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# Effects of Lay Rationalism, Attitude Dimension and Involvement Type on Intent to Purchase Hedonic Product

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## Abstract

**Purpose** - This study aimed at investigating the mediation roles of attitude dimensions in the effects of involvement type on hedonic product purchase intention and moderation role of lay rationalism in the effects of involvement type on attitude dimensions.

**Research design, data, and Methodology** - “Wenjuanxing” was used online to make questionnaire, which was loaded on Wechat and QQ. 125 data were collected online in China. The Process macro model 58 including moderation of the two paths in the causal sequence was used to verify hypotheses.

**Results and Conclusions** - First, cognitive (affective) involvement had positive effect on the utilitarian (hedonic) dimension of consumer attitude and the purchase intention. Second, hedonic dimension of attitude had positive effects on purchase intention, but utilitarian dimension of attitude had not significant positive effects on purchase intention. Third, Lay rationalism did decrease (did not increase) the positive effects of affective (cognitive) involvement on hedonic (utilitarian) dimension of attitude. Therefore Marketing managers should understand the differences between the cognitive involvement and affective involvement, and develop the ways by which they attract consumers to choose their hedonic product. And they should give affective (cognitive) information to the customers with low (high) rationalism consumers when they do marketing for their hedonic product.

**Keywords:** Attitude Dimensions, Involvement Type, Lay Rationalism, Hedonic Product Purchase Intention.

**JEL Classifications:** C83, L81, M31, P46.

## 1. Introduction

Utilitarian products versus hedonic products are linked to functional and instrumental consumption versus experiential consumption (Hirschman & Holbrook, 1982). However, whether a product is hedonic or utilitarian can be described according to the degree of relative salience of its hedonic and utilitarian attributes (Kivetz & Simonson, 2002). Chocolate might be generally classified as a hedonic product, however,

while the taste of chocolate can be viewed as a hedonic dimension, the high calorie content of chocolate can be approached based on the utilitarian dimension. Both hedonic and utilitarian dimensions to it there are. In this vein, the utilitarian and hedonic characteristics of the product consumption experience can be described according to the relative salience of attribute-specific level of a product.

Hedonic motivation is focused on a personal experience of pleasure or pain, and hedonic consumption can be explained by the view that people purchase hedonic products to meet their hedonic needs. The hedonic principle of pursuing pleasure and avoiding pain divides the emotional experience into the different levels from good to bad. The main object of hedonic motivation is to get as close as possible to a good level (Higgins, 2006).

There have been previous studies which have researched, affective versus cognitive response-based decision making (Drolet & Mary, 2004), indulging in hedonic consumptions (Kivetz & Simonson, 2002), feelings and rationality as utility

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operation (Bossert, Kotaro, & Kōtarō, 2010). But these previous studies keep silent about the relationship between attitude dimension and involvement type. This article extends the notion of compatibility to the relationship between the attitude dimension and involvement type in case of choosing hedonic product.

The internal structure of consumer cognition and emotion may be inconsistent with the external objective world. If researchers want to explore the involvement in a product, they need to measure how the product is perceived in the consumer's mind. Consumers may buy some specific products because there is an emotional reflection (Izard & Sandra, 1980) or cognitive reflection inside their mind. People will feel and maintain positive emotions to have the motivation to purchase and use hedonic products, wherein they might be involved in the positive emotions. And utilitarian characteristics of the product consumption experience can also be considered in the process of purchasing the hedonic products. The taste of the chocolate can be more considered by consumers seeking immediate gratification, while the calorie content of the chocolate might get more weight from the consumers feeling hungry. Therefore, it is important and necessary to distinguish the hedonic dimension from the utilitarian dimension when doing marketing.

The utilitarian and hedonic dimension of product value are distinct from each other. Involvement is a person's perceived relevance of the object based on their needs, values, and interests (Zaichkowsky, 1985). Cognitive involvement is relatively logic and utilitarian while affective involvement is relatively emotional and hedonic (Zaichkowsky, 1994), therefore, cognitive involvement could have more relationship with the utilitarian dimension of attitude, and affective involvement is more related with hedonic dimension of attitude (Voss, Spangenberg, & Grohmann, 2003). Based on two dimensions of involvement-cognitive and affective involvement, consumers can be both rational and emotional when making a purchase decision or forming a purchase intention. Thus, marketers should differentiate between these two dimensions for developing product positioning strategies and modeling marketing programs (Dillon, Madden, Kirmani, & Mukherjee, 2001).

In the other hand, the consumer's attitude is complex and has multiple dimensions. Hirschman and Holbrook (1982) stated the understanding and enjoying consumption are based on hedonic and utilitarian dimension. And Voss, Spangenberg, and Grohmann (2003) adopted the two-dimensional view of attitudes-utilitarian attitude dimension and hedonic attitude dimension, and stated that product category involvement is clearly connected with utilitarian and hedonic dimensions of attitude through empirically exploring the distinction between the two dimensions to find the relationship between involvement construct and the attitude dimensions.

Hsee, Jiao, Fang, and Yiheng (2015) proposed lay

rationalism as a factor inducing trade-off of ration (reason) and emotion (feelings), although people depend on reason more than feelings. What happens to consumers with high lay rationalism when they make decisions about the hedonic product?

Individual lay rationalism difference could play an important moderating role in the effects of cognitive (affective) involvement on the utilitarian (hedonic) dimension of attitude towards hedonic product. Attitude is direct antecedent to purchase intention. The utilitarian (hedonic) attitude dimension could be approached in view of mediation roles in the effects of cognitive (affective) involvement on the intent to purchase hedonic product. However, past research has not given much attention to the moderation roles of the lay rationalism in the effect of cognitive (affective) involvement on the utilitarian (hedonic) dimension of attitude. So, it is necessary to explore the moderation roles of rational versus emotional degree of consumers' own in their completing route from cognitive (affective) involvement on the utilitarian (hedonic) dimension of attitude towards hedonic product. Therefore the purposes of this research are described as followings.

First, we theoretically review the two dimensions of consumer attitude, that is, utilitarian and hedonic attitude dimensions, and will explore whether the two could play mediation roles in the effects of involvement type on hedonic product purchase intention. Second, this study will explore the direct roles of each involvement type in forming hedonic product purchase intention. Third, current study will also identify the moderation roles of lay rationalism in the effects of the cognitive (affective) involvement on utilitarian (hedonic) attitude dimension.

Therefore, this study will contribute to the advancement of the theory about attitude dimension as well as involvement type, and also give managerial implications to hedonic product marketing managers, since the answer to the question (which information is more effective between affective information and cognitive information in attracting consumers in the respects of the level of their lay rationalism?) will be given to the managers.

## 2. Literature Review and Hypotheses

### 2.1. Product Type and Involvement Theories

Past research presented that product has two dimensions: utilitarian and hedonic content (e.g., Spangenberg, Voss, & Crowley, 1997; Voss, Spangenberg, & Grohmann, 2003). Utilitarian products are mostly for product functions (e.g. toilet paper) rather than for consumers' interests. Hedonic products are mostly for consumers' fantasy interests and feelings (e.g. candy). Since the difference between these two dimensions of products will influence the purchase of the products and consumers' buying patterns (O'Curry &

Strahilevitz, 2001), the past research about the two types of product have been conducted. In real life, the purchase number of utilitarian products is much higher than that of hedonic products. But consumers are willing to pay more for hedonic products (Werthenbroch, 1998). Products with high hedonic value are less likely to be abandoned (Dhar & Werthenbroch, 2000), wherein utilitarian attributes are assumed to be less important to consumers than hedonic attributes. The main difference between utilitarian and hedonic products leads to differently expected effect on consumers. Hedonic products are not only more satisfying than utilitarian products, but also more exciting (Loewenstein, 1987). However, the relative salience degree of hedonic and utilitarian attributes of a product can help describe whether it is hedonic or utilitarian (Kivetz & Simonson, 2002). Ice-cream is generally perceived as a hedonic product, however, while the taste of ice-cream is a hedonic attribute, the calorie content of the ice-cream is utilitarian attribute. According to the relative salience of attribute-specific level of a product, the characteristics of a product consumption experience can be differently described.

In the other hand, involvement is a feeling state evoked by motivation. Consumers have the motivation of processing information about product attributes and values to evaluate product or to make a choice (Zaichkowsky, 1985). A majority of researchers have focused on the level of involvement (low vs high) determined by the degree of personal relevance or importance (Greenwald & Leavitt, 1984), and also considered the types of involvement (Park & Mittal, 1985; Park & Young, 1986). According to Kim and Yongjun (2009), involvement can be approached by two-dimensional construct, cognitive involvement and affective involvement. Cognitive involvement refers to the degree of considering and processing the offering information relevant to themselves, while affective involvement refers to the level of feeling or emotional states evoked by such offering as product or brand. Stemming from past studies, consumers' decision-making processes (purchase intention or purchase decision) are involved with cognitive as well as affective offering's values and attributions (Werthenbroch, 1998; Bruyneel, Dewitte, Vohs, & Warlop, 2006).

Since distinct motivation was presented between cognitive and affective product involvement, it would be of reliability to propose that such a distinction may also cause different purchase intention. For example, in the opinion of Voss, Spangenberg and Grohmann (2003), measuring consumers' attitude toward a product category, affective and cognitive dimensions of involvement could lead to the place of making a distinction between utilitarian and hedonic constructs, which means attitude toward the brand or product depends on cognitive or affective involvement. However, it is not clear how cognitive or affective involvement affects the distinctive dimensions of the attitude toward the brand or product.

And not only theoretical but also empirical elaboration has been well examined in view of the point that it is related to

involvement positively. We will focus on the version of central route processing models in approaching the cognitive and affective involvement. In central route persuasion, we use cognitive and affective involvement instead of cognitive elaboration (Petty, Caccioppo, & Schumann, 1983), which could affect purchase intention through the mediation of consumer attitude (Goldsmith, Barbara, & Stephen, 2000).

## 2.2. Product Involvement Type and Consumer Attitude Dimensions

The utilitarian dimension of attitude might be formed based on utilitarian product value/benefits, while the hedonic dimension of attitude might be from hedonic product value/benefits. Two basic reasons such as instrumental, utilitarian reasons, and consummatory affective (hedonic) gratification (from sensory attributes) play roles in consumers' purchasing goods and services and performing consumption behaviors (Batra & Ahtola, 1991; Strahilevitz & Myers, 1998). The attitude toward the product might depend on cognitive involvement concerned with utilitarian product value/benefits and affective involvement related to hedonic product value/benefits. Utilitarian/hedonic approach is needed for better understanding and studying of consumer attitude. And not only positive emotions can be triggered, but also negative ones can be too, by hedonic products.

Products may at the same time have both utilitarian and hedonic benefits. With the consumption of either utilitarian or hedonic benefits, consumers can accomplish consumption value (Holbrook, 2006). Therefore, the consumer preference for these two benefits must be checked all the time, even a product is hedonic product. However past research has not given much attention to the effect of utilitarian and hedonic aspects of hedonic product on attitude dimensions. Cognitively involved consumers will give more attention to the utilitarian benefits, while affectively involved consumers will give more attention to the hedonic benefits. Therefore, involvement type and type of attitude dimension might be clearly related with each other, though separated in view of meaning differences between them. The attention to the effect of involvement type on dimension of attitude type and hedonic product purchase intention is the focus of this research, which is different from past research.

Personal involvement, that is, cognitive involvement versus affective involvement differs depending on product/brand's functional (utilitarian) versus emotional (hedonic) attributes. Involvement type and type of attitude dimension can have clear connections with each other, though separated in view of meaning differences (Voss, Spangenberg, & Grohmann, 2003). Utilitarian values are associated with achieving goals and are directed toward the rational and cognitive decision making (Teo, 2001; Mathwick, Naresh, & Edward, 2001). The relevance of the content (functional information) may causes cognitive involvement. Consumers will focus on functional and instrumental values of the product/brand to

increase utilitarian dimension of consumer attitude. So, we assume hypothesis as follows:

**H1:** Cognitive involvement has positive effects on utilitarian dimension of consumer attitude.

Utilitarian motives and hedonic motives are the two major types of motive causing involvement. As stated above, utilitarian motives cause cognitive involvement, and hedonic motives cause affective involvement (Crowley, Spangenberg, & Hughes, 1992; Voss, Spangenberg, & Grohmann, 2003).

Hedonic value is more subjective and emotional and results more from fun and entertainment (Holbrook & Hirschman, 1982; Babin, William, & Mitch, 1994). What emotion may consumer feel at their living with computers, phone, and other electronic products? Hedonic consumption of electronic products can enhance not only consumers' emotional pleasure and happiness feelings but also certain level of satisfaction. Affective involvement focused on the level of feeling or emotional states evoked by pleasing properties such as exploration enjoyment might lead consumers to the place of being interested in hedonic values which are non-instrumental, experiential and affective. Therefore the affective involvement in hedonic sensation at the products will positively affect hedonic attitude dimensions.

**H2:** Affective involvement has positive effects on hedonic dimension of consumer attitude.

### 2.3. Product Involvement Type and Purchase Intention

Consumers' cognitive state by which consumers are actively collecting and processing information has influences on consumer behavior (Eroglu, Karen, & Lenita, 2003). Consumers' interest in thinking about and learning information pertinent to a hedonic product could lead them to the place of trying or using the product. Consumers involved with brands because of their attachment to them are unlikely to be involved in deciding which brand to buy since they already think the brand is the best (Hoyer, Macinnis, & Pieters, 2013). High cognitive involvement based on the goal achievement motives may more actively trigger higher purchase intention (Park, Lennon, & Stoel, 2005). There is a relationship between cognitive involvement and purchase intention in the respects of the central process of the persuasion model (Vakratsas & Ambler, 1999). Especially when consumers cannot get valuable information about a hedonic product without using or consuming the product, cognitive involvement with the product may lead to high purchase intention (Jiang, Chan, Tan, & Chua, 2010). Therefore we propose the positive effects of cognitive involvement on hedonic product purchase intention.

**H3:** Cognitive involvement has positive effects on hedonic product purchase intention.

A consumer's level of involvement can affect consumer behavior (information processing and purchase intention) (Zaichkowsky, 1994). Affective involvement is more related to the focus on emotional feelings when processing information or making a decision. Consumers' interest in evoking deep feelings about hedonic product could lead them to the place of consuming the product. When emotionally attached to and involved with the product, they might view it as an extension of themselves and could feel much passion towards it (Thomson, MaInnis, & Park, 2005). Thus, involvement in positive feelings including "happiness" and "satisfaction" (Park, Lennon, & Stoel, 2005) may lead to high purchase intention. In contrast, negative feeling states such as "uneasy" and "anger" may lead to low purchase intention. As such, high purchase intention can be from high positive affective involvement. Therefore, we propose positive effect of positive affective involvement on hedonic product purchase intention.

**H4:** Positive affective involvement has positive effects on hedonic product purchase intention.

### 2.4. Attitude Dimension and Purchase Intention

Consumer behavior depends on consumer's motivation, emotion, values, and attitude. With discussion of Batra and Ahtola (1991), consumers seem to pursue either functional properties or affective enjoyment. Consumer attitude consists of thoughts/beliefs, feelings/emotion, and behaviors/intentions towards good or service. The attitude is consisting of cognitive attention, affective attention, and information processing related with consumer's past experience, present behavior and future intentions (Solomon, Bamossy, Askegaard, & Hogg, 2010; Herbes, Christoph, & Iris, 2018). And positive attitude towards an object (product/brand) can lead to positive purchase intention of consumers (Chen, 2007).

In view of goal systems theory (Fishbach, Friedman, & Kruglanski, 2003), the goal can be concretely manifested at individuals' mental activity to affect their motivations and behaviors. Motivational aspect of the goal that comes from their inside can motivate people to do something. Products may at the same time have both utilitarian and hedonic benefits. With the consumption of utilitarian/hedonic benefits consumers can accomplish both of utilitarian and hedonic goal (Holbrook, 2006). Both utilitarian goal and consummatory affective goal at the place of consuming product or services could play roles in consumers' purchasing goods and services (Batra & Ahtola, 1991; Strahilevitz & Myers, 1998). Both the utilitarian dimension of attitude formed in the basis of utilitarian product value/ benefits and the hedonic dimension of attitude from hedonic product value/benefits will play roles in consumers' purchasing goods and services. Therefore, each of the utilitarian and hedonic dimension of attitude towards hedonic product will have positive effect on the product purchase intention. Accordingly, two hypotheses are outlined as follows:

- H5:** Hedonic dimension of consumer attitude has a positive effects on hedonic product purchase intention.
- H6:** Utilitarian dimension of consumer attitude has a positive effects on hedonic product purchase intention.

### 2.5. Moderation Roles of Lay Rationalism

Usually, when people make decisions, they face dilemmas between “the head” (reason) and “the heart” (feelings). And it seems that people often follow the head. Hsee, Jiao, Fang, and Yiheng (2003) proposed lay rationalism as a tendency that decision makers rely on rationalistic attributes more than affective influence, which is said as lay rationalism principle in this paper.

The lay rationalism can be seen as weighing differences between reason versus feelings to guide decisions. Thus, when an individual makes decisions, and place weight on reason versus feelings, the individual’s weighing differences will play an important role on how much they will put efforts into rationalistic versus affective attributes (Hsee, Yang, Zheng, & Wang, 2015). Also, based on past researches in decision theory, it seems that feelings and rationality are not considered as two completely opposite content, and there is an internal consistency between the feelings and rationality, thus, both feelings and rationality may be treated as a kind of utility operation (Bossert, Kotaro, & Kōtarō, 2010).

Following experiment designed by Chitturi, Raghunathan, and Mahajan (2007), we can know that participants favored the better function in choice but the better looking in liking. It seems that people will put more weight on reason when making purchase decision but more weight on feelings when just indicate option enjoyment (Kramer, Maimaran, & Simonson 2012; Hsee, Yang, Li, & Shen, 2009). Some consumers’ decisions might more lean to reasons (focus on function), while others’ decision might more lean to feelings (appeal to attraction). Obviously, situational factors affect the choice which people will make or how much weight they will put on each of such two factors as feelings and rationality, which in turn, induces response type (hedonic or utilitarian dimension of attitude).

As discussed by Dhar and Wertenbroch (2000), utilitarian goods are more instrumental and functional, while hedonic goods are more multisensory and related to pleasure and enjoyment. Referring to thinking of reason, consumers consider more utilitarian attributes and values while mentioning about feelings, consumers inherently focus on hedonic attributes. However, following the assumption of Hsee, Yang, Zheng, and Wang (2015), consumers who are more lay rationalistic could increase the effects of cognitive involvement on utilitarian dimension of attitude, and could decrease the effects of affective involvement on hedonic dimension of attitude, in the process of choosing hedonic product. What happens to the consumers who are more lay rationalistic in the process of choosing hedonic product? In this paper, by applying the lay rationalism principle we

propose our assumption that the effects of cognitive (affective) involvement on utilitarian (hedonic) dimension of attitude may be moderated by lay nationalism.

- H7:** Lay rationalism will increase the positive effects of cognitive involvement on utilitarian dimension of attitude towards hedonic product.
- H8:** Lay rationalism will decrease the positive effects of affective involvement on hedonic dimension of attitude towards hedonic product.

All of the research hypotheses can be shown up by Figure 1.

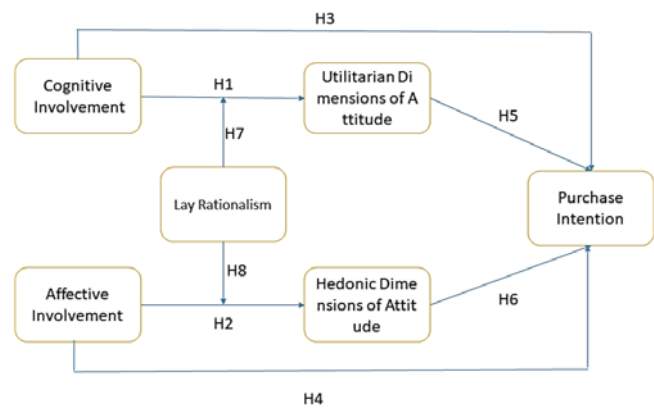


Figure 1: Summary of Hypotheses

### 3. Research Methodology

This research assumes that cognitive (affective) product involvement can affect utilitarian (hedonic) dimension of consumer attitude which could influence consumers' intent to purchase hedonic product, also assumes the product involvement can affect the purchase intention directly. And lay rationalism is suggested to play a moderation role in the effect of the involvement on the attitude dimension.

At the first stage of the empirical design, product is selected for the empirical study. In view of the playful, cheerful, funny and amusing attributes of hedonic product, we choose a computer game, "menghuanxiyou" named in Chinese as our empirical object. And in order to verify that consumers have indeed developed hedonistic attitude when consumers notice the products, we check the hedonic characteristics of the product with four items (playful, cheerful, funny and amusing). And four items (effective, helpful, functional, necessary) are used to check the utilitarian aspects of the product. And items for measuring each construct are developed as followings.

Firstly, as stated in the theoretical background part, cognitive involvement results from utilitarian motives wherein consumers are interested in considering and processing the offering information relevant to themselves. However,

affective involvement predicts the level of consumers' feeling and emotional states caused by hedonic motives about the offerings (Zaichkowsky, 1994; Hoyer, MacInnis, & Pieters, 2013). In order to measure the degrees of consumer's product involvement, we refer to the scales of Zaichkowsky (1985) consisting of 10 items which could measure cognitive and affective involvement. The items for measuring cognitive and affective involvement are shown in Table 1.

Secondly, Consumer attitude dimension towards products or brands can be divided into two dimensions: utilitarian and hedonic (Diefenbach & Marc, 2011; Voss, Spangenberg, & Grohmann, 2003). Utilitarian dimension consists of functional and instrumental contents evoked by products, while hedonic dimension is related to sensational experience of using the products (Voss, Spangenberg, & Grohmann, 2003). We use the HED/UT Scales developed by Voss, Spangenberg, and Grohmann (2003) to measure consumer's attitude dimensions. Items for utilitarian and hedonic dimension of attitude are shown in Table 1.

Thirdly, Lay rationalism is a tendency that people use reason more than feelings to make decisions (Hsee, Yang, Zheng, & Wang, 2015). Based on the scales of Hsee et al.

(2015), the items for lay rationalism are developed as shown in Table 1.

Finally, Purchase intention can be stated as consumer's willingness to buy a certain product (Bagozzi & Robert, 1979). Based on the research of Spears and Singh (2004), the items for purchase intention are developed, as shown in Table 1.

All the items for each construct are answered using a 7-point scale ranged from 1(not at all) to 7(very much). Chinese questionnaire was made by translating English version into Chinese version. We took a pretest in which 30 graduate Chinese students participated, to check any errors in the Chinese version questionnaire, and to explore the characteristics of the video game product in the AD developed for the empirical study. The result showed that the video game we chose was perceived to have more hedonic property rather than utilitarian property (Mutilitarian=3.5833, Mhedonic=5.1250,  $t=19.391$ ,  $p=.000$ ). We corrected the errors such as typo or mistakes in making sentences. To collect data, we used "Wenjuanxing" (a professional questionnaire survey, examination and vote platform) online

**Table 1:** Measurement Items for Each Construct

Constructs	Items	References
Cognitive Involvement.	<ol style="list-style-type: none"> <li>1. I feel the product in the AD is important to me.</li> <li>2. I think the product in the AD is relevant to me.</li> <li>3. I think the product in the AD is valuable to me.</li> <li>4. I believe the product in the AD is means a lot to me.</li> <li>5. I think I need the product in the AD.</li> </ol>	Zaichkowsky (1985)
Affective Involvement.	<ol style="list-style-type: none"> <li>1. I feel the product in the AD is interesting to me.</li> <li>2. I think the product in the AD is appealing to me.</li> <li>3. I think the product in the AD is fascinating to me.</li> <li>4. I believe the product in the AD is exciting to me.</li> <li>5. I think I need the product in the AD is involving to me.</li> </ol>	Zaichkowsky (1985)
Utilitarian Dimension of Attitude	<ol style="list-style-type: none"> <li>1. I think the product in the AD is effective to me.</li> <li>2. I feel the product in the AD is helpful to me.</li> <li>3. I consider the product in the AD is functional to me.</li> <li>4. I think the product in the AD is necessary to me.</li> <li>5. I believe the product in the AD is practical to me.</li> </ol>	Voss, Spangenberg, & Grohmann (2003)
Hedonic Dimension of Attitude	<ol style="list-style-type: none"> <li>1. I think the product in the AD is fun to me.</li> <li>2. I feel the product in the AD is exciting to me.</li> <li>3. I consider the product in the AD is delightful to me.</li> <li>4. I think the product in the AD is thrilling to me.</li> <li>5. I believe the product in the AD is enjoyable to me.</li> </ol>	Voss, Spangenberg, & Grohmann (2003)
Purchase Intention	<ol style="list-style-type: none"> <li>1. I definitely want to buy the product in the AD.</li> <li>2. I definitely intend to buy the product in the AD.</li> <li>3. I have very high purchase interest in the product in the AD.</li> <li>4. I definitely buy the product in the AD.</li> <li>5. I probably buy the product in the AD.</li> </ol>	Spears & Singh (2004)
Lay Rationalism.	<ol style="list-style-type: none"> <li>1. When making decisions, I like to analyze financial costs and benefits and resist the influence of my feelings.</li> <li>2. When choosing between two options, one of which makes me feel better and the other better serves the goal I want to achieve, I choose the one that better serves the goal.</li> <li>3. When making decisions, I think about what I want to achieve rather than how I feel.</li> <li>4. When choosing between two options, one of which is financially superior and the other 'feels' better to me, I choose the one that is financially better.</li> <li>5. When choosing between products, I rely on product specifications (numbers and objective descriptions) rather than my gut feelings.</li> </ol>	Hsee, Yang, Zheng, & Wang (2015)

in China to make questionnaire, and we loaded it on Wechat and QQ (network communication tool). We collected 140 questionnaires online from Chinese participators. And 15 of them was not adopted because the respondents didn't finish the questionnaire exposed to them. So, the remaining 125 data were used for empirical study.

## 4. Analysis and Results

### 4.1. Demographic Analysis Results

Demographic information of the 125 data is shown in Table 2. 51.2 percent of the participants were male and 48 percent were aged 21-30 years old.

### 4.2. Reliability and Validity

Principal component analysis based on Varimax and Cronbach's  $\alpha$  in SPSS 22.0 program were used to check reliability and convergent validity of the items for each construct.

As shown in Table 3, five components are shown as lay

rationalism( $\alpha=.906$ ), Purchase Intention (.901), Utilitarian Dimension of Attitude( $\alpha=.891$ ), Cognitive Involvement( $\alpha=.891$ ), Affective Involvement( $\alpha=.879$ ) and Hedonism Dimension of Attitude( $\alpha=.860$ ). All the factor loadings of items for each construct are greater than .7, and the other loadings of items not related to their construct are less than .3. Therefore the measurement items are judged to converge to their own construct.

**Table 2:** Demographic Analysis Results

	Variable	Frequency	Percentage(%)
Gender	Male	64	51.2
	Female	61	48.8
Age	under the age of 20	3	2.4
	21-30	60	48
	31-40	29	23.2
	41-50	25	20
	Over the age of 50	8	6.4
Household Income	under 3000CNY	26	20.8
	3000-6000CNY	55	44
	6000-9000CNY	39	31.2
	over 9000CNY	5	4
Total Response		125	100

**Table 3:** Results of Analyzing Principal Components

Construct	Item	Component						Cronbach's $\alpha$
		1	2	3	4	5	6	
Lay Rationalism	Lay3	.863	.021	.070	.037	.000	.021	.906
	Lay5	.861	.011	.056	.046	-.012	-.060	
	Lay2	.854	.089	.013	.068	.079	.038	
	Lay4	.850	.042	.057	.089	-.033	.032	
	Lay1	.871	-.145	.044	.066	.011	.032	
Purchase intention	PI4	.078	.842	.042	.180	.097	.122	.901
	PI2	-.024	.836	.142	.031	.045	.159	
	PI5	.003	.826	-.007	.059	.088	.167	
	PI3	.014	.809	.191	.128	.075	.136	
	PI1	-.041	.803	.031	.133	.107	.031	
Utilitarian Dimension of Attitude	U2	.011	.097	.854	.009	.005	.031	.891
	U3	.061	.109	.830	-.004	.134	.005	
	U4	.094	.119	.818	.042	.172	-.011	
	U5	.085	.039	.804	.041	.107	.086	
	U1	-.001	.000	.799	.001	.063	.091	
Cognitive Dimension of Involvement	CO4	.053	.067	-.035	.844	.029	.096	.891
	CO1	-.069	.067	.037	.843	.042	.061	
	CO2	.049	.076	.086	.830	-.015	.031	
	CO3	.140	.162	.059	.827	-.037	.001	
	CO5	.154	.126	-.059	.783	.068	-.078	
Affective Involvement	AF1	-.077	-.058	.093	.023	.822	.078	.879
	AF4	.141	.102	.077	-.029	.817	-.002	
	AF2	-.032	.117	.098	.008	.816	.023	
	AF5	.075	.078	.066	.053	.815	.037	
	AF3	-.067	.168	.142	.035	.772	.162	
Hedonic Attitude	H3	.040	.076	.025	-.070	.144	.813	.860
	H4	-.058	.071	.163	.046	.006	.806	
	H2	.025	.148	-.006	.029	-.006	.792	
	H1	.052	.190	-.061	-.036	.064	.768	
	H5	.001	.076	.097	.152	.102	.761	

4.3. Testing Hypotheses

Whether the effects of cognitive (affective) involvement on the utilitarian (hedonic) dimension could be moderated by common lay rationalism is at issue of this study. The effect of the utilitarian and the hedonic dimension on the intent to purchase the product is assumed. Conditional process model starting at each involvement in this study includes moderation of the two paths in the causal sequence from cognitive (affective) involvement to the intent to purchase the hedonic product. 58th Process macro model of Hayes (2013) is used to check the moderation roles of the lay rationalism in the effect of cognitive (affective) involvement on the utilitarian (hedonic) dimension and also to additionally explore those in the effect of utilitarian (hedonic) dimension on the intent to purchase the product.

As results shown in Table 4, H1 was accepted. Cognitive involvement had a positive affect on utilitarian dimension of attitude (b=.9422, t=2.6126, p=.0101). The moderation role of lay rationalism (H7) was not accepted but rejected (b=-.1765 t=-2.5593, p>.05), since the coefficient of the (A X B) was negatively signed. That is, the positive effect of cognitive involvement on utilitarian dimension of attitude was explored to be attenuated according to the degree of lay rationalism.

**Table 4:** Results of Analyzing the Variables Related to Utilitarian Dimension of Attitude

Outcome : UTILITARIAN DIMENSION OF ATTITUDE							
Model Summary							
	R	R-sq	MSE	F	df1	df2	P
	.2498	.0624	2.2042	2.6843	3.0000	121.0000	.0497
Model							
	coeff (b)	se	t	p	LLCI	ULCI	
Constant	1.2975	1.1584	1.1200	.2649	-.9959	3.5909	
COGNITIVE INVOLVEMENT(A)	.9422	.3606	2.6126	.0101	.2282	1.6562	
LAY RATIONALISM (B)	.6262	.2271	2.7576	.0067	.1766	1.0758	
A X B	-.1765	.0690	-2.5593	.0117	-.3131	-.0400	

As shown in Table 5, H2 was accepted. Affective involvement had a positive effect on hedonic dimension of attitude (b=.5995, t=2.6765, p=.0085). The moderation role of lay rationalism (H8) was accepted (b=-.0911 t=-1.9880, p<.05). That is, the positive effect of affective involvement on hedonic dimension of attitude was explored to be decreased according to the degree of lay rationalism.

**Table 5:** Results of Analyzing the Variables Related to Hedonic Dimension of Attitude

Outcome : HEDONIC DIMENSION OF ATTITUDE							
Model Summary							
	R	R-sq	MSE	F	df1	df2	P
	.2777	.0771	1.2304	3.3700	3.0000	121.0000	.0208

Model							
	coeff (b)	se	t	p	LLCI	ULCI	
Constant	2.1985	1.1011	1.9966	.0481	.0185	4.3785	
AFFECTIVE INVOLVEMENT(C)	.5995	.2240	2.6765	.0085	.1561	1.0429	
LAY RATIONALISM (B)	.4119	.2272	1.8130	.0723	-.0379	.8616	
C X B	-.0911	.0458	-1.9880	.0491	-.1818	-.0004	

As shown in Table 6, H3 was accepted (b=.1872, t=2.1947, p<.05). Cognitive involvement had a positive effect on purchase intention. However, H5 was not accepted, but rejected (b=.0164, t=.0627, p>.05). Utilitarian dimension of attitude has no effect on the purchase intention. Additionally, a moderation role of lay rationalism in the effect of utilitarian dimension of attitude on purchase intention made no senses (b=.0405 t=.8215, p>.05).

**Table 6:** Results of Analyzing the Variables Related to Purchase Intention in Case of Cognitive Involvement

Outcome : PURCHASE INTENTION							
Model Summary							
	R	R-sq	MSE	F	df1	df2	P
	.3005	.0903	1.7583	2.9787	4.0000	120.0000	.0219
Model							
	coeff (b)	se	t	p	LLCI	ULCI	
Constant	4.1879	1.0653	3.9312	.0001	2.0786	6.2971	
UTILITARIAN DIMENSION OF ATTITUDE(D)	.0146	.2334	.0627	.9501	-.4474	.4767	
COGNITIVE INVOLVEMENT	.1872	.0870	2.1947	.0301	.0183	.3561	
LAY RATIONALISM (B)	-.1742	.2320	-.7509	.4542	-.6336	.2851	
D X B	.0405	.0493	.8215	.4130	-.0572	.1382	

As shown in Table 7, H4 was accepted (b=.1382, t=2.4097, p<.05). Affective involvement had a positive effect on purchase intention. And H6 was accepted (b=.9854, t=4.3781, p<.05). Hedonic dimension of attitude had positive affect on purchase intention. Additionally, a moderation role of lay rationalism in the effect of hedonic dimension of attitude on purchase intention made no senses (b=-.0491, t=-1.0679, p>.05).

**Table 7:** Results of Analyzing the Variables Related to Purchase Intention in Case of Affective Involvement

Outcome : PURCHASE INTENTION							
Model Summary							
	R	R-sq	MSE	F	df1	df2	P
	.6887	.4743	1.0162	27.0644	4.0000	120.0000	.0000
Model							
	coeff (b)	se	t	p	LLCI	ULCI	
Constant	-.7981	1.1229	-.7107	.4786	-3.0214	1.4252	
HEDONIC DIMENSION OF ATTITUDE(E)	.9854	.2251	4.3781	.0000	.5398	1.4312	



AFFECTIVE INVOLVEMENT	.1382	.0674	2.4097	.0426	.0047	.2716	
LAY RATIONALISM (B)	.2810	.2333	1.2046	.2307	-.1809	.7430	
E X B	-.0491	.0459	-1.0679	.2877	-.1400	.0419	

## 5. Conclusion

### 5.1. Research Summary and Discussion

In this research, we mainly explored the direct relationship between both cognitive (affective) involvement and purchase intention and identified an indirect relationship between them by using the utilitarian (hedonic) dimension of attitude as a mediator between them. Meanwhile, the moderation roles of lay rationalism were tested in the effects of cognitive (affective) involvement on the utilitarian (hedonic) dimension. And involvement was measured based on two dimensions—cognitive and affective. Consumer's attitude towards product was measured based on the utilitarian and hedonic dimensions. And for the empirical study, we chose a video game named "meng huan xi you" which was a kind of popular game about which a lot of Chinese people might have strong memory. It was checked whether this video game is a hedonic product.

The empirical study used the Process macro model 58 to test the hypotheses, which made the results as follows:

(1) Cognitive involvement had a positive relationship with the utilitarian dimension of consumer attitude. And affective involvement had a positive relationship with the hedonic dimension of consumer attitude (hypotheses 1 and 2). These two hypotheses are accepted.

(2) Cognitive involvement and positive affective involvement both had positive impact on purchase intention (hypotheses 3 and 4). These two hypotheses are accepted.

(3) Utilitarian dimension of attitude had not positive effects on purchase intention. Hypotheses 5 is not accepted.

(4) Hedonic dimension of attitude has positive effects on purchase intention (hypotheses 6). This hypothesis is accepted.

(5) Lay rationalism did not increase the positive effects of cognitive involvement on utilitarian dimension of attitude towards hedonic product. Hypotheses 7 is not accepted.

(6) Lay rationalism did decrease the positive effects of affective involvement on hedonic dimension of attitude towards hedonic product (hypotheses 8). This hypothesis is accepted.

Hypotheses 5 and 7 were not accepted. Utilitarian dimension of attitude did not promote the purchase intention. High lay rationalism versus low lay rationalism did not increase the positive effects of cognitive involvement on utilitarian dimension of attitude towards hedonic product, but did decrease the positive effects, in the view that the valence of the interaction coefficient was significantly

negative. Even though people generally depend on ration rather than feelings, lay rationalism was explored to play roles in a trade-off between ration (reason) and emotion (feelings) (Hsee, Yang, Zheng, & Wang, 2015). When consumers are exposed to hedonic product, there can be the conflicts between the meaning and the utilitarian attributes of the hedonic product in the process of making the trade-off between the reason and the feelings.

Goal systems theory (Fishbach, Friedman & Kruglanski, 2003) indicated that the goal is concretely manifested in individuals' mental activity to affect their behaviors and motivations. And the goal can motivate them to do something concerned with their mind (Chartrand & Bargh, 1996). When consumers are exposed to hedonic product, the meaning of the product can be evoked for the consumers to have hedonic goal to affect the process of making decision. To the consumers giving more weight to the meaning of the hedonic product rather than to the utilitarian attributes the positive effects of cognitive involvement on utilitarian dimension of attitude towards hedonic product could be decreased, and the utilitarian dimension can not promote the intention. Therefore the interaction effects of lay rationalism and cognitive involvement should be more studied.

### 5.2. Implications

The current research explored the direct and indirect relationship between involvement type and hedonic product purchase intention. The hedonic (utilitarian) dimensions of attitude and purchase intention were explored to be affected by affective (cognitive) involvement. And negative roles of lay rationalism in the effect of affective involvement on the hedonic dimension were identified. These finding can contribute to the advancement of theory about hedonic product choice process.

Based on the results of this study, marketing managers should implicitly find the ways by which cognitive as well as affective involvement with their hedonic product could be increased, to attract consumers to choose their hedonic product. They should make efforts to increase consumers' interest in both thinking about, learning, utilitarian information about their hedonic product and deep feelings evoked from the product to promote cognitive and affective involvement with their hedonic product. Furthermore, they should give affective information to the low rationalism customers for the usefulness of doing marketing for their hedonic product, and make efforts to show the positive affective points versus utilitarian aspect such as cost and functions of their hedonic product to high rationalism customers, because the effects of affective involvement on the hedonic dimension of attitude which affects the intent to purchase the product are decreased according to the rationalism level.

### 5.3. Limitation and Future Research

However, our studies have some limitations.

First, in our daily life, utilitarian and hedonic products cannot be completely separated, because all the products can include both of the utilitarian and hedonic attributes. For one product, some people can think it is utilitarian while others may think it is hedonic, according to whether salient attributes are perceived to be utilitarian or hedonic. Therefore it is necessary to study utilitarian product by using the same process used in this research.

Second, the product attitudes of our study were not reviewed in the respects of the necessities for long term life. For example, choice between two distant product categories such as chocolate giving immediate gratification and fruit serving healthy condition might induce conflicts between tasty goal and healthy goal. In view of the long term life goal, the fruit is better than the chocolate. This study did not consider the conflicts concerned with self-control in the respects of the long term goal, even the topic is focused on the hedonic product. This issue can be added in future studies.

Third, we only focused on the characteristics of the product itself, did not mention the influence of advertising in the paper. The people's acceptance of advertisements may also affect the attitude dimension and the purchase intentions. This variable can be added to future studies.

Fourth, the usage of hedonic product can be different according to ages, jobs, or regions, which were not explored at this study. Future study is needed to find the differences.

Fifth, to understand the process of promoting the intent to purchase the hedonic product advertised by social media, future studies could consider other variables such as sales promotion tools (Hwang & Jung, 2018), social media acceptance (Hooda & Ankur, 2018) and lay theory (Choi, Wang, & Chen, 2018).

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