

# The Effects of Service Quality on Customer Satisfaction and e-Loyalty in e-learning Site

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**Abstract:** *The purpose of this study was to investigate the nature of relationships among service quality, customer satisfaction and e-loyalty in e-learning site. In order to achieve the study purpose, survey method was applied. As a result, it was revealed that service quality had significant effects on customer satisfaction in e-learning site. The influential factors of service quality on customer satisfaction included convenience of use, personalization, tangibles, responsiveness, and reliability in e-learning site. In addition, service quality had significant effects on e-loyalty as well.*  
**Keywords:** *e-Learning Site, Service Quality, Customer Satisfaction, e-Loyalty*

## 1. Introduction

The so-called information revolution triggered by advanced communication technologies such as the internet has had a significant influence on our daily lives. The arenas of education and training are no exception. The rapid rate of change demands an ability to learn to adjust quickly and assimilate large amounts of conflicting information. E-learning, in particular, gained a pivotal position in the field of human resource and organization development as well as public arenas such as university education.

Specifically, e-learning is defined as “a wide set of applications and processes such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), satellite broadcast, interactive TV, and CD-ROM”(Jun, 2005). E-learning can be seen as not only one of internet-based information technologies which can provide education services but also one of teaching-learning methods which can implement self-directed learning(Lee & Lee, 2005).

Education and training via the Web are growing rapidly because they have the potential to meet the needs of those who seek to find a way to learn more efficiently and conveniently. Recently, the e-learning market in Korea has been growing rapidly over the past several years. This growth has been propelled by both the supply and demand sides. E-learning providers have improved the quality of e-learning site and

resolved customization issues to successfully overcome client's reluctance to use e-learning.

The purpose of this study was to investigate the nature of relationships among service quality, customer satisfaction and e-loyalty in e-learning site. Then we derive key factors which affect the service quality of e-learning site and tested if these factors have a positive effect on customer satisfaction and e-loyalty.

## 2. Research Model and Hypotheses

We apply the SERVQUAL concept to the Parasuraman et al.(1988)'s service quality measurement model for this purpose. SERVQUAL, suggested by Parasuraman et al. in 1985, has been adopted most widely among other measurements and it has extended its application to various fields by many researches. Then this study selects the variables well matched to service quality of e-learning site on the basis of independent variables of this study, sets the models as adding the factors newly noticed such as convenience of use and personalization. In the points of view discussed until now, we suggest a research model like Figure 1. It is a modified the Parasuraman et al.(1988)'s service quality measurement model considering e-learning site. This model is composed of independent variables(tangibles, reliability, responsiveness, empathy, convenience of use, and personalization), customer satisfaction and e-loyalty[1, 3, 5, 6, 7, 8, 9].

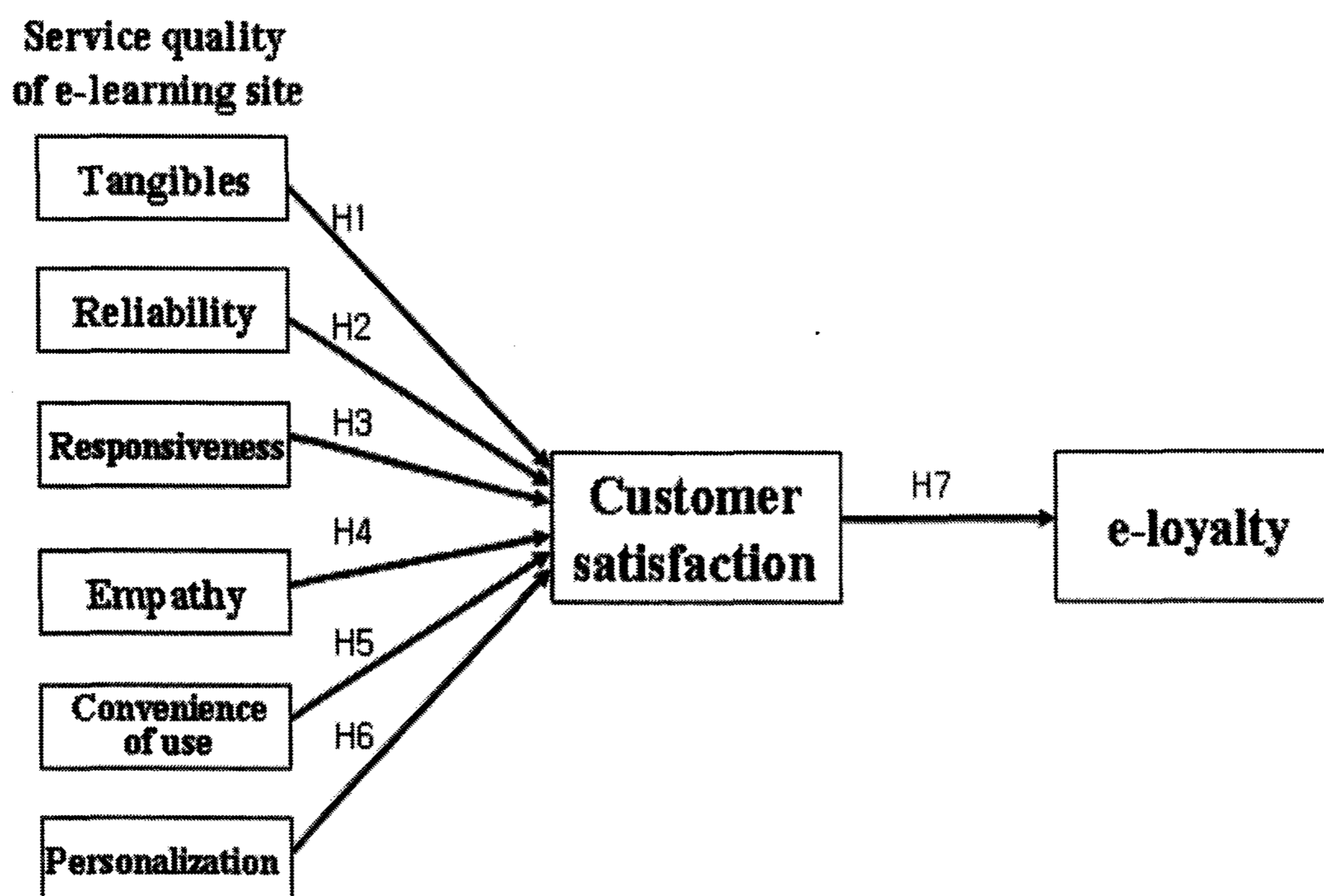


Figure 1. Research model and hypotheses

We suggest the hypotheses as follows :

- H1 : Tangibles have a positive effect on customer satisfaction in e-learning site.
- H2 : Reliability has a positive effect on customer satisfaction in e-learning site.
- H3 : Responsiveness has a positive effect on customer satisfaction in e-learning site.
- H4 : Empathy has a positive effect on customer satisfaction in e-learning site.
- H5 : Convenience of use has a positive effect on customer satisfaction in e-learning site.

- H6 : Personalization has a positive effect on customer satisfaction in e-learning site.
- H7 : Customer satisfaction has a positive effect on e-loyalty in e-learning site.

### 3. Research Methods

We sent 500 questionnaire sheets to university students who experienced e-learning site. A total of 372 valid questionnaires were used for data analysis. The measurement scales for this study have been drawn from Parasuraman et al.(1988)'s SERVQUAL model with the factors newly noticed such as convenience of use and personalization. All items used the seven-point scale(1=very strongly disagree, 7= very strongly agree).

### 4. Analysis and Results

As a result, it was revealed that service quality had significant effects on customer satisfaction and e-loyalty in e-learning site. The influential factors of service quality on customer satisfaction included convenience of use, personalization, tangibles, responsiveness, and reliability in e-learning site. In addition, service quality had significant effects on e-loyalty as well[Figure 2].

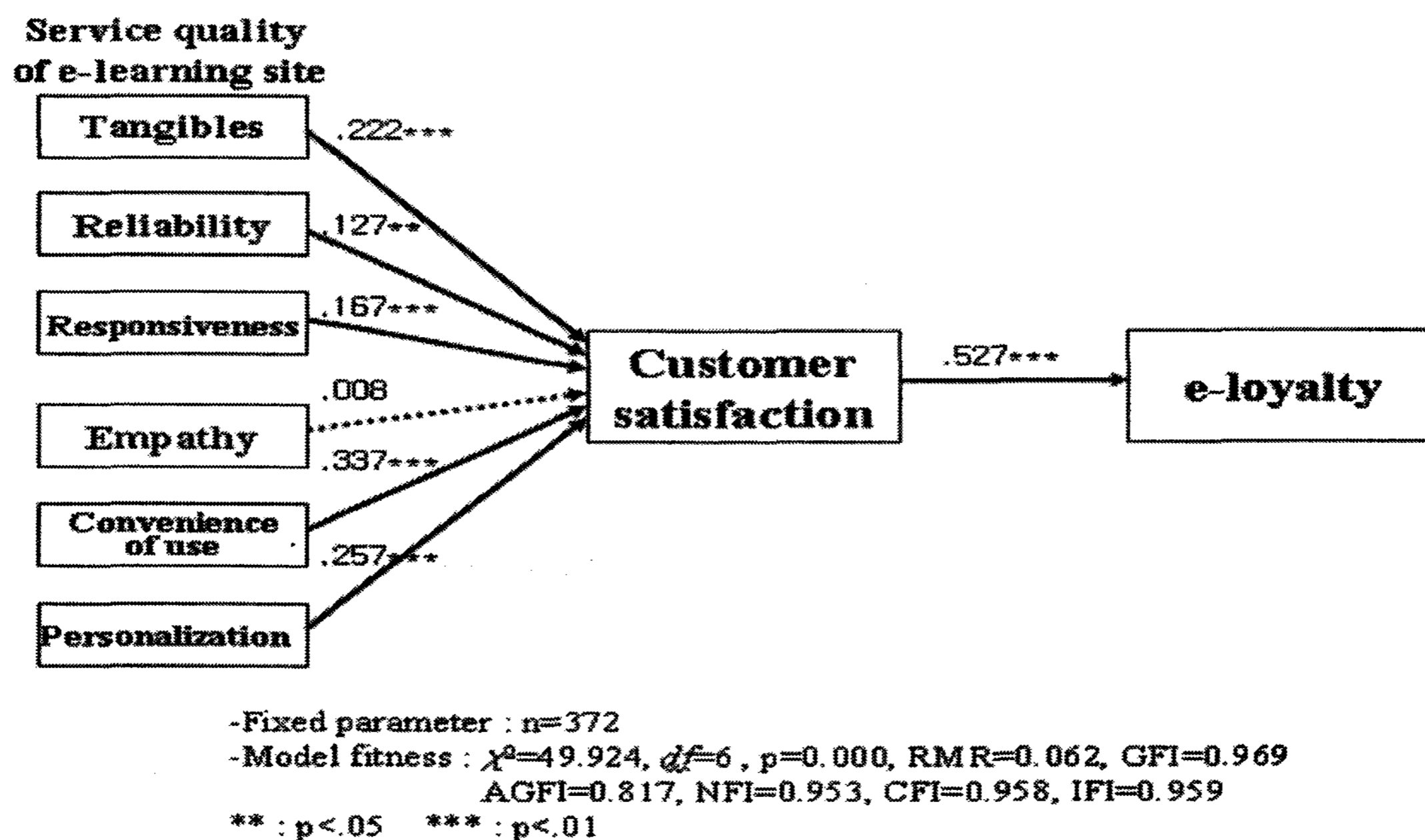


Figure 2. Path analysis of research model

Table 1. Results of hypotheses test

No.	Hypothesized Path	Estimate(t-value)	Result
H1	Tangibles → Customer Satisfaction	0.222***(4.002)	Supported
H2	Reliability → Customer Satisfaction	0.127**(2.408)	Supported
H3	Responsiveness → Customer Satisfaction	0.167***(2.631)	Supported
H4	Empathy → Customer Satisfaction	0.008(0.129)	Rejected
H5	Convenience of use → Customer Satisfaction	0.337***(5.651)	Supported
H6	Personalization → Customer Satisfaction	0.257***(5.083)	Supported
H7	Customer Satisfaction → e-Loyalty	0.527***(12.847)	Supported

## 5. Conclusion

From the empirical analysis we conclude that convenience of use, personalization, tangibles, responsiveness, and reliability are key factors for the service quality of e-learning site. We also see the significance of the relationships among service quality of e-learning site, customer satisfaction, and e-loyalty. An important finding in this study is that convenience of use and personalization were the most influential factors on customer satisfaction and e-loyalty in e-learning site.

Therefore, it can be further recommended for e-learning site that they should be concerned with increasing overall service quality to enhance e-loyalty, which is an important indicator of CRM(Customer Relationship Management) strategies.

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