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John Wells  
*Washington State University*

Ryan Wright  
*Washington State University*

Thomas Carnigan

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# **The Influence of Website Quality and Expectancy-Disconfirmation on Assessments of Service Quality: A Signaling Theory Perspective**

John D. Wells\*  
Washington State University  
wellsjd@wsu.edu

Ryan T. Wright  
Washington State University  
ryantwright@wsu.edu

Thomas Carignan  
Accenture  
thomas.carignan@accenture.com

\* - Contact author

## **ABSTRACT**

*This empirical research paper investigates the role a website plays in combating asymmetries of information when consumers assess the quality of a service offering. Specifically, this paper reports on an empirical study that examines the effects of website quality signal as well as signal expectancy-disconfirmation on assessments of service quality. The signaling theory and expectancy-disconfirmation theory literature is reviewed to provide a theoretical framing for this study. In turn, a research model with associated hypotheses is justified and presented. The results from the study provide strong evidence that when faced with high asymmetries of information in an eCommerce domain, website quality is an effective lever for evaluating the quality of a service. This extends the signaling theory body of literature to an ecommerce domain, particularly with respect to the evaluation of services via a website. Future research is also discussed.*

## **KEYWORDS**

Electronic Commerce, Expectation-Disconfirmation Theory,  
Signaling Theory, Website Quality

## INTRODUCTION

With the emergence of eCommerce, the website has become a primary means for evaluating products and services. Given, the information technology (IT) mediated nature of eCommerce, consumers are often faced with high asymmetries of information (i.e., little knowledge about the organization and/or its products/services). However, should a consumer want to narrow such information asymmetries when assessing product quality, they can either evaluate the product prior to purchase or take advantage of a liberal return policy. Services, however, are not as flexible as one cannot evaluate a service prior to purchase, which means that the only means for directly assessing quality is to purchase and experience the service. So, from an eCommerce perspective, our overarching research question is: *What role a website plays in combating asymmetries of information when consumers assess the quality of a service offering?*

Marketing research posits that consumers rely on informational cues to overcome high asymmetries of information (Kirmani and Rao 2000). Informational cues are referred to as *signals* that are used by consumers to assess the quality of an organization and its products/services (Bloom and Reve 1990). In a traditional marketing setting, commonly employed signals include price, brand, and warranties to name a few (Dawar and Parker 1994). From an eCommerce perspective, the website seems a likely candidate for sending a consumer a reassuring signal as they evaluate a service online. For instance, recent information systems research has pointed to the importance of websites for conveying organization commitment by stating that “in a Web environment, where the main interaction consumers have with an e-vendor is through the Web site, an obvious way to *signal* (emphasis added) such a commitment is through the character of the Web

site” (Gefen et al. 2003). Thus, we are interested in examining the influence of website quality as a signal that helps a consumer overcome high information asymmetries when evaluating a service offering.

In addition to examining the viability of website quality as a signal, we are also interested in investigating whether a consumer’s *a priori* expectation of a signal has an effect on assessments of service quality. In other words, based on the source domain, do consumers expect more or less from the same signal? This is a particularly relevant issue when considering the use of website quality as a signal in an eCommerce service context. For instance, does an organization with a more IT credibility (e.g., Microsoft) produce higher expectations when consumers interpret the website as a signal of service quality? Thus, we are interested in examining the effect of consumer expectations of the signal when originating from organizations with varying degrees of IT credibility.

This paper reports on an empirical study that examines the effects of website quality signal as well as signal expectancy-disconfirmation on assessments of service quality. Next, the signaling theory and expectancy-disconfirmation theory literature is reviewed. In turn, a research model with associated hypotheses is justified and presented. An overview of the research methodology and the results from an empirical study are discussed. The paper concludes with a discussion of contributions and future research.

## **THEORETICAL DEVELOPMENT**

### **Signaling Theory**

Signaling theory originates from the agency theory and economics of information literature (Jensen and Meckling 1976). While signaling theory has been used extensively to understand assessments of product quality (Dawar and Parker 1994), considerably less

attention has been paid to assessments of service quality (Herbig and Milewicz 1994). When faced with high information asymmetries in a service evaluation context, there is some evidence that consumers often rely on informational cues that provide reliable signals of quality (Ostrom and Iacobucci 1998). Regardless of the type of quality assessment, a review of the literature reveals two key attributes of a signal: 1) *extrinsic to the entity of interest* (Rao and Monroe 1989) and 2) *evaluative utility* (Dodds et al. 1991). The following discussion qualifies these two key attributes in the context of our research question.

The marketing literature has qualified informational cues that consumers use to evaluate products and services across a basic dichotomy: intrinsic vs. extrinsic (Richardson et al. 1994). Intrinsic informational cues are considered to be attributes that, if altered, would change the inherent nature of the product or service. For instance, changing the furniture in a resort guest room would fundamentally change the service experienced by the consumer. Conversely, *extrinsic informational cues* are extraneous to the actual service that is experienced by the consumer. Continuing with the resort example, expensive atmospherics (e.g. granite counter) in the reception area may not necessarily translate into a quality service experience. Expensive atmospherics, while extrinsic to the actual service experience, are intended to help consumers alleviate initial high information asymmetries by sending the *signal* that similar quality will be consistent throughout the service encounter. Given their extrinsic nature to the entity of interest, signals are more readily available to consumers for evaluation purposes (Bloom and Reve 1990), particularly when faced with high information asymmetries.

While being extrinsic to the entity of interest makes a signal a viable means for service evaluation, the signal must still possess adequate *evaluative utility*. The consumer risk literature has posited that the evaluative utility of an informational cue (either intrinsic or extrinsic) consists of two dimensions: predictive and confidence value (Cox 1967). Predictive value is defined as “the probability with which a cue seems associated with (i.e., predicts) a specific product attribute” (p. 331). For example, the expertise of a mechanic who performs maintenance on an automobile is highly predictive of the quality of that service. However, a consumer must have the ability and confidence to judge such intrinsic cues accurately. In turn, confidence value is defined as “how certain the consumer is that the cue is what they think it is” (p. 331). Continuing with the automobile maintenance example, a consumer who is experienced in automotive repair most likely has confidence in their ability to judge the quality of the mechanics work. Yet, a person with less automotive repair experience may acknowledge the predictive value of using the mechanics’ expertise as an intrinsic cue, but has less confidence in their ability to assess such cues accurately. Inherently, intrinsic cues possess higher levels of predictive value compared to extrinsic cues. Yet, consumers often turn to signals because their extrinsic nature stimulates higher levels of confidence when assessing such cues. In turn, consumers typically assign a higher confidence value to an extrinsic cue (i.e., signal). Simply put, consumers are more confident in their ability to assess signals (e.g., atmospherics) compared to assessing the intrinsic attributes of a service (e.g., automotive repair). Thus, for an extrinsic cue to possess evaluative utility, appreciable levels of both predictive and confidence value must be present with the confidence value generally exceeding the predictive value of the cue.

## Signal Expectancy-Disconfirmation

While there is extensive literature that investigates the efficacy of various signals (e.g., price, brand, etc.), the effect of a consumer's expectations associated with a signal has received less attention. For instance, a consumer's preconceived expectation of price may affect how quality is perceived when that particular signal is utilized. To expand further, a consumer's *a priori* expectation of price may produce different degrees of expectancy-disconfirmation (positive or negative) that will ultimately impact how quality is assessed (e.g., the price was more/less expensive than expected). Expectancy-disconfirmation theory (EDT) (Oliver 1980), extended from cognitive dissonance theory (CDT) (Festinger 1957), has been used primarily to help predict consumer satisfaction (Anderson and Sullivan 1993). According to CDT, satisfaction is a form of cognition that can include beliefs, affect, and opinions to name a few (Festinger 1957). So, from a signaling theory perspective, expectancy-disconfirmation can be theorized to have an effect on a consumer's belief or opinion that a product or service is of high/low quality. Thus, we argue that there is theoretical justification for integrating signal expectancy-disconfirmation as a predictor of perceived quality.

The next logical step is to provide a theoretical argument for *why* signal expectancy-disconfirmation will influence consumer assessments of quality. We posit that signal expectancy-disconfirmation will be driven by the predictive value of the signal. To explain further, signaling theory assumes that a signal has a higher confidence value compared to predictive value (Cox 1967). Yet, appreciable levels of predictive value must be present in a signal and we contend that variations in predictive value will have a direct effect on signal expectancy-disconfirmation. Further, we posit that

predictive value is influenced by the credibility of the source from which the signal originates. A source is deemed credible based on perceived expertise and competence (Self 1996). Taken a step further, a signal that is congruent with the credibility of the source is likely to possess high predictive value. For example, the predictive value of an atmospheric signal for a building contractor's reception area may be higher as compared to the atmospheric for an electrician's reception area. In the case of the building contractor, the quality of the atmospheric (e.g., granite counters, crown molding) in the reception area represents high predictive power in that the consumer may interpret such a signal as being a reflection of the contractor's credibility. Conversely, the same quality atmospheric in an electrician's reception area will possess less comparative predictive value as the consumer will not interpret such a signal as being directly representative of the electrician's credibility. Thus, we theorize that source credibility, or lack thereof, will affect the predictive value of a given signal. In turn, the signal's predictive value will influence a consumer's signal expectancy-disconfirmation, which will subsequently affect perceived quality.

## **RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT**

Ecommerce, by definition, is fully mediated by information technology (Rayport and Jaworski 2003), which leaves the consumer with no physically tangible cues for evaluating the quality of products or services. Given these inherent asymmetries of information, early eCommerce research emphasized a need to provide consumers with an IT-mediated experience that would prove effective for conveying product and service attributes (Jarvenpaa and Todd 1996-1997). As stated earlier in the paper, the pre-evaluation information asymmetries associated with products and services, respectively,



are fundamentally different. Asymmetries of information related to a product can be narrowed by evaluating the product prior to purchase or returning the product. Conversely, the evaluation of a service occurs after one has purchased and experienced it, hardly an *a priori* evaluation. Thus, one can argue that narrowing information asymmetries when evaluating services online may be relatively more challenging when compared to evaluating products online.

The website has been argued to be the primary conduit for helping consumers overcome the inherent information asymmetries associated with evaluating a service online. Further, the consumers' perception of website quality has been emphasized as a key facilitating factor in that "when the customer sees a Web site and not the firm, the site becomes the firm" (Pitt et al. 1999) (p. 12). So, it seems apparent that website quality is an important factor when evaluating services in an eCommerce context, particularly when consumers are faced with high asymmetries of information. Subsequently, our first research proposition is *does website quality manifest as a signal of service quality in an eCommerce environment?* Also, given the inherent IT-nature of website quality as a signal for conveying service quality, we would also like to investigate the potential influence of the signal's source credibility. Thus, our second research proposition is *does a website quality signal originating from an IT-credible organization (e.g., Microsoft) create expectations that significantly influence how consumers assess service quality?* To answer these two research propositions, we offer the following research model (see Figure 1) with associated hypotheses.

\*\*\*\*\* Insert Figure 1 \*\*\*\*\*

Theoretically, to position website quality as a signal for assessing service quality, certain assumptions must be met. First, website quality must *be extrinsic to the entity of interest*. For instance, download delay (i.e., an attribute of website quality) was observed to influence how a consumer perceived an online retailer (Rose and Straub 2001). Yet, download delay is not an inherent attribute of the eventual service that would be consumed (e.g., booking a hotel room via a website). Fast or slow, the speed of the website can influence what a consumer would expect in terms of service quality, but is not directly representative of the service. The next assumption is that website quality possesses evaluative utility, which implies that appreciable levels of predictive and confidence value are present. From a predictive value perspective, website quality has been observed to influence a consumer's impression of an organization (Winter et al. 2003) as well as brand quality (Gwee et al. 2002). In another study, website errors were shown to negatively affect how consumers perceived the quality of an online store, which subsequently influenced trust and intention to purchase (Everard and Galletta 2005). In all of these instances, the quality of the website was observed to possess predictive value in that website quality was used to make evaluative inferences (i.e., predictions). Given the apparent predictive value of website quality, the next issue is the confidence value of this particular signal. Several eCommerce metrics have emerged over the last few years that have demonstrated that consumers are capable of assessing website quality across a number of dimensions (Loiacono et al. 2003; Yoo and Donthu 2001), providing support for the confidence value that consumer have in assessing website quality as a signal. Having offered the case that website quality is not only extrinsic to the service being

evaluated, but also possessing both predictive and confidence value, we offer the following hypothesis:

*H1: Perceptions of website quality affect a consumer's perception of service quality*

Having made a case for website quality as a signal of service quality, the next step is to examine the effect that source credibility has on the expectations of the signal. As discussed earlier in the paper, a popular approach to studying consumer expectations is expectation-disconfirmation theory (EDT). In the IS literature, EDT has been used to understand how disconfirmed expectations of IS characteristics can influence continuance (Bhattacharjee 2001; Bhattacharjee and Premkumar 2004) as well as web-customer satisfaction (McKinney et al. 2002). Applying EDT to a website quality signal, we posit that the predictive value of the website quality will vary based on the perceived IT credibility of the signal's source. In turn, varying levels of the predictive value of a website quality signal will produce a corresponding signal expectancy-disconfirmation. For example, a website quality signal originating from an IT credible organization (e.g., Google) should possess higher predictive value, resulting in a stronger relationship between signal expectancy-disconfirmation and perceived service quality.

Thus, we offer the following hypothesis:

*H2: Perceptions of signal expectancy-disconfirmation affect a consumer's perception of service quality*

Electronic commerce interface research considers a consumer's behavior intention as an important factor (Gefen et al. 2003). The IS literature provides empirical support for a causal link between perceived organization quality and consumer purchase intention (Chu et al. 2005; Everard and Galletta 2005). We posit that a similar relationship exists

between perceived service quality and behavioral intention, leading to our final hypothesis:

*H3: Perceptions of service quality affect a consumer's behavioral intention*

## **RESEARCH METHOD**

A 2x2 experiment was designed to test the proposed research model and associated hypotheses. Subjects were asked to evaluate a university course using one of four randomly assigned interfaces that contained website quality of varying quality (i.e., low or high) as well as two different course domains (i.e., English composition or MIS website design). The choice of a college course website was attractive in that it would stimulate realistic involvement from the participating subjects (i.e., undergraduate students). Further, a college course is an accurate instantiation of a service that would be evaluated via a website. The following sections discuss the subjects, experimental procedures, manipulations, and measures.

### **Subjects**

The subjects for this study were undergraduate students who were enrolled in an introductory management information systems course at a major university in the United States. A total of two-hundred ninety-seven subjects participated in the study with 40.1% being female and 89.2% of the participants being between 18 and 23. Participation was strictly voluntary and participants received course credit upon successful completion of the study.

### **Experimental Procedures**

Subjects were randomly assigned to one of the four interface treatments. A scenario was created that framed the task as an evaluation of a specific college-level

course for a friend who was majoring in that particular discipline (i.e., English or MIS) (See Appendix, Exhibit B). The rationale behind the scenario was to minimize a subject's personal attitude or opinion toward the particular discipline and/or the course being evaluated. Also, hypothetical courses were created to create high asymmetries of information for the subject as they evaluated the course via the website, which is a fundamental tenet of signaling theory. Upon complete of the browsing task, a survey was administered that gathered data about perceptions of website quality, website expectancy-disconfirmation, course quality, and intention to recommend the course to their friend.

### **Manipulations**

Two different interface treatments were created that contained website characteristics with varying degrees of quality (See Appendix, Exhibit C). Drawing from the existing website quality literature, a representative set of website quality characteristics were manipulated including download delay, navigability, visual appeal, to create varying degrees of website quality. Download delay was manipulated by introducing a 4-second delay for any action taken by the user. The navigability characteristic was manipulated via differences in information structure. The visual appeal website characteristic was manipulated by a consistent use of colors (e.g., backgrounds) and the use of graphics (e.g., color tabs for information selection), respectively.

Theoretically, we posit that the predictive value of a website quality signal will vary based on the IT credibility of the signal's source that, in turn, will influence the consumer's signal expectancy-disconfirmation. Therefore, to infuse variability in signal expectancy-disconfirmation, two different course domains with inherently different degrees of IT credibility were created: English creative writing and MIS website design.

We expect that a website quality signal within an MIS website design course, compared to the English creative writing course, will possess high predictive value that will produce higher levels of signal expectancy–disconfirmation. For added control, all information was held constant (e.g., instructor name, number of assignments) across both course domains with the exception of certain contextual information (e.g., course descriptions).

### **Measures**

The constructs measured in this study include independent variables website quality and signal expectancy-disconfirmation as well as dependent variables perceived service (i.e., course) quality and behavioral intention. All items were measured using a 7-point Likert scale (see Appendix, Exhibit B).

**Independent Variables:** Website quality was operationalized as a continuous, perceptual measure, adapted from past website quality measures (Loiacono et al. 2003). The 3-item measure was intended to reflect the proportional levels of the aforementioned website quality manipulations (e.g., download delay). Signal expectancy-disconfirmation was operationalized as a continuous, perceptual measure, adapted from past disconfirmation measures in the IS literature (Bhattacharjee 2001). The 3-item measure was intended to capture a consumer’s expectancy-disconfirmation of website quality that is magnified by the credibility of the signal’s source (i.e., English vs. MIS course).

**Dependent Variables:** Perceived course quality was operationalized as a continuous, perceptual measure, which was adapted from prior signaling research (Boulding and Kirmani 1993). Behavioral intention was operationalized as a continuous, perceptual measure, using newly generated items that were adapted to the course evaluation task used in this study.

## **ANALYSIS OF RESULTS**

The results for this study are analyzed using a three-step approach. First, the descriptive statistics (means, standard deviations) for the independent and dependent variables are presented along with the manipulation checks for the interface treatments. Also, a CFA analysis and validity of the constructs is discussed. Second, structural equation modeling (SEM) is used to validate the measurement model and to analyze the proposed hypotheses in the structural model. Finally, an ANOVA analysis is employed to plumb into more detail about the nature and magnitude of the effects observed in the study.

### **Descriptive Statistics, Manipulation Checks, and Construct Validity**

Table 1 contains the descriptive statistics for the continuous variables used in this study. Referring to Figure 2, one can see differences existing across the low and high website quality manipulations. Significant differences were observed between the low and high quality websites, providing support for the overall website quality manipulation.

\*\*\*\*\* Insert Table 1 \*\*\*\*\*

\*\*\*\*\* Insert Figure 2 \*\*\*\*\*

Using SPSS 13.0, a principal components analysis (PCA) was run separately for each of the theorized constructs to test for convergent validity. Each PCA produced an eigen-value greater than one, which supports the unidimensionality of the construct. Factor loadings were observed to be above the acceptable threshold of .707 (Segars 1997) and acceptable reliability for each construct was demonstrated (see Appendix, Exhibit A). Also, discriminant validity for each construct was supported by examination of both the correlation and AVE results.

### **SEM: Measurement and Structural Models**

The measurement model for the study was validated using AMOS 4.01 software. The GFI was 0.961, AGFI .916, NFI 0.985, CFI 0.992, and the RMSEA 0.062 (with lower-bound at .045 and upper-bound at .078). All fit indices are well within the acceptable ranges as well as the RMSEA. Assuming acceptable model fit as well as convergent and discriminant construct validity, the structural model is used to test the hypothesized relationships in the research model (see Figure 3). Referring to Figure 3, the structural model demonstrated acceptable fit. Both website quality and signal expectancy-disconfirmation were observed to have a significant effect on perceived course quality (H1 and H2). Further, a significant effect was observed for the relationship between perceived course quality and behavioral intentions (H3). Thus, all three hypotheses were supported.

\*\*\*\*\* Insert Figure 3 \*\*\*\*\*

### **ANOVA**

As stated earlier, an ANOVA analysis is conducted to plumb into more detail about the nature and magnitude of the effects observed in the SEM analysis. Using SPSS 13.0, an ANOVA model<sup>#</sup> was run that included website quality and course domain as categorical independent variables and perceived course quality as a continuous dependent variables (see Table 2). A significant relationship was observed between website quality and perceived course quality ( $p < .0001$ ), which supports H1. A significant effect was observed between course domain and perceived course quality ( $p = .017$ ). While this result provides some initial support for H2, the significant interaction between website quality

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<sup>#</sup> Subjects were randomly discarded from the original sample of 297 subjects to create balanced cells for the ANOVA model, which resulted in a sample of 260.



and course domain ( $p=.027$ ) warrants additional analysis. Judging from the cell means and the interaction plot chart (see Figure 4), the course domain manipulation appears to be causing an ordinal interaction. To explain further, the signal expectancy-disconfirmation is expected to be influenced by the IT credibility (or lack thereof) of the signal's source. The evidence resulting from this ANOVA analysis supports the contention in that a high quality signal originating from either course domain does not stimulate a difference in perceived service quality. However, a low quality signal originating from an IT credible source (i.e., MIS) results in significantly lower perceived service quality as compared to the same low quality signal being sent from a non-IT credible source (i.e., English). Thus, we contend that H2 is supported.

\*\*\*\*\* Insert Table 2 \*\*\*\*\*

\*\*\*\*\* Insert Figure 4 \*\*\*\*\*

## **CONTRIBUTIONS, LIMITATIONS, AND FUTURE RESEARCH**

### **Contributions**

This research study examined website quality as extrinsic information cue (i.e., signal) that are intended to help consumers evaluate the quality of a service. Further, a consumer's disconfirmed expectations when processing a signal were also examined to see if perceptions of service quality were affected. The results from the study provide strong evidence that when faced with high asymmetries of information in an eCommerce domain, website quality is an effective lever for evaluating the quality of a service. This extends the signaling theory body of literature to an ecommerce domain, particularly with respect to the evaluation of services via a website. An additional contribution is the observed effect of signal source's IT credibility. This study supports the contention that an IT-mediated signal originating from an IT-credible organization will be held to a

higher standard. For instance, a software company (e.g., Oracle) will likely be expected to deliver a higher quality website compared to an organization with less IT-credibility (e.g., vacation resort).

### **Limitations**

While this study provides some interesting insights and contributions, it is not without its limitations, which deal primarily with the generalizability of the results. First, both studies used the same websites in a controlled laboratory environment to test the proposed hypotheses, which limits external validity. Second, and on a related note, the use of university courses as the context of the service quality assessment is limiting as well. While the use of these courses increased the involvement of the subjects, the generalizability to other business domains is not possible. Finally, the use of student subjects, while effective for controlling for the homogeneity of the sample, limits the generalizability to other populations.

### **Future Research**

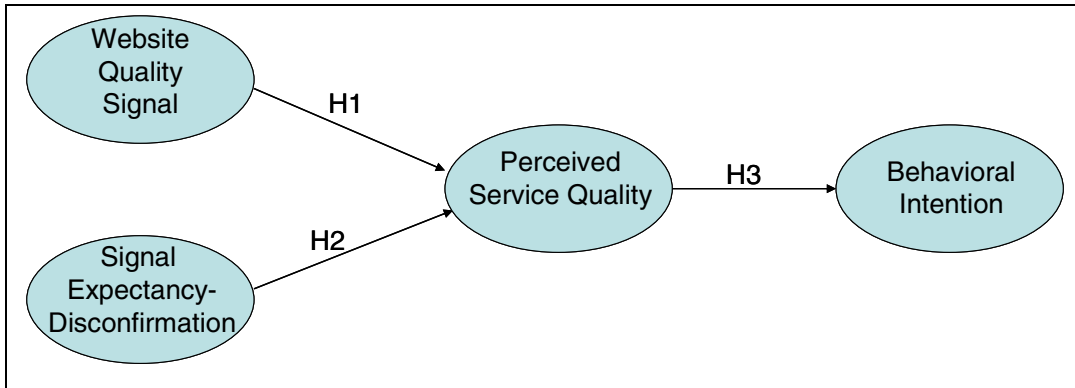
The results from this study, while promising, still require additional research to understand website quality as a signal for conveying service quality. Future research is necessary to decompose the website quality signal by isolating and understanding the relative effect of specific website characteristics (e.g., visual appeal) on perceptions of service quality. Further, the concept of signal expectancy-disconfirmation needs to be more thoroughly examined across different business domains to gain a more accurate understanding of its effect on service quality assessments. Future research will help identify the key factors that affect how consumers perceive and interpret website quality as a means for making quality assessments when faced with high asymmetries of

information. The use of signaling theory provides a useful theoretical foundation for understanding the inherent value of the organization's website and how it can help facilitate the management of online consumer interactions.

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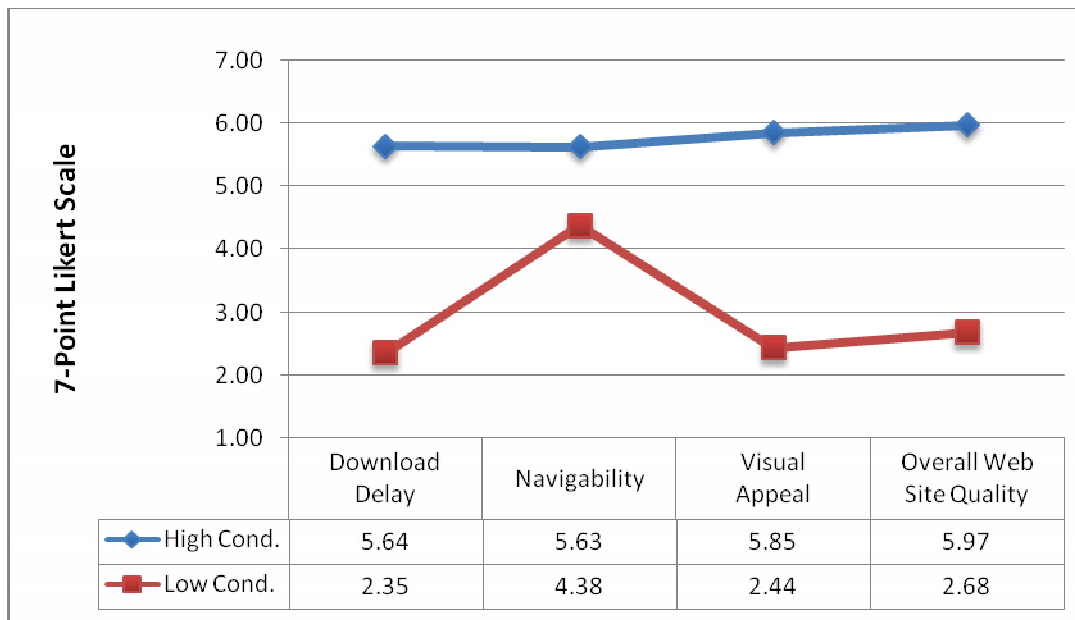
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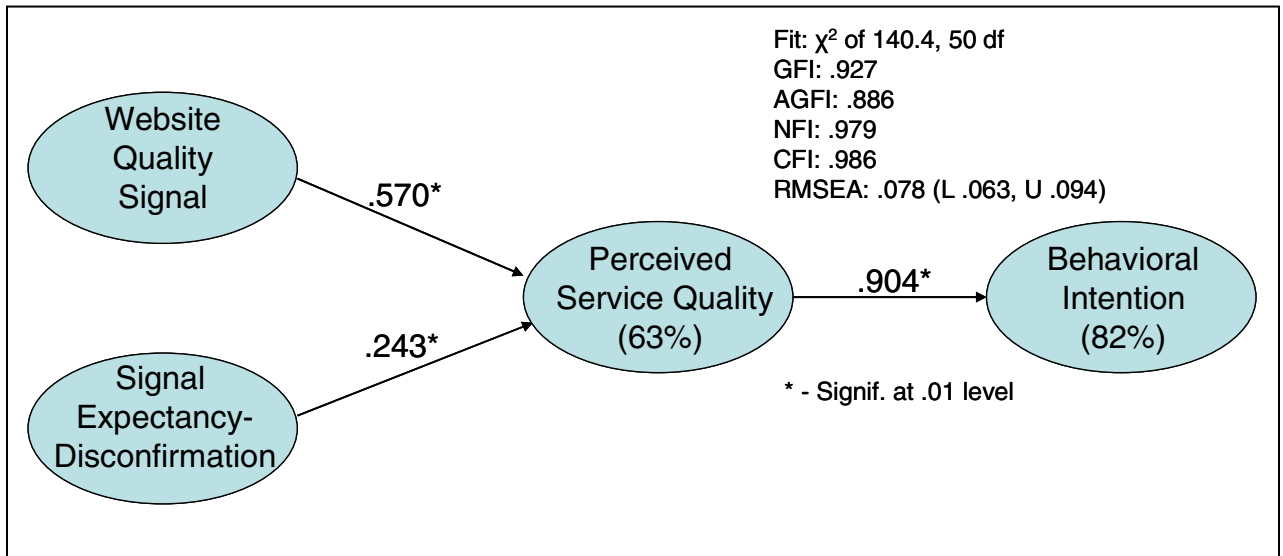
**Figure 1. Research Model**

**Table 1. Descriptive Statistics**

Construct	N	Min	Max	Mean	Std. Deviation
Website Quality	297	1	7	4.30	2.077493
Signal Expectancy-Disconfirmation	297	1	7	4.18	1.853291
Course Quality	297	1	7	4.72	1.473266
Behavioral Intention	297	1	7	4.69	1.615007



**Figure 2: Interface Manipulation Checks**

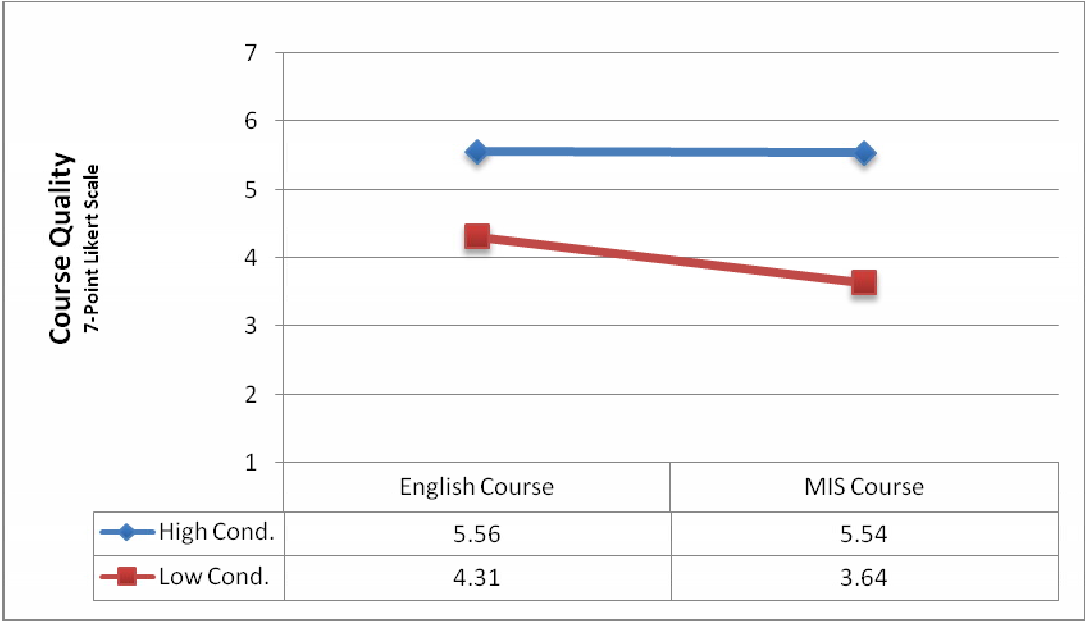


**Figure 3. Structural Model**

**Table 2. ANOVA Results for Perceived Service Quality**

Source of Variation	Sum of Squares	DF	Mean Square	F-Ratio	Prob. > F
Website Quality	202.910	1	202.910	141.538	.0001
Course Domain	6.509	1	6.509	4.540	.034
Website Quality*Course Domain	7.426	1	7.426	5.180	.024
Error	420.047	293	1.434		
C-Total	642.471	296			

R-Squared = .339 (Adjusted R-Squared = .331)



**Figure 4. Interaction Plot Chart**

## APPENDIX

### Exhibit A: Construct Validation

Construct	Factor Loading	Reliability (alpha)
<b>Perceived Website Quality (WSQ)</b>		0.980
All in all, I would rate the WEBSITE as being of high quality.	0.938	
How would you rate the general quality of the WEBSITE?	0.977	
All things considered, how would you rate the quality of the WEBSITE?	0.970	
<b>Signal Expectancy Disconfirmation (EXPC)</b>		0.980
My experience with using the WEBSITE was better than I expected.	0.954	
The quality of the interaction with the WEBSITE was better than what I expected.	0.963	
The quality of the WEBSITE was higher than what I expected.	0.931	
<b>Perceived Service Quality (PSQ)</b>		0.969
I perceive the MIS344 - Web Development COURSE to be well designed	0.963	
I perceive the MIS344 - Web Development COURSE to be an effective learning experience	0.978	
I perceive the MIS344 - Web Development COURSE to be comprehensive and complete	0.971	
<b>Behavioral Intention (BI)</b>		0.984
Assuming your friend were looking to take a COURSE from this department, what is the likelihood that you would recommend MIS344 - Web Development?	0.979	
Suppose your friend was looking to take a COURSE from this department. How likely would you be to encourage them to select MIS344 - Web Development?	0.988	
Presume your friend is looking to take a COURSE from this department, what is the likelihood that you would encourage them to enroll in MIS344 - Web Development?	0.985	



## **Exhibit B: Task**

Student ID: \_\_\_\_\_

### **COURSE WEBSITE SURVEY**

Please complete the following questionnaire: [www.wright-research.com/coursesurvey01/](http://www.wright-research.com/coursesurvey01/)

#### **Next, please read the following scenario:**

You have a good friend who is an MIS major. During the enrollment period for the upcoming term, your friend has asked you to look over a class that they find to be potentially interesting. However, your friend doesn't know much about the course or the instructor as the course is a new offering and the professor is also new to the university. With no previous information about the professor or course, your friend has asked you to take a look at the course website and give your opinion about the potential quality of the course. With an open mind, you begin to browse the course website, hoping that it will provide you with the information necessary to determine the quality of the course and/or the instructor.

Please determine whether you would give your friend a positive or negative evaluation of this course based on the information you ascertain from the website. Below is a list of items that will help you in assessing the course website. Please answer and check off each question as you go through the list.

Go to [www.wright-research.com/course/11/](http://www.wright-research.com/course/11/)

**Next, please click on the Award Winning Course (MIS 344 –Web Site Design) and Browse around.**

**PLEASE READ CAREFULLY!** Be sure to read the course description carefully so that you will be prepared to discuss it with your friend who is looking for potential MIS classes. Also, you will be asked a few questions on the post-survey about the course content.

**FLIP OVER**

Once you are done browsing the website, please execute the following tasks:

1 What is this course about? (Provide 1-2 sentences)

---

---

2 Read the "Spotlight On" section. Briefly summarize the section below?

---

3 What is the Instructor's name? \_\_\_\_\_

4 When is the first assignment due? \_\_\_\_\_

5 In what circumstance are you eligible to receive an "incomplete" grade for the course?

---

6 What is the instructor's phone number?

(.....) - \_\_\_\_\_

7 How many points are allotted for student participation? \_\_\_\_\_

8 Name one (1) of the suggested publications listed on the main page:

---

9 How many total points can you earn in this class? \_\_\_\_\_

Check

Please complete the following questionnaire: [www.wright-research.com/survey10/](http://www.wright-research.com/survey10/)

Survey Code: 11

## Exhibit C: Interface Manipulation Checks

Interface Construct	Low	High											
<b>Download Delay</b>	A 4-second download delay is coded into the design of the website. Users wait 4 seconds to access any page on the website.	The site was designed using Flash. As soon as the site was downloaded (average of 3-4 second) there is no lag navigating between pages.											
<b>Navigability</b>	Less efficient and inconvenient design specifications are incorporated into the website. For example, subjects had to use the back button in the browser in order to move from page to page.	Flash provided navigation that was embedded in every page to provide easy access to all the pages.											
<b>Visual Appeal</b>	Unprofessional and unattractive aesthetics are used in the design of the website.	Cutting edge techniques were used to provide a very professional and attractive aesthetics.											
<p><b>Welcome to English 344 - Creative Writing!</b></p> <p>Navigation: Home, About, Contact, Copyright</p> <p>Welcome to ENG 344! The course that will help you explore your creative side. This website will be a useful resource throughout the semester. I suggest you visit this page on a regular basis to keep current on due dates and assignments. The website will be regularly updated as the semester progresses.</p> <table border="1"> <thead> <tr> <th>Spotlight On</th> <th>Publications</th> <th>Resources</th> </tr> </thead> <tbody> <tr> <td> <b>Writing Award Winning Stories</b>                      Throughout the semester you will be exposed to writing techniques used in published literature today.                 </td> <td> <b>LibraryNotes</b>                      English / Technology  <b>Academic Writing</b>                      Academic Writing                      Phn. English Comp. Online                 </td> <td>                     Rhetoric &amp; Comp                      Writing for an Audience                      Teaching English Composition                      Paradigm Online Writing Assistant                      Allyn &amp; Bacon / Longman Catalog                 </td> </tr> </tbody> </table> <p><b>Fact of the Day</b>  <i>Pathos</i>, also called the <i>pathetic</i> or <i>emotional</i> appeal, persuades audiences by arousing the emotions (Lauden 74).</p>	Spotlight On	Publications	Resources	<b>Writing Award Winning Stories</b> Throughout the semester you will be exposed to writing techniques used in published literature today.	<b>LibraryNotes</b> English / Technology <b>Academic Writing</b> Academic Writing Phn. English Comp. Online	Rhetoric & Comp Writing for an Audience Teaching English Composition Paradigm Online Writing Assistant Allyn & Bacon / Longman Catalog	<p><b>ENG 344 creative writing</b></p> <p>Navigation: Home, About, Contact</p> <p>Welcome to ENG 344! The course that will help you explore your creative side. This website will be a useful resource throughout the semester. I suggest you visit this page on a regular basis to keep current on due dates and assignments. The website will be regularly updated as the semester progresses.</p> <table border="1"> <thead> <tr> <th>Spotlight On</th> <th>Publications</th> <th>Resources</th> </tr> </thead> <tbody> <tr> <td> <b>Writing Award Winning Stories</b>                      Throughout the semester you will be exposed to writing techniques used in published literature today.                 </td> <td> <b>LibraryNotes</b>                      English / Technology  <b>Academic Writing</b>                      Academic Writing                      Phn. English Comp. Online                 </td> <td>                     Rhetoric &amp; Comp                      Writing for an Audience                      Teaching English Composition                      Paradigm Online Writing Assistant                      Allyn &amp; Bacon /                 </td> </tr> </tbody> </table>	Spotlight On	Publications	Resources	<b>Writing Award Winning Stories</b> Throughout the semester you will be exposed to writing techniques used in published literature today.	<b>LibraryNotes</b> English / Technology <b>Academic Writing</b> Academic Writing Phn. English Comp. Online	Rhetoric & Comp Writing for an Audience Teaching English Composition Paradigm Online Writing Assistant Allyn & Bacon /
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