

인터넷에서 건강정보 이용의도에 대한 실증 연구 : 성별에 따른 비교*

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An Empirical Study of Intention of Usage of Health Information on the Internet : Comparison by Gender*

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■ Abstract ■

Since the general quality of life has been improving, people have become interested in "well-being." The widespread acceptance of the importance of "well-being" to quality of life has encouraged people to take more interest in getting health information online when they need it. Expansive use of online health information suggests that individual characteristics (i.e., gender and other traits), Website features, and perceived trust are related to the primary concern for many online health information consumers. This study examines whether familiarity, perceived security, and reputation of health information on various Websites influence the relationship of trust and intention to use by gender. These research results will contribute to the adoption of online health information by gender and, moreover, will provide companies with an understanding of key characteristics of consumers who use emoticons and provide useful implications for marketing strategies to current and future consumers.

Keyword : Internet, Health Information, Trust, Behavior Intention to Use, Experience,
Security, Familiarity, Reputation

논문투고일 : 2011년 07월 22일 논문수정완료일 : 2011년 08월 13일 논문게재확정일 : 2011년 09월 05일

* 본 연구자들은 초고에 유익한 고견을 제안해주신 편집위원님과 심사위원님들께 감사드립니다.

이 논문은 2011년 상지대학교 교내 연구비 지원에 의한 것임.

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1. Introduction

Great interest in and extensive use of e-health information suggests that the primary concern for many consumers is the useful nature of e-health information [1, 3, 33]. This trend has resulted in the emergence of a new business model that involves providing e-health information to consumers [26, 36, 37, 41, 42]. A recent study [5] identified relationships among sensitivity, privacy, and trust regarding the use of e-health information.

Presenting e-health via the Internet has made possible the following things. First, consumers are able to communicate or share ideas with experts and doctors without visiting a hospital. Second, depending on the conditions of the product or service, consumers are able to gain access to free e-health information, or sometimes to in-depth e-health information with a fee. Third, consumers enjoy health information in various areas : alternative medicine, Oriental medicine, and Western medicine. Such advantages have encouraged use of the e-health information [22, 23].

The trust issue is very important due to the nature of the online environment. The serious sensitivity of e-health information and the high risk of obtaining indiscriminant e-health information unless one selects carefully suggest that the importance of trust with respect to e-health information is greater than that associated with more general online product information [24]. For instance, Hu and Sundar [18] investigated relationships between credibility and the behavioral intention of e-health information. Likewise, the importance of the use of quality tools to ensure the reliability of e-health information has been emphasized [9, 15, 16]. A consumer's gender in the decision-making process for an e-business has also been considered

a key factor in determining consumer behavioral intention to use or buy [10, 13, 14, 39].

Much like the difference that is seen between male and female consumers' use of Internet shopping malls [13, 39], Cline and Haynes's [7] work suggested that more women than men have used e-health sites due to women's caring role in society [7]. Also, the results of Pennbridge et al.'s study [32] suggested that 60% of respondents using the Internet to locate health information were women [32].

In addition, as the role of trust has been emphasized in the e-business and e-commerce area [6, 12, 29-31, 38], the importance of trust also has been the focus of numerous studies [5, 16, 18, 21].

Thus, based on previous studies' findings that gender differences do exist in the use of the Internet for locating health information, this study examines whether familiarity, perceived security, and the reputation of health information Websites influence the relationship of trust and intention to use by gender [10].

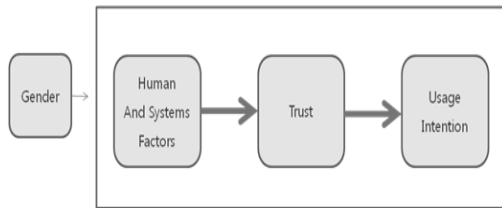
2. Theoretical Background

2.1 Conceptual Model

Kim et al. [22] pointed out the importance of trust in online purchase decision-making. Numerous studies suggested familiarity, perceived security, and reputation of health information Websites affect the trust variable in promoting the use of e-business [21, 30, 31, 36, 38]. Moreover, major studies that have focused on and examined gender differences show a discrepancy in online customer behavior [4, 12, 19, 22, 29].

Therefore, an understanding of customers' differences by gender regarding personal psychology

and systems factors, that is gender, personality, feature of web-site, and trust, has been found. Thus, the following conceptual model [Figure 1] is proposed by incorporating such relationships in this study.



[Figure 1] Conceptual Model

2.2 Health Information and Trust of the Web

The term “well-being” usually refers to the degree to which an individual feels and is well. In this sense, it is synonymous with “quality of life.”

Currently, the widespread importance of well-being for quality of life has led people to take more interest in getting health information online when

they need it. This trend has resulted in the emergence of a new business model that involves providing e-health information to consumers [36]. A brief summary of the relevant previous studies is presented in <Table 1>.

As shown in <Table 1>, consumers’ trust and psychological factors regarding e-health information from e-health Websites are correlated with the use and intention to use of e-health information.

The explanations described above suggest that the level of consumers’ intention to use e-health information may be linked to the promotion of consumers’ health in either direct or indirect ways by utilizing and using e-health information. The use of e-health information that is not trustworthy results in negative perceptions and further prohibits the use of e-health information by consumers [5].

Due to the serious sensitivity of e-health information and the high risk of obtaining indiscriminant e-health information unless one selects carefully, the importance of trust with respect to

<Table 1> Prior Studies

Researchers	Main points
Song and Zahedi [36]	Investigating consumers’ intention to use health information along with trust of health infomediaries.
Luo and Najdawi [26]	Discussing measurements of trust building in health information portal sites.
An [1]	Recognizing consumers’ patterns in the adoption and use of e-health Websites.
Zhang et al. [42]	Examining consumers’ search for information in health Web portal sites.
Kim, Lee, and Nam [23]	Evaluating cancer patients’ use of health-related online information and the importance and improvement of usage.
Liang et al. [24]	Suggesting the utilization of information technology in managing a health condition.
DeLenardo [9]	Proposing the importance of Web-based systems for patients.
Goldschmidt [15]	Proposing the importance of information systems in the medical and health fields.
Stvilia et al. [37]	Evaluating the quality measurement model in online health information.
Bansal, Zahedi, and Gefen [5]	Investigating relationships among information sensitivity, privacy concerns, trust, and use of online health information.
Hanifa et al. [16]	Offering various codes of conduct or quality rating tools to assess the quality of health Websites
Hu and Sundar [18]	Examining online health information resource and proposing a new online source typology.

e-health information is greater than that associated with more general online product information [16, 18]. Song and Zahedi [36] proposed factors that influence consumer trust in health infomediaries¹⁾ and identified the relationships between consumer trust and intention to use health infomediaries. Luo and Najdawi [26] highlighted the importance of building consumer trust in health-related Web portals.

Thus, our study should address the importance of consumers' trust in using e-health information, which will lead to a consideration of the useful strategic implications of trust in e-health Websites.

2.3 Health Information Use

Trust is a factor that significantly influences the adoption of e-commerce [19]. An examination of previous e-commerce studies on what influences trust formation shows two factors to be individual characteristics and technical characteristics. Moreover, an understanding of consumer behaviors by gender is a key factor in the growing use of e-commerce [4, 22, 29, 38].

The individual factors influencing the use of health information are the individual's prior experiences with Internet use, trust of health information, the quality of health information vendors' service provision, the reputation of health information vendors, and so on. The systematic factors influencing health information use are quality of Web information systems, quality of information, security

of the use of health information, and so on [36]. This study focuses on individual experiences of Internet use. Among the variety of factors that influence health information use are Website familiarity, the security of Websites that provide health information, reputation of the health information vendor, and trust of the health information vendor.

2.4 Research Hypothesis

Consumers regard trust as important in buying products or services on the Web [38]. Once consumers purchase products or services from the Web, if they trust their Websites, they continue to buy products or services on those sites. In another word, past buying experiences with a product or service contribute to a formation of trust in the Web [6, 22, 30]. In particular, Luo and Najdawi [26] argued that past experiences influence customers' use of health portals. Based on the above-mentioned studies, this study hypothesizes that consumer's experiences in using health information obtained from the Internet will positively influence trust formation.

[H1] Experiences in using health information obtained from the Internet will positively influence trust formation.

Reputation refers to customers' feeling about using services and their satisfaction or dissatisfaction with those services. Vendors who offer products and services on the Web may have either positive or negative reputations according to customers' perceptions. According to Wang and Benbasat [40], trust is a very important factor in consumers' adoption of online recommendation agents offered online. If consumers feel trust in buying a product

1) See the (King, J., Infomediary omputerworld, Vol. 33, No.4(1999), p.58)-"Health Informedirary is a new Internet business model that applies to firms that help customers deal more efficiently and effectively with online vendors. In e-commerce, it functions as a third-party provider of unbiased information and as a business matchmaker."

from the Web, the online reputation strengthens the customer's intention to buy, but if consumers feel low trust in buying products from the Web, the online reputation weakens the customer's intention to buy. Therefore, reputation plays an important role in influencing the customer's trust and intention to buy in e-commerce transactions [35]. According to Gefen and Straub [14], a good reputation that is based on customers' positive experiences strengthens the importance of the companies' social existence in e-commerce. Therefore, companies should make every effort to build trust by establishing a good reputation if they hope to succeed in e-commerce. Currently, review sites for online products provide important guidelines that impact customers' buying decisions [35]. Moreover, according to Zahedi and Song [41], the good reputation of providers of e-health information is a social basis to form and keep the trust of consumers who use it. Based on these studies, this study hypothesizes that the reputation of e-health infomediaries will positively influence customer trust.

[H2] The reputation of e-health infomediaries will positively influence customer trust.

Perceived security refers to feelings customers have about security risks in e-commerce. For example, if consumers perceive that their transactions will be secure due to good security measures in e-commerce, such as e-shopping malls, it builds their trust in them so that their intention to buy becomes greater. In other words, perceived security by consumers creates trust in buying products and services [22, 34]. Especially, according to Bansal and Zahedi [5], the extent to which individual consumers perceive that the Website is secure influences their trust in online information. There-

fore, this study hypothesizes that if consumers' perceived security about health information sites is high, the formation of trust in using the health information will be high.

[H3] The perceived security of a site will positively influence consumer trust in using health information Websites.

According to Luhmann [25], intimacy between companies and customers importantly influences the formation of trust and the success of the business. Intimacy, not only between companies and customers but also in e-commerce is a very important factor [22]. Intimacy in e-commerce develops favorable feelings in customers and can overcome hostility customers may have developed from previous negative buying experiences. Intimacy can be encouraged by offering efficient search information and other helpful online aids. [11, 22]. According to Gefen [14], intimacy in e-commerce significantly influences the formation of trust and the intention to buy in consumers. When consumers feel intimacy with a company, their actual intention to buy will be greater. For example, when consumers want to buy a book at amazon.com, if they know from previous experience that it will be easy to search for information about the book and easy to pay for it, they will feel intimacy with that site. This feeling of intimacy becomes important in forming trust about making purchases online [11]. Especially, in the study of Luo and Najdawi [26], consumers' previous buying experiences influenced their use of health portals. Therefore, this study hypothesizes that feeling intimacy with health information Websites will positively influence consumer trust.

[H4] The feeling of intimacy with health information Websites will positively influence consumer trust.

Trust is a very important factor in online and off-line business [4, 12, 25, 28, 34, 40]. Because strengthening consumer trust directly influences the intention to buy in e-commerce, companies should establish various strategies for strengthening trust. According to Kim, Fernin, and Rao [22], trust in e-commerce has a positive influence on a customer's intention to buy. Mayer et al. [28] emphasized the importance of the relationship between companies and their customers in the formation of trust. Moreover, according to Bhattacharjee [6], Gefen [12], and McKnight et al. [30], trust reduces the perception of risk in Internet e-commerce and strengthens customers' intention to buy. Based on the studies listed above, this study hypothesizes that customers' trust in e-health information will positively influence the intention to use the health information.

[H5] Customers' trust in e-health information will positively influence the intention to use the health information.

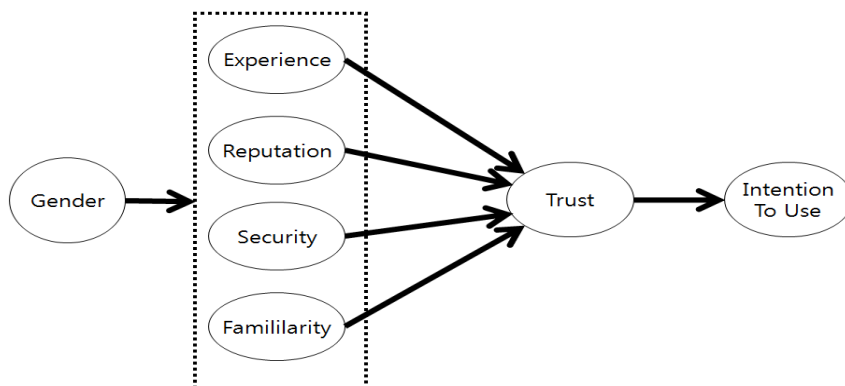
Furthermore, as noted previously, there are differences in consumer behaviors by gender in e-commerce [43]. Because studies on gender differences are very important research issues, there have been many studies to examine gender differences in e-commerce [13, 17, 39].

The understanding of gender differences in consumer behavior provides useful information to guide marketing strategies to customers for companies. Therefore, many gender studies have been performed in various marketing and information management areas. In this study, we will analyze gender differences in the use of e-health information.

3. Research Methodology

3.1 Research Model

This study analyzed various factors that influence consumers' intention to use e-health infomediaris. For independent variables, this study selected experiences reputation, security, and intimacy, and we posit a research model that shows the relationships between selected dependent variables, and trust according to gender differences in



[Figure 2] Research Model

consumers' intention to use e-health information. The research model for this study is shown in [Figure 2].

3.2 Research Variables

Intention to use and trust are very important re-search variables in e-commerce studies. Trust is one of the variables that strengthen the intention to use in consumers' behaviors. "Trust" refers to online consumers' feelings about health in-fomediaries [22, 36]. The "intention to use" refers to consumers' intention to use health infomediaries [8]. Moreover, this study that is based on Zhang and Prybutok's [43] study selected gender as a moderator that will suggest various implications for marketing strategies. This study also selected experiences, reputation, security, and intimacy as independent variables.

3.3 Survey Process

The survey instrument consisted of questions

based on a 7-point Likert type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The survey was conducted in March 2008, and the tar-get sample was students who took classes related to MIS. A total of approximately 500 surveys were sent out, and 376 of the surveys were returned. There were 274 usable responses from the 376 that were returned.

4. Empirical Test

4.1 Basic Statistical Analysis

The descriptive statistics of responses were analyzed. Of the 274 respondents, 124 were male and 150 were female (male = 45.3%, female = 54.7%). Daily Internet usage was measured by the amount of time spent daily on the Internet, and the average time of spending per day was 2.63 hours.

4.2 Validity and Reliability

Prior to test reliability of variables, for measur-

<Table 2> Factor Analysis and Reliability

Variables	Items	Factor			
		1	2	3	4
F	F2	.779	.230	.366	.161
	F3	.768	.293	.391	.137
	F1	.756	.343	.352	.161
R	R1	.256	.838	.127	.161
	R3	.224	.768	.276	.229
	R2	.238	.761	.323	.221
E	EX3	.366	.339	.769	.198
	EX2	.448	.269	.766	.164
	EX1	.445	.256	.752	.217
S	SE3	-.028	.165	.213	.816
	SE1	.320	.130	-.019	.796
	SE2	.118	.208	.203	.790
Cronbach's alpha		.909	.860	.938	.791

〈Table 3〉 Correlation

V	N	Mean	S.D.	E	R	S	F	T	I
E	3	3.0097	1.22313	1					
R	3	3.4258	0.98398	.661**	1				
S	3	3.6740	0.92094	.454**	.483**	1			
F	3	3.1667	1.19599	.808**	.649**	.417**	1		
T	3	3.6034	1.01096	.477**	.534**	.558**	.477**	1	
I	2	3.5401	1.25146	.543**	.472**	.406**	.491**	.667**	1

Note) N = Items Numbers.

** : p-value < 0.1.

ing the construct configuration, we tested Normality, homogeneity of variance, and linearity. For testing Normality, we conducted to Kolmogorov-Smirnov (KS) test in <Table 5>. At the 0.05 level of significance, all measurement items were found to have Normality. For testing linearity, we conducted to correlation analysis. The result shows high correlations among all variables at the 0.05 level of significance. The result of Levene test failed to show heterogeneity among all variables at the 0.05 level of significance.

However, we adopted and analyzed a seven point Likert type scale in this study. The four points are symmetrically distributed within right and left of the normal distribution and there are the possibility to the same variance. Therefore, we uses all variables in this study.

And, we conducted to test exploratory factor analysis with Varimax rotation and reliability. In <Table 2>, we obtained four variables (experience, reputation, security, and familiarity). The reliability results as follows in <Table 2> [27]. Also, we test confirmatory factor analysis about four variables in this study. The results showed GFI = .971, AGFI = .954, RMR = .031, NFI = .980, = 49.446, and p-value = 0.415. All fit index values are higher than recommended cutoffs.

〈Table 4〉 Model Fit Index

Fit Index	Fit level	Male	Female
Chi-square	p >= 0.5	155.431 (p = .002)	185.290 (p = .000)
RMSEA	<= 0.06	.060	.069
NFI	> 0.9	.919	.916
TLI	>= 0.9	.967	.953
CFI	>= 0.96	.974	.963
GFI	> 0.8	.888	.879
AGFI	> 0.8	.842	.829

Therefore, construct validity in this study could be established [2]. In order to examine the discriminate validity of the variables used in the study, the correlation analysis was conducted. <Table 3> shows that all variables are close or below 0.8, which supports that the results are statistically acceptable to be used in the study [20].

4.3 Test of Model

In this study, we conducted the test of the structural equation modeling (SEM) in order to find relationships between independent and dependant variables. We also adopted Maximum likelihood method. <Table 4> shows the good fit index, and <Table 6>, [Figure 3], and [Figure 4] show the results of SEM.

<Table 5> Tests of Normality

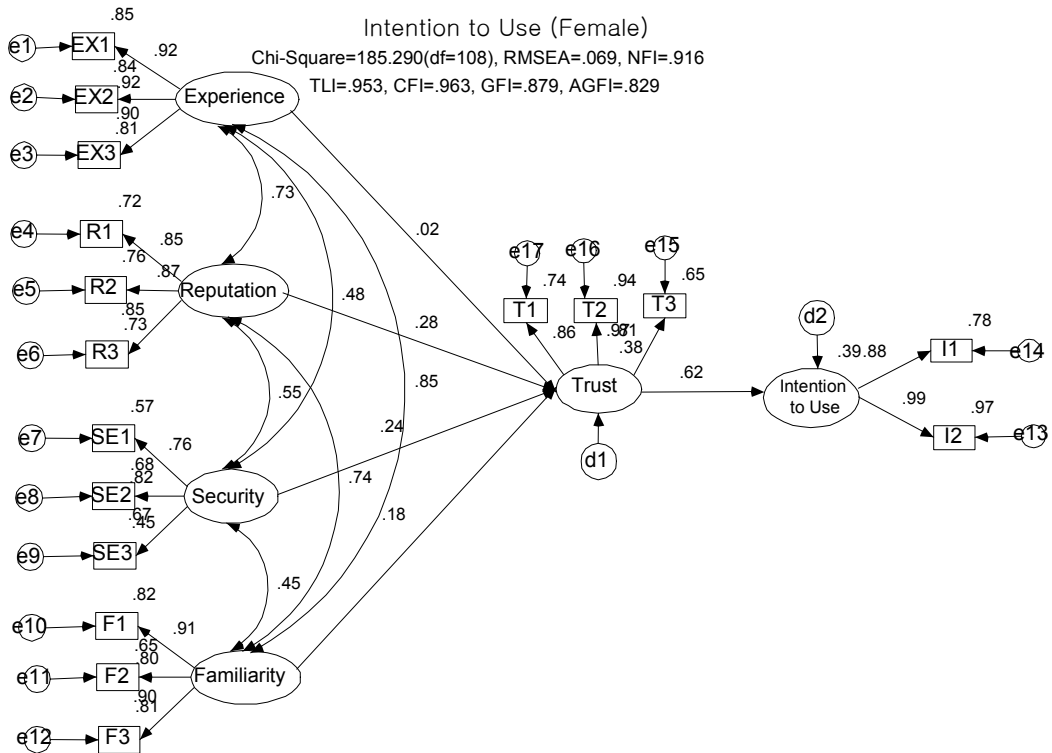
		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
I1	1	.148	124	.000	.946	124	.000
	2	.215	150	.000	.926	150	.000
I2	1	.192	124	.000	.936	124	.000
	2	.189	150	.000	.930	150	.000
T1	1	.214	124	.000	.928	124	.000
	2	.264	150	.000	.897	150	.000
T2	1	.218	124	.000	.924	124	.000
	2	.260	150	.000	.900	150	.000
T3	1	.234	124	.000	.924	124	.000
	2	.202	150	.000	.920	150	.000
SE1	1	.228	124	.000	.912	124	.000
	2	.206	150	.000	.914	150	.000
SE2	1	.212	124	.000	.925	124	.000
	2	.256	150	.000	.905	150	.000
SE3	1	.174	124	.000	.936	124	.000
	2	.227	150	.000	.904	150	.000
R1	1	.223	124	.000	.909	124	.000
	2	.227	150	.000	.903	150	.000
R2	1	.201	124	.000	.922	124	.000
	2	.247	150	.000	.892	150	.000
R3	1	.175	124	.000	.929	124	.000
	2	.267	150	.000	.869	150	.000
F1	1	.162	124	.000	.927	124	.000
	2	.193	150	.000	.921	150	.000
F2	1	.150	124	.000	.938	124	.000
	2	.172	150	.000	.934	150	.000
F3	1	.160	124	.000	.930	124	.000
	2	.182	150	.000	.927	150	.000
EX1	1	.154	124	.000	.916	124	.000
	2	.170	150	.000	.914	150	.000
EX2	1	.156	124	.000	.915	124	.000
	2	.173	150	.000	.921	150	.000
EX3	1	.165	124	.000	.930	124	.000
	2	.180	150	.000	.919	150	.000

Note) (a) Lilliefors Significance Correction.

<Table 6> Results of Structural Model

Hypotheses	Male			Female		
	R	C.R.	p	R	C.R.	p
1 E → T	-.144(.167)	.825	.410	.018(.024)	.149	.882
2 R → T	.229(.208)	1.487	.137	.264(.277)	2.060	.039
3 S → T	.615(.578)	4.884	.000	.284(.243)	2.414	.016
4 F → T	.218(.270)	1.340	.180	.129(.181)	1.082	.279
5 T → I	1.055(.858)	12.149	.000	.808(.624)	7.306	.000

Note) Regression coefficient value : R.



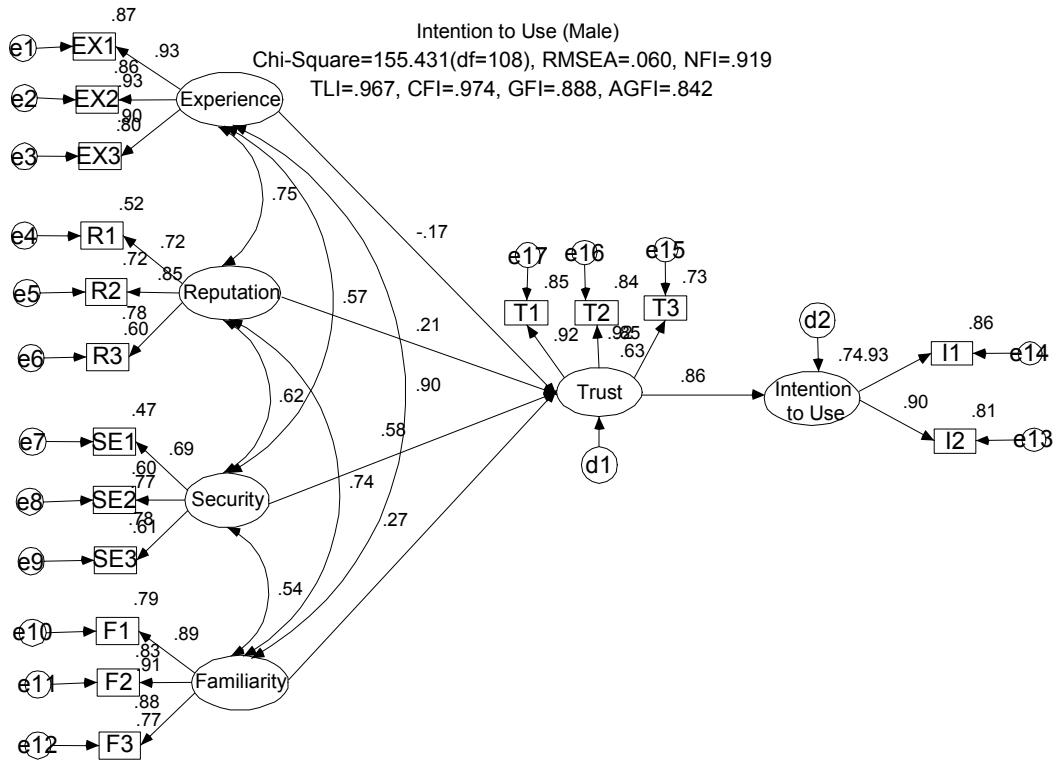
[Figure 3] SEM Result : Female

In <Table 4>, in the case of the male group, re-search model shows the Chi-square, 155.431 (p = .002), RMSEA = .06, NFI = .919, TLI = .967, CFI = .974, GFI = .888, and AGFI = .842, which indicat-ing that the theoretical model fit of the present study is a good fit. In the case of female group, model fit index also shows the Chi-square of

185.290 (p = .000), RMSEA = .069, NFI = .916, TLI = .953, CFI = .963, GFI = .879, and AGFI = .829, which indicating a good fit.

4.4 Testing Hypotheses

In <Table 6>, the empirical results show the re-



[Figure 4] SEM Result : Male

relationships of independent and dependant variables. In the case of male group, the hypothesis that security affects trust was supported based on the finding that the regression coefficient is 0.615 and C.R. value is 4.884(p-value = 0.000) at the 1% significance level. The hypothesis that trust affects intention to use was also supported based on the finding that the regression coefficient is 1.055 and C.R. value is 12.149(p-value = 0.000) at the 1% significance level. The rest hypotheses were not supported.

In the case of female group, the hypothesis that reputation affects trust was supported based on the finding that the regression coefficient is 0.264 and C.R. value is 2.060(p-value = 0.039) at the 5% significance level. The hypothesis that security affects

trust was also supported based on the finding that the regression coefficient is 0.284 and CR value is 2.414(p-value = 0.016) at the 5% significance level. The hypothesis that trust affects intention to use was supported based on the finding that the regression coefficient is 0.808 and CR. value is 7.306 (p-value = 0.000) at the 1% significance level. The rest hypotheses were not supported.

Thus, the overall findings of the results can be summarized as follows. In the male group, two hypotheses (security → trust, and trust → intention to use) were supported. In the female group, three hypotheses (reputation → trust, security → trust, and trust → intention to use) were supported based on the empirical test of this study. However, in the both cases of male and female group, experience

and familiarity didn't affect trust.

5. Implications and Future Studies

5.1 Implications

This study suggested implications for establishing marketing strategies for e-health infomediaries by analyzing the relationships between consumer experiences, security, intimacy, and reputation, and the factors of trust and intention to use. In addition, this study also suggested implications for establishing marketing strategies for managing customer relations by analyzing the gender differences in those results. The characteristics of this study's results are as follows.

First, regression analysis on experiences, security, intimacy, and reputation revealed that security influenced the element of trust. In the case of men, the hypothesis that security influenced trust was selected with a regression coefficient of 0.614(4.884), which is less than a 1% significance level. In the case of women, the hypothesis that security influenced trust was selected with a regression coefficient of 0.284(2.414), also less than 1% significance level. In particular, in comparing men to women, men were shown to have a higher formation of trust in e-health infomediaries. Therefore, given that trust formation was stronger in the male group of consumers, it appears that more effective security strategies need to be established for female consumers. For example, security strategies that would improve the level of trust for the female group might include offering safer consumer identification, less complicated payment systems, greater protection of consumer information, and the like.

Second, a discrepancy was noted between the men's and women's groups on the reputation factor. In the case of the men's group, the hypothesis that reputation influences trust was not selected because the regression coefficient value was 0.229 and the C.R. value was 0.137. On the other hand, in the women's group, the hypothesis that reputation influences trust was selected because the regression coefficient value was 0.265 and the C.R. value was 2.060, less than 5% significance level. Based on these results, the reputation of e-health infomediaries does not help to form trust among men, but it does help to develop trust among women, so companies should establish oral marketing strategies that will establish a good reputation with women. On the other hand, for the men's group, the company should establish differentiated strategies that will make them want to use the e-health-related information directly.

Third, trust formation is an important issue in establishing the e-business strategy. This study analyzed the influence of trust on intention to use e-health infomediaries. In the case of men, the hypothesis that trust influences intention to use e-health infomediaries was selected with these regression coefficients and C.R. value 1.055(12.149), under 1% significance level. For women, the hypothesis that trust influences intention to use e-health infomediaries was selected with regression coefficients and C.R. value 0.808(7.306), under 1% significance level. In other words, the trust in e-health infomediaries does influence intention to use in both men and women, but men showed stronger influence in this relationship. Therefore, for men, companies can consider that trust-strengthening strategies will strengthen the use of e-health infomediaries. However, companies should know that women are more hesitant about using

e-health infomediaries due to various conditions and their careful approach to information; thus companies should establish various trust-forming strategies that will appeal to women.

The academic implications of this study are as follows. Even though the use of e-health information is a very important research area, there is a lack of research that focuses on the influence of individual characteristics on trust. The study implies that more empirical analysis is needed about the influence of individual characteristics on trust and intention to use e-health information. Moreover, there are implications to suggest that differentiated marketing strategies focusing on factors such as previous experiences, reputation, intimacy, and security will influence trust and the use of e-health information by gender. Furthermore, at a time when the importance of e-health infomediaries is increasing, implications from this study suggest a theoretical backbone to aid in the proliferation of health information-related areas.

This study's practical implications are as follows. Currently, many companies that have a business model of providing health information are developing various strategies, both online and offline, to increase their profits. The e-health infomediaries gain profits by selling health information, products, and services to consumers through the Internet, thus avoiding the difficulties of time and place. This study suggests strategic implications to strengthen the health infomediaries' business model. Moreover, it is significant that consumers consider the security factor to be very important in their use of e-health information. Trust in e-commerce directly influences consumers' intention to use because of concerns about losing their private information, making secure payments, and similar worries. So trust influences their intention to use

e-health infomediaries. Therefore, companies should develop a business strategy that focuses on trust formation by strengthening the perception of their security. Moreover, demographic factors, such as gender, significantly influence consumers' use of e-health information, so e-health information companies or providers should take this into consideration in their marketing strategies.

5.2 Limitations and Conclusions

There are several limitations to this study. First, this study conducted an empirical test about the intention to use of health information only among college students, so the research results cannot be generalized to consumers of all ages. Therefore, to overcome this limitation on generalization, future research studies should be performed with various other types of consumer classes.

Second, this study analyzed personally perceived adoption factors of e-health information, such as reputation, intimacy, experience, and security, as independent variables on the intention to use real e-health information. Other factors beyond these factors, such as consumer's economic situations, their knowledge about the Internet, and the purpose of their use of health information, also directly influence the intention to use. Therefore, future studies should conduct research in this area by considering the various other factors.

A third research limitation is that this study focused on the influential relationships between trust of health infomediaries and intention to use. The actual trust in e-commerce consists of various trust factors, such as the trust in services, products, Websites, financial transactions, and other factors. Therefore, future studies should develop more specific trust factors and do the research with

those trust factors to determine the influence of intention to use health infomediaries.

Fourth, this study considered only the gender factor in demographic studies, but future studies should also focus on other demographics of consumers, such as age, profession, income, race, and other factors that might influence the perception or use of e-health information.

Even though this study has the limitations described above, many companies are interested in the results, and the study has provided strategic implications that can strengthen the competitiveness of companies that develop business models related to e-health information. Based on this study's results, future studies about the use of e-health information should develop various trust and circumstantial factors and should analyze those factors by considering other consumer characteristics and the differences between online and offline consumers. Such future studies would add information to both the practical and theoretical implications of the e-health information business.

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〈Appendix 1〉 Survey Items

- I will make use of online health infomediaries (OHI).
- I will continue to use OHI.
- I rely solely on health information offered by OHI.
- I rely on contents offered by OHI.
- I rely on OHI regarding its business transactions, information operation strategies, and warranty policies.
- To avoid any problems during the process of information exchange, OHI uses security solutions.
- As far as I know, personal information is well protected by OHI.
- As far as I know, OHI concerns about individual's privacy.
- As far as I know, OHI has high reputation.
- I speak well of OHI to people around me.
- I know that OHI has the good reputation.
- I am familiar with using OHI.
- I repeatedly use OHI whenever I have a question.
- I am good at using OHI.
- I frequently use OHI because of my preference.
- I frequently use OHI due to obtaining various health information.
- Your gender (male, female).

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