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경영학석사학위논문

**Choice between Aesthetic and
Utilitarian Value:
The Moderating Role of
Purchase Goal and Familiarity**

심미적 가치와 기능적 가치의 선택:
구매 목적과 친숙도의 조절효과에 대한 연구

2016년 8월

서울대학교 대학원

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Choice between Aesthetic and Utilitarian Value: The Moderating Role of Purchase Goal and Familiarity

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이 논문을 경영학 석사학위논문으로 제출함

2016년 05월

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2014년 06월

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Abstract

I develop a regression model which explains the moderating role of purchase goal and familiarity on choosing between aesthetic and utilitarian value. Five main products in smartphone market were used as stimuli. Respondents were asked to answer questions on purchase goal and familiarity toward the products from different brands. The result of the study proves that preference of consumers with hedonic consumption goal is more influenced by the aesthetic value of a product. On the other hand, for those with utilitarian consumption goal, functional value has more impact on preference. Regarding consumers' familiarity toward the products and product category, for consumers with high familiarity on the product, functional value increases preference more than aesthetic value. As predicted, when a consumer is oriented toward hedonic goal, they prefer aesthetic value over functional value. However, when the consumer has high level of familiarity on the product, they prefer functional value over aesthetic value.

Keywords: aesthetic value, utilitarian value, purchase goal, consumer familiarity

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1. Introduction

Marketers have always questioned and tried to find out what makes people choose certain product has been the major concern and interest in consumer research and marketing management. Product attributes that influence consumer choice decision include product design, functionality, price, and etc. The product design is related to aesthetic value of a product. The term, aesthetics was first introduced in the late 1700's by the German philosopher Alexander Baumgartrai in desire to emphasize the experience of art as a field of concrete knowledge in which content (i. e., knowledge) is communicated in sensory form as opposed to strict reasoning or logic. His work was concerned with poetry and other arts and thus aesthetics was subsequently applied to the philosophical study of all the arts and manifestations of natural beauty (Berlyne 1974). In consumer research, aesthetics, often termed as product aesthetics, refers product appearance or design and its appreciation. Aesthetic value is consumers' appreciation of product's appearance and its beauty.

Today, in the era of technological advance, most consumer products meet consumers' functional demand toward products. As a result, visual appearance of products is a source of competitive advantage for companies and a critical determinant of consumer

response and product success. In consumer research, distinctions of product nature are often made between “aesthetic” and “utilitarian” products (Holbrook 1980). According to Hertenstein, Platt, and Veryzer (2005), product design can improve customer retention and thus increase company performance. This implies that marketers should acknowledge that product appearance is significant in success of company. The importance of product design is even more salient today as product design has become a main strategy of differentiating a product from competitors in the market. Since most products provide similar level of technology, it has become the only way in which one’s product can stand out from various product choices in the market. Upon its importance in practice, there have been done numerous research regarding the aesthetic value of product in innovative product design and development. However, little research has been done in academic field, especially in study of consumer choice.

Vast research on consumer choice has focused on decision between hedonic versus utilitarian choice. In their study, Batra and Ahtola (1990) have stated that consumers purchase goods for two basic reasons which are consummatory affective (hedonic) gratification (from sensory attributes), and instrumental or utilitarian purpose. Voss, Spangerberg, and Grohmann (2003) have adopted this two-dimensional conceptualization of consumes

attitude: the hedonic and utilitarian dimensions. According to those research, products are often divided into either hedonic versus utilitarian categories. However, hedonic and utilitarian values are not the only distinction on which benefit consumer weigh when making choice decision. Aesthetic value of a product or service is in line with hedonic value that aesthetic part of product also stems from experiential and affective value of decision maker. Although most research has divided products into hedonic versus utilitarian, most products have both hedonic and utilitarian aspects at the same time. Likewise, products often have both aesthetic and utilitarian aspects and both values affect consumer decision on making choice. Therefore, is important to take into account for factors that influence the weight consumer give on the two values when making a product choice.

By nature, people have preference for what is beautiful. Evolutionarily, beauty has been appreciated by humanity since people naturally like beautiful person and objects. However, consumers cannot always make decision based on how beautiful a product is. Rather, because of the economic consequences of their decision, consumers have to weigh the trade-off between aesthetic and utilitarian values of options. If two alternatives in option choice set have the same functional value, consumers prefer the product with more favorable appearance. That means, people would likely

to choose aesthetic option over option with only functional value when the cut-off in their mind is met. Since humans innately appreciate and are in favor of good appearance, there is no reason for not choosing a product with higher aesthetic value if it already satisfied the cutoff line of functional value. In an article, results have shown that under conditions in which the options in a choice set meet or exceed both functional and hedonic cutoffs, consumers attach greater importance to the hedonic attribute (Chitturi et al. 2007).

These studies on hedonic versus utilitarian option choice implies that consumers, whenever they have a chance, would always want to choose hedonically superior option. Consumers tend to select options with functional value when it has superior functionality. However, depending on the situation, their preference toward functional versus aesthetic option will be different. Once the choice meets the cutoff level for functional value, aesthetical value would insert greater importance on consumer choice. Today, most products in the smartphone market meet the average cut-off level of functionality because of technological advance. As so, consumers will tend to consider aesthetic value when purchasing products. In this article, the author tries to find when the aesthetic value of a product has greater impact on consumers' preference.

By conducting surveys, this research is to observe how weights of aesthetic and utilitarian value change depending on different factors. Its purpose is to find out which value (aesthetic vs. utilitarian) serves more important role in consumer's product purchase. The current research will define which of three factors – task environment, goal of task, and individual characteristics – plays as a key factor in shifting the relative importance of aesthetic value versus utilitarian value of product. That is, the purpose is to find out under with condition, which value becomes prominent in purchase decision.

2. Literature Review

According to consumer research, factors that influence consumers' decision making can be divided into three big categories. Those are task environment, goal of task, and consumer characteristics. First, the purchase environment such as store interior design, product layout, product choice options, and etc. have impact on consumer's product choice. Consumer's purchase decision often depends on different task environment. Second, goal of task can be hedonic versus utilitarian goal, promotion versus prevention goal of decision, and etc. Depending on different purchase goals, consumers choose between various options based on goal orientation. Third factor is consumer characteristics such as personality, lifestyle, and other psychological factors. Since consumer characteristics is developed and remain constant throughout their lives, marketers and academic research should consider consumer characteristics when developing any marketing or even business strategies. Although purchase environment and goal orientation can change or be changed depending on the situation, consumer's own personality or characteristics can hardly be changed or manipulated by company or marketers. In present study, it aims to focus on the effect of purchase environment, goal and consumer characteristics on consumers' choice between aesthetic and utilitarian products.

2.1. Aesthetic Value

According to Gestalt theories, people inherently prefer objects with symmetry, unity, and harmony among elements. This aesthetic preference or taste appears to be innate. In consumer product domain, aesthetics is associated with visual appearance of product such as product design, size, and logo. According to evolutionary theories, people have preference toward beautiful objects. This is because beauty has survival advantage over decades. As a result, people often look for products that have good appearance such as iPhone. However, such appreciation of aesthetics can be changed in regards to different factors such as task environment, goal of task, and consumer characteristics. In this research, author would like to focus on option choice set among various task environmental factors, hedonic versus utilitarian aspects among different goals of task, and need for uniqueness among different consumer characteristics.

In addition, according to Bloch, Brunel, and Arnold (2003), there is individual difference in consumers' weight toward aesthetic aspect of a product which is termed as Centrality of Visual Product Aesthetics(CVPA). As shown in the research, consumers have different centrality toward product aesthetics. However, little research has found out the actual antecedents of this difference. Some researchers argue that such difference is innate in consumers'

nature. However, those aesthetic taste or preference is socially learned throughout their lives. In addition, consumers not always prefer either aesthetic or functional side of products. Rather, their decision or choice often depends on the product, situational factors, purchase goal, etc. This implies that consumers' aesthetic preference is context-dependent and they often undergo trade-off between aesthetic and functional value of product. This research aims to study the effect of decision environment and consumer characteristics on consumer attitudes toward aesthetic and utilitarian values of a product.

2.2. Purchase Goal: Hedonic versus Utilitarian

Consumers purchase the same products for different goals, for example, for their own pleasure which is hedonic goal—or to achieve some higher level purpose—utilitarian goal (Botti and McGill 2011). When making a purchase, consumers make decision in accordance with their own goals of the task and the goals can be divided into hedonic versus utilitarian goals. In this research, hedonic goal of a choice is related to adventure, social, and gratification shopping motivations. Adventure shopping is externally oriented and related to need for stimulation and self-expression through play and creativity among human organisms.

Consumers with adventure shopping goal enjoy exploring. Social shopping motivation is a way of social bonding through spending time with friends and family members. Gratification motivation involves shopping for stress relief, shopping to alleviate a negative mood, and shopping as a special treat to oneself. Consumers who have hedonic goal strive for emotional experience such as pleasure and fun. An example of such goal is purpose for purchasing a product for using at work or for study. When consumers have to buy certain product for improving their studying ability or work efficiency such as a calculator, they will put more importance on utilitarian value rather than aesthetic value of options.

On the other hand, utilitarian goal is related to more instrumental and extrinsic aspect of purchase goal. Such kind of goal is associated with virtues and necessities. Hedonic goal is emotionally driven, whereas utilitarian goal is cognitively driven (Holbrook and Hirschman 1982). As mentioned before, consumers have two basic motives for purchasing goods and services. One is hedonic which is related to sensory and affective part and the other is utilitarian which is more related to the consequences of an action. In conclusion, hedonic motive or goal of choice is for pleasurable experience or experiential benefit, whereas utilitarian motive or goal of choice is for own economic benefit, whereas utilitarian goal is more associated with economic and functional value of choice. A

hedonic experience is intrinsically motivated and inherently rewarding and for this reason is sought as an end in itself, a terminal goal. By contrast, a utilitarian experience is extrinsically motivated because it is not rewarding in itself but is instrumental to the achievement of a higher-level goal (Dhar and Wertenbroch 2000). Therefore, since aesthetic value is also emotionally driven, when consumers pursue hedonic benefit of purchase, they would more likely to appreciate aesthetic value than functional value of a product.

Therefore, since aesthetic value is also emotionally driven, when consumers pursue hedonic goal of purchase, they would more likely to appreciate aesthetic value than functional value of a product. When the goal is more oriented toward hedonic value, consumers' preference would be affected more greatly by aesthetic value than functional value. On the other hand, when the goal is oriented toward utilitarian value, consumers' preference would be affected more greatly by functional attribute than aesthetic attribute of a product.

2.3. Familiarity: Experts versus Novice

In numerous studies, consumer expertise or knowledge plays a significant role in consumer information processing. Studies on cognitive response found that only those individuals with well-developed knowledge base have access to certain types of cognitive resources. According to several studies, attribute-oriented thoughts may be more difficult for less knowledgeable consumers (Edell and Mitchell 1978, Wright 1975, Wright and Rip 1980). On the other hand, more knowledgeable consumers who have familiarity and expertise in products, can better process information related to product attributes. The impact of consumer expertise has been widely investigated in the context of advertising and persuasion (Alba and Hutchinson, 1987). Extant research suggests that the differences in schematic, categorical, and factual knowledge among consumers affect how they process message information. However, little research has been done in its effect on consumer product choice. Alba and Hutchinson (1987) have suggested: "because experts possess a richer knowledge base and have a larger amount of available cognitive capacity, they are more likely to elaborate on product-related information and thereby connect the new facts to previously learned facts" (p. 416). They propose that consumer knowledge includes familiarity and expertise. Familiarity is defined as the number of product-related experiences that have been

accumulated by the consumer. Expertise is defined as the ability to perform product-related tasks successfully.

In this research, both familiarity and expertise part of consumer knowledge will be measured in order to measure their influence on choice between aesthetic versus utilitarian products. Expert consumers will have the knowledge and ability to process attribute related information in higher cognitive level, they will more likely to focus on the functional value of a product. On the other hand, novice consumers who have little knowledge about the product and are low in ability to evaluate product attributes, they will more likely to focus on the outside aspect of the product, as termed in this research, the aesthetic attributes.

Since consumers with relatively high level of knowledge have familiarity toward product functional attributes and ability to process attribute related product aspects in detail and in depth. That is, consumers with higher familiarity on the product category and the product, would be more affected by functional attribute of the product when forming preference. Therefore, consumers would insert greater weight on product's functional value when they are familiar with the details of the product such as various functions, attributes, pros and cons compared to other products in the same category. However, consumers would put more weight on product's aesthetic value when they are not familiar with the product since

they do not have enough knowledge or the ability to process functional attributes in detail.

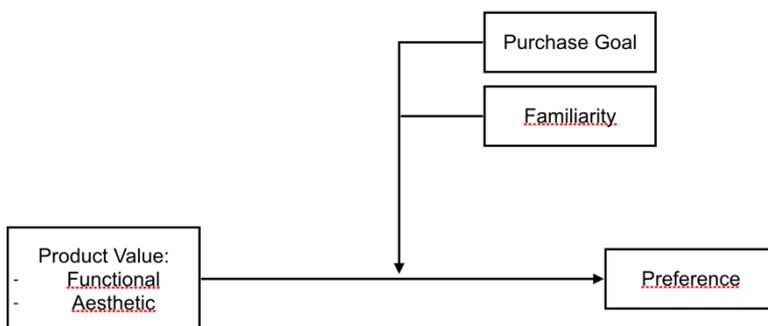
3. Research Model

3.1. Model Set Up

Hypothesis 1: Since aesthetic value is also emotionally driven, when consumers pursue hedonic goal of purchase, they would more likely to appreciate aesthetic value than functional value of a product.

Hypothesis 2: Since consumers with relatively high level of knowledge have familiarity toward product functional attributes and ability to process attribute related product aspects in detail and in depth, they will insert greater weight on product’s aesthetic value.

Figure 1. Research Model



Regression model used in this research is as follows.

$$y_i = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \beta_1 (X_1 \cdot G) + \beta_2 (X_1 \cdot F) \\ + \beta_3 (X_2 \cdot G) + \beta_4 (X_2 \cdot F) + \varepsilon$$

y_i: Preference

a₀: Intercept

X₁: Functional Value

X₂: Aesthetic Value

G: Consumption Goal

F: Familiarity

Variables included in the regression equation are functional and aesthetic value, purchase goal (or consumption goal), and familiarity level of consumers. In this research, the moderation effect of purchase goal and familiarity are analyzed. β_1 , β_2 , β_3 , and β_4 are the coefficients of interaction terms between the independent variable (functional and aesthetic value) and the moderating variable (purchase goal and familiarity).

4. Research Method

4.1. Samples

In the study, respondents are 113 students at Seoul National University (female= 46, male= 67). The age of the respondents are ranged between 19 years old to 30 years old (mean= 23.37, standard deviation= 3.459). Respondents were assigned to the same condition and were asked to answer questions in the survey for 6 pair of brands (possible two-brand pair from four brands are six pairs).

4.2. Procedure

Study has been conducted via survey method. In measuring the purchase goal of smartphones, respondents were first asked to answer to a question of which goal they use smartphones. They were asked to answer whether they use nine key functions of their smartphones for hedonic goal (e.g. to have fun or good time when gathering with friends or family) or for utilitarian goal (e.g. for study or work). The nine functions are call, text message, SNS, e-mail, information search, viewing or writing a document, music, video, and camera. Usage goal was measured on those nine functions using bipolar scale (-3= I mainly use smartphone for utilitarian goal such

as study or work, -2= I use smartphone for utilitarian goal, -1= I use smartphone a little more for utilitarian goal, 0= There is no difference in usage goal, 1= I use smartphone a little more for hedonic goal, 2= I use smartphone for hedonic goal, 3= I use smartphone mostly for hedonic goal such as for my hobby or having fun with friends or family). For more reliable responses, they were also asked to rate how much they use each of nine main features of four different brands of smartphone. In addition, they watched a video clip, which shows actual using experience of the four products. In order to provide respondents with indirect experience of using the four products, the video clip included lock screen, unlocking the screen, setting menu, turning to different pages of the screen.

After watching the video clip, students were asked to rate the level of familiarity on smartphones. According to the previous research, familiarity includes two constructs—experience and expertise in the product category. Therefore, in measuring level of familiarity on the product category, questions were asked on the level of experience and expertise of the respondents. The respondents were asked to rate each question on the seven-point Likert scale (1=strongly disagree, 7=strongly agree). There were four self-report questions to measure the familiarity level. The cronbach- α of the four questions was 0.749. However, the cronbach- α became 0.836 for only including the last three questions. As a result, the

mean value of three out of four questions were used as a construct measuring familiarity level.

Then, the respondents were asked to answer questions about six different pairs of smartphones. In measuring the aesthetic and utilitarian value of product, measures of product design and functional attributes have been used. First part of the questions was on the functional value of the pair. Respondents were asked to rate the extent to which product is more closely related to six questions (see Appendix). From result of reliability test of those questions, cronbach- α was over 0.9 for all six choice sets. Therefore, the mean value of ten questions was used as the construct for measuring functional value of a product. Next part were questions on the aesthetic value of the pair. The aesthetic dimension refers to the perceived appearance and beauty of a product. There were ten questions measuring the appearance of products. Since from the reliability test, cronbach- α was over 0.9 for all six choice sets, the mean value of questions was used as the construct for aesthetic value.

Next, respondents were asked to rate their preference for the products. The question was set as bipolar scale measuring which brand is better in the level preference (-3= product A is the best, 0= there is no difference in preference, 3= product B is the best). Questions on functional and aesthetic values and preference were

repeated for six product pairs. Those pairs include two products out of four smartphones – Samsung Galaxy s6, Apple iPhone, LG G4, and TS Luna. The order of the choice sets was randomly assigned in order to control any sequential effects.

5. Data Analysis and Results

5.1. Results

In analyzing the data, two different regression analyses have been conducted. The first regression model simply includes independent variables— aesthetic and functional value, purchase goal, and familiarity— and dependent variable— preference. In the second regression model, the brand pair effects are included in addition to those variables. This is to control any brand pair effect that may influence respondents' choice. As shown in table 1, since significance of F-value change is smaller than .05, the regression model is significant. The R-square of the model is .688. This means that the regression model can explain 68.8% of total variance of preference. Table 4 shows that even when the effect of brand pair is controlled, the regression model is proven to be significant with R-square of .706 ($p < .000$).

Main Effect First, main effect of the two independent variables was assessed. That is, whether the functional and aesthetic value of a product affects preference is analyzed. Table 2 shows that the main effect of independent variables (aesthetic and functional value) are significant ($p < .001$). The effect of moderators (purchase goal and familiarity) are also significant ($p < .05$). As shown in table

4, the coefficients of functional value and aesthetic value are significant ($p < .001$) in regression model with brand pair controlled. The regression coefficient of functional value is .409 and the coefficient of aesthetic value is .573. This means that when functional value increases by 1 scale, the preference increases by .409 and when aesthetic value increases by 1 scale, the preference increases by .573. This does not necessarily mean that aesthetic value has greater impact on preference. More discussion will be made later in the article.

In addition, the moderators which are purchase goal and familiarity also have significant impact on preference ($p < .05$). The regression coefficients of goal and familiarity are .092 and -.063. This means that as when consumers use smartphone more for hedonic goal, preference increases by .092. Whereas, when consumers' familiarity level increases, preference decreases by .063.

Moderation Effect After testing the main effect of functional and aesthetic value of the product, linear regression analysis is conducted to test the moderation effect of consumers' level of familiarity on smartphones, and of purchase goal of smartphones. As shown in table 4, the regression coefficients of all four interaction terms are significant ($p < .05$). The regression coefficient for interaction term of functional value and purchase goal is -.082. This means that when purchase is more oriented toward hedonic goal,

functional value decreases preference by .082. In other words, functional value increased preference more greatly when purchase or consumption goal is more utilitarian. The regression coefficient for functional value and familiarity interaction term is .051. When consumers display higher familiarity toward the product, functional value increased preference by .051. That is, functional value has greater impact on preference when with higher familiarity. The regression coefficient for aesthetic value and goal interaction is .089. When consumers are more inclined to hedonic goal, aesthetic value increases preference by .089. This means that aesthetic value has greater impact on preference when purchase goal is more hedonic-oriented. The regression coefficient for aesthetic value and familiarity is -.037. When with high familiarity level, aesthetic value decreases preference by .037. In other words, aesthetic value has greater impact on preference when consumers have lower familiarity.

Table 1. Summary of Regression Model

R	R Square	Adjusted R Square	Std. Error of Estimate	R Square Change	Change Statistics			
					F Change	df1	df2	Sig. F Change
.832 ^a	.692	.688	1.02005	.692	187.651	8	669	.000

a. Predictors: (Constant), X2.F, Goal, Familiarity, X1.G, X1.F, X2.G, Aesthetic, Functional

b. Dependent Variable: Preference

Table 2. Regression Coefficients

Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.073	.110		.660	.510
Functional	.460	.091	.345	5.025	.000*
Aesthetic	.596	.047	.522	12.798	.000*
Goal	.084	.042	.045	2.004	.045*
Familiarity	-.060	.030	-.045	-1.970	.049*
X1.G	-.078	.035	-.083	-2.215	.027*
X1.F	.047	.021	.146	2.174	.030*
X2.G	.076	.032	.091	2.385	.017*
X2.F	-.030	.011	-.107	-2.656	.008*

a. Dependent Variable: Preference

Table 3. Summary of Regression Model with Brand Pair Controlled

R	R Square	Adjusted R Square	Std. Error of Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.840 ^a	.706	.701	.99917	.706	122.913	13	664	.000

a. Predictors: (Constant), Z5, Familiarity, X2.G, Goal, Z2, Functional, Z1, Z3, X2.F, Z4, X1.G, Aesthetic, X1.F

b. Dependent Variable: Preference

Table 4. Regression Coefficients of Brand Pair Controlled Model

Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-.145	.143		-1.015	.310
Functional	.409	.094	.307	4.370	.000*
Aesthetic	.573	.048	.501	11.958	.000*
Goal	.092	.041	.049	2.224	.026*
Familiarity	-.063	.030	-.048	-2.113	.035*
X1.G	-.082	.035	-.087	-2.372	.018*
X1.F	.051	.021	.160	2.421	.016*
X2.G	.089	.032	.106	2.809	.005*
X2.F	-.037	.011	-.132	-3.326	.001*
Z1	.246	.145	.050	1.694	.091
Z2	.508	.138	.104	3.680	.000*
Z3	.024	.134	.005	.181	.857
Z4	.522	.149	.107	3.506	.000*
Z5	-.093	.134	-.019	-.691	.490

a. Dependent Variable: Preference

5.2. Regression Model

As shown in the above analysis, a linear regression model is formed as below.

$$\begin{aligned}y_i = & -0.145 + 0.409X_1 + 0.573X_2 - 0.082(X_1 \cdot G) \\ & + 0.051(X_1 \cdot F) + 0.089(X_2 \cdot G) \\ & - 0.037(X_2 \cdot F) + \varepsilon\end{aligned}$$

y: Preference

*X*₁: Functional Value

*X*₂: Aesthetic Value

G: Consumption Goal

F: Familiarity

5.3. Model Evaluation: Residuals

In order to evaluate the significance of regression model, residuals have to be considered. First, a regression model should have residuals with normal distribution. In figure 3, residuals of the model display normal distribution. In addition, in figure 4, P-P plot of the residuals shows that observed cumulative probability and expected cumulative probability is very close to each other. The more equal the two lines, the more accurate the regression model is. This means that the model is highly predictive. Lastly, the variance

of residuals should be independent from value of independent variable. Figure 5 shows that residuals display no certain patterns. Therefore, we can conclude that the regression model has predictive ability. That is, the regression model from the analysis has explanatory power for predicting consumer preference.

5.4. Discussion

As shown from the above regression analysis, the interaction terms have significant moderating effect. To respondents with hedonic purchase goal, aesthetic attribute or value of a product has greater impact on preference, whereas to those with utilitarian purchase or consumption goal, functional value has more impact on preference than aesthetic value does. As predicted, when participants are oriented toward hedonic purchase goal, they prefer aesthetic value rather than functional value when choosing a product. This means that for hedonic purchase goal, respondents rely more on aesthetic value of the product when making choice decisions. On the other hand, for utilitarian purchase goal, similar to past research, respondents rely more on utilitarian value of a product when making decisions. This seems rational since utilitarian goal is directly related to the utilitarian aspects of purchasing products or service.

Regarding the familiarity level, participants who have high level of familiarity toward the product, prefer functional value rather than aesthetic value. Those who display lower level of familiarity toward the product, aesthetic value increases preference more than functional value does. This means that respondents with high level of familiarity toward the product or product category have the ability to process the information about utilitarian or functional attributes of the product. As a result, they tend to focus more on the utilitarian value of the product when choosing an option. However, participants who have lower level of familiarity do not have enough ability to compare and evaluate the utilitarian or functional benefits of the product. Although evaluating functional attribute requires certain level of consumer knowledge, aesthetic attribute can be processed more easily since it is related to the appearance of the product. Therefore, they tend to rely more the aesthetic attribute of the product when making decision.

The regression coefficient of aesthetic value is .573, which is higher than that of functional value (.409). However, this does not necessarily mean that aesthetic value has greater impact on preference than functional value does. It should be understood as that aesthetic part of a product has the effect as much as functional part of the product. In most studies, functional aspect of a product often received more attention. However, this research has proved

that aesthetic aspect such as design and appearance of a product should also be considered. In other words, aesthetic value has importance as much as functional value does and those two values should be equally examined when predicting consumer's preference.

Regarding the intercept not being significant, this can be explained by that the experiment was set up to choose between the product pair and there was not no-choice option. In further studies, no-choice option can be included for more accurate estimation of model. In addition, since the products displayed in the choice sets were not virtual products that consumers have never seen. Rather, real products from the current market were used as stimuli. This can have influence on the result because people could already have formed certain level of preference toward a certain product. In future research, virtual products can be used as stimuli in order to measure more accurate preference.

6. Conclusion

In this paper, a regression model was developed to measure the effect of variables that have impact on preference. Variables studied in this research are familiarity, purchase goal, and aesthetic and functional values of the products. The main purpose was to prove whether purchase goal and level of familiarity have moderating effect on relationship between functional, aesthetic value and choice preference. Purchase goal was measured between hedonic and utilitarian orientation. Aesthetic and functional attributes were measured in comparing two products in each of six choice sets. Familiarity was measured through questions on the level of experience with the products, and knowledge about the product category.

The results show that to consumers with hedonic purchase goal, aesthetic attribute or value of a product has greater impact on preference, whereas to those with utilitarian purchase goal, functional attribute has more impact on preference. Regarding the familiarity level, to consumers with high familiarity on the product, functional value increases preference more than aesthetic value. As predicted, when people is oriented toward hedonic goal, they prefer aesthetic value over functional value. However, when people have

high level of familiarity on the product, they prefer functional value over aesthetic value.

This research contributes to the marketing literature both theoretically and empirically. From the theoretical perspective, whereas the previous research has only focused on functional and utilitarian value of a product and often omitted aesthetic value of the product, this research has shown that aesthetic value holds importance at least as much as functional value does. In addition, not just selecting between hedonic versus utilitarian choices, whether consumers' purchase goal is oriented toward either hedonic or utilitarian also influences choice decision. Purchase or consumption goal that consumers hold for certain product may change the relationship between product attributes and preference on it.

From an empirical perspective, this research provides implications for firms' prediction on consumer preference of their products. The result implies that in addition to utilitarian value, aesthetic value should be included in predicting consumers' preference. Actually, in some cases, aesthetic value has even stronger effect on consumer preference than utilitarian value. Firms should keep in mind that hedonic versus utilitarian purchase goals and familiarity level can always change consumer preferences.

Despite the theoretical contributions and managerial implications, this study has some limitations. First, the stimuli used in the study were not virtual products. Rather, actual smartphones that are currently in the market were used as the stimuli. This could have affected the respondents' preference score since participants may already have formed certain image or preference in the past. Future research should develop virtual products that respondents have never experienced. Second, the research was conducted through online survey. As a result, there may have been limitations in measuring participants' evaluation on product attributes, especially the functional attribute. In, further study, researchers should have the respondents touch and use the products. This can make the participants form actual experience and rate product value based on their real experience.

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Appendix

Figure 2. Histogram of Residuals in Regression Model 1

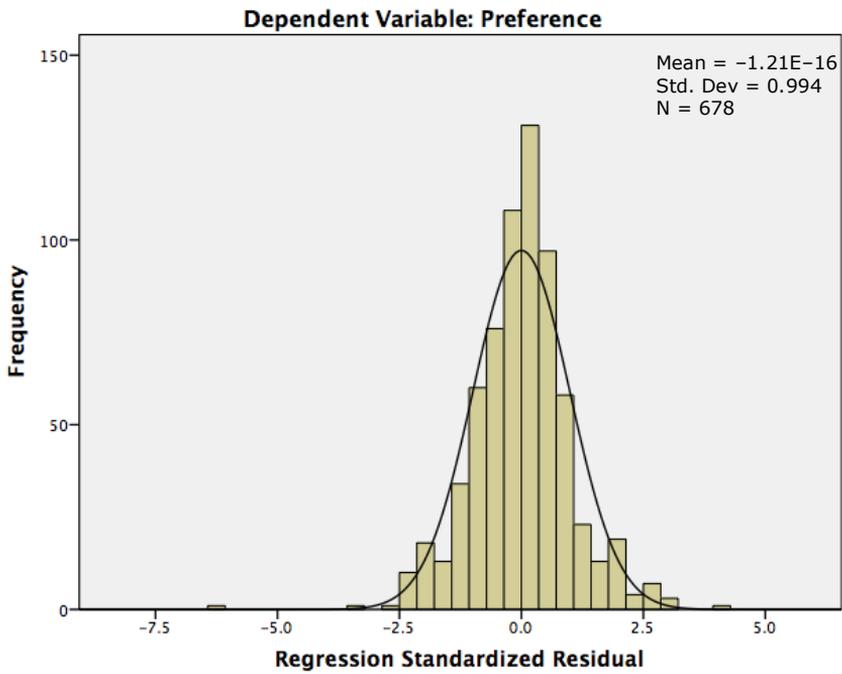


Figure 3. P-P Plot of Residuals in Regression Model 1

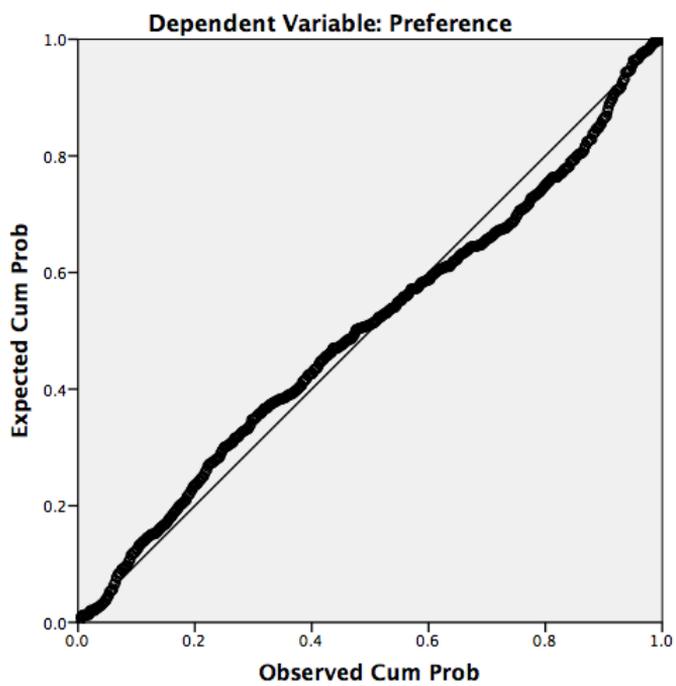
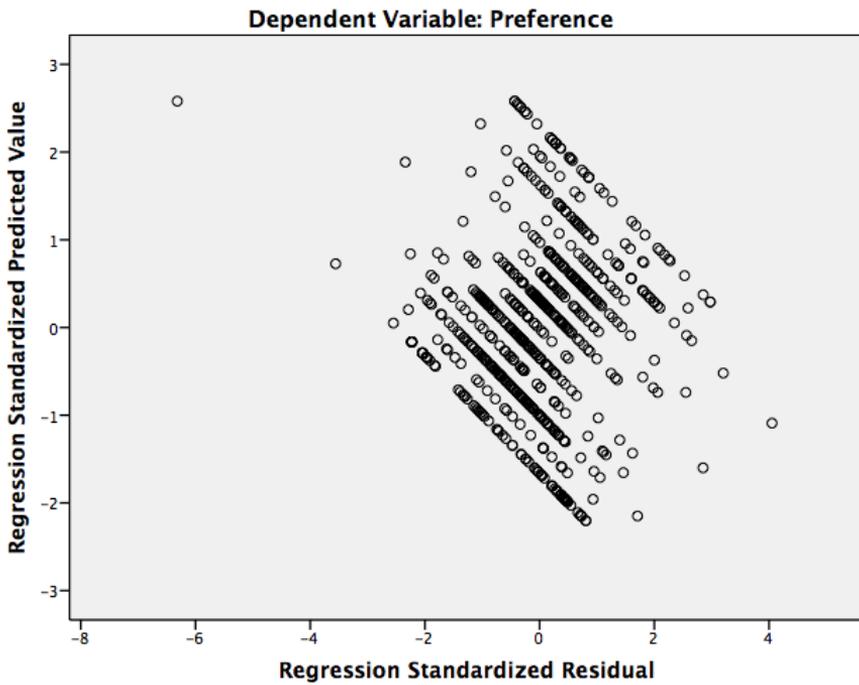
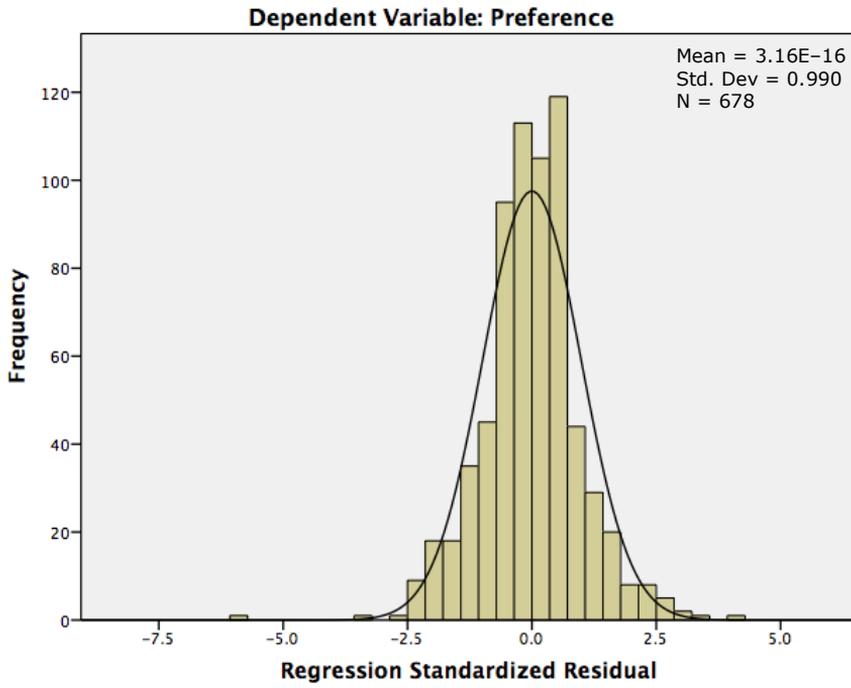


Figure 4. Scatter Plot of Residuals in Regression Model 1



**Figure 5. Histogram of Residuals in Regression Model 2
with Brand Pair Controlled**



**Figure 6. P-P Plot of Residuals in Regression Model Model 2
with Brand Pair Controlled**

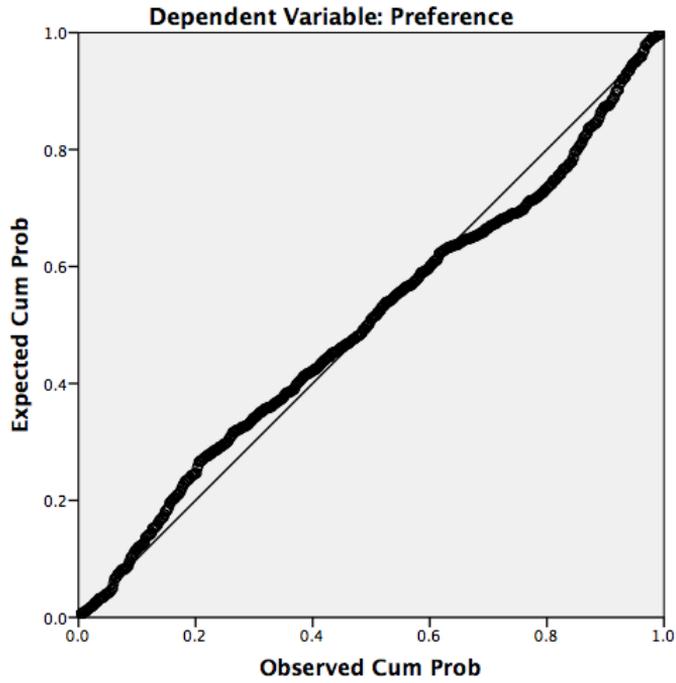
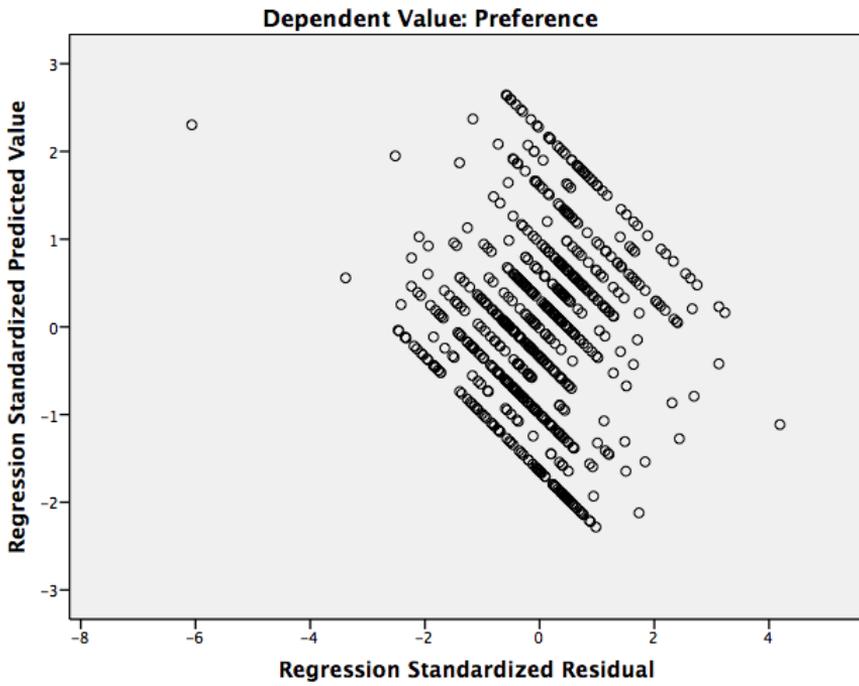


Figure 7. Scatter Plot of Residuals in Regression Model Model 2 with Brand Pair Controlled



국 문 초 록

심미적 가치와 기능적 가치의 선택: 구매 목적과 친숙도의 조절효과에 대한 연구

본 연구에서는 심미적 가치와 기능적 가치가 제품 선호도에 미치는 영향에 있어 어떠한 조건에서 상충관계를 갖는지 회귀모형을 통해 설명하고자 하였다. 제품 목적 변수(쾌락주의와 실용주의 목적)와 개인 관련 변수로 제품에 대한 소비자의 친숙함 정도에 심미적 가치와 기능적 가치가 제품 선택에 어떠한 영향을 미치는지 연구하였다. 연구 결과, 제품군에 대한 소비자의 친숙도와 제품 사용 목적이 제품의 속성들이 선호도에 미치는 관계를 조절하는 것으로 나타났다. 제품을 쾌락 목적으로 사용할 경우 제품의 심미적 속성이 선호도에 더 큰 영향을 미치게 되는 반면, 기능적 속성이 선호도에 미치는 영향은 감소한다. 친숙함 또한 조절효과를 가지는데 제품 및 제품군에 대한 친숙함이 높을 때 제품의 심미적 속성 보다는 기능적 속성이 선호도 증가에 더 큰 영향을 미치는 것으로 나타났다. 심미적 가치는 낮은 친숙함일 때 제품에 대한 선호도를 더 증가시켰다. 즉, 제품을 쾌락적 목적으로 사용할 경우와 제품에 대한 친숙도가 낮은 경우에 기능적 가치보다 심미적 가치가 제품에 대한 선호도를 더 증가시킨다.

주요어: 심미적 가치, 기능적 가치, 구매 목적, 소비자 친숙도
학 번: 2014-20427