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Hedonic or Utilitarian Product: The Influence of Temporal Distance upon Consumers' Choice

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Abstract

The concept of temporal distance is already understood and discussed in Construal Level Theory. In previous researches, however, we found severely limited understanding regarding the influence of temporal distance on consumer behavior. This research looks into how temporal distance affects consumer preference to hedonic and utilitarian products by conducting two experiments. In Experiment 1, it demonstrated that consumers under nearer temporal distance prefer products with better utilitarian attributes over those with better hedonic attributes in purchases, while their preference goes to products with better hedonic attributes against those with better utilitarian attributes in purchases under farther temporal distance. In Experiment 2, variables in a decision-making task (chosen or forgone decision-making) were added to demonstrate that there is a reciprocal influence from temporal distance and decision-making model upon consumer choice between utilitarian and hedonic products. In a buying context under nearer temporal distance, consumers prefer products with better utilitarian attributes in the chosen decision-making (compared with products with better hedonic attributes), while consumers prefer products with better hedonic attributes in the forgone decision-making (compared with products with better utilitarian attributes). In a buying context under farther temporal distance, consumers prefer products with better hedonic attributes, regardless of chosen or forgone decision-making (compared with products with better utilitarian attributes).

Key Words: *Temporal Distance, Hedonic Attributes, Utilitarian Attributes, Decision-Making Task.*

Introduction

Consumer choice is often driven by utilitarian or hedonic demands. For instance, when consumers choose one new car, they may be concerned with utilitarian attributes (such as average driving mileage per unit of gasoline) or hedonic attributes (such as sports design). As indicated in the previous researches, these

different considerations will be contrasted with product evaluation and attitude, in order that people can distinguish products according to the relative hedonic or utilitarian nature (Batra and Ahtola, 1990; Mano and Oliver, 1993). More broadly, hedonic products provide more empirical consumption, fun, pleasure, and excitement (designer clothing, sports car, expensive watch, etc.), while utilitarian products are mainly instrumental and utilitarian (microwave oven, personal computer, etc; Hirschman and Holbrook, 1982; Strahilevitz and Myers, 1998). If consumers make a choice between products with such different dimensions, it is meaningful to consumer behavior to understand how consumers make tradeoffs between hedonic and utilitarian attributes.

The previous researches on how consumers make tradeoffs between hedonic and utilitarian attributes have not considered the influence of temporal distance, while the viewpoint of temporal distance has been understandingly discussed in literature of the Construal Level Theory (CLT) (Liberman and Trope, 1998; Trope and Liberman, 2000). According to CLT, people will express an event with nearer temporal distance by using concrete and low-level constructs, and express the event with farther temporal distance by using contract and high-level construct. In other words, the low-level construct represents a relatively unstructured construct, including the contextualized expression of secondary and accidental features of events; relatively, the high-level construct represents relatively structured constructs; the non-contextual expression of key points is extracted from the available information; these constructs include the core features of the main levels of an event. The research of temporal construct theory also pointed out that, when the event is described to be nearer in temporal distance, the individuals will avoid abstractly expressing their objectives, and they will prefer the more concrete and task-specific expression (allowing to make effective response to context) (Trope and Liberman, 2000, 2003); relatively, the temporal proximity will aggravate people's sensitivity towards the possibility of potential impediment and negative result (Liberman and Trope, 1998). For instance, when the event is described to be nearer in temporal distance, the concern for eagerness (such as: why should I work hard to achieve this goal?) will be transferred to a concern for feasibility (such as: what should I do to achieve this goal?); when the event is described as nearer in temporal distance, people tend to be comparatively less optimistic to satisfy their goals (Gilovich, Kerr, and Medvec, 1993; Nisan, 1972; Sanna,1999; Savitsky et al., 1998; Shepperd, Ouellette, and Fernandez, 1996). Moreover, Mogilner, Aaker, and Pennington (2008) also demonstrated that consumers will prefer prevention framed products to promotion framed products in a purchase with nearer temporal distance, while consumers will prefer the promotion framed products to prevention framed products in a purchase with farther temporal distance. They also pointed out that, the main reason lies in that the expected pleasure of achieving one goal with farther temporal distance will drive them to prefer promotion framed products over prevention framed products, while the expected pain in the unrealized purchase goal will drive them to prefer prevention framed products to promotion framed products. This research discussed the influence of temporal distance on consumer choice between utilitarian and hedonic products. As the utilitarian dimension is more concrete and prevention-focused, and choosing products with better utilitarian dimension is relatively safe, while the hedonic dimension is more abstract and promotion-focused, and choosing products with better hedonic dimension is desirable, it implies that consumer tradeoff between utilitarian attributes and hedonic attributes will be influenced by temporal distance.

Moreover, previous research also indicated that consumer tradeoff between utilitarian attributes and hedonic attributes will be influenced by the types of decision-making tasks. For instance, the research of Dhar and Wertenbroch (2000) demonstrated that consumers will choose goods with better utilitarian attributes in the chosen decision-making task (acquisition choices; choosing one from two schemes), while they will choose goods with better hedonic attributes in forgone decision-making (forfeiture choices; forgoing one from two schemes). Therefore, this research added the influence of temporal distance. Regarding a purchase with nearer temporal distance, it is expected that consumers will prefer goods with better utilitarian attributes in the chosen task, and that consumers will prefer goods with better hedonic attributes in the foregone task; however, regarding a purchase with farther temporal distance, it is expected that consumers will prefer goods with better hedonic attributes, whether it is chosen or forgone decision-making, implying that temporal distance and the decision-making task will reciprocally influence consumer tradeoff between

utilitarian attributes and hedonic attributes, and the relevant theoretical analysis and hypothesis will be illustrated in the following.

Temporal Distance and Consumer Choice between Hedonic and Utilitarian Goods

Many researches have focused on the role of time in forming the consumer evaluation of future purchase decision-making. In previous literature, the variable of time has been operated as some diversified methods and been replaced by habit to represent different concepts. For instance, many researches focus on the influence of time pressure on judgment and decision-making (e.g., Ben Zur and Breznitz, 1981), or focus the role of time on the expected emotional response to future events (e.g., Buehler and McFarland, 2001), the influence of wait time on choice (e.g., Leclerc, Schmitt, and Dube, 1995), the influence of description of time interval on consumer discount rate (LeBoeuf, 2006), and the evaluation of a result to be understood at a certain future time point (Loewenstein, 1987). The research of Mogilner et al. (2008) discussed the role played by the viewpoint of temporal distance in goal-oriented consumer behavior. This research carried out the discussion by focusing the time viewpoint regarding temporal distance.

The viewpoint of temporal distance has been understandingly discussed in CLT (Liberman and Trope, 1998; Trope and Liberman, 2000). CLT is a framework connecting distance and abstraction, pointing out that psychological distance is an important determinant factor, and determining whether the main and necessary features or secondary and peripheral features are used as the evaluation basis. According to CLT, people will express an event with nearer temporal distance by using more concrete and low-level constructs, and express an event with farther temporal distance by using contract and high-level construct. The low-level construct is relatively unstructured, including the contextualized expression of secondary and accidental features of events; relatively, the high-level construct is comparatively structured; the non-contextual expression of key points is extracted from the available information; these constructs include the core features of the main levels of an event. Thus, the expression of an event with nearer temporal distance is rich in details, and some are accidental and peripheral; the expression of an event with farther temporal distance will obtain the more abstract description by ignoring secondary and accidental features.

Research related to the temporal construct viewpoint also provides an argument regarding how the temporal proximity for one upcoming purchase influences consumer perception towards self-regulatory-framed products (Mogilner et al, 2008). As indicated in the temporal construct theory, when the event is described to be nearer in temporal distance, the individuals will avoid abstractly expressing their objectives and they will prefer the more concrete and task-specific expression (allowing to make effective response to context)(Trope and Liberman, 2000, 2003); relatively, temporal proximity aggravates peoples' sensitivity towards the possibility of potential impediment and negative result (Liberman and Trope, 1998). For instance, when the event is described to be much nearer in temporal distance, the concern for eagerness (such as: why should I work hard to achieve this goal?) will be transferred to concern for feasibility (such as: what should I do to achieve this goal?); thus, immediate action is required, and it can be seen that the attraction will lose its shine in the future (Zauberman and Lynch, 2005). Moreover, when the event is described to be nearer in temporal distance, people tend to be comparatively less optimistic to satisfy their goals (Gilovich et al., 1993; Nisan, 1972; Sanna, 1999; Savitsky et al., 1998; Shepperd et al, 1996). Therefore, in the case of one purchase decision with nearer temporal distance, consumers may face the expected pain when they cannot achieve the purchase goal. As clearly indicated in previous research on regulatory focus, the pain when consumers cannot achieve one prevention-focused or minimal goal is more intense than the pain when consumers cannot achieve one promotion-focused or maximal goal (Idson et al., 2000). Therefore, when consumers face one purchase with near temporal distance, the product that is safe and avoids negative result (a prevention-framed product) is more attractive than the product that obtains a positive result and is full of hope (a promotion - focused product); in other words, regarding a purchase with nearer temporal distance, when the goal cannot be achieved, the expected pain will strengthen consumers' attraction towards prevention-framed products (compared with promotion-framed products); relatively, when the purchase is farther in temporal distance and consumers remain optimistic of achieving the purchase goal, the preference

for prevention-framed products may not occur. As the obtained happiness of promotion-focused or maximal goal is greater than the obtained happiness of prevention-focused or minimal goal (Idson et al., 2000; Liberman, Idson, and Higgins, 2005), when consumers' purchase occurs in the far future, the promotion-framed products will be more attractive than prevention-framed products.

This research put forward that temporal distance will influence consumer choice between hedonic and utilitarian goods. The main reason is that utilitarian attributes are more concrete compared with hedonic attributes, while hedonic attributes are more abstract compared with utilitarian attributes, and people tend to express an event with nearer temporal distance with the more concrete construct and to express the event with farther temporal distance with the more abstract construct, as a result, in a purchase with nearer temporal distance, consumers tend to choose products with better utilitarian attributes; while in a purchase with farther temporal distance, consumers tend to choose products with better hedonic attributes. In addition, if the research result of Mogilner et al, (2008) is used for inference, utilitarian attributes are relatively safer attributes for consumers, while hedonic attributes are prone to the attributes of hope and eagerness. Therefore, choosing products with better utilitarian attributes is relatively more prevention-focused, while choosing products with hedonic attributes is relatively more promotion-focused. Thus, in a purchase with nearer temporal distance, it is expected that consumers will choose the relatively safe option (option with better utilitarian attributes) due to facing the expected pain when the goal cannot be achieved; in a purchase with farther temporal distance, consumers will choose the relatively desired option (option with better hedonic attributes) in the mind due to facing the pleasure achieving the goal. In addition, this research proposed that, in a purchase with nearer temporal distance, as consumers will face the expected pain when the goal cannot be achieved, they will choose a relatively safe option; in a purchase with farther temporal distance, as consumers will face the expected pleasure when the goal is achieved, they will choose a relatively desired option in the mind. Researchers, therefore, inferred that, in a purchase with nearer temporal distance, consumers will choose products with better utilitarian attributes, while in a purchase with farther temporal distance, consumers will choose products with better hedonic attributes. The inference above can form the following hypotheses:

H1: Temporal distance will influence consumer choice between hedonic and utilitarian goods.
H1a: In a purchase with nearer temporal distance, consumer preference for products with better utilitarian attributes is greater than products with better hedonic attributes.
H1b: In a purchase with farther temporal distance, consumer preference for products with better hedonic attributes is greater than products with better utilitarian attributes.

Temporal Distance, Decision-Making Task, and Consumer Choice Between Hedonic and Utilitarian Products

Previous research indicated why the tradeoff between hedonic and utilitarian dimension will differ based on the decision-making task. For instance, the choice (rating is made compared and with the separate options) task usually refers the option with better utilitarian dimension. Tversky and Griffin (1991), and Shafir, Simonson, and Tversky (1993) put forward that decision-makers will seek reasons and propositions to justify their choices. Similarly, Tversky, Sattath, and Slovic (1988) indicated that the scheme of providing decision-makers with justified propositions is more possible to be chosen. Based on such a viewpoint, Bohm and Pfister (1996) indicated that the context promoting justification will strengthen consumer preference for utilitarian features. Bazerman, Tenbrunsel, and Wade-Benzoni (1998) indicated that the choice task will force the decision-makers to focus on the "should" preference, thus, they are more likely to prefer options with more utilitarian dimensions.

As hedonic and utilitarian products can both provide consumers with benefits, where the former is to give enjoy in experience, while the latter provides a function in the practical dimension (Batra and Ahtola, 1990; Hirschman and Holbrook, 1982; Mano and Oliver, 1993); also due to this difference, the post-consumer guilt is connected with hedonic consumption (Kivetz and Simonson, 2002a, b; Strahilevitz and Myers,

1998). Due to the part of guilt, it is more difficult to judge the justification of an expenditure in hedonic products, while it is easier to judge the justification of an expenditure in utilitarian products (Prelec and Loewenstein, 1998). Past research demonstrated that consumer tradeoff between hedonic and utilitarian goods is influenced by the decision-making task. For instance, the researches of Dhar and Wertenbroch (2000) demonstrated that consumer tradeoff between hedonic and utilitarian goods will be influenced by a chosen (choosing one from two schemes) or a forgone decision-making task (forgoing one from two schemes), leading to the reversals of preference. The literature basis for this paper is the result of message evaluation and deliberation (e.g., Tybout and Artz, 1994), and researchers demonstrated that, in forgone decision-making, more simultaneous deliberations will increase the shock of the hedonic level in the overall evaluation. Therefore, compared with utilitarian products, the preference for hedonic products is more powerful in forgone decision-making than in acquired decision-making.

The research of Dhar and Wertenbroch (2000) put forward that, a forgone task can generate more simultaneous deliberations than a chosen task, and also emphasized the two reasons that consumers carry out deliberations at different levels: first, in the forgone task, consumers will spend more time discussing this object, thus, they are more likely to deliberate the potential benefits of this object (Strahilevitz and Loewenstein, 1998); second, in forgone decision-making, as based on the theoretical literature of counterfactual thinking, there will be a greater degree of deliberation. Previous researches have distinguished two kinds of comparative types: one is preferring a comparison of actual results between schemes (upward counterfactual thinking); the other is about not referring the comparison between schemes (downward counterfactual thinking), pointing out that the frequency of upward counterfactual thinking is more than downward counterfactual thinking (Roese and Olson, 1997). The relevant researches also extend the idea of counterfactual thinking, pointing out that the imagination of the possible scheme result occurs earlier than the choice (Sanna, 1996). It is suggested in these findings that, consumers' forgoing one option (upward counterfactual thinking) should be more likely to simultaneously deliberate the future scheme result than choosing one option (downward counterfactual thinking) (see also Carmon and Ariely, 2000). Therefore, in forgone decision-making, the existence of such differentiated deliberation will strengthen the relative evaluation regarding hedonic attributes. The contents above are based on two propositions: first, as indicated in literature, messages with positive stimulation are able to strengthen the love for judgment (Tybout and Artz, 1994). Therefore, the use of one item with more excellent and positive value will increase its attraction (Shiv and Huber,2000; Strahilevitz and Loewenstein, 1998), in particular, deliberation will increase and more easily imagine the influence of the attributes on product evaluation, and render them more prominent (Keller and McGill, 1994; Sherman et al., 1985; Shiv and Huber, 2000). As hedonic attributes can more easily arouse the imagination in degree (MacInnis and Price, 1987), the attraction for a scheme with better hedonic dimension is relatively strengthened. Second, upward counterfactual thinking will generate negative emotion, as the imagination is worse after a choice than before a choice (Roese, 1997; Sanna,1999), thus, forgone decision-making will trigger upward counterfactual thinking in degree, rendering the results of negative emotions worse. In the end, subjects will minimize the motivation of expected negative emotion by obtaining more hedonic products.

If the influence of the temporal distance factor is added, regarding a purchase with nearer temporal distance, goods with better utilitarian dimension will be chosen in the chosen task; while goods with better hedonic attributes will be preferred in the forgone task, as more simultaneous deliberations will be generated in the forgone task according to the inference of Dhar and Wertenbroch (2000); regarding a purchase with farther temporal distance, it is expected that consumers will prefer goods with better hedonic attributes, whether it is chosen or forgone decision-making. The inference above can form the following hypotheses:

H2: Temporal distance and decision-making tasks will reciprocally influence consumer choice between hedonic and utilitarian goods.

H2a: In a purchase with nearer temporal distance, consumers will prefer products with better utilitarian attributes in the chosen decision-making (compared with the products with better hedonic attributes), and will prefer products with better hedonic attributes in the forgone decision-making (compared with the products with better utilitarian attributes).

H2b: In a purchase with farther temporal distance, consumers will prefer products with better hedonic attributes, whether it is chosen or forgone decision-making (compared with the products with better utilitarian attributes).

This research adopted two experiments to verify the two hypotheses proposed above. The objective of Experiment 1 is to test H1, and the object of Experiment 2 is to test H2. The relevant experimental design and results will be illustrated in the following.

Experiment 1

Objective: the objective of Experiment 1 is to test H1, i.e. temporal distance will influence consumer choice between hedonic and utilitarian products; in a purchase with nearer temporal distance, consumers will choose products with better utilitarian attributes (H1a); in a purchase with farther temporal distance, consumers will choose products with better hedonic attributes (H1b).

Design: Experiment 1 adopted the intergroup experimental design with 2 groups (temporal distance: near vs. far). The independent variable of the experiment is temporal distance, and the dependent variable is the proportion that subjects choose products with better utilitarian or hedonic attributes.

Subjects: the experimental subjects were college students who were allocated at random to the two experiment conditions; each group had 100 subjects; every subject will receive one gift after the test.

Experimental stimulation: experimental stimulation adopted the choice problem of an apartment lease. Two options are provided to subjects to make a choice: one option is an apartment with better utilitarian attributes and worse hedonic attributes. The apartment is described as follows: this apartment is located downtown, where living function and transportation are both convenient. Only a 5-minute journey is required to go to the workplace. However, the living environment is noisy and has no beautiful landscape. The other option is an apartment with worse utilitarian attributes, but with better hedonic attributes. The department is described as follows: this apartment has an elegant environment and beautiful landscape. However, it is far away from downtown, living function and transportation are both inconvenient, and a 15-minute journey is required to go to the workplace.

Experimental procedure and operation: in order to improve the level of involvement of the subjects, the experiment adopted the method of one-on-one interviews. At the beginning of the experiment, subjects in the group with near temporal distance are told: “Please imagine that you suddenly get a job and you must take office within one week. Therefore, you need to rent one apartment tomorrow. Assuming that the following two apartments are the options after you have screened at the present time. Which apartment would like to choose, please?”. The subjects in the group with far temporal distance are told: “Please imagine that you will work in a new environment in two years. Therefore, two years later, you need to rent one apartment. Assuming that the following two apartments are the options after you have screened at the present time. Please imagine which apartment you would like to choose two years later.” Then, the subjects will make a choice in the two options. Whether it is the group with near or far temporal distance, subjects are required to fill in one item about the operation and test after making a choice, namely, “as for the above decision-making, in your opinion, the temporal distance for lease is now”. A Likert five-point scale was used for measurement, ranging from 1 (very near) to 5 (very far).

Results: in the part of the operation and test, regarding the group with near temporal distance (n=100), the average number of perception of temporal distance is M near=1.5 (SD near=.67); regarding the group with far temporal distance (n=100), the average number of perception of temporal distance is M far=4.3 (SD far=.64). The statistical test results showed that the operation of temporal distance is successful (t(198)=-30.042; p<.001). The experimental results are as shown in Table 1. In the group with near temporal distance (N=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 65% (n=65), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 35% (n=35) (65% vs. 35%; p<.005). In the group with far temporal distance (N=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 23% (n=23), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 77% (n=77)(23% vs. 77%; p<.001). The statistical test results showed that different temporal distance will significantly influence the chosen options ($\chi 2$ (1)=35.795; p<.001). Therefore, H1, H1a, and H1b are supported As indicated in Table 1 below.

Table 1 The Chosen Proportion in Different Temporal Distance (Experiment 1)

Chosen Proportion			
Temporal Distance	Options with better utilitarian attributes and worse hedonic attributes	Options with better hedonic attributes and worse utilitarian attributes	$\chi 2$
Near (N=100)	65%	35%	35.795*
Far (N=100)	23%	77%	

*p<0.001.

Experiment 2

Objective: the objective of Experiment 2 is to test H2 in the plan of the first year, i.e. temporal distance and decision-making task will reciprocally influence consumer choice between hedonic and utilitarian products. In the purchase with nearer temporal distance, it is expected that consumers will choose products with better utilitarian attributes in chosen decision-making, while consumers will choose products with better hedonic attributes in forgone decision-making (H2a); in the purchase with farther temporal distance, consumers will choose goods with better hedonic attributes, whether it is chosen or forgone decision-making (H2b).

Design: Experiment 2 adopted the intergroup experimental design with 2 (temporal distance: near vs. far)× 2(decision-making task: choose vs. forgo) groups. The independent variable of the experiment is temporal distance and decision-making task, and the dependent variable is the proportion that subjects choose products with better utilitarian or hedonic attributes.

Subjects: the experimental subjects were college students who were allocated at random to the four experiment conditions; each group had 100 subjects; the subjects in Experiment 2 and Experiment 1 are independent from each other, and every subject will receive one gift after the test.

Experimental stimulation: experimental stimulation adopted the choice problem of travel itinerary in Europe. Two options are provided for subjects to make a choice: one option is an itinerary with better utilitarian attributes and worse hedonic attributes. This travel itinerary is described as follows: this travel itinerary has convenient and inexpensive (later check-out time) journey (good transportation). However, this travel itinerary has no attractive scenery (limited recreational activities), and the hotel is ordinary (very few night activities). The other option is the itinerary with worse utilitarian attributes and better hedonic attributes. The itinerary is described as follows: this travel itinerary has beautiful scenery (having an attractive

beach) and good hotel (rich night activities). However, this itinerary has longer travel time (worse transportation) and is more expensive (earlier check-out time).

Experimental procedure and operation: in order to improve the level of involvement of the subjects, the experiment adopted the method of one-on-one interviews. At the beginning of the experiment, subjects in the group, where temporal distance is near and the decision-making model is chosen decision-making, are told to "Please imagine that you will travel to Europe, which one would you like to choose from the following two schemes?". The subjects in the group where the temporal distance is near and decision-making model is forgone decision-making are told to "Please imagine that you will travel to Europe, and which one would you like to forgo from the following two schemes?". The subjects in the group where the temporal distance is far and decision-making model is chosen decision-making are told "Please imagine that you will travel to Europe two years later, and which one would you like to choose from the following two schemes?". The subjects in the group where the temporal distance is far and decision-making model is forgone decision-making are told "Please imagine that you will travel to Europe two years later, which one would you like to forgo from the following two schemes?". Then, the subjects will make a choice in the two options. The subjects in the four groups are required to fill in one item regarding the operation and test after making a choice, namely, "as for the above decision-making, in your opinion, the actually temporal distance for travel is ____now". A Likert five-point scale was used for measurement, ranging from 1 (very near) to 5 (very far).

Results: in the part of operation and test, regarding the group with near temporal distance (n=200), the average number of perception of temporal distance is M near=1.69 (SD near=.76); regarding the group with far temporal distance (n=200), the average number of perception of temporal distance is M far=4.14 (SD far=.66). The statistical test results showed that the operation of temporal distance is successful (t(398)=-34.159; p<.001). And the experimental results are as shown in Table 2. In order to test whether temporal distance and decision-making model will reciprocally influence consumers choice between utilitarian and hedonic products, researchers adopted the method of hierarchical log-linear, and the result showed that there exists an interaction effect ($\chi 2$ (1)=10.383; p<.005) between temporal distance, decision-making model, and choice.

In the group (N=200) with near temporal distance, in the chosen decision-making model (n=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 68% (n=68), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 32% (n=32) (68% vs. 32%; p<.001); in the forgone decision-making model (n=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 28% (n=28), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 72% (n=72) (28% vs. 72%; p<.001) ($\chi 2$ (1)=32.051; p<.001). In the group(N=200) with far temporal distance, in the chosen decision-making model (n=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 25% (n=25), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 75% (n=75) (25% vs. 75%; p<.001); in the forgone decision-making model(n=100), the proportion of choosing the options with better utilitarian attributes and worse hedonic attributes is 21%(n=21), while the proportion of choosing the options with better hedonic attributes and worse utilitarian attributes is 79% (n=79)(21% vs. 79%; p<.001) ($\chi 2$ (1)=.452; p=.502).

The statistical test results showed that temporal distance and decision-making model will reciprocally influence consumers' choice between utilitarian and hedonic products. In the purchase with nearer temporal distance, consumers will prefer products with better utilitarian attributes (compared with products with better hedonic attributes) in the chosen decision-making, and prefer products with better hedonic attributes (compared with products with better utilitarian attributes) in forgone decision-making. In the purchase with farther temporal distance, consumers will prefer products with better hedonic attributes (compared with products with better utilitarian attributes), whether it is chosen or forgone decision-making. Therefore, H2, H2a, and H2b are supported As indicated in Table 2 (below).

Table 2 The Chosen Proportion in Different Temporal Distance and Decision-making Model (Experiment 2)

Chosen Proportion			
Temporal Distance	Decision-making Model	Options with better utilitarian attributes and worse hedonic attributes	Options with better hedonic attributes and worse utilitarian attributes
Near(N=200)	chosen(n=100)	68%	32%
	forgone(n=100)	28%	72%
Far(N=200)	chosen (n=100)	25%	75%
	forgone (n=100)	21%	79%

*p<0.001.

Discussion & Conclusion

The viewpoint of temporal distance has been understandingly discussed in literature of the Construal Level Theory (CLT). According to the temporal construct theory, people will express an event with nearer temporal distance by using the more concrete and low-level construct, and express an event with farther temporal distance by using the more contract and high-level construct. However, researches regarding the influence of temporal distance on consumer behavior are very few. This research put forward that, temporal distance will influence consumer choice between hedonic and utilitarian goods. The main reason is that utilitarian attributes are more concrete, as compared with hedonic attributes, while hedonic attributes are more abstract, as compared with utilitarian attributes, and people tend to express an event with nearer temporal distance with the more concrete construct, and to express an event with far temporal distance with the more abstract construct, as a result, in a purchase with nearer temporal distance, consumers tend to choose products with better utilitarian attributes; while in a purchase with farther temporal distance, consumers tend to choose products with better hedonic attributes.

Moreover, if the research result of Mogilner, Aaker, and Pennington (2008) is used for inference, utilitarian attributes are relatively safer attributes, while hedonic attributes are prone to the attributes of hope and eagerness. Therefore, choosing products with better utilitarian attributes is relatively more prevention-focused, while choosing the products with better hedonic attributes is relatively more promotion-focused. Thus, in a purchase with nearer temporal distance, it is expected that consumers will choose a relatively safe option (option with better utilitarian attributes) due to facing the expected pain when the goal cannot be achieved; in a purchase with farther temporal distance, consumers will choose the relatively desired option (compared with option with better hedonic attributes) due to facing the pleasure achieving the goal. In addition, this research proposed that, in a purchase with nearer temporal distance, as consumers are afraid to face the expected pain when the goal cannot be achieved, they will choose a relatively safe option, which is the result after making a comparison between schemes. Therefore, consumers will prefer the "should" decision (which one consumers should choose); in a purchase with farther temporal distance, as consumers will face the expected pleasure when the goal is achieved, they will choose the relatively desired option in the mind. Therefore, they will prefer the "want" decision (which one do consumers want to choose in your mind). Previous researches have demonstrated the result that, in "should" decisions, the options with better utilitarian attributes will prevail, while in "want" decisions, the options with better hedonic attributes will prevail. Researchers, therefore, inferred that in a situation with nearer temporal distance, consumers will choose products with better utilitarian attributes, while in a situation with farther temporal distance, consumers will choose products with better hedonic attributes.

This research makes great contribution to extending temporal distance to the field of consumer behavior, and makes great contribution regarding how consumers make tradeoffs between hedonic and utilitarian attributes, which is also discussed in literature. In previous research, that hedonic and utilitarian goods will

lead to the reversals of preference is usually related to the decision-making task, including chosen and forgone decision-making; in chosen decision-making, consumers will prefer utilitarian goods, while in forgone decision-making, consumers will prefer hedonic goods. Finally, this research verified that temporal distance is also an importance factor leading to the reversal of preference for hedonic and utilitarian goods. When temporal distance is nearer, consumers will prefer products with better utilitarian attributes; when temporal distance is farther, consumer will prefer products with better hedonic attributes. Based on this, regarding the reason for the reversals of preference for consumer tradeoff between hedonic and utilitarian attributes, and in addition to the decision-making task mentioned in literature, this research also put forward that, temporal distance is the reason for the reversals of preference regarding hedonic and utilitarian products; this research has great contribution to supplementing literature in this aspect.

References

Batra, R., & Ahtola, O. T. (1990). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters, 2 (2),* 159-170.

Bazerman, M. H., Tenbrunsel, A. E., & Wade-Benzoni, K. (1998). Negotiating with yourself and losing: Understanding and managing conflicting internal preferences. *Academy of Management Review, 23,* 225-241.

Ben Zur, H., & Breznitz, S. J. (1981). The effects of time pressure on risky choice behavior. *ActaPsychologica, 47 (February),* 89-104.

Bohm, G., & Pfister, H. (1996). Instrumental or emotional evaluations: What determines preferences? *Acta Psychologica, 93 (1-3),* 135-148.

Buehler, R., & McFarland, C. (2001). Intensity bias in affective forecasting: The role of temporal focus. *Personality and Social Psychology Bulletin, 27 (November),* 1480-1493.

Carmon, Z., & Ariely, D. (2000). Focusing on the forgone: How value can appear so different to buyers and sellers. *Journal of Consumer Research, 27 (December),* 360-370.

Dhar, R., & Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research, 37 (February),* 60-71.

Gilovich, T., Kerr, M., & Medvec, V. (1993). Effect of temporal perspective on subjective confidence. *Journal of Personality and Social Psychology, 64 (April),* 552-560.

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing, 46 (July),* 92-101.

Idson, L. C., Liberman, N., & Higgins, E. T. (2000). Distinguishing gains from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology, 36 (May),* 252-274.

Keller, P. A., & McGill, A. L. (1994). Differences in the relative influence of product attributes under alternative processing conditions: Attribute importance versus attribute ease of imagability. *Journal of Consumer Research, 3 (1),* 29-49.

Kivetz, R., & Simonson, I. (2002a). Earning the right to indulge: Effort as a determinant of customer preferences toward frequency program rewards. *Journal of Marketing Research, 39 (May),* 155-170.

Kivetz, R., & Simonson, I. (2002b). Self-control for righteous: Toward a theory of precommitment to indulge. *Journal of Consumer Research, 29 (September),* 199-217.

LeBoeuf, R. (2006). Discount rates for time versus dates: The sensitivity of discounting to time-interval description. *Journal of Marketing Research, 43 (February),* 59-72.

Leclerc, F., Schmitt, B., & Dube, L. (1995). Waiting time and decision making: Is time like money? *Journal of Consumer Research, 22 (June),* 110-119.

Liberman, N., Idson, L. C, & Higgins, E. T. (2005). Predicting the intensity of losses vs. non-gains and non-losses vs. gains in judging fairness and value: A test of the loss aversion explanation. *Journal of Experimental Social Psychology, 41 (July),* 527-534.

Liberman, N., & Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology, 75,* 5-18.

Loewenstein, G. (1987). Anticipation and the valuation of delayed consumption. *Economic Journal, 97 (September),* 666-684.

MacInnis, D. J., & Price, L. L. (1987). The role of imagery in information processing: Review and extensions. *Journal of Consumer Research, 13 (March),* 473-491.

Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research, 20 (December),* 451-466.

Mogilner, C., Aaker, J. L., & Pennington, G. L. (2008). Time will tell: Distant appeal of promotion and imminent appeal of prevention. *Journal of Consumer Research, 34 (February),* 670-681.

Nisan, M. (1972). Dimension of time in relation to choice behavior and achievement orientation. *Journal of Personality and Social Psychology, 21 (February),* 175-182.

Prelec, D., & Loewenstein, G. (1998). The red and the black: Mental accounting of savings and debt. *Marketing Sciences, 17 (1),* 4-28.

Roese, N. J. (1997). Counterfactual thinking. *Psychological Bulletin, 121 (1),* 133-148.

Roese, N. J., & Olson, J. M. (1997). Counterfactual thinking: The intersection of affect and function. In *Advances in Experimental Social Psychology, Vol. 29,* Mark P. Zanna, ed. San Diego: Academic Press, 1-59.

Sanna, L. J. (1996). Defensive pessimism, optimism, and simulating alternatives: Some ups and downs of prefactual and counterfactual thinking. *Journal of Personality and Social Psychology, 71 (5),* 1020-1036.

Sanna, L. J. (1999). Mental simulations, affect, and subjective confidence: Timing is everything. *Psychological Science, 10 (July),* 339-345.

Savitsky, K., Medvec, V. H., Charlton, A. E., & Gilovich, T. (1998). What, me worry? Arousal misattribution and the effect of temporal distance on confidence. *Journal of Social Psychology Bulletin,24 (May),* 529-536.

Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-based choice. *Cognition, 49 (October/November),*11-36.

Shepperd, J. A., Ouellette, J. A., & Fernandez, J. K. (1996). Abandoning unrealistic optimism: Performance estimates and the temporal proximity of self-relevant feedback. *Journal of Personality and Social Psychology, 70 (April),* 844-855.

Sherman, S. J., Cialdini, R. B., Schwartzman, D. F., & Reynolds, K. D. (1985). Imagining can heighten or lower the perceived likelihood of contracting a disease: The mediating effect of ease of imagery. *Personality and Social Psychology Bulletin, 11 (March),* 118-127.

Shiv, B., & Huber, J. (2000). The impact of anticipating satisfaction on consumer choice. *Journal of Consumer Research, 27 (September),* 202-216.

Strahilevitz, M. A., & Loewenstein, G. F. (1998). The effect of ownership history on the valuation of objects.*Journal of Consumer Research, 25 (December),* 276-289.

Strahilevitz, M., & Myers, J. G. (1998). Donations to charity as purchase incentives: How well they work may depend on what you are trying to sell. *Journal of Consumer Research, 24 (4),* 434-446.

Trope, Y., & Liberman, N. (2000). Temporal construal and time-dependent changes in preferences. *Journal of Personality and Social Psychology, 79 (December),* 876-889.

Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review, 110* (*7*), 403-421

Tversky, A., & Griffin, D. (1991). Endowment and contrast in judgments of well-being.In *Subjective Well-Being: An Interdisciplinary Perspective*, Fritz Strack, Michael Argyle, and Norbert Schwarz, eds. Oxford: Pergamon Press, 101-118.

Tversky, A., Sattath, S., & Slovic, P. (1988). Contingent weighting in judgment and choice. *Psychological Review, 95 (3),* 371-384.

Tybout, A. M., & Artz, N. (1994). Consumer psychology. *Annual Review of Psychology, 45,* 131-169. Zauberman, G., & Lynch Jr., J. G. (2005). Resource slack and discounting of future time versus money.*Journal of Experimental Psychology: General, 134 (February),* 23-37.