

Factors of Information Credibility for an Internet Advice Site

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Abstract

Information credibility is important to Internet advice site vendors because they primarily build a revenue stream based on how credible consumers consider the information on the website. Unless consumers believe the website's information is credible, they are not likely to be willing to act on the advice. This paper reports on an empirical study of how individual differences and initial site impressions affect perceptions of website information credibility. Results confirm that most of the proposed individual difference and initial impression variables play an important role in how consumers view the credibility of an unfamiliar website. Implications are included regarding adapting websites to take into account initial site impressions and individual differences.

1. Introduction

The Internet is growing as a marketplace of both products, services, and information. As use of the Internet grows, consumers are extending their web uses to access advice about matters that affect their lives, such as career, relationship, medical, financial, and legal information. Some firms offer free advice (e.g., FreeAdvice.com, jobseekersadvice.com, WorldLawDirect.com) while others charge for their advice services (e.g., bobvila.com, bankruptcymedia.com, legalserviceconnection.com).

Firms with an existing top-notch reputation and high credibility with consumers, such as Kiplinger, Keen, AAA Motor Club, MetLife, Better Business Bureau, and Forbes can leverage their reputation to provide similar services on the Internet. However, firms without a pre-existing high level of credibility may have difficulty enticing customers to not only come and see their advice site, but to believe the advice enough to follow it. This study addresses information credibility issues for advice firms that do not have a pre-existing reputation with consumers.

The faceless, impersonal nature of the Internet also makes it difficult to build credibility. This is true for a

number of tasks that could be done either in person or over the Internet. For example, negotiators have more difficulty building credibility over the Internet than in face-to-face negotiations [5]. Building credibility about product information is probably harder over the Internet because the products cannot be handled and seen in person [7]. Further, [9] suggested that it is hard to assess website credibility because of the lack of communication standards. The many publicized problems involving scams and personal information misuse [18] have also decreased web vendor credibility, or at least raised reasonable doubts. For example, one legal advice expert established credibility, built a clientele, collected money, and then disappeared [49], making recourse next to impossible. Because of such occurrences and the fear of lost personal information, people are now more likely to use the Web for specific purposes on sites they trust [20].

Consumer views of what makes a site credible are more complex and nuanced now than even half a dozen years ago [59]. For these and other reasons, the initial explosive growth of commercial Internet use has diminished among the public [58] as the magic aura of Internet vendor credibility has dissipated. Still, some people, such as Weblog users, think Internet information is actually more credible than information from traditional sources, such as the news media [25]. This seems counter-intuitive given that many have become more skeptical of Internet information over time. Skepticism has resulted from both news media publication of Internet abuses and from word-of-mouth.

The difficulty of creating new website information credibility raises the question this research pursues: *what are the factors that build information credibility in an unfamiliar website's advice?* By information credibility is meant the extent to which one perceives the website information is believable, true, or factual [12][51][57]. Other dimensions of credibility exist, such as safety, depth, and expertise [25][41], but are not examined in this research. Information credibility differs from trusting beliefs in that trusting beliefs is about a person or organization, while credibility is about the information

itself. That is, information credibility does not refer to the believability of the website or the people behind the website. Rather, it focuses on the information artifact – the advice or information on the site. Still, credibility and trust are probably closely related, because if one believes an organization’s information is credible, one has reason to trust the organization. Because these concepts are related, some of the arguments the paper makes for credibility factors derive from the trust literature.

The research question studied here is important because, to our knowledge, no research has addressed the factors of website information credibility directly. Significant research has been done on building trust in website vendors or stores (e.g., [15][23][54]) but trust in a website vendor, though related, is not the same as site information credibility. The former focuses on trust in the people behind the site, while the latter focuses on believability of the information the site provides. Similarly, some research has been published about computer credibility [10][57]. However, this research focuses primarily on the credibility of computers or computer products [12] rather than on information credibility. Credibility of computers is not the same as site information credibility.

Two other sets of researchers have studied credibility with a different focus than ours. Researchers of information quality have included information credibility as one of many aspects of quality [9]. However, these studies have not studied the antecedents of information credibility. Communication researchers have studied source credibility, but have primarily used it as an independent variable predicting persuasion [8]. Communication scholars have begun to study website information credibility (e.g.,[25][41]), but have primarily compared credibility of the Internet with credibility of other information sources like television and newspapers. Recognizing this deficiency, communication researchers Flanagin and Metzger [9] have called for research on the factors of website credibility.

Information credibility is a key to the success of Internet advice providers. Unless the consumer feels the information provided is credible, the consumer will probably not return to the site. For example, research has found credibility to affect brand extension acceptance [47]. Thus, building information credibility is likely important to advice site success. Many factors may influence consumer perceptions of site information credibility. This research builds a model of possible factors of initial advice website information credibility and then tests which are significant.

While the importance of information credibility seems obvious, empirical evidence of its worth is underdeveloped. Therefore, this study also documents the importance of information credibility by modeling its effects on consumer willingness to follow website advice. Willingness to follow advice goes beyond an espousal of credibility because it shows the vendor has influenced a consumer to be willing

to take action. Websites are only efficacious to the extent that they influence consumers to take the next step and engage the vendor’s product or service. Travel websites have to get consumers to book, not just look. Consumer product websites thrive when consumers make purchases instead of window shopping. For an advice website, consumer willingness to follow advice is arguably just as important a step towards action as willingness to purchase is for a consumer product website. If credibility strongly predicts willingness to follow website advice, the importance of website information credibility will be demonstrated.

2. Theory Development

Because of the need to study how credibility is built from the start, we focus on two promising types of factors (see Figure 1): individual characteristics or dispositions of the consumer and initial consumer impressions of the site before the consumer becomes familiar with the site through trial usage. The model suggests that information credibility fully mediates the effects of both individual dispositions and initial impressions on willingness to follow website advice. Full mediation is justified later in this section.

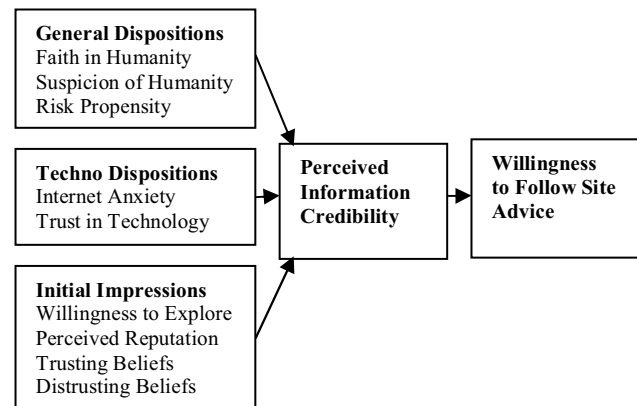


Figure 1. Research Model

Effects of Dispositions on Initial Credibility

Credibility is best formed in the long-term by sampling and testing a website’s advice to see how well it works over time. For example, a financial investment website may provide advice that, if taken, will result in a poor or a good return on investment. Advice on a health site may be taken and the results observed. However, when a consumer first encounters a website, first-hand observational evidence of advice credibility is not available. Hence, factors such as site first impressions and personal disposition will be important to perceived advice credibility. Just as with research on trust, initial cues and

signals are likely important to the early development of information credibility [1][43], just as communication studies find [17]. Thus, some of the factors we later pursue relate to early impressions of the website that produce credibility. In early trust formation, disposition has been found to be important [14][35][43]. Thus, we also justify several dispositional antecedents of credibility.

For purposes of research, two very early periods of consumer activity have been defined: the *introductory stage*, in which consumers have only second-hand information about a website, and the subsequent *exploratory stage*, in which consumers interact with the website for the first time to see what it is like [37]. In both stages, consumers form impressions about the site, but the introductory stage is when the most tentative and easy to influence impressions are formed. These impressions may or may not change in the future, but initial impressions often have a powerful effect on future beliefs because of the human tendency to continue current beliefs into the future [37]. In this study, we are interested in the effects of dispositions and introductory stage consumer site impressions on exploratory stage perceived information credibility.

Just as disposition to trust tends to affect trusting beliefs in website vendors (e.g., [14][35]), so disposition to trust is likely to affect perceived information credibility. Credibility, defined above as how believable information is, is similar to, but distinct from, trusting beliefs, which is usually comprised of benevolence, ability, and integrity belief components [15, 35]. Because information credibility is similar to trusting belief-integrity, it is likely that it will be predicted by disposition to trust, just as trusting beliefs is (e.g., [14][43]). We study the aspect of disposition to trust called faith in humanity, which means the assumption that general other people are reliable and well-intentioned [34]. If one assumes others are generally well-intentioned and reliable, then one is more likely to believe that the information another provides will be credible.

H1: Faith in humanity will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

While some researchers posit that distrust is merely an aspect or level of trust [24][48], others suggest distrust is a construct entirely separate from trust [29]. Little research has been done on distrust in order to understand how its effects differ from those of trust. This study defines suspicion of humanity as the assumption that general people are not reliable and well-intentioned. Defined in this way, suspicion of humanity is conceptually the mirror opposite of trust, as [29] suggested. Empirical work comparing trust and distrust concepts is in its infancy [38].

Suspicion of humanity should affect information credibility because one with high suspicion of humanity has high standards regarding what is credible and what is not. By contrast, one with low suspicion of humanity will accept someone or something as credible on meager evidence. Therefore, how suspicious one is of people generally should affect how credible one thinks website information is.

H2: Suspicion of humanity will negatively influence exploratory stage perceived information credibility of an unfamiliar advice website.

Koller [27] found risk to be an antecedent of trust. Risk and risk propensity are related [52]. Because trust and credibility also relate, we wondered if risk taking propensity and credibility might be related. Risk propensity means the personal tendency or likelihood of taking risks, per Sitkin and Weingart [52], who found that risk propensity affected risk perceptions about a scenario. The more one is willing to take risks, the more one should believe in the credibility of information from unfamiliar sources. Believing in the credibility of an unfamiliar information source introduces specific risks because the information may not be correct and may therefore lead to unintended consequences. For example, believing in the credibility of health information on a website could lead to the risk of worsening health because the information one acts upon is not true.

H3: Risk propensity will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

While H1-H3 address general personal tendencies to trust, distrust, or take risks, H4 and H5 address technology-related tendencies. Internet anxiety is similar in nature to computer anxiety and might be considered a sub-construct thereof, since the Internet is one of many computing venues. Internet anxiety is defined as the tendency to be nervous or tense while using the Internet. A person may not be wary of general others or of general risks, but may still have low beliefs in website information credibility because of Internet anxiety. The person with high Internet anxiety may feel uncomfortable using the Internet or uncomfortable generally about information or advice on the Internet. Therefore, a person with high Internet anxiety may have more trouble believing advice from an unfamiliar Internet vendor than a person with low Internet anxiety. High Internet anxiety may cause one to categorize all Internet sites as hard to trust. On the other hand, a person experiencing low Internet anxiety is likely to believe a site's information is credible, *ceteris paribus*. No prior studies test Internet anxiety's link to credibility.

H4: Internet anxiety will negatively influence exploratory stage perceived information credibility of an unfamiliar advice website.

It may be that trust in general people is not as important to Internet site credibility perceptions as is trust in general technology itself. By trust in technology—general, we mean positive beliefs about general technology. Trust in technology is not so far a major factor in IS research, although it has been researched in other fields, such as computer science and psychology (e.g., [28][39]). Trust in technology is different from trust in people because technology has neither volition nor motives. In this study, trust in technology focuses on the attribute of the functionality of the technology. Some who trust people in general, for example, may not trust technology. Trust in general technology probably affects information credibility. For example, those who have low beliefs about the functionality of technology may not think technology-delivered medical advice is credible, even when they would readily accept the identical medical advice from a physician directly.

H5: Trust in technology will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

Effects of Initial Consumer Perceptions

First impressions can be powerful indicators that a website is credible because people tend to rely on first impressions when no other information is available [17][34][56]. This is consistent with research which found that perceived credibility is based more on emotional feelings than on rational logic [50] and is influenced by cues and appearance [17]. Although other first impressions could be studied, this section proposes that four specific first impressions are important factors of information credibility: willingness to explore the site, perceived reputation, trusting beliefs in the site, and distrusting beliefs in the site. Each of these first impressions refers to perceptions about the website formed during the introductory stage of a consumer's experience (before seeing the site) that would affect perceived credibility during the exploratory stage.

Effect of Willingness to Explore the Site. Introductory stage willingness to explore the site will predict information credibility in the exploratory stage. Willingness to try out or further investigate a product or service is important because it makes a consumer more likely to procure or use the product or service. For example, car salespeople try to get consumers to take a test drive to see if they like the vehicle, knowing that it brings them one step closer to a purchase. A test drive might give the consumer a visceral experience that helps them decide "I want this car!" It could provide a negative experience, but is more likely to be positive. If one is unwilling to take a test drive, one is not likely later to take the larger step of making a purchase. Similarly, if one is not willing to explore a website, then one is less likely to

accept its advice. If a consumer is willing to explore a website, this indicates that the website is at least attractive enough to be investigated further.

H6: Introductory stage willingness to explore the website will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

Reputation's Effect. Second-hand reputation has often been studied as a factor of trust [6][23]. Hoxmeier [21] found consumer perceived vendor credibility and reputation to be significantly correlated. Ba and Pavlou [1] found that auction participant feedback mechanisms establish the kind of reputation that builds credibility trust. A consumer who, through second-hand information, comes initially to believe a site has a positive reputation is more likely to trust the site [22] and should therefore have higher information credibility perceptions than one who believes the site has a poor reputation.

H7: Introductory stage perceived reputation will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

Trusting Beliefs' Effect. As stated earlier, trusting beliefs are related to perceived credibility. Perry and Mankin [44] found that trust in a manager and credibility of the manager were significantly correlated across several managers. Thus, the first trusting impression should be a factor of credibility. Those who are inclined to trust a site on the basis of introductory stage information about it are likely to believe it is credible in the exploratory stage.

H8: Introductory stage trusting beliefs in the site will positively influence exploratory stage perceived information credibility of an unfamiliar advice website.

Distrusting Beliefs' Effect. As argued earlier for faith in humanity and suspicion of humanity, distrusting beliefs is a construct distinct from trusting beliefs. Assuming this is so, distrusting beliefs is also a likely factor of credibility that complements the effects of trusting beliefs. A person who distrusts a website on first impressions is less likely to believe the site is credible. To our knowledge, no empirical research has tested this link.

H9: Introductory stage distrusting beliefs in the site will negatively influence exploratory stage perceived information credibility of an unfamiliar advice website.

The Effects of Credibility

Empirical evidence shows that trust predicts willingness to follow website advice [36]. Information credibility, like trust, is probably an important predictor of future actions of the Web consumer. If a consumer believes the website's advice is credible, there is little reason not to follow the advice. One who believes the advice is not credible will probably not be willing to take the risk of acting on the advice.

H10: Perceived information credibility will positively influence willingness to follow an unfamiliar website’s advice.

Figure 1 depicts credibility fully mediating the effects of its factors on willingness to follow advice. It is possible that several of the factors might influence willingness to follow advice. Disposition to trust has been found to be correlated with similar variables like willingness to purchase [16]. Pavlou [42] found that reputation had a direct impact on intention to transact. However, information credibility is very central to the question of whether or not one acts on the site’s advice. If the advice is credible, one will act upon it. If not, one will not be willing to act on the advice. Although this sounds very black-and-white, we believe that because credibility is so relevant and essential to advice-taking, the predictive power of credibility will simply overpower the effects of other variables, such that they are fully mediated. This is similar to how, in TAM research, perceived usefulness tends to be so predictive of intention to use that it often mediates the other model predictors that might otherwise predict intention to use. Similarly, in attitude research, those attitudes highly relevant to behaviors tend to be highly correlated with those behaviors.

H11: Perceived information credibility will fully mediate the influence of the independent variables on willingness to follow an unfamiliar website’s advice.

The above hypotheses present and justify the research model. The next sections present the methods and results of the study. Then implications are drawn.

3. Methodology and Results

Subjects and Procedures

571 students from a large U. S. university participated in the study, producing 504 usable responses (88%). Respondents were motivated to participate using course extra credit in their computer literacy course amounting to about 2% of the total points possible for the course. The average respondent age was twenty. 59% percent were female. Although university students do not represent all Web users, they represent a group likely to use the Web [40], making student samples interesting and appropriate for exploratory studies of beliefs and intentions such as reported here. Descriptive statistics of study measures are shown in Table 1. All items were measured using a one to seven point Likert scale with anchors of Strongly Disagree to Strongly Agree except risk propensity, which used the anchors Low Tendency and High Tendency.

Data gathering took place in three rounds, in order to provide a test that examines how the factors work over time. In time one, the dispositional and control variables

were measured. In time two (introductory stage), the first impressions variables were measured. The two dependent variables were measured in time three (exploratory stage, after the site was seen).

Table 1. Descriptive Statistics

Construct	Mean	Median	Std. Dev.
Willingness to Follow Advice	4.7	4.8	1.2
Information Credibility	5.4	5.5	1.0
Faith in Humanity–Benevolence	4.4	4.3	1.1
Faith in Humanity–Integrity	4.1	4.3	1.0
Faith in Humanity–Competence	4.9	5.0	1.0
Suspicion of Humanity-Benevolence	4.6	4.7	1.2
Suspicion of Humanity-Integrity	5.3	5.3	1.2
Suspicion of Humanity-Competence	3.7	3.7	1.1
Risk Propensity	3.0	3.0	1.3
Internet Anxiety	2.1	1.8	1.2
Trust in Technology-General	5.4	5.5	1.0
Willingness to Explore Site	5.1	5.3	1.4
Perceived Reputation of Site	4.5	4.3	1.1
Trusting Beliefs in Site	4.6	4.5	1.1
Distrusting Beliefs in Site	4.1	4.0	1.3

To represent the introductory stage, the subjects were given a scenario to solve – that during hot summer weather their air conditioner became inoperable and their landlord was not making efforts to fix it. They were then told about a website offering free legal advice that might help them solve the problem. At this stage, they were not taken to the site. Rather, they were told the site offers free advice on various legal issues and that they must now decide whether or not, given the scenario described, they would visit the site to learn about their legal rights to deal with the landlord. After receiving this information, respondents answered first impression construct items – willingness to explore, perceived reputation, trusting beliefs, and distrusting beliefs about the site. Next, to represent the exploratory stage, subjects were taken to the legal advice website and asked to find the legal information needed to solve the air conditioner scenario. They either used the search function or scanned topics to find relevant legal advice. Exploratory stage constructs – perceived information credibility and willingness to follow site advice – were then measured.

The study used an online questionnaire to collect data for all constructs. Activity began when subjects were sent an email from their course instructor, who was not a researcher on the study. The email contained a link to the study site. The major focus of the content in the email message concerned the expected completion date and credit for doing the activity, without a detailed explanation of the purpose of the study. Thus, subjects participated in the study with no

prior knowledge of the Web vendor, constructs, or research focus.

Demographic items included gender, age, education level, and time spent per week transacting on the Internet. These were used as control variables in the study, anticipating that they might affect credibility or willingness to follow site advice [9][25]. Because structural assurance and situational normality have been used in past Internet studies (e.g., [15]), they were also included as control variables.

Measures

The trust- and distrust-related scales were adapted from [35][36][38], as were the reputation, willingness to follow advice and willingness to explore the site scales. The faith in humanity and suspicion of humanity scales consisted of three items each related to the benevolence, integrity, and competence of others, following [35]. Faith in humanity and suspicion of humanity were treated as second-order constructs in the modeling, using the molecular approach outlined in [3]. The molecular (as opposed to molar) modeling method was chosen because the benevolence, integrity, and competence beliefs are component parts (similar to indicators) of the overall faith in humanity construct. The molecular method treats the sub-constructs as reflective rather than formative items, just as the items of the sub-construct are treated as reflective. Using the same number of items (3) to measure each first order construct works best when using PLS [53]. Because good credibility scales are hard to find [10], the four item credibility scale was created new. Internet anxiety items were adapted from the Computer Anxiety Rating Scale [19]. Risk propensity items were adapted from [52].

Measurement Model and Validity Analysis

The measurement model was analyzed using Partial Least Squares (PLS), a structural equation modeling method. PLS is frequently used for exploratory research, especially with complex models that consider causality [26]. Since no previous tests of this model have been done, this study matches the criteria for PLS use. PLS also helps studies identify the best among a number of possible factors.

We first performed Churchill's item culling step [4] sometimes used in PLS and other modeling by running the measurement model and examining the outer model loadings. Ideally, loadings of the items on their construct should exceed 0.70, although the construct can still demonstrate acceptable construct validity if some items

are somewhat below 0.70 as long as others are higher than 0.70. All constructs met this requirement except risk propensity, whose first two items had very low loadings. These two items were therefore eliminated.

In PLS, the measurement model is first analyzed to determine construct validity; then the structural model is analyzed to test hypotheses about relationships among constructs. The proper way to test validity of second-order constructs like faith in or suspicion of humanity is at the first order construct level [53]. PLS model loadings and cross loadings provided evidence that the measurement model had acceptable convergent and discriminant validity (see Table 2), as follows. The internal composite reliability (ICR) figures (similar to Cronbach's alpha) indicate the internal consistency of each construct. These values exceeded the 0.70 cutoff as recommended by [13], with the lowest at 0.85. Internal consistency reliability is a necessary, but not sufficient condition for establishing convergent validity. A second test of convergent validity specifies that the average variance extracted (AVE) must exceed the standard minimum level of 0.50 [2]. The diagonal of Table 2 shows that convergent validity was demonstrated according to this criterion, with the lowest AVE at 0.68

Discriminant validity is evaluated by comparing latent variable correlations against the square root of the AVEs [13]. A more stringent test is to compare the correlations against the AVEs. Referring to Table 2, for example, all latent variable correlations in row 4 – Faith in Humanity-Integrity and corresponding column 4 are less than the AVE (0.68) found at the intersection of row 4 and column 4. Since all latent correlations in any intersecting row and column were less than the corresponding AVE found at the row/column point of intersection, the constructs were judged discriminant. From these tests, we accepted the measurement model and proceeded to analyze the structural model.

Structural Model Analysis and Results

Partial least squares (PLS) structural equation modeling was used to estimate the structural model. Since PLS does not produce model fit statistics, results are evaluated based on estimators of item loadings, path coefficients, and the percentage of variance explained in each dependent variable. Results are shown in Figure 2.

Faith in humanity-general and Internet anxiety were not significantly related to information credibility, not supporting H1 and H4. However, the other dispositions – suspicion of humanity, risk propensity, and trust in technology were significant predictors of credibility, which supports H2, H3, and H5. Three of the four initial impressions variables were significantly related to

information credibility, supporting H6, H7, and H8. However, distrusting beliefs in the site was not related to information credibility, not supporting H9. These variables and the control variables explained 30% of the variance in information credibility. None of the control variables was significant in predicting either dependent variable. Information credibility was a strong predictor of willingness to follow the site advice, explaining 35% of the variance. Overall, 7 of the 10 hypothesis linkage tests had significant, supportive results.

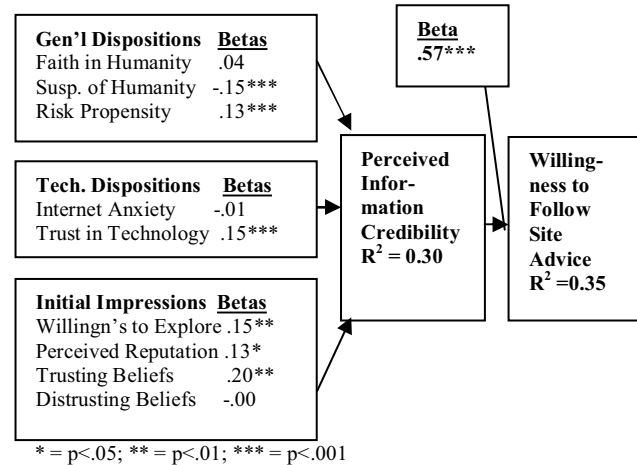
Table 2. Measurement Model Results

Latent Variables:	ICR	1	2	3	4	5	6	7	8
1 Wil. To Fol.	.95	.78							
2 Inf. Credib.	.93	.58	.86						(AVE on diagonal)
3 FIH-Benev.	.90	-.02	.02	.75					
4 FIH-Integ.	.86	.00	.04	.52	.68				
5 FIH-Cp.	.90	.16	.23	.32	.35	.75			
6 SOH-Benev.	.90	-.15	-.19	-.25	-.24	-.05	.75		
7 SOH-Integ.	.90	-.13	-.20	-.16	-.28	-.06	.60	.74	
8 SOH-Cp.	.91	-.04	-.02	-.09	-.12	-.40	.29	.20	.77
9 Risk Prop.	.85	.04	.13	.02	-.06	.03	-.02	.06	-.14
10 Inter. Anx	.92	-.05	-.15	-.09	-.08	-.18	.06	.16	.11
11 Trust Tech.	.94	.15	.28	.21	.17	.37	-.01	-.19	-.10
12 Wil. to Exp.	.94	.34	.38	.05	.05	.15	-.10	-.15	-.05
13 Reputation	.95	.37	.39	.05	.11	.17	-.13	-.11	.01
14 Tr. Beliefs	.94	.42	.43	.07	.09	.19	-.10	-.10	-.01
15 Distr. Bel'f.	.96	-.26	-.18	-.07	-.09	-.13	-.06	.10	.11

Latent Variables:	9	10	11	12	13	14	15
9 Risk Prop.	.74						
10 Inter. Anx	-.22	.73					
11 Trust Tech.	.03	-.06	.73				
12 Wil. to Exp.	.07	-.15	.19	.84			
13 Reputation	-.01	-.06	.15	.50	.86		
14 Tr. Beliefs	.03	-.08	.24	.57	.69	.83	
15 Distr. Bel'f.	-.08	.05	-.08	-.28	-.39	-.44	.85

Mediation (H11) was tested in a manner similar to step-wise regression [55]. First we ran a model predicting willingness to follow advice with only the control variables. Only education was significant (beta = -0.13*; R²=0.04). Second, the nine independent variables were added as predictors of willingness to follow advice. Only suspicion of humanity, willingness to explore, and trusting beliefs were significant (betas = -.09*, .13*, .22**, respectively; R²=0.24). Third, information credibility was added as a predictor of willingness to follow advice. While credibility was highly significant (beta = 0.48***) in this model, none of the independent variables was significant in this model, and the R² increased to 0.40. Hence, information credibility fully

mediated the influence of the other variables, supporting H11.



Note: None of the control variables entered (age, gender, education, time spent Web transacting, structural assurance, situational normality) were significant in predicting either dependent variable.

Figure 2. Structural Model Results

4. Discussion

In this section, we first discuss possible reasons why some hypotheses were not supported. Then implications of the study for research on information credibility are discussed. Limitations or caveats of the study are discussed. Then we discuss practical implications of the study and conclude.

Internet anxiety may not have been a significant factor because of the nature of the sample. The student subjects were computer literate and had relatively low Internet anxiety on average (2.1/7.0). Alternatively, Internet anxiety may not have been effective because students may have been reluctant to admit anxiety about computer-related issues. This variable may become significant with older or less Web-savvy users.

Faith in humanity was not a significant factor, and was only correlated with credibility at r = 0.12. This is a significant finding in light of the fact that suspicion of humanity was a significant factor of credibility (beta = .15***). In the early days of Internet use, many people gave Web information the benefit of the doubt, although exceptions exist, such as the politically-interested respondents of [25]. Using data gathered in late 1998 and early 1999, Flanagin and Metzger [9] found that Internet information was just as credible as information obtained through magazines, radio, and television. They remarked

that “this finding is somewhat alarming since it suggests that people are not taking an especially critical stance toward what is arguably the least critical medium (in terms of editorial review of content).” [9, p.529] It appears that our data, gathered in mid-2003, show that consumers are taking a more critical stance by relying more on suspicion of humanity, the skeptical side of their personality, than on faith in humanity. This finding may also be due to the nature of the information. [9] found that web users of entertainment information used less verification effort than did users of news and reference information. This makes sense, in that incorrect news/reference information could be more damaging than entertainment information, thus requiring more rigorous verification. Hence, since our information was legal information, it may be that suspicion of humanity was an important factor because it represented the skeptical side of the psyche that wants verification of the information [29], while the faith in humanity side does not care as much about verification. Lack of support for H1 may be because faith in humanity works best when little is known about the trustee. Thus, it may have predicted introductory stage credibility; but this was not tested.

Distrusting beliefs, on the other hand, was not a significant predictor. Trusting beliefs was a much better predictor of credibility. This result begs further explanation.

Future Research Implications

The results indicate several fruitful avenues for future research. First, the moderate R^2 s indicate that additional factors should be identified and added to the theoretical model. We suggest the following techno-dispositions as credibility factors: personal innovativeness, perceived web risk, and computer self-efficacy. The credibility literature suggests other factors. Information completeness was found to affect information credibility in medical advice sites [8]. Providing citations, author credentials, brick-and-mortar location, contact information, quick help request response, or displaying site awards or reviews of site contents may also raise credibility [11]. Other general personality traits should also be assessed, such as introversion/extraversion or optimism/pessimism.

Second, the differential roles of disposition to trust and distrust appear to substantiate the idea that they are distinct concepts. The low correlations between faith in humanity and suspicion of humanity (all $|0.40|$ or below) confirms they are distinct. This implies researchers should be careful not to conflate these constructs in Web studies.

Other factors that should be researched relate to how credibility develops over time. Familiarity with the website is one factor that should be researched, as it has been found to predict consumer trust [14]. [45] found that event familiarity produced higher scores in a content analysis rating. Ease of use and usefulness should be

factors that build credibility after the user has a chance to try out the site [11][12]. Quality or professionalism of the site’s design, also called site quality, should influence credibility [12][36]. Communications network-related factors include links a website has to credible or reputable other websites [41][54] or citing authority for the advice [17]. Similarly, interaction quality is an important factor of the belief that a salesperson has high expertise [30].

Study Limitations

The results are generalizable only to American university undergraduate students and may not generalize to all Web users. Online consumers tend to be better educated and younger than most consumers. Still, American undergraduate students comprise a group of interest to Web vendors. This study may suffer from common method variance. To test the extent of this problem, a Harman one-factor test was done [46]. This involves creating a principal components factor analysis with all the model constructs (controls excluded) to see if one factor explains the majority of variance. The result was that 11 factors with eigenvalues greater than 1.0 resulted, accounting for 72 percent of the total variance. The first factor only explained 20% of the variance. Together with the relatively low correlations in Table 2, this result indicates that common method variance is not a serious issue for this data set.

Implications for Practice

It appears from the results that faith in and suspicion of humanity are two very different concepts, each having different effects on website information credibility, with suspicion of humanity the more predictive construct. This means that vendors should not only try to build trust, but should take measures to manage security and risk concerns by overcoming consumers’ general suspicions and fears (suspicion of humanity). What this implies to vendors is that they should try such approaches as assurances, certification, guarantees, privacy policies, feedback mechanisms, flexible return policies, and the ability to contact and receive replies from customer service to curb consumer concerns of safety and risk.

Web advice vendors should also be aware that one of the keys for boosting consumer willingness to follow advice is to build credibility in that advice. It appears that information credibility is a powerful precursor to acting on the advice the vendor provides.

5. Conclusion

This study tests a model of the factors of initial Website information credibility. This topic is important

because of the dearth of research on the factors of website advice credibility and because of the tendency to rely on website information even though it may be inaccurate [9]. The study contributes by showing that initial site information credibility can be built without experiential factors. The study provides evidence that initial information credibility is built through three general dispositions: disposition to distrust, trust in general technology, and risk propensity. The study also found that three first impressions of the site – trusting beliefs, perceived reputation, and willingness to explore the site – were important to building site information credibility. Additional research is needed to confirm and expand on these findings.

6. References

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