

Comparable or Enriched: Influence of Temporal Distance upon Consumer Tradeoff between the Two Attributes

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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 tradeoff between comparable attributes (such as price) and enriched attributes (such as brand) by implementing two studies. Study 1 demonstrated that, in a buying context under nearer temporal distance, consumers prefer products with better comparable attributes (lower price) over products with better enriched attributes (better brand); in a buying context under farther temporal distance, consumers prefer products with better enriched attributes (better brand) over products with better comparable attributes (lower price). In Study 2 variables of decision-making task (joint evaluation or separate evaluation) were added to demonstrate that there is a reciprocal influence from temporal distance and decision-making model upon consumer tradeoff between comparable attributes (such as price) and enriched attributes (such as brand). For a purchase with nearer temporal distance, consumers prefer products with better comparable attributes (compared with products with better enriched attributes) in the joint evaluation model, while consumers prefer products with better enriched attributes (compared with products with better comparable attributes) in the separate evaluation model. For a purchase with farther temporal distance, consumers prefer products with better enriched attributes, regardless of whether it is the joint evaluation or separate evaluation model (compared with products with better comparable attributes).

Keywords: Temporal Distance, Comparable Attributes, Enriched Attributes, Decision-Making Task Model

1. Introduction

Consumer must make decisions and tradeoffs in different product attributes, in which price and intrinsic features are more specific product attributes, while messages, such as brand and country of origin, are more enriched attributes. This research adopted the definition proposed by Nowlis and Simonson (1997), i.e. comparable attributes are defined as consumers are able to compare the options relatively easily and precisely (for instance, option A costs NTD 50 more than option B; option A has the feature X while option B has no feature).

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On the contrary, when it is more difficult to compare the attributes, and evaluation of these intrinsic attributes is more meaningful and can provide some messages (such as brand name and country of origin), thus, these attributes are defined as enriched attributes.

In addition to the above, the research of Nowlis and Simonson (1997) discussed those two kinds of preferences result in reversals of preference for the task: one is joint evaluation based on a direct scheme; and the other is a separate evaluation based on separate options. They proposed that, when consumers are able to compare the options relatively easily and precisely (for instance, option A costs NTD 50 more than option B; option A has the feature X, while option B has no feature), these attributes are relatively important in comparing the basic task (choice); on the contrary, when it is more difficult to compare the attributes, and the evaluation of these intrinsic attributes is more meaningful and can provide some messages (such as brand name and country of origin), these attributes will receive more weight (for instance, the possible rating in purchase) to form a preference, as based on separate option evaluation. Then, it is expected that options with better comparable attributes will be preferred in joint evaluation, while options with better enriched attributes will be preferred in separate evaluation.

This research discussed the influence of temporal distance on consumer tradeoff between comparable attributes and enriched attributes for products. The viewpoint of temporal distance, as proposed in previous relevant literature, has been understandingly discussed in the Construal level theory (CLT) (Liberman and Trope, 1998; Trope and Liberman, 2000). According to the argument discussed in CLT, people will express an event with nearer temporal distance by using concrete and low-level construct, and express the event with farther temporal distance by using abstract and high-level construct; the low-level construct is a relatively unstructured construct, including the contextualized expression of secondary and accidental features of events; relatively, the high-level construct is a relatively structured construct; 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 for the event with nearer temporal distance is rich in details, and some are accidental and peripheral; the expression for an event with farther temporal distance will obtain the more abstract description by ignoring secondary and accidental features. The research of the 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 peoples' 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 over promotion framed products in a purchase with nearer temporal distance, while consumers will prefer promotion framed products over prevention framed products in a purchase with farther temporal distance. They also pointed out that, the main reason lies in that the expected pleasure in 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 over promotion framed products. Therefore, it is necessary to discuss the influence of temporal distance on consumer tradeoff between comparable attributes and enriched attributes for products. As comparable attributes are more concrete (such as price) for consumers, choosing products with better comparable attributes is relatively more precise and safe; while enriched attributes are more abstract and promotion-based (such as brand), thus, choosing goods with better enriched attributes is more desirable. The two attributes above also imply that, consumer tradeoff between comparable attributes and enriched attributes will be influenced by temporal distance.

Moreover, this research also considers the influence of temporal distance and decision-making task (joint evaluation or separate evaluation) on consumer tradeoff between comparable attributes and enriched attributes. It is expected that, in a purchase with nearer temporal distance, joint evaluation makes consumers choose goods with better comparable attributes, while separate evaluation makes consumers choose goods with better enriched attributes.

However, in a purchase with farther temporal distance, as consumers prefer concern for eagerness, when faced with the expected pleasure achieving the goal, it is inferred that consumers will choose goods with better enriched attributes whether it is joint evaluation or separate evaluation. The relevant theoretical analysis and hypothesis will be illustrated in the following.

2. Formation of Theoretical Background and hypothesis

2.1 Influence of decision-making task on consumer tradeoff between comparable and enriched attributes

Consumer preference can be formed by different methods. Tversky, Sattah, and Slovic (1988) demonstrated the systematized contradiction between choice and value-matching task, i.e. when one scheme is more excellent in the dominant dimension (the second dimension is significantly less excellent), this scheme is more likely to be preferred in the chosen task. Many previous researches have discussed the difference between judgment and choice (e.g. Billings and Scherer, 1988; Ganzach, 1995; Montgomery et al., 1994; Payne, 1982), as well as the difference between attribute-based preferences and attitude-based preferences (Sanbonmatsu and Fazio, 1990; Sanbonmatsu, Kardes, and Gibson, 1991). In particular, many researches focused on the demonstration of the reversals of preference for consumers' choice and rating systematization (e.g., Bazerman, Loewenstein, and Hite, 1992; Fischer and Hawkins, 1993; Goldstein and Einhorn, 1987).

The research of Nowlis and Simonson (1997) demonstrated that, two kinds of preferences will naturally result in reversals of preference for task: one is the joint evaluation based on the direct scheme; the other is the separate evaluation based on separate options. They proposed that, when consumers can compare the options relatively easily and precisely (for instance, option A costs NTD 50 more than option B; option A has the feature X, while option B has no feature.), these attributes are defined as comparable attributes, and are relatively important in the comparison-based task (choice). On the contrary, when it is more difficult to compare the attributes, and the evaluation for these intrinsic attributes is more meaningful and can provide some messages (such as brand name and country of origin), these attributes are defined as enriched attributes. Thus, these attributes will receive more weight (for instance, the possible rating in purchase) to form a preference based on separate option evaluation. From this, it can be seen that it is expected that options where products have better comparable attributes are preferred by consumers in joint evaluation, while options where products have better enriched attributes are preferred by consumers in separate evaluation.

In fact, Nowlis and Simonson (1997) put forward that, consumer reversals of preference, as generated by different preference elicitation tasks, are based on the compatibility of the task and the attribute feature. In their research, in order to discuss the influence of compatibility of attribute-task on consumer preference, the collection of the following two options is considered: the two options are different in quality and price; one option is color TV set A, the brand is Sony, and the price is \$309; the other option is color TV set B, the brand is Magnavox, and price is \$209. Firstly, the chosen task is considered. Although making a choice from the choice set, which is described as two schemes with two attributes exceeding one method, and comparison between attributes will play an important role in the process of choice (e.g., Russo and Doshier, 1983; Schkade and Johnson, 1989).

Moreover, the one most direct method lies in comparing the intervals between two attributes in order to solve one problem of binary choice (having two different attributes), namely, whether one option's advantage (benefit) in one dimension is greater than its disadvantage (cost) in another dimension; for instance, when faced with the choice set of TVs, consumers will compare the difference between the brands of Sony and Magnavox, as well as the difference in price. In the process of choice, the important role of choice indicates that the importance of attributes may be influenced by the comparability of attributes. Previous researches have provided evidence supporting this proposition. In addition, Slovic and Macphillamy (1974) discussed that there are common attributes (the two schemes have different attribute values in the same dimension) and unique attributes (namely, each option has one feature that is not provided by the other scheme) in the two schemes. They found that, when consumers are making a choice, common attributes will receive higher weight than non-common attributes, as the common attributes of the two options can be directly compared (Markman and Medin, 1995), and this finding can be extended, meaning that when all the schemes have the attribute value of this attribute, precise and unambiguous difference will be generated. Thus, consumers tend to choose the relatively more important attribute values, which some schemes do not have.

This suggestion will make consumers generate precise and unambiguous comparison attributes, which will receive higher weight in the choice.

In particular, it is possible to easily and effectively distinguish price and brand in comparison. Previous researches indicated that comparing digitized information (such as price) will be much easier than comparing colloquial information (such as brand) (Viswanathan and Narayanan, 1994). Showing the difference in price is more precise, unambiguous, and easy to calculate; on the contrary, familiar brand names are usually rich in showing diversified qualitative clues with connection, belief, and experience (e.g., Aaker, 1991; Keller, 1993). Therefore, the difference between brands may be relatively imprecise, ambiguous, and non quantitative. In this analysis and suggestions, the weight of brand name (price) is lower (higher) in choice and other comparison-based task inclinations, and in the comparable attributes, it is expected that the brand name (such as TV's price) will received higher weight in the comparison-based task; however, relatively, it has no significance in separate evaluation. In addition, price may not be useful to form the overall evaluation, as it is difficult to make a tradeoff between brand name and price from a single option; on the contrary, although brand name is relatively incomparable, it is suggested in the richness connected by brand that brand name should be one powerful clue in separate evaluation, namely, consumers are able to make a meaningful evaluation for one certain brand without comparing two brands. In addition, compared with choice, it is expected that the task of rating will strengthen the weight of brand name and reduce the weight of price.

2.2 Temporal distance and consumer tradeoff between comparable attributes and enriched attributes

The viewpoint of temporal distance has been understandingly discussed in CLT (Lieberman and Trope, 1998; Trope and Liberman, 2000), which is a framework connecting distance and abstraction, pointing out that psychological distance is an important determinant factor, 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 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 for an event with nearer temporal distance is rich in details, and some are accidental and peripheral; the expression for an event with farther temporal distance will obtain the more abstract description by ignoring secondary and accidental features. From the above researches related to the correlation between temporal distance and CLT, it can be found that people will express an event with farther temporal distance by using more abstract construct, and express an event with nearer temporal distance by using more concrete construct.

The researches related to the temporal construct also provide an argument regarding how the temporal proximity for one upcoming purchase influences consumer perception towards self-regulatory-framed products (Mogilner, Aaker, and Pennington, 2008). As clearly indicated in the temporal construct theory, when an event is described as 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 sensitivity towards the possibility of potential impediment and negative result (Lieberman and Trope, 1998). For instance, when an event is described as 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 appeal in the future (Zauberman and Lynch, 2005). Moreover, when an event is described as 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, Ouellette, and Fernandez, 1996).

Therefore, in a case of one purchase decision with nearer temporal distance, consumers may face the expected pain when they cannot achieve the purchase goal. As 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 that 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 a negative result (a prevention-framed product) is more attractive than the product that obtains positive result and is full of hope (a promotion - focused product); namely, 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 are still optimistic to achieve the purchase goal, the preference for prevention-framed products may not occur. As the obtained happiness of a promotion-focused or maximal goal is greater than the obtained happiness of a prevention-focused or minimal goal (Idson et al., 2000; Liberman, Idson, and Higgins, 2005), when the purchase occurs in the far future, the promotion-framed products will be more attractive than prevention-framed products. This research discussed the influence of temporal distance on consumer tradeoff between comparable and enriched attributes. It is inferred that, the comparable attributes (such as price) are relatively precise, unambiguous, and quantitative, namely, it is relatively concrete; while enriched attributes (such as brand) is relatively imprecise, ambiguous, and non-quantitative, implying a diversified connection, belief, and experience, namely, it is relatively abstract. Therefore, it is expected that, in a purchase with nearer temporal distance, the weight of comparable attributes will be increased, thus, consumers will prefer products with better comparable attributes; in a purchase with farther temporal distance, the weight of enriched attributes will be increased, thus, consumers will prefer products with better enriched attributes.

In conclusion, in a purchase with nearer temporal distance, it is expected that consumers will choose a relatively safe option due to facing the expected pain when the goal cannot be achieved; in a purchase with farther temporal distance, consumers will choose a relatively desired option in the mind due to facing the pleasure of achieving the goal; the comparable attributes are more concrete and safe, as compared with enriched attributes, while enriched attributes are relatively abstract and desirable, as compared with comparable attributes. Therefore, in a purchase with nearer temporal distance, it is expected that consumers tend to choose products with better comparable attributes, while in a purchase with farther temporal distance; consumers tend to choose goods with better enriched attributes. Moreover, in a purchase with nearer temporal distance, it is referred that, consumers will prefer a "should" decision, while in a purchase with farther temporal distance, consumers will prefer a "want" decision. As a "should" decision is about which scheme should be chosen, and comparable attributes are more precise, unambiguous, and quantized, it is expected that comparable attributes will have the higher weight in the "should" decision, thus, in a purchase with nearer temporal distance, consumers tend to choose the scheme with better comparable attributes. The "want" decision is about which scheme consumers want to choose in their mind, thus, the enriched attributes will have the higher weight in the "want" decision. Therefore, in a purchase with farther temporal distance, it is expected that consumers will choose schemes with better enriched attributes. The above reference can form the following hypotheses:

H1: Temporal distance will influence consumer tradeoff between comparable attributes (such as price) and enriched attributes (such as brand).

H1a: In a purchase with nearer temporal distance, consumers will choose products with better comparable attributes (lower price) more than products with better enriched attributes (better brand).

H1b: In a purchase with farther temporal distance, consumers will choose products with better enriched attributes (better brand) more than products with better comparable attributes (lower price).

2.3 Temporal distance, decision-making task, and consumer tradeoff between comparable and enriched attributes

This research also considered the influence of temporal distance and decision-making task (joint or separate evaluation) on consumer tradeoff between comparable attributes and enriched attributes. In a purchase with nearer temporal distance, it is expected that a decision-making task will influence consumer tradeoff between comparable attributes and enriched attributes. When decision-making is a joint evaluation, it is expected that comparable attributes have the higher weight, thus, consumers will choose products with better comparable attributes; when decision-making is a separate evaluation, it is expected that enriched attributes have the higher weight, thus, the purchase of products with better enriched attributes may have the higher score. However, in a purchase with farther temporal distance, it is referred that consumers tend to choose products full of hope and eagerness.

Therefore, it is inferred that, consumers will choose products with better enriched attributes more than products with better comparable attributes, whether it is a joint evaluation or a separate evaluation. The above inference can form the following hypotheses:

H2: Temporal distance and a decision-making task (joint or separate evaluation) will reciprocally influence consumer tradeoff between comparable attributes (such as price) and enriched attributes (such as brand).

H2a: In a purchase with nearer temporal distance, when the decision-making task is a joint evaluation, consumers will choose products with better comparable attributes (lower price) more than products with better enriched attributes (better brand); when a decision-making task is a separate evaluation, consumers will choose products with better enriched attributes (better brand) more than products with better comparable attributes (lower price).

H2b: In a purchase with farther temporal distance, consumers will prefer products with better enriched attributes (better brand) more than products with better comparable attributes (lower price), whether the decision-making task is a joint or separate evaluation.

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

Experiment 1

Objective: the objective of Experiment 1 is to test H1, namely, temporal distance will influence consumer choice in products with better comparable attributes or products with better enriched attributes. In a purchase with nearer temporal distance, consumers will choose products with better comparable attributes more than products with better enriched attributes (H1a); in a purchase with farther temporal distance, consumers will choose products with better enriched attributes more than products with better comparable 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 a scheme with better comparable attributes (lower price) or enriched attributes (better brand).

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 LCD TV and laptop. Two options are provided for each product for the subjects to make a choice: one option is the product with better comparable attributes (lower price); the other option is the product with better enriched attributes (better brand); taking the LCD TV as the example, the product with better comparable attributes is described as CHIMEI, 42 inches, LED, noise suppression/surround speakers/LCD TV, \$20,888; the product with better enriched attributes is described as TOSHIBA, 42 inches, Full HD LED, 720-degree three-dimensional color gamut/LCD TV, \$30,900.

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. Taking the LCE TV as the example, at the beginning of the experiment, subjects in the group with near temporal distance are told "Please imagine that you would like to buy a TV set at the present time, assuming the two options below, which one would you like to choose, please?". Then, the subjects make a choice from 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, "regarding the above decision-making, in your opinion, the temporal distance for purchase is ____ now." A Likert five-point scale was used for measurement, ranging from 1 (very near) to 5 (very far).

Results: in this part of the operation and test, regarding the group with near temporal distance ($n=100$), the average number of perception of temporal distance is $M_{near}=1.67$ ($SD_{near}=.87$); regarding the group with far temporal distance ($n=100$), the average number of perception of temporal distance is $M_{far}=3.97$ ($SD_{far}=.88$). The statistical test results showed that the operation of temporal distance is successful ($t(198)=-18.5$; $p<.001$). 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 comparable attributes is 72% ($n=72$), while the proportion of choosing the options with better enriched attributes is 28% ($n=28$) (72% vs. 28%; $p<.001$). In the group with far temporal distance ($N=100$), the proportion of choosing the options with better comparable attributes is 17% ($n=17$), while the proportion of choosing the options with better enriched attributes is 83% ($n=83$) (17% vs. 83%; $p<.001$).

The statistical test results showed that different temporal distance will significantly influence the chosen options ($\chi^2(1)=61.241$; $p<.001$). Therefore, H1, H1a, and H1b are supported.

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

Experimental stimulation (product type)	Temporal distance	Chosen Proportion		χ^2
		Options with better comparable attributes	Options with better enriched attributes	
LCD	Near (N=50)	70% (n=35)	30%(n=15)	23.188*
	Far (N=50)	22%(n=11)	78%(n=39)	
Laptop	Near (N=50)	74%(n=37)	26%(n=13)	39.208*
	Far (N=50)	12%(n=6)	88%(n=44)	
Total	Near (N=100)	72%(n=72)	28%(n=28)	35.795*
	Far (N=100)	17%(n=17)	83%(n=83)	

* $p<0.001$.

Experiment 2

Objective: the objective of Experiment 2 is to test H2 in the plan of the second year, namely, temporal distance and decision-making task will reciprocally influence consumer choice in products with better comparable attributes or products with better enriched attributes. In a purchase with nearer temporal distance, when the decision-making task is a joint evaluation, it is expected that consumers will choose products with better comparable attributes (lower price) more than products with better enriched attributes (better brand); when the decision-making task is a separate evaluation, consumers will choose products with better enriched attributes (better brand) more than products with better comparable attributes (lower price)(H2a). In a purchase with farther temporal distance, consumers will prefer products with better enriched attributes (better brand) more than products with better comparable attributes (lower price) (H2b), whether the decision-making is a joint or separate evaluation.

Design: Experiment 2 adopted the intergroup experimental design with 2 (temporal distance: near vs. far) \times 2 (decision-making task: joint evaluation vs. separate evaluation) groups. The independent variable of the experiment is temporal distance and decision-making task, and the dependent variable is the proportion that subjects choose schemes with better comparable attributes (lower price) or enriched attributes (better brand) in the choice set.

Subjects: the experimental subjects were college students who were allocated at random into the four experimental conditions; each group had 50 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 purchase problem of a computer screen. Two options are provided to the subjects to make a choice or evaluation: one option is a product with better comparable attributes (lower price), which is described as CHIMEI, 22 inches, LED, computer screen with digital analog dual input interface, \$5,688; the other option is a product with better enriched attributes (better brand), which is described as DELL, 22 inches, multi-touch, 5-millisecond quick reaction, HDMI computer screen, \$8,490.

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 the temporal distance is near and the decision-making model is a joint evaluation are told "Please imagine that you would like to buy a set of computer screen at the present time, and assuming the two options below, and which one would like to choose, please?"; the subjects in the group where the temporal distance is near and the decision-making model is a separate evaluation are told that "Please imagine that you would like to buy a computer screen, regarding the following products, your purchase possibility is ____.". A Likert 7-point scale was adopted to measure the purchase possibility, respectively from very possible to very impossible.

After the subjects complete the evaluation of the first product, subjects are required to complete an irrelevant task, in order to remove the influence of the evaluation of the first product on the evaluation of the second product. Regarding this task, subjects are required to find the eight differences in two pictures, and then the evaluation for the second product is carried out. In order to ignore the order effect, 25 subjects out of 50 in this group firstly evaluate CHIMEI and then evaluate DELL; another 25 subjects carry out the evaluation in a contrary order. The subjects in the group where the temporal distance is far and decision-making model is a joint evaluation are told "Please imagine that you would like to buy a set of computer screen one year later, and assuming that there are the two options below, which one would you choose?"

The subjects in the group where the temporal distance is far and decision-making model is a separate evaluation are told "Please imagine that you would like to buy a set of computer screen one year later, regarding the following products, your purchase possibility is ____." A Likert 7-point scale was adopted to measure the purchase possibility, including very possible to very impossible. After subjects complete the evaluation of the first product, subjects are required to complete an irrelevant task, in order to remove the influence of the evaluation of the first product on the evaluation of the second product. Regarding this task, subjects are required to find the eight differences in the two pictures, and then the evaluation for the second product is carried out. In order to ignore the order effect, 25 subjects out of 50 in this group firstly evaluate CHIMEI and then evaluate DELL; another 25 subjects carry out the evaluation in a contrary order. The subjects in the four groups are required to fill in one item regarding the operation and test after completing the choice or evaluation, namely, "regarding the above decision-making, in your opinion, the temporal distance for purchase 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 testing, regarding the group with near temporal distance ($n=100$), the average number of perceptions of temporal distance is $M_{near}=1.62$ ($SD_{near}=.73$); regarding the group with far temporal distance ($n=100$), the average number of perceptions of temporal distance is $M_{far}=4.01$ ($SD_{far}=.85$). The statistical test results showed that the operation of temporal distance is successful ($t(198)=-21.139$; $p<.001$). In a separate evaluation model, when the purchase possibility of one product evaluated by subjects is higher than another product, it is deemed that subjects choose this product. The experimental results are as shown in Table 2. In order to test whether temporal distance and the decision-making model will reciprocally influence subjects choice between products with better comparable attributes and enriched attributes, researchers adopted the method of hierarchical log-linear, and the result showed that there exists an interaction effect between temporal distance, decision-making model, and choice ($\chi^2(1)=28.251$; $p<.001$).

In the group with near temporal distance ($N=100$), in the joint evaluation model ($n=50$), the proportion of choosing the options with better comparable attributes is 78% ($n=39$), while the proportion of choosing the options with better enriched attributes is 22% ($n=11$) (78% vs. 22%; $p<.001$). In the separate evaluation model ($n=50$), the proportion of choosing the options with better comparable attributes is 16% ($n=8$), while the proportion of choosing the options with better enriched attributes is 84% ($n=42$) (16% vs. 84%; $p<.001$) ($\chi^2(1)=38.579$; $p<.001$). In the group with far temporal distance ($N=100$), in the joint evaluation model ($n=50$), the proportion of choosing the options with better comparable attributes is 14% ($n=7$), while the proportion of choosing the options with better enriched attributes is 86% ($n=43$) (14% vs. 86%; $p<.001$); in the separate evaluation model ($n=50$), the proportion of choosing the options with better comparable attributes is 26% ($n=13$), while the proportion of choosing the options with better enriched attributes is 74% ($n=37$) (26% vs. 74%; $p<.005$) ($\chi^2(1)=2.25$; $p=.134$). The statistical test results showed that temporal distance and decision-making model will reciprocally influence the choice between products with better comparable attributes and enriched attributes. In a purchase with nearer temporal distance, consumers will prefer products with better comparable attributes (compared with products with better enriched attributes) in the joint evaluation, and prefer products with better enriched attributes (compared with products with better comparable attributes) in the separate evaluation. In a purchase with farther temporal distance, consumers will prefer products with better enriched attributes, whether it is a joint evaluation or separate evaluation. Therefore, H2, H2a, and H2b are supported.

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

	Chosen Proportion Options with better comparable attributes	Temporal distance Options with better enriched attributes	Decision-making Model
Joint evaluation (n=50)	78% (n=39)	22% (n=11)	Near (N=100)
Separate evaluation (n=50)	16% (n=8)	84% (n=42)	
Joint evaluation (n=50)	14% (n=7)	86%(n=43)	Far (N=100)
Separate evaluation (n=50)	26% (n=13)	74%(n=37)	

* $p < 0.001$. vs.

Discussion

This research discussed the influence of temporal distance on consumer choice behavior, and focused on the influence of temporal distance on consumer tradeoff between comparable attributes (such as price) and enriched attributes (such as brand), demonstrating that, in a purchase with nearer temporal distance, the weight of comparable attributes will be increased and consumers will prefer products with better comparable attributes; in a purchase with farther temporal distance, the weight of enriched attributes will be increased and consumers will prefer products with better enriched attributes. This is maybe because comparable attributes (such as price) are relatively precise, unambiguous, and quantitative, namely, it is relatively more concrete; while enriched attributes (such as brand) are relatively imprecise, ambiguous, and non quantitative, implying diversified connection, belief, and experience, namely, it is relatively more abstract. Moreover, when the temporal distance is nearer, consumers will choose a relatively safe product due to the expected pain when the purchase goal cannot be achieved; when the temporal distance is farther, it is expected that consumers will choose a relatively desirable product in the mind due to the expected pleasure when the purchase goal is achieved. The comparable attributes are relatively concrete and safe, as compared with enriched attributes, while enriched attributes are relatively abstract and desirable, as compared with comparable attributes. Therefore, in a purchase with nearer temporal distance, consumers tend to choose products with better comparable attributes, while in a purchase with farther temporal distance; consumers tend to choose goods with better enriched attributes.

Moreover, in a purchase with nearer temporal distance, consumers will prefer the "should" decision, while in a purchase with farther temporal distance, consumers will prefer the "want" decision. As a "should" decision is about which scheme "should" be chosen in consumers' mind, and comparable attributes are more precise, unambiguous, and quantized, comparable attributes will have the higher weight in a "should" decision, thus, in a purchase with nearer temporal distance, consumers tend to choose the scheme with better comparable attributes. The "want" decision is about which scheme consumers want to choose in their mind. At this time, the enriched attributes will have a higher weight in the "want" decision. Therefore, in a purchase with farther temporal distance, it is expected that consumers will choose schemes with better enriched attributes.

This research also considered the influence of temporal distance and decision-making task (joint or separate evaluation) on consumer tradeoff between comparable attributes and enriched attributes. In a purchase with nearer temporal distance, the decision-making task will influence consumer tradeoff between comparable attributes and enriched attributes. When the decision-making is a joint evaluation model, products with comparable attributes have the higher weight, thus, consumers will choose products with better comparable attributes; when decision-making is a separate evaluation model, products with enriched attributes have the higher weight, thus, the purchase of products with better enriched attributes may have the higher score. However, in a purchase with farther temporal distance, consumers tend to choose products full of hope and eagerness. Therefore, consumers will choose products with better enriched attributes more than products with better comparable attributes, whether it is a joint evaluation or separate evaluation model.

In conclusion, it can be exactly known that, as the temporal distance increases and consumers' purchase changes from nearer temporal distance to farther temporal distance, the weight owned by price will gradually reduce, while the weight owned by brand will gradually increase, namely, in a purchase with nearer temporal distance, consumers are more practical and comparison-based, and are determined by external factors; in a purchase with farther temporal distance, consumers are intrapsychic and are determined by the inner mind. This research has enriched the theoretical literature regarding the influence of temporal distance on consumer choice, and has deep contribution.

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