

정보원천의 매력도 속성과 제품의 표현성이 멘탈 시뮬레이션에 미치는 영향

김유수* · 박지혜**

The Effect of Source Modeling Attributes and Self-Expressive Product Category on Process vs. Outcome Simulation

Abstract

본 연구는 정보원천의 매력도 속성이 과정 시뮬레이션과 결과 시뮬레이션에 미치는 영향에 대해 탐색하였다. 실험 결과, 매력도 속성을 많이 소유한 정보 원천이 등장하는 광고에 노출된 소비자는 매력도 속성을 적게 소유한 정보 원천이 등장하는 광고에 노출되는 경우에 비해 과정 시뮬레이션을 더 크게 하였다. 반대로, 정보원천의 매력도 속성 소유 정도가 큰 경우, 속성 소유가 적은 경우에 비해 결과 시뮬레이션의 정도가 낮았다. 본 연구는 정보 원천의 매력도 속성이 과정 시뮬레이션에는 긍정적인 영향을, 결과 시뮬레이션에는 부정적인 영향을 미친다는 것을 검증하였다. 과정 시뮬레이션이 결과 시뮬레이션에 비해 구매 의도에 긍정적 영향을 미친다는 과거 연구 결과를 종합하여, 광고 설계에 대한 정보 원천 매력도 속성 소유 조정을 통해 과정 시뮬레이션을 극대화 할 수 있는 실무적 시사점을 제시하였다.

I. The Effect of Source Modeling Attributes and Self-Expressive Product Category on Process vs. Outcome Simulation

As the 21 century goes on and compe-

titions in the global market becomes more and more severe, companies are faced with harder challenges of survival. Demands of global customers have been diversified, and companies try to renovate and differentiate themselves to stay in the

* 한국외국어대학교 경영대학원 마케팅학과

** 한국외국어대학교 글로벌경영대학 경영학부 부교수

market and to grow. As the age of mass production and mass consumption nearly ends, the center of economic system is moving from producers to consumers. Despite companies gained fortune rather easily from economies of scale in the past, it is now almost impossible for companies to grow without appropriate selection and concentration.

Customer-centered market gave birth to a lot of new paradigms regarding customer psychologies. As the weight of the market moved from the company headquarters to consumers who have complicated set of minds, researches of consumers' mind are becoming more important in marketing management. Companies, threatened for survival, are putting more and more dollars in effective marketing of their products, using many different channels to catch customers' eyes.

As the marketing competition goes deeper, consumers are exposed to excessive advertisements and getting smarter, sorting out the massive messages with own standards. The importance of making consumer-friendly and effective messages stands out at this point. This paper examines how the different types of celebrity endorser and different types of product brings different effects in consumers' mind.

According to the recent studies in social psychology, specific types of mental simulation are especially useful for individuals to reach future goals (Taylor, Pham, Rivkin, and Armor, 1998). In their study, Taylor and Pham (1999) found that the most successful mental simulation occurs when people concentrate on the process or the progressive steps toward a goal, than when people more care about the outcome or benefits of achieving the goal in their mind. This study intends to expand the different effects of two types of mental simulations: process versus outcome simulation into the marketing area. Particularly, the study will test in detail the difference in levels of imitative behavioral intentions, process simulations and outcome simulations between the groups divided by the level of celebrity endorser's attractiveness attributes and the level of self-expressiveness attributes of product.

II. Theoretical Background

1. Mental simulation

Mental simulation can be defined as an imitative mental representation of an event or series of events (Taylor and Schnieder,

1989). Cognitive construction of hypothetical scenarios, including plans for mental simulations are usually in the form of stories or narratives (Fiske, 1993). When people mentally simulate certain events, they create situations where they are the main character, imagine about actual or potential behaviors (Escalas, 2004). Mental simulation is one of the most important and unique functions of human cognitive system (Taylor and Schnieder, 1989). With mental simulation, people can recall the past events and also make predictions on future outcomes through the recollection. That is, mental simulation is an important feature of human mind through which people can prepare for the future events with the recollection of past experiences (Escalas, 2004). Both functions of mental simulation, retrospective (consideration of what happened) and prospective (consideration of how to make something happen) is both important (Escalas and Luce, 2003). In this study, however, the focus will be on the prospective functions of mental simulation.

According to previous researches, the positive changes on attitudes, behavioral intentions, and actual behavior caused by prospective mental simulation can affect future outcomes if the simulation is self-

relevant and repeated (e.g., Anderson, 1983; Carroll, 1978). Also, mental simulation tends to include behaviors and events which are very specific and causally related (Taylor et al., 1998). Because these behaviors and events are very specific and causally related, mental simulation can function as behavioral plans (Escalas and Luce, 2003). The behavioral plans formed by mental simulation are limited by constraints of reality, thus simulated behaviors and events are realistic, plausible and can be considered as problemsolving activities (Kahneman and Miller, 1986).

Mental simulation is flexibly formed, so people can find the best options for problem-solving in each specific situation (Escalas and Luce, 2003). In addition, mental simulation may increase the emotional or motivational states which encourage action, while decreasing the hinder elements, such as anxiety or worry (Taylor and Schneider, 1989). That is, mental simulation can help people with the answers for various problems they encounter and also help to cope with the stresses with the mental stability function (Taylor and Schneider, 1989). However, recent studies have figured out that not all the mental simulation bring the same benefits (Taylor et al., 1998).

Recent studies focus on the effect of mental simulation on behavioral changes. These studies conclude that the most effective mental simulation is formed when people concentrate on the process of achieving goals, not on the outcome or benefit of the goals (Pham and Taylor, 1999). This can be interpreted that simulating progressive steps for a goal is more effective than simulating successive outcome of the goal in goal achieving (Escalas and Luce, 2003). For instance, a student who wants to be a successful surgeon would have more chance of achieving the goal when he imagines the progressive steps to become a successful surgeon than when he imagines benefits of being a successful surgeon (Pham and Taylor, 1999).

Process-focused simulations allow people to formulate a plan. That is, process simulations provide detailed methods to process a certain work before it begins (Escalas and Luce, 2003). While process simulations allow people imagine progressive steps of behavior, outcome simulations allow people imagine successful outcomes and benefits from them, and when people imagine each steps of behavior, it is more likely connected to setting specific plans for goals. The focal point of process simulations is to eliminate the

hindering factors in a goal achievement, emphasizing on the 'how' to achieve the goal. In this way, individuals tend to strengthen their action parts for their goal achievements, connecting the action to the outcome progressively (Escalas and Luce, 2003). When process-centered thoughts are activated, people tend to evaluate their behaviors focusing on 'how to behave', and when they are making purchases, they focus on 'how to eliminate' the constraints on purchase process (Zhao, Hoeffler and Zauberman, 2007).

Outcome-focused simulations are goal-rehearse mental simulations. People experience a goal-achieved situation through imagining of the outcomes or benefits of the goal (Escalas and Luce, 2004). The focal point of outcome simulations is on 'why' we have to achieve a goal (Zhao, Hoeffler and Zauberman, 2007). Because the outcome simulation emphasizes on the outcomes or benefits of behaviors, the progressive steps or plans are relatively not concerned (Escalas and Luce, 2004). When outcome-centered thoughts are activated, people tend to evaluate their behaviors focusing on 'why to behave' (Zhao et al., 2007).

Escalas and Luce (2003) made progressive steps on mental simulations, bro-

ught the theory into the advertisement area to see the connection between mental simulations and consumers' behavioral intentions. In their experiment, the participants who were instructed to focus on the process of using an imaginary vitamin product reported stronger intentions to engage in behavior encouraged by the advertisement. And also, participants were more sensitive to argument strength under process-focused instructions, such that process-focused instructions enhance the favorable effect of strong arguments and the unfavorable effect of weak arguments (Escalas and Luce, 2003). Another study about metal simulation's effect on consumer behavior found out that the level of product innovation could work as a moderating variable in mental simulation product evaluation process. When participants were exposed to an advertisement of highly innovative product, their evaluation on product was higher when the advertisement message was based on outcome simulation (Yeo and Song, 2010). Krishnamurthy and Sujana (1999) said that mental simulations' persuasive effect could be controlled by the degree of contextual detail, Keller and McGill (1994) proved that more easily imagined attributes of products could have irregular effect on con-

sumer decisions. Continuous studies on mental simulations' effect on consumer behavior are in progress, however, and the comparative effects of the two types of mental simulation; process and outcome simulation, are now applied in various marketing areas.

2. Modelling and Behavioral Imitation

Previous research studying the effectiveness of celebrity endorsement has focused mainly on personal attributes of the celebrity that enhance his or her persuasiveness (Erdogan, 1999). For example, a number of researchers have used models in which "source credibility," typically viewed as a function of trustworthiness refers to the general believability of the endorser. Expertise refers to the product knowledge of the endorser and thus to the validity of his or her claims regarding the product, and is believed to be a factor that increases persuasiveness above and beyond the effects of trustworthiness (Silvera and Austad, 2003). Other researchers have emphasized the importance of source attractiveness in determining liking for the endorser and thereby increasing endorsement effectiveness (Friedman and Fried-

man, 1979). To the extent that attractiveness is an important determinant of endorsement effectiveness, research based on the match up hypothesis (Kahle and Homer, 1985) suggests that its importance is limited by the degree to which attractiveness “fits” well with the advertised product (Kamins, 1990). Furthermore, although effective advertising is more likely to rely on the admiration component because the influential power of celebrities is closely connected to their status as role models (Raven, Schwarzwald, and Koslowsky, 1998).

Nehanive and Dautenhahn (2001) said that imitative behavior is a strong mechanism to learn new behaviors and has many positive sides that can be socially acknowledged. And also imitative behaviors could stand for every copying behavior of on the line between observation and execution in a broad sense (Billard, 2002). People who are in the process of pursuing self-respect and social recognition, have a desire for using or having products that have ideal images they always hoped (Johar and Sirgy, 1991). Imitative buying behavior means that an individual or a group of people try to imitate a certain person or a group, buying the same things that the subject has. Buying the same clothing or accessories that cele-

brities or sports stars wearing is a good example of imitative buying (Kim and Lee, 2002). Kim and Lee (2002) proved through their study that higher household income level leads to better chance of imitative buying behavior. It means that economical abundance could be expressed through imitative buying to satisfy the material needs. In explaining of imitative buying behavior, consumption patterns such as ‘following the celebrities’ and ‘following friends’ are typical examples of imitative consumption (Huh, 2001).

When consumers buy and use products, they care about the symbolic meaning of the product to communicate with other society members and to formulate, expand the self-concept. That is, consumption behavior is a symbolic way consumers emphasizing the importance of self-concept in buying things (Park et al., 2004). With their symbolic meanings, products can be used for a communication channel among society members, and also can be used to formulate self-concept. According to Wright et al. (1992), the products with symbolic meaning personify themselves, grant important roles as an effective communication channel or a creator of consumers’ self-concept (Underwood, 2003). Product symbolism should be defined in this sense.

Past researches defined product symbolism as the way how products or brands deliver customers the core meaning and what the consumers experience after buying and using them (Solomon, 1983). That is, the product symbolism's definition, in short, is the product users' images of themselves, which consumers granted through personification of products.

Previous researches on product symbolism have mainly dealt with a congruence between self-image and product image, forming impression or symbolism of consumption. These researches had their focuses on expression and interpretation of products' symbolic meanings (Hogg et al., 2000). The base hypothesis for the studies is that consumers prefer buying products congruent with their self-concept. When consumers try to express certain aspects of themselves through products, or when they try to use the characteristic of products as means of non-verbal communication, the tendency to choose products that have an image-congruency. Through the image-congruency between consumers and products, consumers can maintain or even strengthen their self-concept, also can express their ideal images effectively (Park et al., 2004).

As mentioned in the literature review,

recent studies proved that the different types of product and advertisement message led to different product evaluations and behavioral intentions. In this study, the attractiveness attributes of two different celebrity endorsers in the advertisement and the self-expressiveness attributes of two different products are used as manipulated variables, and levels of imitative behavioral intentions and mental simulations were measured and compared to see the difference.

According the past research, the reason why consumers imitatively buying products is not simply by consumers' imitative desire, but by the synergy effects between celebrity and products' attributes, working on consumers' mind. And also, selecting a celebrity endorser who has appropriate character or image for the product could increase the effect on imitative buying behaviors (Kim and Jeon, 2009). In the case of mental simulations, an advertisement with stronger arguments induced stronger behavioral intentions under process-focused instruction than under outcome-focused instruction, while an advertisement with weak arguments induced higher behavioral intentions under outcome-focused instruction (Escalas and Luce, 2003). From this result, it could be inferred that

consumers who encounter with strong advertisement messages or celebrity endorsers concentrate more on process-focused simulations. Based on the literature, following hypotheses were developed.

H1: The advertisement with a celebrity endorser who has more attractiveness attributes will result in higher imitative behavioral intentions compared to the advertisement with a less attractive celebrity endorser.

H2-1: The advertisement with a celebrity endorser who has more attractiveness attributes will result in higher level of process simulation compared to the advertisement with a less attractive celebrity endorser.

H2-2: The advertisement with a celebrity endorser who has more attractiveness attributes will result in lower level of outcome simulation compared to the advertisement with a less attractive celebrity endorser.

H3-1: The advertisement of a product which has more self-expressiveness attributes will result in higher level of process simulations compared to

the advertisement of a less self-expressive product.

H3-2: The advertisement of a product which has more self-expressiveness attributes will result in lower level of outcome simulations compared to the advertisement of a less self-expressive product.

III. Method

1. Participants

Randomly selected eighty six females between 20 to 35 years old participated in this study. The experiment was conducted in 2 days from December 14 to 15.

2. Procedure

Both studies discussed in this paper use the same basic methodology, based on the presentation of stimuli and collection of questionnaire responses via paper. The experimental survey presents participants with an introductory comment, a short instruction of the experiment with a color print advertisement stimulus. A series of questionnaire is followed that

are answered on a seven-point Likert scales. The stimuli consist of a gratitude message, a short instruction, and a color-printed advertisement. Participants were instructed to see the advertisement for 30 seconds and guided to complete the following questionnaire. Before answering the survey questions, participants were instructed to fill in things what they saw on the advertisement to enhance the level of recall. Total of four different advertisements were created with two different

celebrity endorsers and two types of beverage products, and the messages in the advertisements were differentiated according product types. In otherwise, the location of the endorsers and products remains constant to minimize unintended effects.

3. Instruments

The independent variables for experiment 1 was the level of attractiveness attributes of the celebrities, and was the

<Table 1> Measurements

Variables		Factor items	Source(s)
Imitative behavioral intentions		Want to resemble	Escalas (2003)
		Want to live alike	
Mental simulation	Process simulation	Imagine using the product	Escalas and Luce (2003)
		Imagine process of using the product	
		Imagine daily usage of the product	
	Outcome simulation	Thought about the benefits of the product	
Thought about the outcome of using the product			
Endorser's attractiveness attributes		The endorser is charming	Cho (2007)
		The endorser is beautiful	
		The endorser is cool	
Product's self-expressiveness attributes		The product suits my taste	Kim and Jeon (2009)
		The product fits nicely with me	
		The product expresses my outer value well	
		The product is elegant	
		The product is luxurious	
		The product is sophisticated	
Demographics		Gender, Age, Marital status, Education level, Monthly household income	

level of self-expressiveness of the products appeared on the advertisement for experiment 2. Total of three dependent variables; the levels of imitative behavioral intentions, process simulations and outcome simulations were asked, followed by questions for manipulation check and demographic information. Except the demographic survey, every question was rated on seven-point Likert scales, ranging 1 (strongly disagree) to 7 (strongly agree). The questions for imitative behavioral intentions were based on the study of Escalas (2003), consist of 2 questions. The levels of process simulations and outcome simulations were measured with 5 questions (3 questions for process simulations and 2 questions for outcome simulations) based on the scales used in the study of Escalas and Luce (2003). For the manipulation check, 3 questions measuring celebrity endorser's attractiveness were applied from the study of Cho (2007) and 6 questions measuring product's self-expressiveness were brought from the study of Kim and Jeon (2009). <Table 1> shows the contents and sources of the survey.

IV. Results

The research was performed by an

experimental way, and the participants of the experiment consisted of eighty females between 20 to 35 years old. To test the reaction to the four different types of advertisement, the participants were randomly given each type of advertisement and answered the following questionnaire. Total of 86 questionnaires were collected and 80 questionnaires were used in the analysis while 6 questionnaires were eliminated due to insincere following of the instruction. 80 questionnaires were redistributed evenly into four groups according to two different types of celebrity endorser and two different types of product. The demographic information of the participants is shown on the <Table 2>.

All the participants were female due to the condition of the research, and the age distribution was fairly distributed in 20 to 35 year old area. Every participant was single, and their household incomes were fairly distributed into seven groups from under 1 million to over 5 million KRW.

As expected, the participants' desire for imitative behavior on two different celebrity endorsers resulted in meaningful statistical difference (Celebrity with high imitative attribute $M=6.275$; Celebrity with low imitative attribute $M=3.367$), $t=8.829$, $p<.01$. The level of self-expre-

<Table 3> Results of Manipulation Checks

	Means	Difference of M	t-value	p
Perception of celebrity endorsers' attractiveness attributes				
High	6.275	High > Low 2.908	8.829	.000
Low	3.367			
Perception of products' self-expressiveness				
High	4.679	High > Low 1.604	7.214	.000
Low	3.075			

ssiveness of the two products manipulated also showed a meaningful difference (Product with high self-expressiveness M=4.679;

Product with low self-expressiveness M=3.075), t=7.214, p < .01. The result is shown on the <Table 3>.

<Table 2> Demographic Characteristics of the Participants

Types		Frequency	Ratio(%)
Gender	Female	80	100.0
Age	24 or under	25	31.3
	25 to 30	44	55.0
	31 to 35	11	13.8
Marital status	Not married	80	100.0
Education level	High school	13	16.3
	Some college	46	57.5
	College	14	17.5
	Master or higher	7	8.8
Monthly household income (KRW)	Under 1 million	6	63.3
	1 to 1.99 million	22	27.5
	2 to 2.99 million	6	7.5
	3 to 3.99 million	17	21.3
	4 to 4.99 million	2	2.5
	Over 5 million	27	33.8

<Table 4> Factor Analysis for Independent Variables

Variables	Factor items	Factor loading		Eigen value	% of variance	α
		1	2			
Attractiveness attributes of the celebrity	1 Charming	.953		4.860	44.960	.968
	2 Beautiful	.956				
	3 Cool	.949				
Self-expressiveness of the product	1 Suit my taste		.687	2.211	33.607	.910
	2 Fit nicely		.740			
	3 Express my outer value well		.868			
	4 Elegant		.883			
	5 Luxurious		.811			
	6 Sophisticated		.875			

In this study, factor analysis were used for validity check of independent and dependent variables. For extracting valid variables, principle component analysis was used, and varimax method was chosen to simplify the factor loading values. Factor loading value shows the correlation between the variables and factors. Therefore, each variable belongs to a factor with the highest factor loading value. Eigen value over 1.0, factor loading value over 0.5 means the variable is significant, and factor loading value over 0.6 means the variable is very important. In this study, Eigen value over 1.0 and factor loading value over 0.6 were set for the standard. Cronbach's α value was used to test the credibility of the factors and value of 0.7 is set for the standard.

The two independent variables used in the study, attractiveness attributes of the celebrity and self-expressiveness of the product, both showed high validity with factor loading values mostly over 0.7, and also high credibility with α -values over 0.9. Eigen values were 4.860 and 2.211, and total % of variance was over 0.7, proved each factor's importance. The result is shown on the <Table 4>.

Intentions for imitative behavior, and the level of mental simulations were the two major dependent variables used in the study. Two major factors, imitative behavioral intentions and mental simulations were extracted from the factor analysis, and both factors showed high validity over 0.7. The credibility of the two variables were also high with α -values over

0.8. Eigen values were 3.258 and 1.353, and total % of variance was over 0.7, proved each variable's importance. The result is shown on the <Table 5>.

In this study, two experiments were performed, and t-test is used to compare the mean values of the four manipulated groups, high-low attractiveness attributes of celebrity endorsers and high-low self-expressiveness attributes of products for verification of hypotheses. t-test is a analytic method to compare the mean value of two groups and is used to verify the difference of the

values. The results of t-test for both experiment are shown on the <Table 6> and <Table 7>.

Hypothesis 1 asserted that the advertisement with a celebrity who has more attractiveness attributes will enhance imitative behavioral intentions. As expected, participants who saw the advertisement with a celebrity endorser who has more attractiveness attributes reported stronger intentions to imitate the celebrity's appearance and lifestyle (Ad with a more attractive endorser M = 6.000 vs. Ad with a less

<Table 5> Factor Analysis for Dependent Variables

Variables		Factor items	Factor loading		Eigen value	% of variance	α
			1	2			
Imitative behavioral intentions		1 Want to resemble	.935		3.928	43.566	.935
		2 Want to live alike	.936				
Mental simulation	Process simulation	1 Imagine using the product		.717	1.353	31.878	.871
		2 Imagine process of using the product		.731			
		3 Imagine daily usage of the product		.722			
	Outcome simulation	4 Thought about the benefits of the product		.803			
		5 Thought about the outcome of using the product		.883			

attractive endorser $M = 2.562$), $t = 10.335$, $p < .01$. Thus, H1 is supported.

Hypotheses 2 assumed that the difference in celebrity endorsers' attractiveness will result in the different level of mental simulation. Hypothesis 2-1 supposed when people see an advertisement with a celebrity endorser who has more attractiveness attributes would result in higher

level of process simulation than when they see an advertisement with a celebrity endorser who is less attractive. In the same condition with H 2-1, hypothesis 2-2 supposed that the level of outcome simulation would be lower for the advertisement with a celebrity who is more attractive. While hypothesis 2-1 was supported (Ad with a more attractive endorser $M = 4.058$ vs. Ad

<Table 6> T-test results for hypotheses 1 and 2

Variables	Manipulation	Mean	Standard error	Difference of M	t	p
Imitative behavioral intention	Celebrity w/ high attributes	6.000	0.216	High > Low 3.438	10.335	.000
	Celebrity w/ low attributes	2.562	0.253			
Process simulation	Celebrity w/ high attributes	4.058	0.279	High > Low 1.025	2.866	.005
	Celebrity w/ low attributes	3.033	0.223			
Outcome simulation	Celebrity w/ high attributes	4.187	0.274	High > Low 0.262	0.666	.507
	Celebrity w/ low attributes	3.925	0.283			

<Table 7> T-test results for hypothesis 3

Variables	Manipulation	Mean	Standard error	Difference of M	t	p
Process simulation	Product w/ high self expressiveness	4.017	0.230	High > Low 1.042	3.513	.001
	Product w/ low self expressiveness	2.975	0.188			
Outcome simulation	Product w/ high self expressiveness	3.938	0.289	High < Low 0.275	-.708	.481
	Product w/ low self expressiveness	4.213	0.259			

with a less attractive endorser $M = 3.033$), $t = 2.866$, $p < .01$, hypothesis 2-2 was not supported (Ad with a more attractive endorser $M = 4.187$ vs. Ad with a less attractive endorser $M = 3.925$), $t = 0.666$, $p > .05$.

Hypothesis 3-1 assumed that when people see an advertisement of a product with high self-expressiveness would result in higher level of process simulation than when people see an advertisement with a product with low self-expressiveness, Hypothesis 3-2 assumed that when people see an advertisement of a product with high self-expressiveness would result in lower level of outcome simulation. While hypothesis 3-1 was supported (Ad with a highly self-expressive product $M = 4.017$ vs. Ad with a less self-expressive product $M = 2.975$), $t = 3.513$, $p < .01$, hypothesis 3-2 was not supported (Ad with a highly self-expressive product $M = 3.983$ vs. Ad with a less self-expressive product $M = 4.213$), $t = -.708$, $p > .05$.

V. Discussion and Conclusion

This study consisted of two experiments; the first experiment was performed under a condition of two manipulated groups which were divided by the

level of attractiveness attributes of the celebrity endorsers to compare the level of imitative behavioral intentions, a process simulation and an outcome simulation between the two groups, and the second experiment with two groups divided by the level of self-expressiveness of products to compare the level of a process simulation and an outcome simulation. These experiments tried to find how different attributes of an advertisement affect on consumers' mental simulations and imitative behavioral intentions in a new perspective, and from that point, the study earns its academic significance.

According to Escalas and Luce (2003), if people formulate process simulations while they are watching advertisements, there are higher chances of buying intentions are created from the process simulations because people tend to create plans for problem solving when they are in a process simulation. In other words, if an advertisement can make people formulate process simulations, also can increase their behavioral intentions.

Based on the findings in experiment 1, it could be concluded that the level of attractiveness of celebrity endorsers had significant effect on consumers' imitative behavioral intentions and process simula-

tions. When the level of attractiveness attributes of the celebrity was higher, the levels of imitative behavioral intentions and process simulations were found to be higher, too. That is, it could be induced that when people see celebrity endorsers in advertisements who they think highly attractive, their desire for imitative behavior will be increased and they will focus more on process simulation, creating plans for a problem solving, eventually formulate a high level of buying intentions for the product advertised.

From the results of experiment 2, it could be induced that products with higher level of self-expressiveness lead people to higher level of process simulation, thus people will formulate practical plans for imitating the celebrity endorser with the consumption of the product.

This study has its limitations as following. First, the study could not make clear of the process where the mental simulations are connected to the actual buying intentions. Based on the previous researches, it is induced that a high level of process simulations is linked to a high level of behavioral intentions, but it could not be seen by the result of this study due to the limitation of the research process. Second, the advertisements used

in the study were created by the researcher and their purpose was to deliver the limited information to participants, therefore they could possess different effects from the actual, professional advertisements. Exogenous variables such as brand familiarity and levels of involvement also could affect on the result of the study despite the researcher did not intend. Finally, the experiments only dealt with specific age groups and gender with a limited category of product. In the future research, more broad sense of age, gender, and product groups should be considered for a better generalization of the theory.

References

- [1] Anderson, Craig A., "Imagination and Expectation: The Effect of Imagining Behavioral Scripts on Personal Intentions," *Journal of Personality and Social Psychology*, Vol.45, No.2, (1983), pp.293-305.
- [2] Billard, A., "Imitation in M.A. Arbib," *Handbook of Brain Theory and Neural Networks*, MIT Press, (2002), pp.566-569.
- [3] Carroll, John S., "The Effect of Imagining and Event on Expectations

- for the Event: An Interpretation in Terms of the Availability Heuristic,” *Journal of Experimental Social Psychology*, Vol.14, No.1(1978), pp.88-96.
- [4] Erdogan, B.Z., “Celebrity Endorsement: A Literature Review,” *Journal of Marketing Management*, Vol.15, (1999), pp.291-324.
- [5] Escalas, Jennifer Edson, “Imagine Yourself in the Product: Mental Simulation, Narrative Transportation, and Persuasion,” *Journal of Advertising*, Vol.33, No.2(2004), pp.37-49.
- [6] Escalas, Jennifer E. and Luce, Mary F., “Process versus Outcome Thought-Focus and Advertising,” *Journal of Consumer Psychology*, Vol.13, No.3 (2003), pp.246-254.
- [7] Escalas, Jennifer E. and Luce, Mary F., “Understanding the Effects of Process-Focused versus Outcome-Focused Thought in Response to Advertising,” *Journal of Consumer Research*, Vol.31, No.2(2004), pp.274-285.
- [8] Fiske, Susan T., “Social Cognition and Social Perception,” *Annual Review of Psychology*, Vol.14, No.44 (1993), pp.155-194.
- [9] Friedman, H.H. and Friedman, L., “Endorsers Effectiveness by Product Type,” *Journal of Advertising Research*, Vol.19, No.5, pp.63-71.
- [10] Hogg, M.K., Cox, A.J. and Kee-ling, K., “The Impact of Selfmonitoring on Image Congruence and Product / brand Evaluation,” *European Journal of Marketing*, Vol.34, No.5/6(2000), pp.641-656.
- [11] Huh, Kyung Ok, “Articles: An Analysis of Consumer Consciousness, Search and Usage of Consumer Information, and Consumer Behaviors Depending on Ages,” *Journal of Consumer Studies*, Vol.12, No.4(2001), pp.39-64.
- [12] Johar, J.S. and Sirgy, M.J., “Value-Expressive versus Utilitarian Advertising Appeals: When and Why to Use Which Appeal,” *Journal of Advertising*, Vol.20, No.3(1991), pp.23-33.
- [13] Kahle, L.R. and Homer, P.M., “Physical Attractiveness of the Celebrity Endorser: A Social Adaptation Perspective,” *Journal of Consumer Research*, Vol.11, No.4(1985), pp.954-961.
- [14] Kahneman, Daniel, and Miller, Dale T., “Norm Theory: Comparing Reality to its Alternatives,” *Psychological Review*, Vol.93(1986), pp.126-153.
- [15] Kamins, M.A., “An Investigation into the “Match-up” Hypothesis in Celebrity Advertising When Beauty may only be Skin Deep,” *Journal of Adver-*

- tising*, Vol.19, No.1(1990), pp.4-13.
- [16] Keller, Punam Anand and McGill, Ann L., "Differences in the Relative Influence of Product Attributes Under Alternative Processing Conditions: Attribute Importance versus Ease of Imagining," *Journal of Consumer Research*, Vol.26(1994), pp.55-69.
- [17] Kim, Jae Sook and Lee, Mi Sook, "The Effect of Star-Entertainer Imitation Behavior on Adolescents' Clothing Behaviors," *Journal of the Korean Home Economics Association*, Vol.40, No.4(2002), pp.201-210.
- [18] Kim, Jinok and Jeon, Jungok, "An Exploratory Research for the Scale Development of Imitative Buying Tendency," *Korean Journal of Consumer and Advertising Psychology*, Vol.10, No.4(2009), pp.663-682.
- [19] Krishnamurthy, Parthasarathy and Sujana, Mita, "Retrospection Versus Anticipation: The Role of the Ad Under Retrospective and Anticipatory Self-Referencing," *Journal of Consumer Research*, Vol.22(1999), pp.448-459.
- [20] Nehanive, Christopher and Dautenhahn, Kerstin, "Like me?-Measures of Correspondence and Imitation," *An International Journal*, Vol.32(2001), pp.11-51.
- [21] Park, Jong Oh, Lee, Cheol-Seon and Yu, Seung-yeob, "The Process Approach in the Formation of Product Symbolism: Focus on Advertising Expression," *Korean Journal of Consumer and Advertising Psychology*, Vol.5, No.3(2004), pp.35-62.
- [22] Pham, Lien B. and Taylor, Shelley E., "From Thought to Action: Effects of Process versus Outcome Based Mental Simulations on Performance," *Personality and Social Psychology Bulletin*, Vol.25, No.2(1999), pp.250-260.
- [23] Raven, B.H., Schwarzwald, J. and Koslowsky, M., "Conceptualizing and Measuring a Power / Interaction Model of Interpersonal Influence," *Journal of Applied Social Psychology*, Vol.28 (1998), pp.307-332.
- [24] Silvera, David, H. and Austad, Benedikte, "Factors Predicting the Effectiveness of Celebrity Endorsement Advertisements," *European Journal of Marketing*, Vol.38, No.11(2003), pp. 1509-1526.
- [25] Solomon, M.R., "The Role of Products as Social Stimuli: A Symbolic Interactionism Perspective," *Journal of Consumer Research*, Vol.10(1983), pp.319-329.

- [26] Taylor, Shelley E., Pham, Lien B., Rivkin, Inna D. and Armor, David A., "Harnessing the Imagination: Mental Simulation, Self-Regulation, and Coping," *American Psychologist*, Vol.53, No.4(1998), pp.429-439.
- [27] Taylor, Shelly E. and Schnieder, Sherry K., "Coping and the Simulation of Events," *Social Cognition*, Vol.7, No.2 (1989), pp.174-194.
- [28] Underwood, R.L., "The Communicative Power of Product Packaging: Creating Brand Identity via Lived and Mediated Experience," *Journal of Marketing Theory and Practice*, Vol.11, No.1(2003), pp.62-77.
- [29] Wright, N.D., Claibourne, C.B. and Sirgy, M.J., "The Effects of Product Symbolism on Consumer Self-Concept," *Advances in Consumer Research*, Vol.19(1992), pp.311-318.
- [30] Yeo, Jun Sang and Song, Hwan Woong, "Effect of Mental Simulation on Consumer Response to Innovative New Product," *Korea Marketing Review*, Vol.25, No.1(2010), pp.25-47.
- [31] Zhao, Min, Hoeffler, Steve, and Zaubergerman, Gal, "Mental Simulation and Preference Consistency over Time: The Role of Process Versus Outcome-Focused Thoughts," *Journal of Marketing Research*, Vol.44(2007), pp.379-389.