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The Differential Factors Influencing Online & Mobile Shopping Behavior*

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Abstract

Purpose - In this study, the author investigates which shopping motivations affect regulatory focus differently. This study also determines the effect of shopping motivation on regulatory focus when consumers use different shopping channels. Additionally, the author tries to investigate how information quality affects regulatory focus. Similarly, this study also examines the effect of the shopping channel on the relationship between information quality and regulatory focus.

Research design, data, and methodology - With 635 surveyed questionnaires, this study was conducted by SPSS and AMOS 22.0 version. SEM was used to verify hypotheses and model.

Results - According to this research, hedonic shopping motivation affects promotion focus positively and prevention focus negatively. Furthermore, when consumers use a mobile channel rather than an online one, hedonic shopping motivation affects prevention focus more negatively. However, depending on the shopping channel, there are no significant differences in the case of the relationship between hedonic motivation and promotion focus. The author also examines how information quality affects regulatory focus. In particular, when consumers use a mobile channel rather than an online one, information quality affects promotion and prevention focus more positively.

Conclusions - Through this study, the author suggests that shopping motivation and information quality could influence consumers' regulatory focus, shopping attitude, and intention.

Keywords: Online and Mobile Shopping, Hedonic Motivation, Utilitarian Motivation, Information Quality, Promotion Focus, Prevention Focus.

JEL Classifications: M31.

1. Introduction

Nowadays, many consumers use internet and mobile shopping channels through various devices, such as smartphones and notebook computers. In particular, mobile commerce has often been considered the new service frontier. The rapid development of modern wireless communication technology and high penetration rate of the Internet have promoted mobile commerce (Pascoe et al., 2002). Shopping or buying through a mobile shopping channel has become an important issue that has drawn much attention in industrial and academic areas. It is predicted that there will be more than two billion smartphone users, or one-quarter of the global population, in 2016 (eMarketer, 2014). M-shopping is also expected to grow

significantly. While the overall retail revenue annual growth rate was 4% until 2016, mobile commerce is expected to grow by 21~29% (Mulpuru et al., 2013). In short, the growth in m-commerce provides plenty of implications for online and mobile distribution marketers.

Mobile commerce refers to any transactions with a monetary value performed through a wireless telecommunication network (Ko, Kim, & Lee, 2009). As a development of e-commerce, m-commerce is regarded as a separate channel that can distribute ubiquitous value by providing convenience and accessibility at any time and any place (Balasubramanian, Peterson, & Jarvenpaa, 2002). As with online commerce, m-commerce has shown increased transactions and profits. However, there is a limited understanding of the environment in online and mobile commerce. Additionally, there are few studies investigating the difference between online and mobile commerce in consumer behaviors. As a result, many researchers argue that m-commerce is not just an extension of e-commerce,

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but has its own new business models, value chain, technological infrastructure, and unique value for consumers (Min, Ji, & Qu, 2008). Therefore, this study defines online shopping as PC based shopping and mobile shopping as shopping using various mobile devices. Even though m-commerce is growing, firms do not yet provide a separate shopping environment in online and mobile channels (Prashar, Vijay, & Parsad, 2015). They just offer the same products through different services (e.g., internet sites and mobile apps) without differentiated strategies.

Because of the unique characteristics of m-commerce (e.g., smartphone size, small screen, limited data-processing capability, ubiquity, various types of mobile apps), there might be some differences between consumer behavior in online and mobile commerce. To gain an understanding of the mobile consumer, recent research has covered various themes, including shopping motivation through service offerings to the consumer (Khajehzadeh, Oppewal, & Tojib, 2014). On the other hand, based on the matter of smartphone size, we try to determine the effect of the information quality of online and mobile channels on consumer behavior.

In this paper, we draw on the theory of regulatory focus to explain the differences between online and mobile shopping (Higgins, 1997). Previous studies do not investigate the effect of shopping motivation (internal factor) and information quality (external factor) on regulatory focus through online and mobile shopping simultaneously. Consumers shop with different shopping motivations that could result in different shopping behaviors. Thus, a theoretical and practical study will identify the underlying consumer motivations in using online and mobile shopping channels.

Therefore, the purpose of this study is to examine how shopping motivation and perceived information quality affect consumers' regulatory focus and shopping intention. This could be a contribution for marketing managers to enhance their knowledge about the differences between online and mobile channels and their precise understanding of their customers.

2. Theoretical Background and Proposition

2.1. Regulatory Focus

Regulatory focus theory demonstrates two major motivation approaches, which are the way consumers seek their goals: promotion focus, which refers to achieving hopes, aspirations, and desires, and prevention focus, which refers to fulfilling duties, obligations, and responsibilities (Higgins, 1997; 1998). Regulatory focus can be a chronic personality characteristic or situationally caused (Crowe & Higgins, 1997).

When pursuing goals, consumers with a promotion focus are inclined to adopt an eagerness strategy (Khajehzadeh, Oppewal, & Tojib, 2014). In other words, to obtain chances to achieve more gains, consumers try to consider more alternatives and find as many opportunities as possible (Forster & Higgins, 2005; Pham & Avnet, 2004). Additionally, promotion-focused consumers tend to engage in exploratory behavior, attend freely to relationships among items, and think more in terms of abstractions and are better able to understand and evaluate ambiguous stimuli and experiences (Semin et al., 2005). However, prevention-focused consumers employ a vigilance strategy. They might not search for alternative options to lower the possibility of making mistakes and experiencing losses (Forster & Higgins, 2005; Pham & Avnet, 2004).

Arnold and Reynolds (2009) suggest that a promotion focus is related to the perception of hedonic shopping motivation, while a prevention focus correlates with perceptions of utilitarian shopping motivation. Accordingly, it can be expected that the consumer's shopping motivation has a relationship with regulatory focus in a similar way (Khajehzadeh et al., 2014). In other words, a consumer with hedonic shopping motivation tends to show promotion-focused behavior, whereas a consumer with utilitarian shopping motivation tends to be prevention-focused.

Consumers expect to satisfy their prevention-focused objectives from utilitarian product attributes and promotion-focused objectives usually from hedonic product attributes (Chernev, 2004). Prior research suggests that prevention-focused consumers tend to consider their objectives as necessities and thus are less responsive to things that are unrelated to their objectives (Freitas & Higgins, 2002; Freitas, Liberman, & Higgins, 2002). Additionally, prevention-focused consumers are more likely to prefer the status quo than promotion-focused consumers (Chernev, 2004).

Khajehzadeh et al. (2014) suggest that utilitarian shopping motivations are more prevention-focused. Conversely, hedonically motivated consumers tend to be more promotion-focused. Therefore, a consumer with a prevention focus is more likely to be influenced by utilitarian shopping motivation and a consumer with a promotion focus tends to be easily influenced by hedonic shopping motivation.

2.2. Shopping Motivation in Online and Mobile Shopping

There are various types of consumer shopping motivations according to the different retail shopping formats (Westbrook & Black, 1985; Parsons, 2002; Singh, 2014). Shopping motivations explain why consumers prefer to buy in a particular shopping channel (Scarpi, 2005). In this regard, shopping motivations have been considered important for developing appropriate marketing strategies for the retail industry (Westbrook & Black, 1985; McGoldrick, 2002).

The mobile shopping channel is different from traditional

online shopping because it offers services without temporal and spatial constraints and makes it possible for consumers to shop when they are on the move (Heinonen & Pura, 2006). Because of the unique characteristics of mobile shopping (e.g., ubiquity, personalization, small screen), consumers may reveal different shopping motivations in using the mobile shopping channel compared with traditional online shopping channels.

Hedonic and utilitarian shopping motivations are proposed in previous research (Babin et al., 1994; Cardoso & Pinto, 2010; Yang & Kim, 2012). Moreover, researchers suggest that utilitarian and hedonic shopping motivations should be regarded together when investigating consumer shopping behaviors (Babin & Darden, 1995).

Utilitarian shopping motivation considers a shopping activity as work (Babin et al., 1994), and it involves convenience and time saving (Jarvenpaa & Todd, 1997; Teo, 2001). Utilitarian shopping motivation emphasizes that a consumer's shopping behavior is influenced by the functional features of the products/services and financial needs (Kim, 2006). According to prior research, efficiency and achievement are suggested dimensions of utilitarian shopping motivation (Babin et al., 1994; Kim, 2006). Kim (2006) states that efficiency shopping reflects a consumer's need to save time and other resources when the consumer shops. Achievement shopping is a goal-related shopping behavior that focuses on obtaining a specific product during a shopping trip (Kim, 2006). When consumers find a suitable product by investing proper time and effort, achievement shopping motivation might be satisfied. Online shoppers tend to value the convenience of locating and saving temporal and psychological resources; thus, this leads them to spend more to save time (Grewal et al., 2003). Moreover, because of the unique characteristics of the mobile channel, consumers could perceive the mobile shopping environment as potentially threatening and problematic in terms of a utilitarian motivation (Nepomuceno et al., 2014). Chitturi, Raghunathan and Mahajan (2008) suggested that hedonic and utilitarian benefits affect consumers' promotion and prevention emotions and further affect consumer loyalty. In particular, the hedonic benefit affects promotion emotion and the utilitarian benefit has a positive effect on prevention emotion. In particular, consumers expect to pursue prevention goals in the utilitarian dimension and expect them to meet the promotion goals in the hedonic dimension (Chernev, 2004; Chitturi, Raghunathan, & Mahajan, 2007). With such efficiency and achievement aspects, consumers with utilitarian shopping motivation would be more likely to show prevention-focused behavior in the online shopping channel than in the mobile channel.

In contrast to utilitarian shopping motivation, hedonic shopping motivation draws attention to the consumer's emotions, psychological sensations, and the entertainment aspects of shopping (Westbrook & Black, 1985; Arnold & Reynolds, 2003; Kim, 2002). Since the mobile shopping

channel is a new shopping channel in comparison to the online channel, consumers could be interested in enjoying new mobile shopping services (Yang & Kim, 2012). Searching for various products in the mobile channel might increase consumer shopping pleasure more than in the online channel. With regard to hedonic shopping motivation, consumers would obtain greater emotional satisfaction from the mobile channel than from the online channel.

Based on the above research, the following hypotheses are suggested:

<H1> Hedonic motivation affects a consumer's promotion focus positively.

<H1-1> If a consumer use mobile channel rather than online one, hedonic motivation affects a consumer's promotion focus more positively.

<H2> Hedonic motivation affects a consumer's prevention focus negatively.

<H2-1> If a consumer use mobile channel rather than online one, hedonic motivation affects a consumer's prevention focus more negatively.

<H3> Utilitarian motivation affects a consumer's promotion focus negatively.

<H3-1> If a consumer use mobile channel rather than online one, utilitarian motivation affects a consumer's promotion focus more negatively.

<H4> Utilitarian motivation affects a consumer's prevention focus positively.

<H4-1> If a consumer use online channel rather than mobile one, utilitarian motivation affects a consumer's prevention focus more positively.

2.3. Information Quality

Lee and Benbasat (2004) suggest that the major differences between the online and mobile shopping channels are time, place, and context according to the consumer's shopping environment, such as the distinct characteristics of the mobile shopping channel. In spite of the potential benefits of the mobile channel, there may be difficulties that arise from the limitations of mobile devices, such as small and low-resolution displays, restrictive storage, and data transfer difficulties (Kamba et al., 1996). Because of these limitations, consumers cannot expect a higher quality of information from the mobile shopping channel. Instead of high-quality information, consumers usually consider the usefulness as more important in the mobile shopping channel (Lee & Choi, 2011). Because consumers who use the mobile shopping channel tend to focus on the enjoyment of shopping, they do not want to spend great effort on finding trustworthy and detailed information. On the other hand, consumers who use the online shopping channel

tend to consider trustworthy and detailed information important because they usually use the online shopping channel when they need to explore more information in detail (Nerger, 2008).

However, the mobile shopping channel does not show proper information that is distinguished from that of the online shopping channel (Lee & Choi, 2011). Because of the limited display size and resolution of mobile devices relative to PCs, the mobile shopping channel provides a separate information process from the first page to the payment page (Lee & Choi, 2011). This could influence consumers' regulatory focus in terms of information quality. According to prior research, the online channel could provide higher information quality than the mobile channel.

Based on the difference between the mobile and online shopping channels, this study determines that information quality could influence regulatory focuses.

<H5> Information quality affects a consumer's promotion focus positively.

<H5-1> If a consumer use online channel rather than mobile one, information quality affects a consumer's promotion focus more positively.

<H6> Information quality affects a consumer's prevention focus positively.

<H6-1> If a consumer use online channel rather than mobile one, information quality affects a consumer's prevention focus more positively.

2.4. Shopping Intention and Attitude

According to the above prior research, it might be reasonable that consumers with utilitarian shopping motivation are more prevention-focused, which consequently has a negative impact on shopping attitude and intention (Lee, Ahn, Kim, & Youn, 2014; Khajehzadeh et al., 2014). However, consumers with hedonic shopping motivation tend to be more promotion-focused, and they are more likely to be eager to buy products and focus on maximal and optimal objectives than on minimal and passive ones (Levine et al., 2000). The regulatory focus could influence a consumer's attitude toward a product offer (Wan, Hong, & Sternthal, 2009) and purchase intention (Labroo & Lee, 2006; Khajehzadeh et al., 2014).

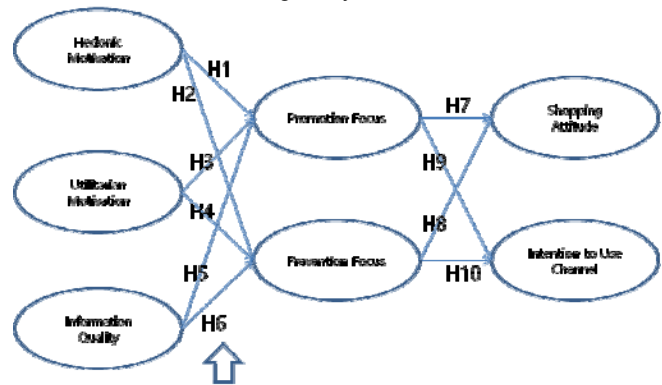
Therefore, promotion-focused consumers might show a positive shopping attitude and intention.

<H7> Promotion focus affects a consumer's shopping attitude positively.

<H8> Prevention focus affects a consumer's shopping attitude negatively.

<H9> Promotion focus affects a consumer's intention to use channel positively.

<H10> Prevention focus affects a consumer's intention to use channel negatively.



Mobile vs. PC-Based H1-1, H2-1, H3-1, H4-1, H5-1, H6-1

<Figure 1> Study Model

3. Methods

3.1. Participants and Study Design

A total of 650 samples were collected from throughout South Korea. The participants were consumers who have experience of online or mobile shopping in a metropolitan area of South Korea. This survey was conducted by using the online survey system of the research company MacroMill (South Korea) for about two weeks from September to October 2016. After excluding samples containing missing data, 635 samples remained. In the final sample of 635 respondents, 52.4% were female and 61.0% were between 20 and 39 years old. Among these samples, 52% were online shopping channel cases and 48% were mobile shopping channel cases.

3.2. Measures

The measurement scales for this research have been made based on the existing literature with minor modifications as needed to customize the research's context. We measured shopping motivations using the scales that Arnold and Reynolds (2003) and Khajehzadeh et al. (2014) suggest. Hedonic and utilitarian motivation was measured by three items, respectively. Additionally, as regulatory focuses, prevention focus was measured with three items and promotion focus was measured with the four items that Khajehzadeh et al. (2014) used. We measured information quality with the three items Lee and Choi (2014) used. Furthermore, appropriate measurements of purchase intention and attitude were selected by Summers et al. (2006) and Nysveen et al. (2005). A seven-point Likert scale (from strongly disagree [1] to strongly agree [7]) was used to measure each item.

3.3. Data Analysis

I used SPSS version 22.0 and AMOS version 22.0 to analyze the data. The demographic analysis methods were frequency, reliability, confirmatory factor analysis (CFA), and correlation analysis. I also verified the ten hypotheses in the research model.

4. Results

4.1. Confirmatory Factor Analysis of Study Variables

This study used structural equation modeling, which is a multivariate statistical technique for structural theory. Additionally, a comparative study is conducted on shopping channels, such as online and mobile, using the same model. <Table 1> shows the confirmatory factor analysis of the measurement scales of shopping motivation, usefulness of information searching, regulatory focus, and shopping attitude and intention. The factor analysis uses Varimax rotation. According to the results of this factor analysis, it is appropriate to choose all measurements for which the factor loading value is greater than 0.5.

A confirmatory factor analysis was conducted to test the dimension of each factor. The results were as follows: $\chi^2 = 320.915$, $df = 168$, $CFI = 0.965$, $IFI = 0.965$, $TLI = 0.956$, and $RMSEA = 0.053$. Many goodness-of-fit criteria can be used to assess an acceptable model fit. Among them, the comparative fit index (CFI) and the Tucker–Lewis coefficient index (TLI) are preferred measures (Bagozzi & Yi, 1988; Bearden et al., 1982). The critical ratio of each factor was over ± 1.96 and significant at $p < 0.001$. I also used construct reliability (CR) and average variance extracted (AVE) tests to examine the research model’s convergent and discriminant validity. Reliability indices are commonly used when they are over 0.6 (Palmatier, Dant, Grewal, & Evans, 2006). The range of CR from 0.861 to 0.953 exceeded the minimum acceptable criterion of 0.6. The AVEs were all greater than 0.5. Thus, the seven proposed factors of the research model are considered valid and reliable (Bagozzi & Yi, 1988).

<Table 2> shows the Cronbach’s alphas, scale means, and standard deviations. The internal consistency of the measurement was evaluated by the Cronbach’s alpha score. The Cronbach’s alphas of the factors were reliable, ranging from 0.849 to 0.948. Cronbach’s alpha was calculated to be greater than 0.70 in two variances in accordance with the Nunnally (1967) standard.

<Table 1> Confirmatory Factor Analysis, Reliability(CR) and Validity(AVE) statistics

Construct	Item	Factor loading	CR	AVE
Hedonic motivation	I visit the shopping channel to relieve my sense of boredom	.928	.953	.871
	I visit the shopping channel to feel better	.939		
	I visit the shopping channel to amuse myself	.933		
Utilitarian motivation	I visit the shopping channel to purchase only the necessary items that I need in the least amount of time	.816	.874	.698
	I visit the shopping channel to get my shopping tasks done in the most efficient way	.884		
	I visit the shopping channel to find what I need to buy and not to go to other shops	.805		
Information quality	The shopping channel provides useful information for buying items	.859	.918	.790
	In the shopping channel, to search information is efficient	.886		
	To get proper information is easy in this shopping channel	.920		
Promotion focus	All the thing I could do to enjoy myself	.964	.861	.779
	Pursuing my ideals and desires	.709		
	Pursuing all the things that I want	.775		
Prevention focus	All the things I deed to do to act sensibly	.761	.899	.692
	Pursuing my oughts and duties	.818		
	Pursuing the things that I need	.873		
	Avoiding making mistakes	.769		
Shopping intention	I will continue to use this shopping channel	.879	.866	.764
	I will purchase other products/services through this shopping channel	.869		
Shopping Attitude	Shopping by this channel is a good idea	.776	.902	.697
	I am favorable toward this shopping channel	.809		
	Shopping by this channel is a wise idea	.881		
	I am positive about this shopping channel	.775		

<Table 2> Cronbach's alpha, scale means and standard deviations

Scale (number of items)	Cronbach's alpha	Means	SD
Hedonic motivation (3)	.926	3.86	1.44
Utilitarian motivation (3)	.791	5.31	1.05
Information quality (3)	.874	5.11	1.21
Promotion focus (3)	.760	5.39	0.93
Prevention focus (4)	.849	5.70	0.94
Shopping intention (2)	.920	5.40	1.22
Shopping attitude (4)	.924	5.08	1.12

4.2. Hypotheses Testing Results

We used Amos 22.0 to analyze the hypothesized model and adopted a two-step model-building approach. The confirmatory factor models were tested prior to testing the structural model, and then the maximum likelihood (ML) estimation method was used.

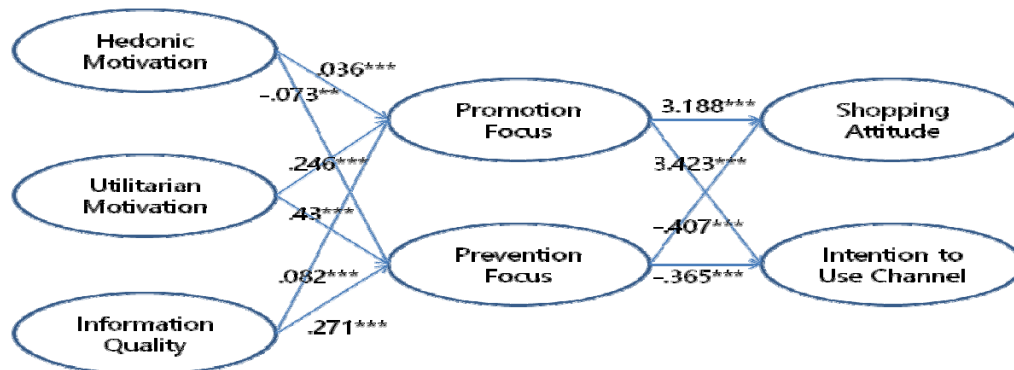
In this study, we examine model validity by using confirmatory factor analysis. The structural model results are shown in <Table 3>. There are several commonly used goodness-of-fit indices in structural equation model analysis: GFI, AGFI, RMR, and CFI. We used Amos 18.0 to examine

the structural model test and adopted CFI, IFI, and TLI as adequate fit indices. CFI may display slight standard error with regard to sample size, IFI does not consider the sample size, and TLI is related to degrees of freedom. A model is considered appropriate when its IFI, TLI, and CFI are greater than 0.9 and its RMSEA is between 0.05 and 0.08. All goodness-of-fit indices of the full model in this study were satisfactory: $\chi^2=845.863(df=176)$, CFI=0.923, IFI=0.923, TLI=0.908, RMSEA=0.077. As a result, these fit indices are appropriate for any sample size.

<Figure 1> shows the results of the full model. After the hypothesis test, we can find that <H1>-<H10> (except for <H3>) are supported. In this study, utilitarian motivation is expected to influence promotion focus negatively. However, it is revealed that utilitarian motivation also affects promotion focus positively. This is because of the characteristics of utilitarian shopping motivation. Utilitarian motivation helps consumers buy products efficiently and pragmatically (Babin et al., 1994; Kim, 2006). The need for efficient consumption makes consumers promotion-focused as well as prevention-focused. According to this result, it can affect all regulatory focuses positively. To better understand this result, it is necessary to understand the differences between online and mobile channels. <Table 4> shows the results of the hypotheses tests in detail.

<Table 3> Fitness of Research Model

	Chi-square	df	GFI	TLI	AGFI	NFI	CFI	IFI	RMR	RMSEA
Full Model	845.863 (p=.000)	176	.893	.908	.860	.905	.923	.923	.139	.077
online model	589.977 (p=.000)	176	.853	.888	.807	.873	.907	.907	.156	.087
mobile model	489.048 (p=.000)	176	.883	.914	.847	.893	.928	.929	.134	.074



Note: *** p<0.001, ** p<0.05, * p<0.1

<Figure 2> Structural model test results: Full model

<Table 4> Test of Hypotheses

Hypotheses	Path	Regression weight	p-value	Results of test
H1	Hedonic motivation à Promotion focus (+)	.036	.000	Supported
H2	Hedonic motivation à Prevention focus (-)	-.073	.002	Supported
H3	Utilitarian motivation à Promotion focus (-)	.246	.000	Not Supported
H4	Utilitarian motivation à Prevention focus (+)	.43	.000	Supported
H5	Information quality à Promotion focus (+)	.082	.000	Supported
H6	Information quality à Prevention focus (+)	.271	.000	Supported
H7	Promotion focus à Shopping Attitude (+)	3.188	.000	Supported
H8	Prevention focus à Shopping Attitude (-)	-.407	.000	Supported
H9	Promotion focus à Intention to use channel (+)	3.423	.000	Supported
H10	Prevention focus à Intention to use channel (-)	-.365	.000	Supported

<Table 5> Comparative Test of Hypotheses between online and mobile channel

Hypotheses	Online channel model		Mobile channel model		Result of test
	Regression weight	P-value	Regression weight	P-value	
H1-1	.043	.004	.36	.027	Supported
H2-1	-.068	.041	-.083	.014	Supported
H3-1	.182	.000	.261	.000	Not supported
H4-1	.588	.000	.386	.000	Supported
H5-1	.148	.000	.019	.350	Supported
H6-1	.196	.000	.320	.000	Supported

According to the analysis, all hypotheses except for <H3-1> are supported. <H3> regards utilitarian motivation and promotion focus, which is not supported in the full model analysis. Through the full model analysis, it is revealed that utilitarian motivation affects promotion focus positively. This suggests that consumers have utilitarian motivation both in mobile and online shopping, which can be interpreted as having a positive effect on promotion focus. In previous studies, hedonic motivation is more active in mobile shopping, which leads to more promotion focus (Nepomuceno et al., 2014). However, Sheng and Teo (2012) argue that both utilitarian and hedonic dimensions are important in mobile services, and Moon and Kim (2001) suggest that both utilitarian and hedonic benefits may have a positive impact on consumer experience. Therefore, it can be interpreted that utilitarian motivation can positively affect promotion focus in online and mobile situations as the result of this study. <H3-1> is that utilitarian motivation could affect promotion focus more negatively in the mobile channel than the online channel. On the other hand, based on <Table 5>, utilitarian motivation affects promotion focus more positively in the mobile channel than the online one. According to this result, in the mobile channel, utilitarian motivation makes consumers focus on the positive side of shopping and thus has positive impacts on shopping attitude and intention. In addition to the relationship between utilitarian motivation and prevention focus that have been accepted in previous

studies, consumers in mobile and online shopping situations can confirm that practical motivation has a positive effect on promotion focus.

5. Discussion and Future Research

Mobile shopping channels have received much attention from many marketing researchers. Accordingly, this study examines factors that might affect shopping attitude and intention in mobile and online channels and investigates the relationship between shopping motivation, information quality, and regulatory focus. Shopping motivation is composed of hedonic and utilitarian motivation (Babin et al., 1994; Cardoso & Pinto, 2010; Yang & Kim, 2012), and regulatory focus is divided into promotion and prevention focus (Higgins, 1997; 1998).

Arnold and Reynolds (2009) suggest that promotion focus is related to the perception of hedonic shopping motivation, while prevention focus correlates with perceptions of utilitarian shopping motivation. Based on prior research, in this study, these relationships are examined in depth. In advance, this study determined the different effects of shopping motivation on regulatory focus regarding mobile or online channels. Lee and Choi (2011) suggest that mobile shopping channel does not show proper information, which is distinguished from the online shopping channel. There

may be difficulties that arise from the limitations of mobile devices (Kamba et al., 1996). Because of these, consumers cannot expect a higher quality of information from the mobile shopping channel than the online one.

5.1. Theoretical Implications

According to this study, it is revealed that most of the hypotheses are supported. First, hedonic motivation affects promotion focus positively and prevention focus negatively. Additionally, utilitarian motivation affects prevention focus positively. Information quality influences regulatory focus positively, as this study expected. However, it is also different from the expectation of this study, as the result indicates that utilitarian motivation affects promotion focus positively.

Furthermore, through the comparative analysis in this study, differences between the online and mobile shopping channels were found, and these could affect customer behaviors. Hedonic motivation influences regulatory focus more in the mobile channel than the online one. However, utilitarian motivation shows differential results. Utilitarian motivation influences prevention focus more in the online channel than the mobile one. However, utilitarian motivation affects promotion focus more positively in the mobile channel than the online one because, in the mobile channel, consumers tend to be more promotion-focused (Arnold & Reynolds, 2009).

Secondly, regulatory focus affects the shopping attitude and intention to use a channel differently. Promotion-focused consumers tend to show a positive shopping attitude and intention. However, prevention-focused consumers show a relatively negative shopping attitude and intention. These results suggest that marketers should encourage consumers to be promotion-focused to obtain good results.

Finally, this study uses PC - based online shopping as concept of online shopping. However, in future research, it is necessary to establish a clear concept to refer to PC - based online shopping and to conduct a detailed study on it.

5.2. Managerial Implications

This study suggests that shopping motivations are effective for promoting regulatory focuses differently in the online and mobile channels. First, this study found that hedonic motivation affects a consumer's promotion focus positively but affect prevention focus negatively. Therefore, in the online shopping environment, marketers need to plan marketing more promptly when selling hedonic products.

Second, as a result of this study, utilitarian motivation has a positive effect on consumer's prevention focus. Therefore, marketers and practitioners will need to plan a message that emphasizes that when selling practical products in an online shopping environment, consumers can avoid risks and make secure purchases. Third, the information quality factor of online shopping environment has a positive effect on consumers' promotion / prevention focus. This implies that the quality of information that consumers see in online shopping environment is important in all cases. Therefore, practitioners will need to organize the information provided to consumers in online shopping.

Fourth, consumer's promotional focus has a positive effect on shopping attitude and online shopping intention, but preventive focus has a negative effect. Therefore, in the online shopping environment, we need a strategy to make consumers promotion focused.

Finally, the results of this study show that mobile environment is stronger than online environment. On the other hand, the effects of utilitarian motivation on promotion focused were not significantly different between PC-based and mobile. Therefore, it will be necessary for marketers to establish a marketing strategy so that consumers can be promoted in the mobile shopping environment.

According to the goal of online and mobile distribution channels, marketing managers should implement discriminative strategies for increasing shopping motivation and managing information quality. Furthermore, it is important to intensify promotion focus to improve shopping attitude and intention.

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