Effects of the m-VALS on the Mobile Shopping Acceptance Incentive and Consistent Use Intention*

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Abstract

Purpose – This study intends to verify if the m-VALS developed to help the establishment of the mobile shopping vitalization strategy is classified as the same type as it is in the adult customers.

Research design, data, and methodology – A total of 84 valid copies of the questionnaire were used. Factor analysis was performed first, as well as performing reliability and validity analysis after deducing the factors, and the simple regression analysis and multiple regression analysis techniques were employed.

Results – The m-VALS needs verification through various groups and the delicateness of the questions needs to be ensured; further, for all the lifestyle types in relation to the mobile shopping acceptance incentives, all the remaining lifestyle types excepting the sociability-oriented type had a positive effect on consistent use intention.

Conclusion – It is implied that the charm of the mobile shopping App should be enhanced and that, when establishing the mobile shopping mall with which the positive frequent and interactive communication is possible along with the opportunity to be together, the positive achievement can be obtained.

Keywords: M-VALS, Life Style, Acceptance Incentive, Consistent use Intention, Regulatory Focus.

JEL Classifications: L86, M10, M15, M31.

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1. Introduction

Since rapid change of the mobile internet environment and the high performance and popularization of mobile devices like smart phone and tablet PC etc have advantages that enable the users to access the information or contents easily at any time and anywhere, new business scope like mobile shopping market in the virtual space along with the various individualization service (Son et al., 2013) are being provided.

Many scholars (e.g. Cui & Roto, 2008; Hinman et al., 2008; Kaikkonen, 2008) are showing differences in the concept and configuration of the scope in terms of the mobile internet. For example, Cui & Roto (2008) has defined the use of web through mobile terminal like looking at web pages with the mobile browser as mobile internet. In response to this, Hinman et al. (2008) defined the mobile internet as the complete connection to the web site using mobile and Kaikkonen (2008) has defined the mobile internet as internet connection through mobile terminal device and asserted that the expression, 'internet connection on the mobile' is more appropriate than the expression 'mobile internet'. In this study, the mobile internet has been defined as the connection to the internet using the mobile terminal which has mobility and portability not the wide concept which comprises the conventional wireless internet, laptop and netbooks etc as in the definition by Kaikkonen (2008). According to the 2013 mobile internet use status survey performed by the Korea Internet & Security Agency (KISA), 25.5% of the mobile internet users started using the mobile internet for the first time in 2010 and the possession rate of smart phone was highest to be 95.5% compared to other devices. According to this report, the use frequency of the mobile internet terminal is 12.3 times per day on average and the mobile internet is being used 1 hour and 34 minutes on average per day.

The mobile shopping market size of our country was merely 10 billion won in 2009, but it has increased to 1 trillion and 700 billion won market and the KOLSA (Korea Online Shopping Association, 2012) has predicted that it shall increase to 7 trillion and 600 billion won by 2014. This bright prospect signifies that the market share of the mobile shopping is being magnified due to the increase of the number of mobile internet users and

this is anticipated to be due mainly to that the consumers can purchase products without restrictions of place and time and thus at their desired time and place in mobile shopping. According to the report of KISA (2013), 36.4% of the mobile internet users experienced the mobile shopping among which 23.8% used mobile shopping more than once a week and the respondents who answered that they do the mobile shopping 1-3 times a month was no less than 43.3%. According to this report also, as for the mobile shopping use rate among the mobile internet users, the women were 41.5%, man were 32.0% and in terms of the age, people in their 20s were 61.2% and the people in their 30s were 50.0%. They had experiences like 'search of information on products and services' (91.8%), 'order and checking the delivery' (53.7%) and 'acquiring of discount and promotion information and coupons '(45.5%). On the other hand, the reasons of not doing the mobile shopping were 'because the off-line shopping is more convenient' (26.0%), 'since the screen is too small and it is difficult to look at it' (26.0%) and 'since I do not know how to use it' (20.8%) etc (KISA, 2013), which means that a majority of them might participate in the mobile shopping as potential customers since the trend is that the size of the mobile device is being bigger these days. However, according to a summary by Ju et al. (2013), while the growing mobile shopping is getting attention from the industry regardless of the overall stagnation of consumption, most of people who experienced mobile shopping are complaining about the inconveniences and they are shopping not restricting their type of app to any specific mobile shopping app(The Electronic Times, 2013), which is being foreseen to be the result that the characteristic of the mobile shopping users was not properly analyzed and the mobile shopping was approached as only one shopping type.

This study has focused on the fact that Ju et al. (2014) has investigated the lifestyles of the mobile internet users and classified the tendencies of them in order to classify the personal characteristic of the mobile internet users of which the number is increasing and help the establishment of mobile shopping vitalization strategy. The m-VALS as the new concept of mobile internet user life style is proposed through a study done against 244 university students based on the VALS among the representative methods analyzing the consumers' life style and I-VALS study classifying the internet users. Thus, this study intends first to verify if the m-VALS can be classified into the same type to adult consumers also in order to verify if the development criterion can be generalized. Second, the study intends to verify if the practical analysis of the cause and effect relationship model can be possible by verifying the effect of the life style type proposed in m-VALS on the consistent mobile shopping use intention and acceptance incentive. Lastly, the study intends to establish the structured study model about whether the regulatory focus based on regulatory focus theory regulates the life style type, consistent use intention and acceptance incentives.

According to the result of this study, first it is expected that

the possibility if the m-VALS can be generalized can be verified. Also, it was anticipated that as it was known, life style reflects consumers' inner characteristics like consumers' characters, motivation and interest etc, thus the strategic management in the mobile shopping mall depending on the users' tendency in business utilizing the mobile internet can be possible through analysis of the consumers' life style. Lastly, it is expected that by verifying if the regulatory focus becomes the motivation along with the tendency analysis reflecting consumers' inner characteristic, clue to establish appropriate marketing strategy can be offered to the shopping mall business people and potential business people who will proceed business afterwards.

2. Theoretical Background & Hypotheses

2.1. m-VALS

The lifestyle was the concept introduced as Lazer (1963) defined it as 'systematic concept, and that it means the characteristic style of living in the congregative and broad sense of the whole society and details and it is related to the unique components and quality representing style of living of specific culture and specific group and it the embodiment of the pattern developed and appeared in the dynamism of lie in the society, and can be said to be the characteristic style of living differentiated from other people possessed by the whole society or members of a part of a society (Kahle et al., 1986; Lazer, 1963). The representative life style analysis method include Wells & Tigert (1971)'s AIO (Activities, Interests, Opinions) and VALS (Values and Life Style) etc and in this study, the VALS and I-VLAS (Internet Value and Life Style) which have become the basis for the m-VALS have been surveyed.

VALS is an abbreviation of the initials of the value and the life style and is the analysis method developed by SRI (Standard Research Institute) International's Mitchell (1983) and is being used very usefully in analyzing the characteristic of the target market and the market departmentalization criteria. The main characteristic of VALS is that it is emphasizing the importance of the measurement and analysis of the psychological phase of the consumers in order to comprehend the characteristic of life style. (Ju et al., 2013, 2014) Also, while VALS has been recognized for its much commercial usefulness in that is sheds lights on individuals overall as well as on the demographic data and consumption system and has big advantage that is depicted precisely each consumer individuals of various groups, the consumer classification by way of VALS coincides much with the demographic elements of the consumers and thus it has some limitations (Ju et al., 2013, 2014).

On the other hand, the in the I-VALS (Internet Value and Life Style), SRI has classified the life style into 10 each, which are wizard, pioneers, upstreamers, socialities, workers, suffers, mainstreamers, sociables, seekers and immigrants etc with the purpose of the analysis of consumers in the interne environment and the promotion of usefulness and quality among the consum-

ers and corporations, information providers and intermediary traders.

m-VALS is the classification into 5 types, which are mania, Sociability-Oriented, Practical Utilization, Self Complacency and Involvement-Oriented through factor analysis of the 24 questions suited to mobile internet environment with the university students as objects done by Ju et al. (2013), considering the fact that many domestic researchers (e.g. Kim & Kwon, 1999; Lee & Shim, 2001) intended to classify the life style of the internet users based on VALS and I–VALS.

To survey the characteristic of each type, first the mania type has the characteristic of being most active and refined among all the mobile internet users, the use of mobile internet of mania type occupies important part of life and it shows much interest in much part of the mobile internet culture. The second type, sociability oriented type is the group which shows the biggest sociable purpose in mobile internet use, and the mobile internet utilization is the main media in utilizing the SNS actively and exchanging the opinions and informations and it corresponds to relatively young layers. The third, practical utilization type is much interested in usefulness of mobile internet and tends to focus on mobile the internet utilization ability for the task-related specific tasks and information acquirement and shows the characteristic of highest information-focused intensity among the mobile internet users. The fourth, self complacency type is a class which has already learned to a certain degree the mobile internet related technology and does not have a desire to pursue new thins any more, but utilizes mobile internet in various usages. Lastly, the involvement-oriented type utilizes the mobile internet mainly for shopping and shows the characteristic of being much interested in purchase of mobile contents like games and musics and utilization of mobile shopping app.

2.2. Mobile shopping acceptance incentive

Since the acceptance incentive of the consumers about new technology is the criteria of the possibility of the corresponding technology being maintained and developed and thus is a very important factor, but the study on the acceptance of mobile shopping (e.g. An & Kim, 2011; Kang, 2013) is insufficient. This study has composed the acceptance incentive of mobile shopping as a concept which comprises the reliability and the interactivity.

One of the reasons why the reliability has become a social issue in many studies based on internet, the virtual space so far is because the consumers have to provide to the seller the payment information and the personal information in a situation where the uncertainty of the non face-to-face activity is high. (Wang & Emuran, 2005) Furthermore, since the personal information in the mobile environment is centered on the individual information based service not like in the conventional analogue media environment, more various level of information is exposed like information for individual identification and for use of service (Lee, 2014). reliability is a factor which affects the consumers' behavior (Bauer et al., 2002) and especially, the

belief in the recognized anticipation and value has been regarded to affect the consistent use intention and purchase behavior through satisfaction (Ho & Wu, 2012). Thus, if users do not believe in the mobile shopping, they will no more share the information and thus according to Kim & Kim (2011), whether the SNS site users trust the sites is an important issue which determines the problem of keeping or discarding of the site, and the reliability level of the mobile shopping mall becomes an important factor which decides the acceptance incentive of the mobile shopping.

Also, one of the characteristic of the Web 2.0 environment which takes the participation, share and openness as the motives can be interactivity (Kim, 2006) and the influence of the interactivity about internet marketing activity is becoming bigger through vitalization of the mobile internet. The mobile shopping mall which is based on the SNS can acquire direct participation and instant reaction in changing the experience of and type of the shopping mall provided to the users. Wu (2006) has said that interactivity is the psychological state which the user experience through the site during the time when he interacts with the web site. To see from this point of view, the mobile shopping mall has the characteristic of being able to be participated any time and any place, and thus the interactivity is an important factor which can measure the acceptance incentive about mobile shopping. Thus, in the mobile environment, the regulatory activity about the more various messages as in the internet device environment, more amount of information, disclosure of information and time deciding activities are done according to the needs and preferences of oneself, people can participate in the interactive activity among the consumers actively like persuasion among themselves (Lee, 2014), and the satisfaction through interaction does make the acceptance of mobile shopping easy and affects positively the consistent use intention.

2.3. Consistent use intention

According to Lee (2014)'s study, the reason why studies on dependent variables like re-visitation intention and consistent use of the users etc are generally presented much in the marketing is because they are the determining variables (Davis et al., 1989; Zhang et al., 2010) with which the consumers access the information and verifies the attitude and decision making depending on such information. To survey the studies regarding the consistent use intention, first, Hsu & Lu (2004) and Lin et al. (2005) have said that the perceived usefulness affects positively the consistent use intention and Kim et al. (2006) said that the consistent use intention occurs after the acceptance stage and it is a behavior which is formed over a long period of time and is affected determinatively by the satisfaction and dissatisfaction of the consumers. On another hand, Lin et al. (2005) has developed the expanded study model through the flow theory and expectation-confirmation model and proved that the perceived playfulness affects positively the consistent use intention of the portal users. Seeing based on these studies re-

sult, it can be anticipated that the possibility of the mobile shopping acceptance incentive affecting the consistent use intention is high.

2.4. Regulatory focus

The regulatory focus theory proposed by Higgins (2000) by supplementing the Self-discrepancy theory is a concept which explains how people satisfy the type of their objectives and the objectives. It has been expanded from the hedonistic principle that people have the motivation to pursue pleasure and avoid agony. Higgins (1997, 1998) has asserted that not all the behavior of the human can not be understood only with the hedonistic principle and proposed that verification of why people pursue pleasure and avoid agony and which method they use to pursue pleasure and avoid agony is needed and said that people shall use different vehicles for regulation toward characteristically different ideal desire status (Han, 2011). Regulatory focus theory is the dual process theory which explains two different self regulatory base for objective behaviors and is explaining the motives and emotions of human by dividing the human's pleasure into two things which are promotion focus, the motive used as approach strategy for acquiring something for the pleasure and the prevention focus, the motive which uses the avoidance strategy to prevent loss to escape from agony.

According to the summary by Han (2001), in the case of promotion focus, people experience joy and related emotions through objective achievement and experience disappointment and related emotions when they fail. Thus, in the promotion focus, an individual focuses on positive results which can be obtained by the individual like ideal, hope, promotion and achievement and desire etc and thus he uses the strategy to obtain positive results which are symbolized as pleasure and he experiences the emotions of pleasure and disappointment depending on the existence and absence of positive results. On the other hand, in the prevention focus, he explains that the individual experiences emotions like safety through objective achievement and experiences emotions like anxiety when he fails. Thus, since an individual focuses on the negative results which he can lose like duty, protection, safety, appropriateness, and responsibility etc, he uses strategies to avoid negative results which is symbolized as agony and experiences the emotions of calmness and anxiety depending on the absence and existence of the negative results (Higgins, 1998; Han, 2011 re-quoted). Higgins (1998) has said that the regulatory focus of an individual is formed in the socialization process and that either one of the two types can be shown strong or both the two types can be shown strong. Thus, this study did not divide the regulatory focus into the promotion focus and protection focus, but has judged that the phenomenon of either one of the two types being offsetting or being sided is the motive which can occur in the process of participating in the mobile shopping.

3. Methodologies

3.1. Research model and hypothesis

The m-VALS has divided by Ju et al. (2013, 2014) into the mania, sociability oriented, practical utilization, self-complacency and involvement oriented types through factor analysis of the 24 questions suited for the mobile internet environment against university student objects has been shown previously. Abby (1979) said that the reason why the study on life style draw attention in the marketing field is firstly because life style is much more effective than demographic variable in segmentalizing the consumer market and secondly because the consumer's behavior pattern related to the life style type can be analyzed more properly and lastly because life style is very useful in predicting the flow of change in the consumers' value system and purchase behavior. (Goo & Kim, 2013) Thus, it can be anticipated that the life style types classified in m-VALS will affect specifically the mobile shopping acceptance incentive. Also, the precedent studies (e.g. Ho & Wu, 2012; Kim & Kim, 2011) on the reliability which classified according to the mobile shopping acceptance incentives and the precedent studies (e.g. Lee, 2014) on the interactivity can predict that these can affect positively the consistent use intention.

However, what this study focuses on is the regulatory focus which can occur related to the mobile shopping. In other words, it is that the regulatory focus will regulate between the life style of the customers regarding mobile and the mobile shopping acceptance incentive and consistent use intention. On another hand, this study has established the following study model and hypotheses by verifying if each question is classified into types through factor analysis, performing the definite factor analysis about classified life styles and utilizing the types which have obtained the validity in order to implement the objective of verifying if the m-VALS is applied in the same way to the adult consumers with the university students as objects. The factor analysis result will be reported in later chapters.
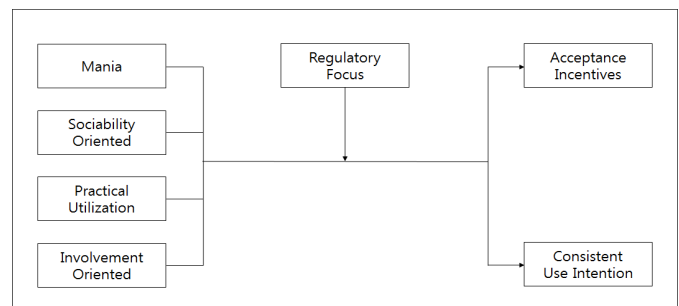
<Figure 1> Research Model

Hypothesis 1. Life style type will positively affected on the acceptance incentive.

Hypothesis 1-1. Mania type will positively affected on the acceptance incentive.

Hypothesis 1-2. Sociability oriented type will positively affected on the acceptance incentive.

Hypothesis 1-3. Practical utilization type will positively affected on the acceptance incentive.

Hypothesis 1-4. Involvement oriented type will positively affected on the acceptance incentive.

Hypothesis 2. Life style type will positively affected on the consistent use intention.

Hypothesis 2-1. Mania type will positively affected on the consistent use intention.

Hypothesis 2-2. Sociability oriented type will positively affected on the consistent use intention.

Hypothesis 2-3. Practical involvement type will positively affected on the consistent use intention.

Hypothesis 2-4. Involvement oriented type will positively affected on the consistent use intention.

Hypothesis 3. The regulatory focus will moderated between the life style type and the acceptance incentive.

Hypothesis 3-1. The regulatory focus will moderated between the mania type and the acceptance incentive.

Hypothesis 3-2. The regulatory focus will moderated between the sociability oriented type and the acceptance incentive.

Hypothesis 3-3. The regulatory focus will moderated between the practical utilization type and the acceptance incentive.

Hypothesis 3-4. The regulatory focus will moderated between the involvement oriented type and the acceptance incentive.

Hypothesis 4. The regulatory focus will moderated between the life style type and the consistent use intention.

Hypothesis 4-1. The regulatory focus will moderated between mania style type and the consistent use intention.

Hypothesis 4-2. The regulatory focus will moderated between the sociability oriented style type and the consistent use intention.

Hypothesis 4-3. The regulatory focus will moderated between the practical utilization type and the consistent use intention.

Hypothesis 4-4. The regulatory focus will moderated between the involvement oriented type and the consistent use intention.

3.2. Data Collection

The questionnaire was performed against 86 adults living in Seoul and capital regions to perform the study. Total of 84 valid responses except for the insincere 2 responses were used in the analysis. To see the demographic characteristic of the respondents, the men were 69 people (82.1%), women were 15 people (17.9%), married people were 24 people (28.6%) and unmarried people were 60 people (71.4%). As for the age group, those between 26 and 35 was biggest number of 62 people (74.7%) and those of over 36 years old were 15 people (18.1%) and those of under 25 were 6 people (7.2%) and the remaining one person was missing.

3.3. Methods

As for the life style, the 24 questions of m-VALS of Ju et al. (2013, 2014), as for the mobile shopping acceptance incentive, 12 questions based on the study of Gefen et al. (2003), Kozinets et al. (2010) and Ko et al. (2005), as for the regulatory focus, the 14 questions based on the study of Lockwood et al. (2002) and Han (2011), and as for the consistent use intention, the 4 questions based on the study of Ko et al. (2011) and Lee & Park (2013) were measured based on Likert 7-point scale.

4. Empirical Analysis

4.1. Factor analysis

The m-VALS was measured university student participants by Ju et al. (2013)'s study, the factor analysis was performed to see if they are classified into same types in case of general adults. For the factor analysis, the principal component analysis was sued and the varimax rotation method among the orthogonal rotation was used for the independent interpretation between factors.

According to the analysis result, a total of 6 factors were deduced and the Kaiser-Meyer-Olkin (KMO) criteria which is to verify the appropriateness of the selection of variables was 0.846, a relatively good value. Also, the Bartlett's Test of Sphericity which presents whether the model of factor analysis is appropriate is to verify the null hypothesis of 'the correlation matrix was unit matrix' and the verified value of the analysis result is 1,422.075 and the significant probability of this value is 0.000 and thus the null hypothesis is overruled. Thus, it can be concluded that the use of factor analysis is appropriate and the common factor exists.

When the above result is compared to m-VALS, 1 factor is shown to have been added and in the m-VALS marked in bold character, the mv12 classified as sociability oriented, mv13 classified as practical utilization, the mv19 classified as the self-complacency and the mv24 classified as involvement oriented were classified each as different factors. According to the determinative factor analysis about the above factors, the result factor 6 did not have validity and in the case of self-complacency also, the concept reliability was 0.62 and it did not procure validity and thus the other remaining factors were classified into mania, sociability oriented, practical utilization and involvement oriented based on the m-VALS classification.

<Table 1> Results of m-VALS Factor Analysis

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
mv1	0.832	0.016	0.116	0.099	0.292	0.092
mv4	0.736	0.162	0.064	0.250	0.207	-0.031
mv2	0.734	0.196	0.216	0.187	0.243	0.174
mv3	0.707	0.066	0.454	0.164	0.073	0.222
mv19	0.533	-0.021	0.329	-0.154	0.498	0.266
mv7	0.073	0.828	0.071	0.080	0.160	0.111
mv8	-0.041	0.823	0.060	0.013	-0.047	-0.345
mv5	0.303	0.759	0.058	0.080	0.146	0.072
mv9	-0.032	0.695	-0.182	0.291	-0.050	0.194
mv6	0.348	0.558	-0.038	0.463	-0.181	0.291
mv11	0.010	0.524	0.144	0.512	0.320	0.152
mv10	0.454	0.459	0.300	0.200	-0.116	-0.367
mv17	0.219	0.014	0.887	0.167	0.064	0.076
mv16	0.109	0.055	0.832	0.020	0.339	0.194
mv18	0.494	-0.048	0.650	0.229	0.271	0.087
mv24	0.269	0.078	0.123	0.780	0.058	-0.093
mv23	0.130	0.199	0.042	0.662	0.525	-0.100
mv12	0.046	0.487	0.048	0.609	0.033	0.082
mv13	0.323	0.193	0.312	0.551	0.019	0.424
mv22	0.317	0.037	0.173	0.027	0.789	0.049
mv21	0.289	0.171	0.247	0.402	0.608	0.201
mv20	0.356	0.027	0.357	0.411	0.584	0.082
mv14	0.163	0.040	0.450	-0.171	0.349	0.636
mv15	0.327	0.181	0.384	0.277	0.048	0.599

4.2. Reliability and validity

Reliability was measured using Cronbach α in order to assess if the measurement articles are maintaining the inner coherence, and the validity analysis was performed after removing the questions of which the standard load amount is under 0.5 according to the determinative factory analysis. The analysis result is proposed in <Table 2>.

<Table 2> Reliability and Validity

Variables	Sub-dimension	Final items	Cronbach's α	Construct Validity	AVE
Life Style	Mania	4	0.880	0.813	0.522
	Sociability	3	0.816	0.668	0.401
	Practical Util.	3	0.881	0.789	0.556
	Involvement	2	0.869	0.739	0.586
Regulatory focus		8	0.901	0.863	0.444
Acceptance Incentives		12	0.913	0.895	0.422
Consistent Use Intention		4	0.862	0.794	0.499

Note) Practical Util. : Practical Utilization

Seeing in the result of Table 2, since the standard load value of the m-VALS is low especially, it can be seen that many questions were removed. This result has the possibility that the number of respondents is relatively low or m-VALS has not been classified appropriately to the adults. Although the concept reliability of the sociability oriented type is .668, under the proposed .7, it has enough reliability and thus was used for analysis. Average dispersion extraction index was low than the proposed values, sociability oriented (AVE=0.401), regulatory focus (AVE=0.444), acceptance intention (AVE=0.422) and consistent use intention (AVE=0.499), thus the validity was to be verified through the comparison with the determinative coefficient, the square value of the correlation coefficient deduced according to the correlation analysis result.

4.3. Correlation Analysis

The correlation analysis was performed to verify the relationship and directional nature between each variable and validity of the variables of which the AVE value is under 0.5.

In order to verify the problem of multicollinearity and the auto-corelation through tolerance and Durbin-Watson test in order to verify that there is no problems of autocorrelation through the verification of independence of the tolerance and residue since relatively strong correlation coefficient was shown between life style types, all the 3 factors of which the coefficient value is high were all input and the regression analysis was performed about the relationship with the acceptance incentive and according to its result, the tolerance limit value was over .978 and the VIF value was also under 1.023 and thus it was judged that there is no autocorrelation and multicollinearity.

As can be seen in the corelation analysis above, it was shown that only the sociability oriented type had statistically significant relationship with the regulatory focus (*r* = 0.076, *n.s*) and the consistent use intention (*r* = 0.182, *n.s*).

<Table 3> Results of Correlation Analysis(n=84)

	1	2	3	4	5	6	7
1. Mania	(.522)						
2. Sociability	.382**	(.401)					
3. Practical Utilization	.674**	.222*	(.556)				
4. Involvement	.632**	.333**	.611**	(.586)			
5. Regulatory focus	.458**	.076	.356**	.295**	(.444)		
6. Acceptance Incentives	.490**	.402**	.329**	.484**	.273*	(.422)	
7. C.U.I	.608**	.182	.474**	.454**	.331**	.581**	(.499)
Mean	4.85	3.69	4.86	4.47	5.11	4.08	4.58
S.D	1.12	1.29	1.27	1.47	0.91	0.95	1.06

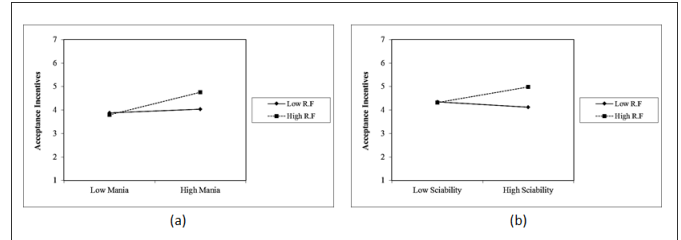Note) * p<.05, ** p<.01, AVE marked in ( ), C.U.I: Consistent Use Intention

4.4. Hypothesis Test

The gender and age, the demographic variables which are expected to affect according to the corelation analysis was performed and regression analysis was performed to verify the direct effect hypothesis and the result is as follows. First, it could be known that all the mania (β=.459, p<.01), sociability oriented (β=.377, p<.01), practical utilization (β=.293, p<.01) and the involvement oriented (β=.456, p<.01) had statistically positive relationship with the mobile shopping acceptance incentive. Thus, hypothesis 1-1, hypothesis 1-2, hypothesis 1-3 and hypothesis 1-4 was supported, respectively. A multi-regression analysis was performed to verify the degree to which the life style types for which the hypothesis was not set but which was statistically significant affect the mobile shopping acceptance incentive and according to its result, in the order of involvement oriented (β =.277, p<.01) and sociability oriented (β=.213, p<.01), the statistical significance was shown positively.

Also, it could be known that regarding the consistent use intention, all the three types, mania (β=.572, p<.01), practical utilization (β=.438, p<.01) and involvement oriented (β=.408, p<.01) except for the sociability oriented (β=.141, *n.s*) affected significantly positively. Thus, the hypothesis 2-1, hypothesis 2-3 and hypothesis 2-4 were supported, however hypothesis 2-2 was not supported. A multi-regression analysis was performed in the same way about the consistent use intention, and according to its result, only the mania type (β=.473, p<.01) had statistically positive effect.

Demographic variables were controlled to be the same to verify the moderating effect, the interaction factor of the life style
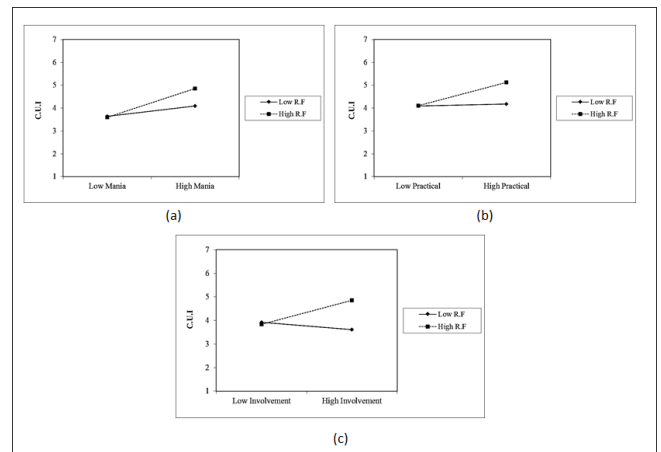
types and regulatory focus was composed and the multi-regression analysis was performed and the result is proposed in <Figure 2> and <Figure 3>.

<Figure 2> Moderating effect of the regulatory focus between the life style and acceptance incentive

As the <Figure 2> presents, it can be known that the regulatory focus is regulating between the mania type and acceptance incentive and between the sociability oriented type and acceptance incentive. Especially, it could be known that in the case of the users who have strong sociability oriented tendency, when the regulatory focus is low, the mobile shopping acceptance incentive was becoming lower. Thus, the hypothesis 3-1 and hypothesis 3-2 was supported, however hypothesis 3-3 and hypothesis 3-4 was not supported, respectively.

<Figure 3> is the result of verification of the moderating effect of the regulatory focus between the life style and the consistent use intention. As proposed, it can be known that the regulatory focus is moderating between (a) the mania type and consistent use intention, between (b) practical utilization and consistent use intention and between (c) involvement oriented and consistent use intention. Especially, is should be marked that in the case of the (c) involvement oriented type, when the degree of regulatory focus is low, the consistent use intention is rather becoming lower. Thus, the hypothesis 4-1, hypothesis 4-3 and hypothesis 4-4 was supported, however hypothesis 4-2 was not supported, respectively.

<Figure 3> Moderating effect of the regulatory focus between the life style and the consistent use intention

5. Discussion and Limitations

This study intended to verify if the m-VALS of Ju et al. (2013, 2014) which has classified the personal characteristics of the mobile internet users of which the number is increasing against the university students in order to help the establishment of mobile shopping vitalization strategy is classified into the same types in the adult consumers. Also, it intended to verify the effect of the life style types on the mobile shopping use intention and acceptance incentive and if it has meanings as the cause and effect relation model. Lastly, it intended to establish a structured study model about if the regulatory focus based on regulatory focus theory is regulating about each of the three, life style types, consistent use intention and acceptance incentive and analyze it practically.

According to the study result, Analysis results and implications of this study are as follows:

First, it can be known that the m-VALS needs more various groups and delicateness of the questions. This is because there was limitations that the absolute personnel of the respondents was small and 1 more factor was deduced than the initially proposed 5 life style types and in the verifying factor analysis result, the concept reliability of the self-complacency was low and thus was excepted in the analysis. The fact that 12 questions among the whole 24 questions were deleted since their standard load value is under 0.5 or their variances extracted were too big among each questions of mania, sociability oriented, practical utilization and involvement oriented types utilized in this study can conclude that the m-VALS has still limitations in differentiating precisely the life style types. Thus, further study will need to perform the followings. First, it shall have to verify if it classifies life styles of mobile users through additional study on various groups. Second, the procedure of verification of the face validity of each questions of m-VALS and verifying the response of the respondents through various investigation method about each question. Lastly, it is suggested that the further study should continue the verification of the validity of the m-VALS criterion through support of professional groups like psychologists along with the above two procedures.

Second, it could be known that all the life style types affected positively the mobile shopping acceptance incentive and all the remaining life style types except for sociability oriented type affected positively the consistent use intentions. This result can be interpreted in a way that the life style types of the mobile shopping users maintain their each personality and affects with the characteristic of each type related to mobile shopping. In the case of the sociability oriented type, as proposed as the characteristic of the life style, it is the group which has the biggest sociable objectives in use of mobile and uses the SNS actively and the mobile internet utilization is the main media in exchanging opinions and information interactively, but it is a relatively young age group and thus the result may have been drawn because the possibility of the result due to the character-

istic of the group which is not interested in mobile shopping or does not have purchase power is high.

Third, according to the multi-regression analysis result, the involvement oriented and sociability oriented type affected the mobile shopping acceptance incentive in its order and only the mania type has affected positively the consistent use intention. This result implies that the characteristic of the reliability and interactivity utilized as the mobile shopping acceptance incentive in this study needs to be understood. In other words, the reliability and interactivity in the mobile shopping process become the factors which all the life style types affect positively and especially the involvement oriented type and sociability oriented type can affect much more. Thus, the charm of the mobile shopping app needs to be promoted and it is suggested that when the mobile shopping mall in which participative, frequent and positive bilateral communication is possible is established, positive results can be driven.

Fourth, the moderating effect of the regulatory focus, the self-regulatory mechanism which is possessed by the consumers for the objective behavior proposed in the regulatory focus theory, the concept which explains how the people satisfy the type of the objectives and the objectives they possess was analyzed and according to its result, it was moderating between the mania type and acceptance incentive and between sociability oriented type and acceptance incentive. Also, it was verified that the regulatory focus was moderating between the mania, practical utilization and involvement oriented types and consistent use intention. However, in the case of the sociability oriented type, when the regulatory focus becomes low, the mobile acceptance incentive of the customers who show high sociability oriented nature becomes lower and in the case of the involvement oriented type also, the consistent use intention became lower. Thus, it is suggested that in the case of the mobile shopping operator or when a person has further operation plan, he/she needs to improve the regulatory focus of the users by developing the scheme to avoid negative results symbolized as agony along with the strategy to obtain the positive results symbolized as the pleasure of the users.

Although this study has proposed some appropriate schemes to the marketing strategies related to mobile shopping and the possibility of validity of m-VALS, it has the following limitations and thus further study needs to improve them.

First, there is a possibility that the result of the factor analysis could be bad or differently grouped because the absolute number of the respondents who responded in this study although the number of respondent was large enough to carry out the regression analysis. Thus, further study needs to secure enough respondents and perform additional analysis.

Second, in this study, the regulatory focus has been analyzed as the 1st factor, but it needs to be analyzed as the sub-factors, promotion factor and prevention factor to establish more various marketing strategy. Thus, further study needs to secure more respondents and analyze the study model through sub-factors of the regulatory focus. Lastly, since this study has been measured with the self-reporting type of questionnaire, there are

potential problems like hindsight bias which can occur and this study has limitations in that it has been performed in cross-sectional approach. About this problem, excavation and development of more objective criteria is needed and the limitations of cross-sectional study need to be overcome through attempts of longitudinal analysis.

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