influence the processing of the communicated content and the change of audience attitudes and beliefs (Burgoon & Hale, 1984; Hovland, Janis, & Kelley, 1953). Recently, it has been suggested that the credibility of the channel/medium of communication influences the selective involvement of the audience with the medium (Metzger et al., 2003). Accordingly, individual audiences are paying closer attention to the media that they perceive to be credible. When individual audiences rely more on a certain communication medium for information seeking, they are likely to rate the medium more credible than other media (Johnson & Kaye, 1998; Kiousis, 2001).

Fast-developing technology, especially in the digital media environment, has empowered individuals and other stakeholder organizations to be creators of communication messages rather than remaining as the static receiver of communication content (McClure, 2007, February 26). As a result, unlike the old days when organizations were often the only senders of messages, the communication process has increasingly become multidirectional, amplifying horizontal influences among individual public members themselves. Additionally, as the influence of emergent social media continues to increase, individual members of publics are starting to demand participatory communication with and from organizations (Edelman, 2008, October 30).

In this era of social media, the demand for a public relations function based on direct and trust-based communication with publics for better relationship building is great (Breakenridge, 2008). At the same time, the emergence of social media can also provide one of the best venues for new public relations (Breakenridge, 2008; Scott, 2007; Weil, 2006), which can function as the hub of dialogic, participatory communications between publics and organizations. In either case, garnering credibility from publics is essential.

Instead of being passive recipients of messages, publics are now active enough to select communication channels, especially when they care about an issue (Rubin, 2002). Unlike traditional media such as radio or television, the use of social media by individuals is increasingly becoming "instrumental" (Rubin, 1984), depending on their motivations for communication (functionality), purposive or planned nature of communicating (intentionality), communication choice (selectivity), and involvement with media. Given such audience selective and active media use, communication without the creation and cultivation of credibility for better public engagement or brand-building can be hardly effective (Holtz & Havens, 2009).

Among various venues of social media, the researcher considers blogs to be most pertinent for the focus of this study. Blogs are driving "PR 2.0.", as making a clear departure from previous practice into much more interactive, spontaneous communication with publics (Scoble & Israel, 2006; Weil, 2006; Yang & Lim, 2009). According to a recent survey of public relations departments in the United States, 49 percent of respondents indicated their public relations departments have been using blogs for practice (PR News, 2009, August 17). Therefore, this current study will be strategically delimited to study a measure of blog credibility.

However, despite the plethora of discussion on social media credibility in the blogosphere (Rowse, 2006, April 24), virtually no empirical research exists to validate the measurement system of social media credibility. With the emergence of "new" audiences and "new" media, the concept of credibility should be updated to the communication needs and motives of new audiences as well as new functions of new media. Traditionally, in communication research, the credibility of the communicator has been highlighted by trustworthiness and expertise. In the contemporary blogosphere, however, blogger credibility has often been replaced with emergent terms, such as "authenticity," "legitimacy," "transparency," "authority," or "passion." For example, the level of authenticity in the communicated messages now decides the blogger's credibility, rather than the communicator himself/herself (Banks, 2008; Weil, 2006). Additionally, the legitimacy of the blogger is enhanced by the personal passion and devotion to the communicated content bring out the legitimacy of the blogger, especially when the blogger has authority about the knowledge to audiences who care (Scoble & Israel, 2006).

Without valid and reliable measurement of credibility, the management of credibility in social media will be hardly feasible. Therefore, this current research aims to develop a new measure of blog credibility from the perspective of new audiences, using exploratory focus groups followed by a confirmatory survey.

LITERATURE REVIEW

The assessment of credibility in the online environment is often much more complex than in previous media contexts due to "the multiplicity of sources embedded in the numerous layers of online dissemination of content" (Sundar, 2008). Credibility has been discussed in the three perspectives of communication: medium credibility, message/content credibility, and source

credibility (Metzger et al., 2003). *Medium* credibility is the perceived level of credibility that individual users have of a specific medium, such as newspapers, television, the Internet, or blogs (Newhagen & Nass, 1989; Sundar & Nass, 2001). *Message* credibility is the perceived credibility of the communicated message itself, such as informational quality, accuracy, or currency (Metzger et al., 2003). Past research on *source* credibility has focused on the expertise or trustworthiness of the source as the likelihood to provide credible information (Armstrong & Nelson, 2005; Berlo, Lemert, & Mertz, 1969; Burgoon & Hale, 1984; Flanagin & Metzger, 2003; Hovland, et al., 1953; McCroskey & Richmond, 1996).

Past research on blog credibility has focused on credibility of blog medium compared with traditional media and the Internet. Researchers used a *general* measure of medium credibility across different media, generally used to measure traditional news media (Banning & Sweetser, 2007; Johnson & Kaye, 1998, 2009; Thorson, Vraga, & Ekdale, 2010). For example, Thorson et al. (2010) measured blog credibility into a single dimension using a scale comprised of six semantic differentials: fair/unfair, biased/unbiased, accurate/inaccurate, doesn't tell the whole story/tells the whole story; cannot be trusted/can be trusted, and balanced/imbalanced, which was developed by Meyer (1988) to evaluate credibility of news papers. Banning and Sweetser (2007) used a general media credibility measure to assess blog credibility: factual; concerned about making profits; invading people's privacy; concerned about the community's well-being; and trusted. Johnson and Kaye (2009) also used a similar measure for credibility of traditional media, comprised of believability, fairness, accuracy and depth.

As a result of using general credulity measures of traditional news media, previous research on blog credibility reported limited measurement reliability. For example, Banning et al. (2007) noted: "Cronbach alphas were run on the five credibility questions for the each of the articles in the instrument, with the result that the Cronbach alpha for the first article was .65 while the Cronbach alpha for the second article was .54. These scores were consistent with those reported in previous studies." (p. 460). Given that the acceptable reliability cutoff point is often at least greater than .80 (Tabachnick & Fidell, 2001), the researcher noted the need to develop a blog-specific measure of credibility based on a Grounded Theory approach and coming from blog users' perspectives. The current research did not examine blog medium credibility, as there are several previous studies on the topic (Banning & Sweetser, 2007; Johnson & Kaye, 1998, 2009; Thorson, et al., 2010). The purpose of this study is to examine the credibility within the realm of blogs rather than across different media. Thus, the focus of the current study is to develop and test a measure of blog credibility, delimiting its scope to blog source credibility and blog message/content credibility.

Blog Medium Credibility

Blogs have often been doubted as a credible communication medium, as there is no clear or "legitimate" gatekeeping process for content production and information sharing. Nonetheless, it is important to understand credibility judgments from blog users' perspectives, as credibility judgments of blogs depend on who is being studied (Johnson & Kaye, 2009). When individual users *rely* more on a specific medium for information, they consider it to be more credible than other media (Flanagin & Metzger, 2000; Johnson & Kaye, 1998; Kiousis, 2001). Therefore,

individual blog readers who rely on blogs for information are likely to consider blogs as more credible sources than other media.

The peer review process in the blogosphere can lead to the increase in the medium credibility of blogs with blog readers considering blogs as moderate to very credible (Johnson & Kaye, 2004). Among actual blog readers, Banning and Sweetser (2007) found that blogs were rated more credible than any other online news source (e.g., online cable TV news, online news magazines, online radio news) and even over traditional news sources. Experienced Internet users rated blogs as more credible, due to their familiarity with the purpose of blogs and the style of blog writing, (Hostway, 2005), and the fact they do not follow traditional news values such as fairness, balance, and objectivity (Johnson & Kaye, 2009). Furthermore, Internet users consider blogs to be credible because blogs are often independent from mainstream, corporate-controlled media (Andrews, 2003), which can allow bloggers to write in-depth, opinionated messages in a transparent manner (Scoble & Israel, 2006). Such transparency is the key factor driving blog readers credibility judgments and audience engagement in blog-mediated messages (Yang & Lim, 2009).

Blog Source Credibility: Blogger Credibility

Previous studies have examined blog source credibility. However, most of previous research relied upon existing source credibility measures of traditional news media or the Internet, without considering blog users' perspectives. The problem with these previous approaches is that without understanding how and why people find information in blogs more trustworthy than other information sources, it is almost misleading to measure the level of

credibility using traditional credibility measures. As previously noted, it is critical to reflect blog users' perspectives in examining how credibility judgments are made.

Yang and Lim (2009) noted that individual users tend to trust organizations when they perceive greater level of *interactivity* in social media; credibility of social media is critical in enhancing such interactivity. Yang et al. found in their experimental research of blog-mediated public relations that interactivity was strongly associated with trust. However, no significant effect of blogger credibility was found. In order to measure blogger credibility, the authors used a traditional measure of source credibility in relational communication (Burgoon & Hale, 1984): trustworthy, expert, reliable, intelligent, professional and experienced. Yang, Kang, and Johnson (2010) studied the effect of blog-mediated communication in mitigating individual stakeholders' negative emotions and used the same 6-item measure of blogger credibility. Again, Yang et al. did not find any significant effects of blogger credibility on key variables of the study, such as audience engagement with crisis messages and their reduction of negative emotions. Therefore, Yang et al. called for a Grounded Theory approach (Glaser & Strauss, 1967) from blog users' perspectives to develop a valid measure of blogger credibility.

Blog Content Credibility

Minimal empirical research on blog content credibility exists currently. On the conceptual level, a limited number books and blog posts have highlighted key attributes that increase blog readers' credibility judgments about blog content. For example, Banks (2008) interviewed 30 leading bloggers and suggested the following attributes regarding blog content credibility: credible blog contents are *focused* (i.e., delving into a specific time; establishing the niche of personal passion), *authentic* (i.e., exclusive coverage of an interesting topic) and

insightful (i.e., in-depth opinions and rich personal experience). Rowse (2006, April 24) has

added *consistency*:

> As I analyze which bloggers I see as credibly in the fields that I'm interested in one of the
>
> factors that I see in all of them is a level of consistency… they don't contradict
>
> themselves in what they present, they are not swayed by popular opinion of them and
>
> they produce quality content regularly over a long period of time. (para. 10)

Additionally, *timeliness* of blog content—i.e., frequent updates of content in the focused area—

has been suggested as a key trait of blog credibility (Banks, 2008; Weil, 2006).

METHODOLOGY

Preliminary Focus Groups

In order to explore key attributes of blog credibility, the researcher developed focus

groups with blog users in November 2009. Each of the five focus groups was comprised of 7 to

10 participants, with 41 blog users participating in total. According to Lenhart and Fox (2006), in

early 2006 from *Pew Internet & American Life Project*, more than half (approximately 54

percent) of bloggers were under the age of 30. Therefore, key criteria of selecting focus group

participants were experience of using/reading blogs on a regular basis, among individuals in their

20s to 30s, in conducting the single-category design of focus groups. The average age of focus

group participants was 25; more female participants (about 68 percent) attended focus groups.

As a pre-session strategy, a nominal group technique was used before focus group

sessions were held: Focus group participants were asked to make a list of key attributes of blog

credibility in general and then to rate the importance of each listed attribute. After the pre-session

nominal group technique, for focus group sessions were semi-structured with a questioning route comprised of one opening question, one introductory question, and four key questions about credibility judgments in blogger source and blog contents; and one ending question (i.e., "If you have a chance to give advice to companies, what advice would you give them to improve their communication credibility on social media?"). Focus group sessions lasted an average of one hour. An experienced blog/social media user was selected as a moderator for the focus group and trained in advance about the purpose of the research, focus group questioning route and other moderating skills. Snacks and meals were offered during the session to stimulate conversation. After each focus group, abridged transcripts were constructed for data analysis.

Several participants indicated that the *source* of blogs is critical. Accordingly, they made judgments about source credibility "at first" to determine if they would read the blog or not. The participants, who often prefer reading blogs over traditional news media, generally indicated that blogs are a credible medium than other participants. Medium credibility of blogs was assessed within other types of social media. In general, the order of social media credibility places blogs higher than Twitter and Facebook, although it still depends on the kind of information users want. Regardless of the different types of social media, focus group participants indicated that companies need to be more interactive. Participants indicated a need for companies to be more personal and approachable on social media sites in order to put a face to a faceless company, as this serves as the basis of their trust toward companies.

The participants who write for blogs or have other substantial familiarity with blogs suggested that credible bloggers are *passionate*, *reliable* and *transparent*, rather than applying traditional source credibility attributes such as perceived expertise on the basis of blogger's

educational or professional backgrounds. For example, some participants noted that they do not

trust such expertise information because people could lie in their bios on social media and say

they have expertise or degrees. Additionally, other participants also shared that their credibility

judgments of bloggers are often derived from the extent of the bloggers' *knowledge* and

influence in the specific field of blog topics. Several participants indicated that they do not read

any blog on a regular basis unless bloggers are either personally known or leading/influential

individuals, or people with *authority* in the fields of their personal interests.

In regards to blog content credibility, strongly shared opinions existed among focus

group participants that credible blog contents are consistent and timely delivered of authentic,

insightful, and informative contents. This becomes a competitive advantage or the niche from

other traditional news media. When blogs covered the focused issue with dedicated efforts (e.g.

frequent updates, longevity of blogs, or interactive features and professional design of blogs),

participants also indicated that they found the content of these blogs as informative and insightful

as well. Among those who do not heavily rely upon blogs for information search and sharing,

common journalism criteria for information credibility were still applied for blog content

credibility: accuracy and fairness of information are still critical in credibility judgments of blogs.

"It's the same as traditional journalism. There will always be things that you find out eventually

weren't true. So time will always tell the truth. Inaccurate and biased information hurt blogs'

credibility significantly," responded a participant, who said she often checks where the facts or

statistics come from.

On the basis of preliminary focus groups and literature review, the researcher developed a

list of key attributes in blogger source credibility and blog content credibility. As previously

noted, blog medium credibility was not examined on the survey, as the focus of the study was not to compare blogs' credibility with other media.

Survey Instrument

Following the results of exploratory focus groups and existing literature, the researcher developed a measure to gauge blog credibility. The key purpose of this survey was to confirm reliability of the proposed measure of blog credibility. Measurement instrument describes the extent to which the respondents recognize the importance of each of the following 14 attributes in evaluating credibility of blogs that they have been reading, in terms of two theoretical dimensions (i.e., blogger credibility and blog content credibility), using 7-point Likert-type scale:

1. Blogger (source) credibility: knowledgeable; influential; passionate; transparent; and reliable (5-item measure)
2. Blog message/content credibility: authentic; insightful; informative; consistent; fair; focused; accurate; timely; and popular (9-item measure)

Survey Administration

In April 2010, a survey was conducted with individual users of social media for one week. Participants completed a self-administered online questionnaire. A sample of 278 social media users was taken using network sampling technique. The researcher posted a message to Twitter and Facebook with a link to the online questionnaire asking social media users to participate in the current study.

Demographic Profiles

Demographic information was collected in terms of age (i.e., 18 to 25 = 45 percent; 26 to 30 = 31 percent; 31 to 45 = 20 percent; Over 45 = 4 percent), gender (i.e., female = 68 percent), educational level (i.e., Mode is 4-Year college degree = 32 percent), and income level (i.e., Mode is $50,000 to $74,999 = 41.5 percent). Among survey participants, 33 percent of them indicated that they read blogs every day, followed by "a couple of times a week" (29 percent), "rarely, only if I come across one randomly" (29 percent), and "once a week" (9 percent). About one percent of sampled participants (n = 28) indicated that they never read blogs, so the researcher did not analyze the results of their questionnaire. Therefore, the final sample size was adjusted to n = 250.

Statistical Procedures for Data Analysis

AMOS 18.0 with Maximum Likelihood (ML) estimation was used as the statistical package to analyze the data for hypothesized model. For scale purification and verification, the researcher used both exploratory and confirmatory factor analyses. Exploratory factor analysis (EFA) establishes a preliminary test of blog credibility measures by identifying items with low factor loadings and determining whether each measurement item loaded on its intended factor suggested by theories (Tabachnick & Fidell, 2001). Therefore, the primary goal of this step is to assess (a) the dimensionality of measurement items into two theoretical factors and (b) the sound association of each measurement item in their intended factor (i.e., standardized factor loading greater than .65)(Hair, Anderson, Tatham, & Black, 1998).

Next, confirmatory factor analysis (CFA) examines and confirms the overall validity of the measure the theoretical structure (Byrne, 2001). First, in order to establish discriminate validity (i.e., difference between factors or latent variables), the researcher will compare the

goodness of data-model fits across different models with variant factor structures (i.e., in this case, one-dimensional model and the proposed two-dimensional model). After establishing the proposed two-dimensional model can be retained as a more reliable model, the researcher will examine construct validity (i.e., reliability between items or indicators) of the proposed measurement model.

Data-Model Fit Indexes

The study used four goodness-of-fit indexes to evaluate model fit: χ^2/df, the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the SRMR (Standardized Root Mean Square Residual). As a parsimonious index, χ^2/df needs to be less than 3 for a sound model fit (Byrne, 2001; Kline, 1998). Furthermore, aaccording to Hu and Bentler's (1999) joint-cutoff criteria for fit indexes in structural equation model (SEM), if the SEM model has CFI $\geq$ .96 and SRMR $\leq$ 1.0 or RMSEA $\leq$ .06 and SRMR $\leq$ .10, it can be suggested that the fit between the data and the proposed model is retainable as a valid model.

Data Screening and Mediation Test: Multivariate Normality and Bootstrapping

Before the analysis, the assumption of multivariate normality was tested. A common procedure to address multivariate nonnormality is bootstrapping (Byrne, 2001). This study performed a bootstrap on 1000 samples, using the ML estimates with bias-corrected 95% confidence intervals for each of the bootstrap estimates. The bootstrap results did not deviate from those based on normal theory; none of the bias-corrected 95% confidence intervals for significant paths in the hypothesized models included zero, suggesting that the significant paths indeed remained significant in the bootstrapping procedure.

RESULTS

Exploratory Factor Analysis

The researcher employed exploratory factor analysis in order to establish the dimensionality of the data and sound association between measurement items in their intended factors. As Table 1 indicates, the results supported the two-dimensional structure of blog credibility measure into *blogger credibility* and *blog content credibility*. Also, Figure 1 illustrates that there are clearly two discriminant groups of measurement items into the proposed structure.

Descriptive Statistics with Measurement Reliability

Blogger credibility. This dimension was used to measure the importance of each attribute in the respondents' answers making judgment of blogger credibility, using 7-point Likert-type scale (i.e., 1 = not important at all; 4 = neutral; 7 = very important): (a) knowledgeable ($M = 6.28$; $SD = .67$), (b) influential ($M = 5.79$; $SD = .64$), (c) passionate ($M = 6.01$; $SD = .64$), (d) transparent ($M = 6.29$; $SD = .71$), and (e) reliable ($M = 6.11$; $SD = .72$). These 5 items loaded on one factor suggesting this measure is uni-dimensional, which explained about 60.80 percent of the total variance. With regard to reliability, the resulting measure led to a Cronbach's alpha of .84.

Blog content credibility. Next, this dimension was used to measure the importance of each attribute in the respondents' making judgment of blog content credibility, using 7-point Likert-type scale (i.e., 1 = not important at all; 4 = neutral; 7 = very important): (a) authentic ($M = 5.81$; $SD = .80$), (b) insightful ($M = 5.91$; $SD = .78$), (c) informative ($M = 5.94$; $SD = .75$), (d) consistent ($M = 5.63$; $SD = .80$), (e) fair ($M = 5.62$; $SD = .73$), (f) focused ($M = 5.65$; $SD = .71$);

(g) accurate ($M = 6.06$; $SD = .76$); (h) timely ($M = 5.82$; $SD = .77$); and (i) popular ($M = 5.79$; $SD = .70$). These 9 items loaded on one factor suggesting this measure is uni-dimensional, which explained about 65.46 percent of the total variance. With regard to reliability, the resulting measure led to a Cronbach's alpha of .93. Table 2 reports correlations between measurement items.

Confirmatory Factor Analysis

Following Byrne (2001), the CFA model was slightly modified by allowing the following error correlations among the observed items within the same subscale: e6-e7, e6-e8, and e9-e10 on the basis of data modification procedure. To the researcher, such error correlations are theoretical. "Authentic" (e6) is positively correlated with "insightful" (e7) and "informative" (e8), while "consistent" (e9) is positively associated with "fair" (e10).

To examine discriminant validity of two factors (i.e., "blogger credibility" and "blog content credibility"), the researcher compared goodness of data-model fits across different models with variant factor structures (i.e., in this case, one-dimensional model and the proposed two-dimensional model).

First, the uni-dimensional model did not have sound data-model fits: $\chi^2 = 250.52$, $df = 74$, $p < .001$, $\chi^2/df = 3.93$, CFI $= .854$, RMSEA $= .128$ (90% CI: .113, .143), and SRMR $= .096$. The lowest standardized factor loading was .44 ("passionate"), while all loadings in were significant at $p < .001$.

However, when applying two-dimensional model (see Figure 2), it turns out that data-model fits of the CFA model was satisfactory enough to be retained as a valid model: $\chi^2 = 113.77$,

$df = 73$, $p < .001$, $\chi^2/df = 1.56$, CFI $= .973$, RMSEA $= .056$ (90% CI: .035, .075), and SRMR $= .042$. The lowest standardized factor loading was .62 ("passionate"), while all loadings in were significant at $p < .001$. In terms of χ^2-df tests, this two-dimensional model is suggested to have sound discriminant validity of the two factors. This model with two factors performs much better than the earlier model with one factor structure: χ^2_{change} (1, n = 250) = 136.75, $p < .001$. Also, all data-model fit indexes became significantly better in the two-dimensional model: CFI$_{change}$ = .119, RMSEA$_{change}$ = -.072, and SRMR$_{change}$ = -.054.

In the final CFA model with two factors (see Figure 2), all factor loadings are greater than .60 and significant at the .001 level, suggesting that each of the two factor has sound construct validity. In terms of AVE (average variance extracted), the factor of blogger credibility has .512, while the factor of blog content credibility has .602. This suggests that both factors extract more common variances to explain the theoretical concept than error variances.

The researcher noted, from the final measurement model, that *authority* (to be "influential") and *reliability* of the blogger are highlighted in the blogger credibility factor, and that *accuracy* and *focus* (as "the niche" of personal interests and experience) are key indicators of the blog content credibility. Also, according to a factor plot (see Figure 1), the researcher found that authority and reliability are very proximate, suggesting these two attributes are strongly associated with each other. For example, a blogger with authority can be perceived to be more reliable than other bloggers. Among indicators of the other factor (i.e., blog content credibility), Figure 1 illustrates that three attributes ("authentic", "insightful" and "informative") are proximate indicators, while "focused", "consistent", and "fair" are strongly associated.

DISCUSSION

The purpose of this research was to develop and test a measure of blog credibility in multiple dimensions with blog users' perspectives reflected. Several previous studies on blog credibility were conducted to compare credibility of blogs with other traditional news media (Banning & Sweetser, 2007; Johnson & Kaye, 1998, 2009; Thorson, et al., 2010). For the purpose of comparative analysis, past research used general measures of medium credibility to test traditional news media, such as Meyer's (1988) measure of media credibility. Other researchers (Yang, et al., 2010; Yang & Lim, 2009), also used exiting measures of communication source credibility, such as in relational communication (Burgoon & Hale, 1984). Previous research cited had limited reliability of the measure or failed to find significant effect of blog credibility despite clear theoretical reasons. Therefore, researchers (e.g., Yang et al, 2010) called for a more grounded approach, emergent from blog users' perspectives, to develop and test a measure of blog credibility. This current study was aimed to fill a void in previous research on blog credibility.

Why is it important to develop a sound measure of blog credibility for the practice and study of public relations or communication management? Communication professionals have been facing various challenges in this new era of digital/social media to find ways to effectively engage stakeholders that may lead to organizational support. As individual stakeholders expect to have substantial interactions with other stakeholders, as well as with organizations, organizations are also increasingly demanded to offer venues for two-way communication allowing anyone to participate. Consequently, the increased interactions among stakeholders and organizations can provide a sound basis to build relational trust, which can be a crucial

antecedent that leads to higher engagement by publics. Nonetheless, the missing link still

pertains as how these organizations can bring individuals to various social media that

organizations use for relationship management. In other words, what are key attributes of

successful social media that initiate interaction/relational loops with individual stakeholders?

Past studies suggest that credibility is the key. Instead of being a passive recipient of

messages, individual members of publics are now active enough to select communication

channels, especially when they care about an issue (Rubin, 2002). When individuals consider a

medium to be more credible than other media, they are also more likely to rely on that medium

for information search and sharing than other media (Johnson & Kaye, 1998; Kiousis, 2001).

Therefore, credibility can be suggested as one of the key factors driving the traffic of individuals

to organizations' social media. Management of social media credibility can also be considered

the priority for enhancing effectiveness of the entire communication management process.

Furthermore, without a valid, reliable measure of social media credibility, successful

management of social media credibility is hardly feasible.

Among various social media, this study delimited its scope to blogs. As previously noted,

blogs are one of most commonly used social media by companies; blogs are driving "PR 2.0.",

as making a clear departure from previous practice into much more interactive, spontaneous

communication with publics (Scoble & Israel, 2006; Weil, 2006; Yang & Lim, 2009).

This study conducted preliminary focus groups consistent with mainstream demographic

information of blog users (Lenhart & Fox, 2006). Focus group participants indicated blog-

specific attributes of credibility such as *passionate*, *transparent*, *influential*, *authentic*, *insightful*,

or *focused*, while emphasizing common credibility criteria such as *knowledgeable*, *accurate*, *fair*,

or *consistent*. This suggests that if a general measure of credibility is used to measure blog credibility, important aspects of blog credibility are subject to being ignored. With triangulating results of focus groups from existing literature on credibility, the researcher developed and tested a 14-item measure of blog credibility.

The results of this study are very supportive of the proposed 14-item measure of blog credibility. Reliability of this measure has been greatly improved, compared with previous research. The data supports the two theoretical dimensions of blog credibility into blogger (source) credibility and blog message/content credibility. Furthermore, the proposed measurement model was successfully validated through confirmatory factor analysis in terms of sound fits between the data and the model. According to key results of this study, *authority* (to be "influential") and *reliability* of the blogger are highlighted in the blogger credibility factor, and that *accuracy* and *focus* (as "the niche" of personal interests and experience) are key indicators of the blog content credibility. The results are consistent with previous literature on blog credibility (Banks, 2008; Scoble & Israel, 2006; Weil, 2006). In terms of relations among blog credibility indicators, the researcher also found that authority and reliability are very proximate, suggesting these two attributes are strongly associated with each other. Among indicators of the other factor (i.e., blog content credibility), the results of this study indicate that three attributes ("authentic", "insightful" and "informative") are proximate indicators, while "focused", "consistent", and "fair" are strongly associated.

Following this current study, the proposed measure of blog credibility can be applied to investigate attitudinal and behavioral effects of blog credibility. For example, after assessing blog credibility by employing content analysis or a survey with the proposed measure, future

research can examine how blog credibility brings out measurable effects such as blog traffic, degrees of interactions, or blog readers' positive attitudes and supportive behaviors. Past research has suggested that enhanced credibility of a medium is strongly associated with increased reliance on the medium for information and further behavioral outcomes. Future research can conduct empirical tests about the link between blog credibility and attitudinal/behavioral outcomes supportive to companies' brands or reputations.

Future research can also study the role of blog design or aesthetic aspects of blogs in terms of additional dimension of blog credibility. Several survey respondents indicated in their open-ended responses that aesthetic aspects of blogs or professional blog design often become a useful cue in deciding their first impressions of blogs and the basis of their credibility judgments. This response was also indicated by focus group findings. Therefore, future researchers can develop and test this additional dimension of blog credibility as blog design.

There are several limitations of the findings of this study. As the scope of this study was kept to corporate communications and the general usefulness and credibility of information that individuals find in blogs, the nature of information was restricted to contents about corporations and their activities. As often is the case, the purpose and the credibility of information tend to co-influence as the utility of information tends to affect the degree of efforts individuals exert to discern the quality of information. This indicates that depending upon the purpose for information, as previously noted, individuals' credibility judgments also tend to shift. Individual perceptions of credible information when he/she reads gaming blogs differ than when he/she reads political blogs.

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Table 1. Exploratory Factor Analysis for Measurement Items on Blog Credibility

Item	Factor Loading		Variance	α
	Blog Content Credibility	Blogger Credibility	Extracted %	
1. Knowledgeable	.26	**.73**	24.00 %	.84
2. Influential	.23	**.77**		
3. Passionate	.18	**.68**		
4. Transparent	.12	**.78**		
5. Reliable	.23	**.78**		
5. Authentic	**.77**	.10	40.24 %	.93
6. Insightful	**.81**	.15		
7. Informative	**.80**	.15		
8. Consistent	**.80**	.23		
9. Fair	**.79**	.28		
10. Focused	**.79**	.20		
11. Accurate	**.73**	.39		
12. Timely	**.74**	.32		
13. Popular	**.74**	.25		
Total Variance Explained			64.23%	

Note. Extraction method was Principal Component Analysis with Varimax Rotation.

Table 2. Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Knowledgeable	—													
2. Influential	.58	—												
3. Passionate	.37	.51	—											
4. Transparent	.51	.51	.45	—										
5. Reliable	.56	.55	.50	.54	—									
6. Authentic	.28	.31	.28	.16	.22	—								
7. Insightful	.34	.27	.29	.26	.30	.67	—							
8. Informative	.34	.37	.24	.21	.28	.65	.64	—						
9. Consistent	.39	.34	.30	.29	.36	.55	.63	.62	—					
10. Fair	.38	.39	.26	.32	.44	.51	.62	.57	.76	—				
11. Focused	.37	.30	.29	.21	.37	.50	.61	.58	.70	.70	—			
12. Accurate	.50	.41	.32	.44	.44	.53	.63	.65	.63	.67	.61	—		
13. Timely	.38	.42	.31	.37	.39	.56	.57	.64	.58	.63	.62	.67	—	
14. Popular	.27	.38	.34	.30	.40	.57	.58	.55	.59	.61	.61	.58	.61	—

Note. n = 250. All coefficients are statistically significant at the .01 level (2-tailed).
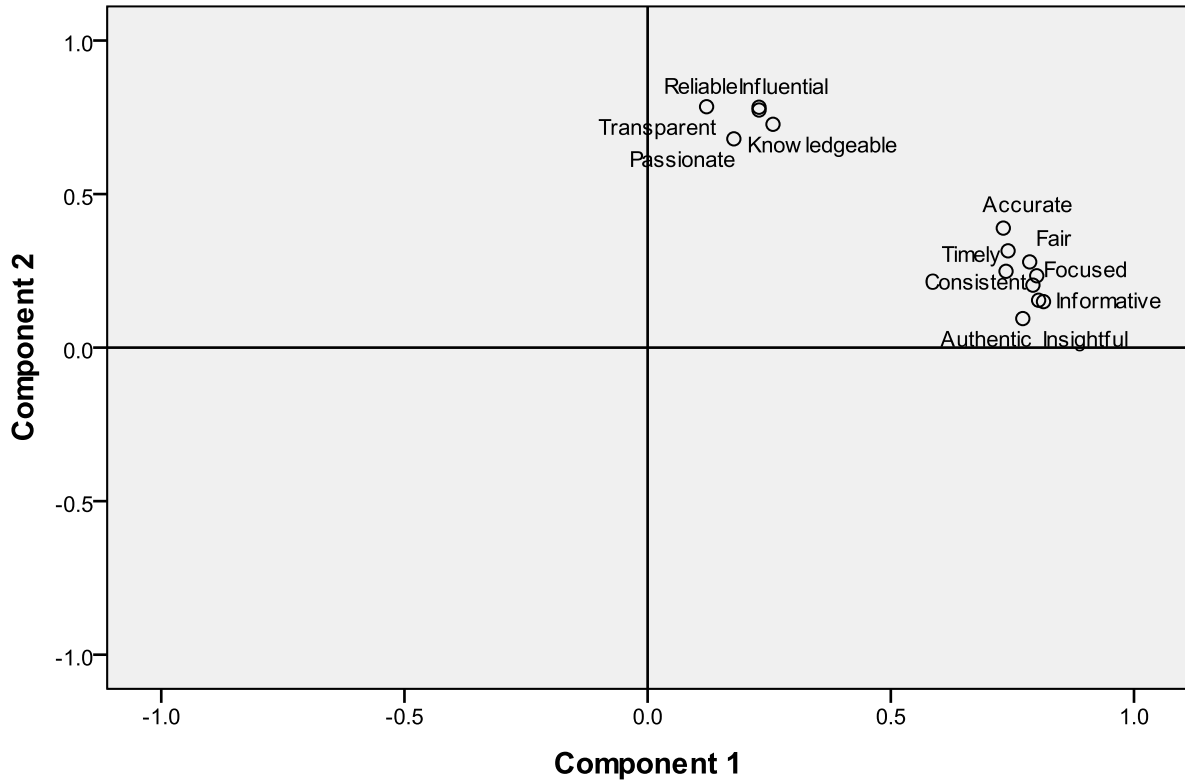
Component Plot in Rotated Space

Figure 1. Factor Plot of Blog Credibility Measurement Items.

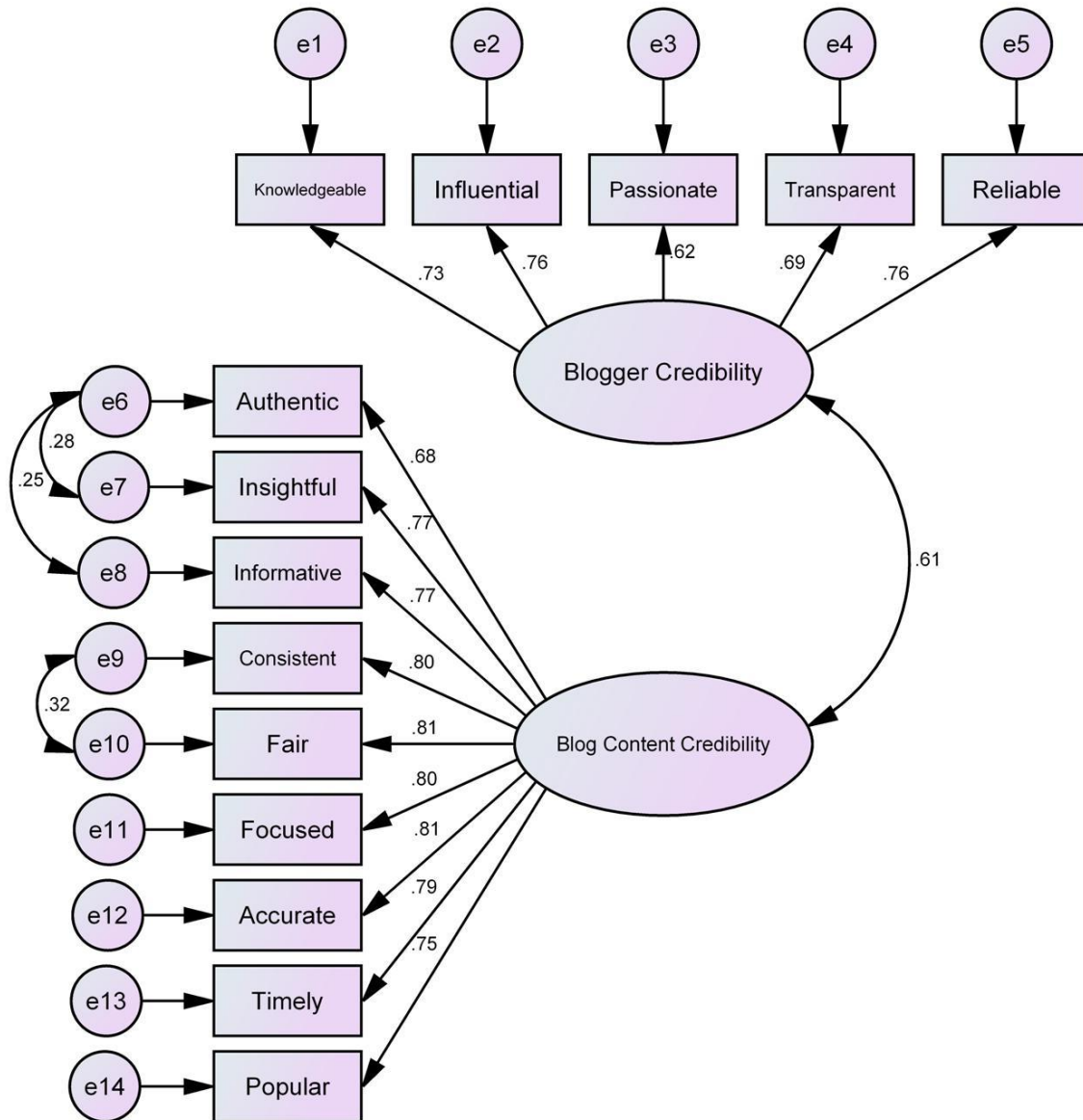Note. Extraction method was Principal Component Analysis with Varimax Rotation.

Figure 2. The Final Confirmatory Factor Analysis (CFA) of Blog Credibility Measurement Items. Note: $\chi^2 = 113.77$, $df = 73$, $p < .001$, $\chi^2/df = 1.56$, CFI = .973, RMSEA = .056 (90% CI: .035, .075), and SRMR = .042.

Measuring Social Media Credibility – A Study on a Measure of Blog Credibility
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