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## Involvement effect on high-educated tourists' perceived credibility of social media

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### ABSTRACT

Involvement has long been studied as a key factor to determine the individual's perceived credibility about particular information source. The perceived credibility of well-educated people is critical for the destination crisis management because people with high education level always play a significant role of public opinion leaders. To determine the relationship between involvement and individual's perceived credibility of social media, current research first determine the dimensionality of involvement, then examine the effectiveness of new-generated factors in evaluating perceived credibility, and the study also re-examine the dimensions that are utilized to evaluate credibility from prior research. The result reveals that 'interest' significantly influences perceived credibility; and among perceived credibility, depth is excluded from the linear regression model, which is contrary to previous research. Current study also provide some practical implications to minimize the negative impact of certain crisis on tourism destination.

### KEYWORDS

Perceived credibility; Involvement; High-educated tourists; Social media.



## INTRODUCTION

For social network sites operators or the ones who utilizing social network for commercial purpose, it becomes more essential to know how people think about the information on a social platform. As a crucial aspect of people's cognitive feature and an important criterion of evaluation information, credibility has been receiving increasing attention from both academic and industrial perspectives. The perceived credibility held by people with high education level needs special attention because well-educated people are determined to be public opinion leaders. Since an increasing volume of destination crisis management has been accomplished by social media nowadays, it is critical for destination crisis management practitioners to acknowledge that how this particular group of people perceives information as credible. Although social network received a growing volume of research in recent years, it is still not sufficient to keep pace with the developing industry. Therefore, current research has two objectives: First, in order to figure out factors contributing to the evaluation of social network's credibility, current research will focus on the effect of involvement in perceived credibility evaluation process. Second, to help destination effectively minimize the negative effect of certain crisis, a real-life case of an explosion in Ninghai Spring is introduced to determine how participants evaluate the credibility of an official announcement presented on the social network. Current study mainly investigates how well educated individuals who always share similarities in many aspects evaluate the credibility of social network based on the situation of destination crisis management. Contrary to the prior study, this research find that for people with high education level, it is inappropriate to use the pre-determined two factors involvement model, instead, a new model with three factors is developed, but only one of them is significant in predicting credibility. Also, one of the four dimensions which are utilized to examining credibility has been found insignificant as well. Current article also provides some practical implications to destination crisis management practitioners in order to effectively and efficiently minimize the negative impact.

## KNOWLEDGE PREPARING

### Credibility

In the era of the information highway, people are overwhelmed by all kinds of information from various information sources. However, people will not perceive the features of information same as others. For a particular piece of information, some will be perceived it as more trustworthy and credible compared over others. The challenge of social network sites' operators is to know how most people process and evaluate the information that they encounter. The history of theoretically studying the concept of credibility can trace back to 1950s, however, there is still no clear definition of credibility and among various definitions. Credibility has been defined from many perspectives. Scholars<sup>[1]</sup> transform the concept of credible from a key issue in human interaction to the feature of information. Credibility is usually defined as believability, trust, reliability, accuracy, fairness, objective and dozens of other concepts and combination thereof. However, this definition is too broad. It also has been defined in terms of characteristics of persuasive sources, characteristics of the message structure and content, and perceptions of media<sup>[2]</sup>. Credibility has been understood as one of the criteria of relevance judgment used when making the decision to accept or reject retrieved information<sup>[3]</sup>.

### Types of credibility

Credibility has been studied in many areas ranging from communication, information science, psychology, marketing, and the management sciences to interdisciplinary efforts in human-computer interaction. Generally speaking, each field as examined the construct and its practical significance using fundamentally different approaches, goals, and presuppositions, all of which results in conflicting views

of credibility and its effects. In the communication area, credibility has been divided into three facets, which are message credibility, source credibility and media credibility<sup>[4]</sup>. Fogg categorizes the information into four types of credibility, including presumed credibility, surface credibility, earned credibility and reputed credibility<sup>[5]</sup>. In the management area, researchers study credibility issues in decision-making systems<sup>[6]</sup>. Some of prior studies focused on the features which make sources or information worth being believed, while others examine the characteristics that make sources or information likely to be believed<sup>[7]</sup>. In conclusion, most scholars who study credibility agree that credibility at least consist of two dimensions: trustworthiness and expertise. In terms of media, previous studies about credibility of media have taken a scrutiny in terms of certain media such as Web sites<sup>[5]</sup> or the comparisons between traditional media and online media. The credibility issues has also draw academic attention in terms of particular types of information such as political information<sup>[8]</sup>, news information<sup>[9]</sup>, and scholarly information<sup>[10]</sup>. Generally speaking, the credibility of web-based information perceived to be less credible due to the structural and editorial characteristics of the web environment<sup>[2]</sup>. Web-based information suffers from a relative lack of professional gatekeepers to monitor content, faces a convergence of information genres, such as the blending of advertising and information, lacking of established reputations, and is particularly prone to alteration. Perceptions of credibility may differ depending on the type of source being evaluated and the context in which the evaluation occurs. Accordingly, different genres of website may contribute to variation in individuals' credibility perceptions, due to perceived communicator biases which can affect pre-message expectancies.

### **Assessment of credibility**

There are multiple theoretical frameworks for assessing credibility. The Prominence - Interpretation Theory raised by Fogg posits that two things need to happen for people to make a credibility assessment: the user notices something (prominence), and the user makes a judgment about what she/he notices (interpretation)<sup>[5]</sup>. Another model claimed by Rieh also looks at credibility assessment as an iterative process<sup>[3]</sup>. Rieh's model begins earlier at the point at which a user makes a predictive judgment about which web site will contain credible information and follows through to include evaluative judgments by which the user expresses preferences for information encountered. Rieh illustrates that the kinds of factors influencing predictive judgments of information quality and cognitive authority differ from those that include evaluative judgments. Wathen and Burkell present a model of credibility assessment, they proposed that a user's first task is to rate the credibility of the medium based on surface characteristics such as appearance, usability, and interface design, and organization of information, followed by rating the source and the message<sup>[11]</sup>. The evaluation of a source is often made in terms of content, relevance, currency, accuracy, and tailoring. The third aspect of process involves the interaction of presentation and content with the user's cognitive state. However, this model wasn't tested empirically. Sundar comes up with four "affordances" in digital media capable of cueing cognitive heuristics pertinent to credibility assessments: Modality, Agency, Interactivity and Navigability<sup>[9]</sup>.

The concept of credibility typically is measured by a multidimensional construct. Believability, accuracy, bias, and depth or completeness are four measures that have consistently emerged from the prior research that have used to measure credibility in 5-point Likert scale<sup>[7]</sup>. Current research will utilize the updated dimensionalities which is widely accepted when measuring media credibility developed by Johnson and Kaye, and the updated four dimensions are believability, accuracy, fairness, and depth of information<sup>[12]</sup>.

*Research question: what's the relation between total perceived credibility and its four internal dimensions?*

### **Involvement**

Involvement level is a critical factor in how people assess credibility<sup>[13]</sup>, it influences what and how people notice<sup>[5]</sup>. Involvement can be seen as a cognitive process resulting from “a person’s perceived relevance of a subject, based on inherent needs, values, and interests”. This study also reveals that high-education users’ involvement affects perceived credibility of Web sites since involvement plays an important role in moderating and explaining various relationships.

Involvement can be categorized as enduring involvement (EI) and situational involvement (SI). Enduring involvement and situational involvement are different not only from the temporal pattern of occurrences, but also from the motivations and the benefits sought<sup>[14]</sup>. Enduring involvement is intrinsically motivated, whereas situational involvement is extrinsically motivated. Either independent effects or interaction effect of both types of involvement will have impact on high-education users’ credibility judgment on social media. Most of time, situational involvement has been determined as a mediating factor in those relationships<sup>[14]</sup>. Also, high-involvement produces a central route to cognitive processing which leads to a more specific examination of facts, and low-involvement leads to a reliance on peripheral cues for evaluation.

### **Enduring involvement (EI)**

Enduring involvement relates to intrinsic value (Houston& Rothschild, 1978), it identifies how people notice things for relatively longer period. It can be defined as an “unobservable state of motivation, or arousal interest toward a recreational activity or associated product, evoked by a particular stimulus or situation, and which has driven properties”. For instance, a person is involved in a Christian-based group because of his strong Christian upbringing and education<sup>[13]</sup>. Enduring involvement levels are reasonably stable. Prior studies also find that high-educated population tends to remain their perceived thought enduring since they usually have a knowledge accepting process which is not easy to be changed. EI keeps consistent but the discussion is largely conceptual as few longitudinally-based data sets exist. Usually, higher level of enduring involvement in an activity can lead people more likely to experience episodes of high psychological involvement when engaged in the activity.

*Research question: Does enduring involvement have significant influence on perceived credibility of high-educated population?*

### **Situational involvement (SI)**

Situational involvement is comparatively short-lived and can be induced when a circumstance generates concern from an individual with regard to how he or she will behave in the situation. Situational involvement is a more external and affective state<sup>[15]</sup>. It explains how consumers attend to objects or things under certain situations, mainly focusing on non-personal factors<sup>[14]</sup>. For instance, this same person awakes in a burning apartment building and other individuals are trapped in that building also<sup>[13]</sup>. Situational involvement can significantly mediate relationships between enduring involvement and another classification if exists like flow, response, etc. However, various situational factors do not function as the same way<sup>[15]</sup>. Higher levels of time, economic, and/or social risks are seemed to be associated with higher levels of situational involvement. Situational involvement is always goal directed<sup>[14]</sup>, once the goal was achieved, the personal relevance with the situation declines. According to Ferebee’s research, when introduce SI into EI, there produce a significant difference. And the SI on its own can show a significant influence on focus type, for instance, to make user shift to a more central focus<sup>[13]</sup>.

Personal factors signify inner values and impact one’s involvement with objects, meanwhile, impacting involvement is and stimulus connected with the physical characteristic of communication media (SNS, TV, radio)<sup>[14]</sup>. Meanwhile, involvement with user experience should be conceptualized as a function of both enduring factors and situational states. Most of the previous studies have researched on enduring and situational involvement interchangeably without considering their different role in user

experience especially considering of high-education population. This study will contemplate both types of involvement, situational and enduring, each of them may play a role in user experience like involvement induced by instantaneous situational factors (situational involvement) or inherent individual factors (enduring involvement).

*Research question: Does situational involvement have significant mediate influence on perceived credibility of high-educated population?*

## METHODOLOGY

To examine the research questions, this study constructed a survey in which social media credibility was measured and the relationship between involvement and perceived credibility was examined. Enduring involvement is measured by 4 variables: fun, appealing, exciting and fascinating, situational involvement is measured through 14 questions including interest, risk, relevance etc. The perceived credibility is measured directly which consists of 4 dimensions: believable, accurate, fair and depth.

All the questions besides demography and information resource were presented as statements to which samples indicated their agreement on a 5-point Likert scale.

The whole survey is as following steps:

Step 1: the study selected a typical topic "Boil Explosion of Ninghai Hot Spring" which is a well-known tourism crisis of Ningbo city. The researchers posted the materials that Ningbo government used to address the crisis in blog and weibo which are different online social medium.

Step 2: sent emails to survey subjects to introduce the research context and what they should do.

Step 3: once the samples received the email, they should answered the questions depending on their intuition as soon as possible, and returned to the researchers.

We have completed 90 surveys and taken 77 copies back. Finally, there are altogether 77 effective surveys.

## DATA ANALYSIS

### Factor analysis

In order to know the variability among observed items of involvement, we made factor analysis firstly. This study adopted EFA to extract underlying dimensions of constructs. A principal component method with varimax rotation was used. Firstly, the study made KMO and Bartlett's Test. The result shows KMO is 0.821, the significance of Bartlett's Test of Sphericity is 0.000, this shows the data is suitable to make factor analysis.

The results of factor analysis of involvement derived a four-factor solution. The 3 factors were labeled self-expression, interest and relevance.

The total variance explained shows the extracted 3 factors' cumulative squared loadings is 65.26%.

Factor 1: part of myself-image, tells other about me, create a certain image, portrays an image of me to others, others use to judge me, says something about me, tells me about others

Factor 2: has much interest on it, appealing, fascinating, exciting, I use it all the time

Factor 3: shows much perceived risk, has much personal relevance with me, attention focus

According to the conjunct characteristics of the items of each factor, the study renames the factor 1 self-expression, renames factor 2 interest and factor 3 relevance.

### Multiple regression analysis

In order to know the relation between the 3 factors and the total perceived credibility, the study made the linear regression analysis, the model summary shows that R is 0.416, R Square is 0.173 and the adjusted R Square is 0.139. The result of linear regression analysis shows that the significance of

self-expression and relevance is 0.551 and 0.197 which shows that they are both unrelated with total credibility significantly.

In order to know about the relation between total perceived credibility and its four dimensions, the study made another linear regression.

The results shows that we can construct a linear regression model between total perceived credibility and its internal dimension:

$$Y = 0.499 + 0.319 \times X_1 + 0.247 \times X_2 + 0.314 \times X_3 \quad (1)$$

$X_1$  is believable,  $X_2$  is accurate,  $X_3$  is fair.

## CONCLUSION

### People with high education level evaluate social media credibility

This study detailed in this chapter describes how people with high education level evaluate social media credibility, and adds to the current state of knowledge on the dimensionality of credibility. It challenges existing notions that the perceived credibility is determined by situational involvement and enduring involvement and paints a portrait of how people with high education level establish credibility when they evaluate social media sources, which should serve as a springboard for further research.

The regression analysis demonstrate that the factor one (which include part of myself-image, tells other about me, create a certain image, portrays an image of me to others, others use to judge me, says something about me, tells me about others) and factor three (which consists of shows much perceived risk, has much personal relevance with me, attention focus) are not significant predictors to determine perceived credibility. This might indicate that for people who have high education level, although they are welcoming social network activities, and they regard social network as an approach of self-expression and has personal relevance, however, when evaluating credibility, they are more skeptical critical. Since people with high education level always lead the public opinion, to effectively processing crisis management, destination management organizations can provide more detailed evidence, and organize the information in a rational and logical format so that the more rigorous information will help convincing high educated people.

### Dimensionality of credibility

Prior studies indicates that credibility can be measured from 4 aspects, which are believability, accuracy, fairness and depth. However, contradictory to previous study, the result from this study reveals that the depth is no longer a key factor in evaluating social media credibility among high-educated population. It is probably because first, nowadays, a huge proportion of people who browse the social network websites tend to take a casual glance rather than rigorous scrutiny. Second, high-educated people always take social media as a booming way to relax themselves during a short break, day off or any spare time which probably is short and scattered. Social media is a convenience information source where they can grasp what has happened recently, and they have no intention to scrutinize the credibility of information. Third, the uncertainty on the true face of an issue will significantly raise their interest to gossip it.

On the other hand, the scenario researchers use for the survey about the Ninghai Hot Spring which is related to a leisure tourism. For a leisure tourism, people care more about the real leisure experience rather than the causal content construction.

In sum, the depth on the information on website itself can not reflect its value especially on those social media platforms as an entertainment for people to glance. And even if people with high education most time are just seeking for fun to take a break on social media, so it is not necessary to figure out how depth the information is to show up the credibility.

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