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Flavor Themselves? or the Differentiation of Them? in Variety Perception of Product Assortment: Focused on Moderating Effects of Regulatory and Thinking Style

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ABSTRACT

This study deals with the impact of the degree of differentiation of product assortment on consumer's perception of variety. For an experiment, the composition of product assortment was defined as a brand and a flavor, and the degree of differentiation was manipulated high for the former and low for the latter. In a product category where the brand only is differentiated, numbers of product assortment (Brand, Flavor) were provided differentially (3, 6 and 9), and the level of consumer's perception of variety was measured, and it was examined whether the perception of variety increased up to the number of increased product assortment. In addition, it was checked whether the perception of variety would be adjusted according to consumer's regulatory focus (Promotion vs. Prevention) and thinking style (Holistic vs. Analytic). As a result of the research, perception of variety increased only with a well-differentiated brand, when the number of brands × flavors increased, but it did not increase when only the number of flavors increased, which showed that differentiation would have a major impact on the perception of variety. In addition, in a category with high brand differentiation and low flavor differentiation, the perception of variety was influenced more by the moderating effect of thinking style than by that of regulatory focus. This is a result contrary to that of existing research that an increase of the number of flavors increases the perception of variety unconditionally while regulatory focus controls the perception of variety. The reason is that this study considered 'flavor uniqueness' as the key factor affecting the perception of variety, and was manipulated contrary to the research. This study suggests that when a distributor like a convenience store that should provide a high perception of variety in a small space in its business establishes a product assortment strategy, it should understand which domain in the target product categories is at a higher level of differentiation, brand or flavor, from hands-on worker and should increase the assortment of the product with better differentiation.

Keywords: Product Assortment, The Perception of Variety, Uniqueness Effect, Regulatory Focus, Thinking Style.

1. INTRODUCTION

Recently, with the expansion of the distribution industry, a lot of convenience store has entered in every alley. Convenience stores occupy good spots, have high rent and small shop scale, so strategically, they should provide a variety enough to attract customers visiting the store. However, since consumers perceive the variety of product assortment instead of the actual number of items, this is not a simple problem. For example, suppose that you are the owner of a convenience store. If you could not but display five kinds of canned coffee on the beverage shelf, based on what criteria would you choose the five out of dozens of canned coffee? You had five kinds of famous canned coffee with a similar flavor but a different brand, while a convenience store across the street displayed five kinds with different flavor from one famous brand. Then, which store would a consumer, who would like to buy canned coffee, feel has more diverse canned coffee, your store and the store across the street? Would it differ depending on the consumer's disposition? Like this, this study deals with what makes consumers feel product assortment diverse and what disposition the difference in their variety perception depends on. For small retailers including convenience store, which should provide a great variety with the minimum number of items in a small space, this study would have a high value to use in their business. Preceding studies on the perception of variety make a common conclusion that the perception of variety has impacts on consumer behaviors: e.g., consumer's selection of a store, satisfaction and consumption. Mostly tangible and physical attributes were suggested as precedent variables affecting the perception of variety (presence of the most favorite item, space allotted to a category, number of product units in stock and display method, etc.) (Kahn & Wansink, 2004; Van Herpen & Pieters, 2002; Hoch, Bradlow & Wansink, 1999; Broniarczyk, Hoyer & Mcalister, 1998). In contrast, as studies on intangible factors related to consumer's perception, (Alexander, 2012; Morales, Kahn, Mcalister & Broniarczyk, 2005; Herpen & Pieters, 2000) carried out a study on consumer's familiarity with product category and Sanjay and William (2010) researched product assortment — they found the conclusion that consumer's perception of variety varied depending on brand uniqueness among brand and flavor —, but as compared with studies on physical characteristics, those on intangible factors are very rare. We would like to study more deeply about the product assortment uniqueness as precedent variables affecting the perception of variety. In other words, not simply the number of products increases the perception of variety but product assortment is unique and differentiated highly. Sanjay and William (2010) applied the uniqueness theory to the research area of the perception of variety for the first time to study the impact of brand uniqueness on the perception of variety. They experimented on how the perception of variety would differ depending on regulatory focus when the numbers of brands and flavors were increased. They experimented in a product category (ice cream) with high differentiation in both brand and flavor and considered the level of brand differentiation only, not that of flavor differentiation. However, we argue that the level of flavor differentiation (uniqueness) also impacts on the perception of variety. Since their result could not be applied to all product categories in the same way and there are a lot of products with a high degree of brand differentiation and a low degree of flavor differentiation in the actual market (e.g. Beer, Cola), the author thought that it would be necessary to look into such product categories separately. Therefore, this study attempts to inquire into how the consumer's perception of variety increases in each case and what difference there are according to consumer's regulatory focus and thinking style when the

number of product assortments (brand, flavor and brand \times flavor) increases, under conditions with high brand differentiation and low flavor differentiation.

2. THEORETICAL BACKGROUND AND HYPOTHESIS

Role of Uniqueness in Perception of Variety

Sanjay and William (2010) applied the uniqueness theory to the research area of the perception of variety for the first time to study the impact of brand uniqueness on the perception of variety. They described that differentiation would be necessary as a prerequisite of perception, with an example of a preceding study that a man can perceive an object not because of the object itself, but because of differentiation or distinction between objects and that if we are exposed to many stimuli, we will selectively perceive sub-elements and perceive a difference first (McGuire, 1984). In addition, they described the relationship between brand uniqueness and differentiation with the results of preceding studies on brand uniqueness that since brand researchers supported the necessity of uniqueness for each brand since similarity between brands might confuse consumers (Keller, 1993) and that the more unique a brand, the higher the degree of brand differentiation becomes (Sujan & Bettman, 1989). Through this, it is inferred that the uniqueness of an object creates differentiation, which allows us to perceive the object. To understand brand uniqueness, understanding its composition is necessary. A brand consists of tangible attributes and intangible associations existing in memory as a central concept or node denoting the brand and a set of associations linked with the node, such as product experiences, advertising messages, attribute information and so on (Keller, 1998). Joining visible product attributes with corporate branding activities produces brand uniqueness (Hoeffler & Keller, 2003), according to which, each brand has different uniqueness. Sanjay and William (2010) said that the abstract part of a brand is associated with a consumer regulatory focus, so brand uniqueness and variety are differently perceived in the consumer's mind. Their important research results are as follows: (1) If the number of brands increases, the variety perceived by promotion-focused consumers will increase while that of a prevention-focused ones will not; (2) If the number of flavors increases, the perception of variety will increase regardless of regulatory focus of the consumer; (3) If the number of brands increases in a product category with high brand differentiation, the variety perceived by promotion-focused consumers will increase while that of prevention-focused ones will not; and (4) An increase of the number of brands in a product category with low brand differentiation does not affect the perception of variety, regardless of regulatory focus. In sum, a consumer cannot perceive variety even if the number increases, unless a brand is unique, because of conceptual, perceptual attributes of the brand. They suggested that since the perception of variety of a brand differs by regulatory focus, product assortment should be expanded so that a high variety of flavors can be perceived, regardless of regulatory focus (Sanjay & William, 2010; Susan, 2006). The author agrees that uniqueness leads to differentiation, which ultimately arouses perception, so its role in the perception of variety is crucial. However, it is judged that flavor uniqueness, another composition of product assortment, should be considered together. Since a flavor, like the structure of a brand, consists of visible attributes (ingredients, materials) and invisible associations (the state of mind felt by a consumer through five senses), like brand creates uniqueness and brand differentiation differs depending on the product category, flavor would create uniqueness and flavor differentiation would differ depending on the product category. Accordingly, like brand uniqueness, flavor uniqueness, too, is very likely to affect the perception of variety in product assortment. This study established two axes, brand and flavor as intangible

factors affecting the perception of variety, and presupposed a key assumption of a condition with a different stimulus from that in the existing studies used to examine if flavor uniqueness would affect the perception of variety, that is, ‘high brand differentiation and low flavor differentiation’ [Figure 14.1]. In fact, in the preliminary research of this study, it turned out that the degree of ice cream flavor differentiation was higher than that of coffee flavor differentiation Table 14.2. Like this, in the product category under a different condition, the consumer’s perception of variety would be different from the existing studies. Since there have been many studies that high differentiation would lead the perception of variety (Keller, 1993; Sujan & Bettman, 1989; McGuire, 1984), this study predicted that the perception of variety would increase with a brand with high differentiation or with increasing number of brand × flavor and that the diversity would not be perceived if only the number of flavors with low differentiation increased.

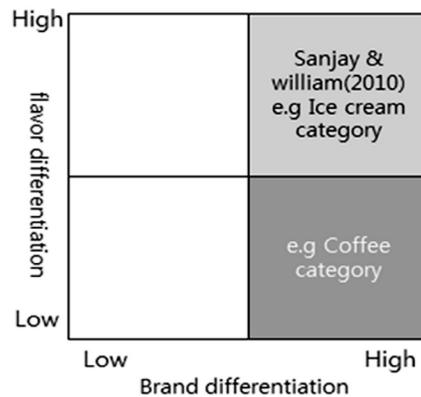


Figure 14.1: Brand-Flavor Differentiation Matrix

H1(a): If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer’s perception of variety will increase as the number of brands increases.

H1(b): If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer’s perception of variety will not increase even if the number of flavors increases.

H1(c): If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer’s perception of variety will increase as the number of brands × flavors increases.

Regulatory Focus Theory

The regulatory focus theory was made by supplementing the self-discrepancy theory, a concept describing the focus and approach that individuals control their behaviors to achieve their goal. According to the theory, the focus of an individual is classified into promotion focus or prevention focus (Yeo & Park, 2006; Higgins, 1998). Promotion focus is related to approach motive to pursue pleasure and obtain a positive result, while prevention focus relates to avoidance motive to avoid displeasure and prevent a negative result. In this background, two regulatory focuses have differences in error, criterion, thinking style, and validity of information used. *First*, there is a difference in the error to avoid between the two regulatory focuses. Since promotion-focused individuals want to achieve their desire (Higgins, 1998), they make efforts not to make an omission error by any change to choose the right alternative (Pham & Higgins, 2005). Prevention-focused individuals have a tendency to be on their guard to secure safety, aim to refuse a wrong alternative (Higgins, 1998), and make efforts to avoid commission error (Pham & Higgins, 2005).

Second, there is a difference in the number of criteria used to classify an object between the two regulatory focuses. Crowe and Higgins, (1997) found that (1) promotion-focused individuals would be very likely to classify a given object using various criteria while prevention-focused individuals, using fewer criteria. They also found that (2) when they were asked to describe a series of objects, promotion-focused individuals would be very likely to describe more properties than prevention-focused ones when they saw the same objects. It can be expected that if this was applied to the perception of variety of a product consisting of brand and flavor, promotion-focused consumers would use both criteria, brand and flavor while prevention-focused consumers would choose one of the two (Sanjay & William, 2010). **Third**, there is a difference in the information used by the two regulatory focuses. Pham and Avnet (2004) in their study, found that promotion-focused individuals would depend on information with a slightly less validity while prevention-focused consumers, that with high validity. It is expected that promotion-focused consumers would judge an increase of variety considering both brands with high differentiation and brand \times flavor while prevention-focused consumers, considering only brands with high differentiation. In other words, if the number of brands increases, the varieties will increase in both promotion-focused consumers and prevention-focused consumers, and if the number of flavors increases, the perception of variety will not increase in the two regulatory focuses. If the number of brands \times flavors increases, the variety perceived by promotion-focused consumers will increase while that by prevention-focused consumers will not. Based on the above, Hypotheses 2, 3 and 4 were set up.

H2: If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands increases, regardless of regulatory focus.

H3: If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will not increase even if the number of brands increases, regardless of regulatory focus.

H4(a): If the degree of brand differentiation is high and that of flavor differentiation is low, the variety perceived by promotion-focused consumers will increase as the number of brands \times flavors increases.

H4(b): If the degree of brand differentiation is high and that of flavor differentiation is low, the variety perceived by prevention-focused consumers will not increase even if the number of brands \times flavors increases.

Thinking Style

Thinking style is a concept discussed in earnest in the 2000s by Nisbett, Peng, Choi, Incheol, Norenzayan and Ara, which refers to two distinct ones caused by the difference between the Eastern and Western culture. Ji, Peng, Nisbett, (2000) classified thinking style into holistic thinking and analytic thinking. According to folklorists, orientals see the world from a holistic perspective while westerners see the universe from an independent and separate analytic perspective (Yoon, Peon and Kim, 2012). Thinking style is caused by the social and cultural environments men have experienced, and the social and cultural environments affect individual cognitive processes, which in turn affect the thinking style (Masuda and Nisbett, 2001). Thus, to understand thinking style, understanding of the Eastern and Western cultural differences should precede. The Eastern culture maintains and attaches importance to social relationships while the Western culture relies on social relationships less and has individualist society and culture, which are conflicting

with each other. In these cultures, individual thinking style takes on a tendency of holistic thinking in the Orient while it takes on that of analytic thinking in the West. Masuda and Nisbett (2001) in their study stated that orientals look at the whole field, infer causal relations, make relatively less logical categorization and depend on dialectic while westerners are more analytical, are interested in objects first, categorize them using rules including formal logic to understand the behaviors of the objects. Based on preceding studies, the properties of the tendency of holistic thinking may be summarized as follows: Holistic thinkers focus on the backgrounds or the relationships between objects and their backgrounds in looking at the objects. Based on such relationships or circumstances, they describe and predict events or objects. They infer with the interactions among many variables and are context- or field-dependent. In judging similarity, they tend to make the final decision with the whole external similarity. In contrast, the properties of the tendency of analytic thinking are as follows: When analytic thinkers look at objects, they focus on the focal objects themselves rather than their fields or relationships. They describe or predict things using the rules or properties of the focal objects. They infer things with the attributes of the objects themselves and are field-independent. In categorization or the judgment of similarity, they tend to do based on rules instead of the whole external similarity (Nisbett et. al., 2001). In fact, this system of thinking is deeply related to cultural phenomena, so it is known that East Asian cultures have more holistic thinkers while Western cultures including European cultures have more analytic thinkers, which has been proven through preceding studies. There have been a few studies to predict the relationship between regulatory focus and thinking style. It is reported that promotion-focused messages are a more effective messaging strategy in the U.S. market with more promotion-focused consumers while prevention-focused messages are a more effective one in the Asian market with more prevention-focused consumers (Higgins, Idson, Freitas, Spiegel & Molden, 2003). Considering the existing studies that the Western cultures have more analytic thinkers while the Eastern cultures, more holistic thinkers, it is found that in the West, promotion-focused disposition matches with an analytic thinker while in the Orient, prevention-focused one, with a holistic thinker. In contrast, according to Zhu and Meyers (2007) and Friedman and Forster (2001) and promotion-focused individuals have holistic and relationship-oriented thinking while prevention-focused individuals have analytic and item-focused thinking. This is a result opposed to the former, and there is no theory that definitively describe the relationship between regulatory focus and thinking style. However, this study would follow the latter. Holistic thinkers infer one result with various reasons, even though the information is not accurate and tend to connect an event even with a seemingly unrelated situation. The promotion-focused disposition is based on less relevant information and has a flexible and less stringent tendency accepting all alternatives. It was predicted that holistic thinkers share the same context with promotion-focused consumers in their perception of variety in such a context. In that both analytic thinkers and prevention-focused consumers have a conservative tendency to dislike incorrect things and use more rigorous and logical information, it can be expected that they would show the same tendency in perceiving variety. Therefore, this study judged that the moderating effect of regulatory focus as above would show a similar result in the effect of thinking style as the same logic might apply, and set up Hypotheses 5, 6 and 7 as follows:

H5: If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands increases, regardless of thinking style.

H6: If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will not increase even if the number of flavors increases, regardless of thinking style.

H7(a): If the degree of brand differentiation is high and that of flavor differentiation is low, a holistic thinker's perception of variety will increase as the number of brands \times flavors increases.

H7(b): If the degree of brand differentiation is high and that of flavor differentiation is low, an analytic thinker's perception of variety will not increase even if the number of brands \times flavors increases.

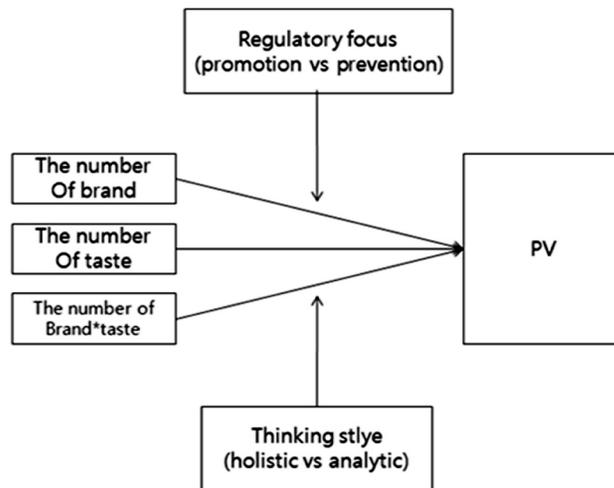


Figure 14.2: Research Model

3. METHODOLOGY

Experimental Design

This study chose a design of factors between the subjects of 3 (No. of Flavor: 3, 6, 9) \times 3 (No. of Brand: 3, 6, 9) \times 2 (Regulatory Focuses: Promotion Focus vs. Prevention Focus) \times 2 (Thinking Styles: Holistic vs. Analytic).

Stimulus Development and Preliminary Research

Product suitable for this study should meet the following criteria: (1) It is a product relatively well-known among the study participants; (2) There are more than nine brands and flavors in the product group; (3) The level of differentiation between brands is high; and (4) The level of differentiation between flavors is low. Considering these criteria, canned coffee was selected as a stimulus. The brands used in this study were actual canned coffee brands, which were long distributed and well-known. For flavors, since the names of flavor provided by the canned coffee brands were all different and most of the number was fewer than nine, coffee shop menus (e.g. Americano, Cafe Latte and Cafe Mocha, etc.) by which the same flavor the subjects could come up with were selected as a stimulus of flavor. The selected nine brands and nine flavors were combined into 3, 6 and 9, the following nine stimuli were developed by making up virtual products Table 14.1.

To verify if the stimuli would be suitable for the purpose of this study, preliminary research was conducted, and the result is as follows Table 14.2. The question is, "How do you think the taste of the above ice cream (coffee) is similar to each other?" If it was very similar, I would answer it by 7 points. It was found that the stimuli selected in this study met all four conditions presented, and that there was a significant difference in the degree of flavor differentiation with those in existing studies.

Table 14.1
Stimuli

Number of Brand	Number of flavor		
	3	6	9
3	Let'be-Americanano	Let'be-Americanano	Let'be-Americanano
	Let'be-Cappuccino	Let'be-Cappuccino	Let'be-Cappuccino
	Let'be-Cafe Mocha	Let'be-Cafe Mocha	Let'be-Cafe Mocha
	Starbucks-Americanano	Starbucks-White Mocha	Starbucks-White Mocha
	Starbucks-Cappuccino	Starbucks-Hazelnut	Starbucks-Hazelnut
	Starbucks-Cafe Mocha	Starbucks-Caramel	Starbucks-Caramel
	Santa Fe-Americanano	Macchiato	Macchiato
	Santa Fe-Cappuccino	Santa Fe-Americanano	Santa Fe-Cafe Latte
	Santa Fe-Cafe Mocha	Santa Fe-Cafe Mocha	Santa Fe-Espresso
6	Let'be-Americanano	Let'be-Americanano	Let'be-Americanano
	Starbucks-Cappuccino	Starbucks-Cappuccino	Starbucks-Cappuccino
	Santa Fe-Cafe Mocha	Santa Fe-Cafe Mocha	Santa Fe-Cafe Mocha
	Georgia-Americanano	Georgia-White Mocha	Georgia-White Mocha
	TOP-Cappuccino	TOP-Hazelnut	TOP-Hazelnut
	French Cafe-Cafe Mocha	French Cafe-Caramel	French Cafe-Caramel
	Let'be-Americanano	Macchiato	Macchiato
	Santa Fe-Cappuccino	Let'be-Cafe Mocha	Let'be-Cafe Latte
	TOP-Cafe Mocha	Santa Fe-Hazelnut	Santa Fe-Espresso
9	Let'be-Americanano	Let'be-Americanano	Let'be-Americanano
	Starbucks-Cappuccino	Starbucks-Cappuccino	Starbucks-Cappuccino
	Santa Fe-Cafe Mocha	Santa Fe-Cafe Mocha	Santa Fe-Cafe Mocha
	Georgia-Americanano	Georgia-White Mocha	Georgia-White Mocha
	TOP-Cappuccino	TOP-Hazelnut	TOP-Hazelnut
	French Cafe-Cafe Mocha	French Cafe-Caramel	French Cafe-Caramel
	Cantata-Americanano	Macchiato	Macchiato
	Maxwell House-Cappuccino	Cantata-Americanano	Cantata-Cafe Latte
	Hollys-Cafe Mocha	Maxwell House-Cafe Mocha	Maxwell House-Espresso
	Hollys-Hazelnut	Hollys-Affogato	

Table 14.2
Result of Pretest

		<i>M</i>	<i>N</i>	<i>R</i>	<i>t</i>	<i>P</i>
Pair 1	Ice cream flavor	1.7143	56	.276	-13.804	.000**
	Coffee flavor	4.5	56			
Pair 2	Coffee brand	2.1250	56	-.005	-9.029	.000**
	Coffee flavor	4.5	56			

Experimental Procedure

This experiment was conducted with a two-page questionnaire on 256 undergraduate and graduate students, and the study participants were randomly assigned to a manipulated regulatory focus and a stimulus. The

items of questionnaire consist of presentation of a task to warm up the regulatory focus, presentation of the stimulus, measurement of the perception of variety, manipulation check of the regulatory focus, measurement of thinking style and demographic questions.

Variable Measurement

Perception of Variety

Seven items, ‘This shop has a variety of coffee’, ‘I don’t think that coffee in this shop is diverse’, ‘The coffee in this shop is diverse enough for me to feel a pleasure to pick’, ‘The range of selection of coffee provided by this shop is suitable for me’, ‘The coffee in this shop is diverse’, ‘This shop does not have enough coffee’, ‘The range of choice of coffee provided by this shop is enough for me’ were presented to measure the perception of variety by modifying the measurement items developed by Sanjay and William (2010) on a 7-point Likert scale according to the degree of agreement.

Regulatory Focus

As for regulatory focuses, promotion focus and prevention focus, were induced using priming task for warm-up. To set off promotion focus, respondents were asked to list three experiences within three years, regarding ‘desire’, ‘hope’, ‘achievement’ and ‘interest.’ To set off prevention focus, they were asked to describe three experiences within three years, regarding ‘obligation’, ‘responsibility’ and ‘loss.’ According to existing studies, this warm-up work is known to induce respondents’ regulatory focus to one direction in the short term (Liverman, idson, Camacho & higgins, 1999)

Table 14.3
Manipulation check

	<i>M</i>		<i>N</i>	<i>R</i>	<i>t</i>	<i>P</i>
	<i>Promotion manipulation question</i>	<i>Prevention manipulation question</i>				
Promotion	4.97	3.40	131	.303	10.529	.000**
Prevention	3.14	4.22	125	.632	-9.483	.000**

Thinking Style

Nine questions, including ‘Everything is connected to a certain degree’, ‘A very little change in the whole may change other factors substantially’ and ‘All phenomena are made up of numerous causes’ were presented and thinking style was measured according to the degree of agreement on a 7-point Likert scale by modifying the measurement items developed by Choi, Dalal, Kim-Prieto & Park (2003).

4. EMPIRICAL ANALYSIS

Validity and Reliability

This study consisted of multi-items, carried out a factorial analysis to test the validity of measurement items and a reliability analysis using Cronbach’s alpha to measure internal consistency between surveys. Each

measurement item was extracted by one factor, and it turned out that internal consistency was maintained: the reliability of measurement items (7) for the perception of variety was .928 while that of measurement items (9) for thinking style was .820.

Manipulation Check

As a result of a *t*-test on the manipulation check of regulatory focus, the manipulation of regulatory focus through warm-up method turned out to be successful. Promotion focus was checked with the question, “How much did you think of ‘achievement’ and ‘success’ while participating in the survey?” while prevention focus was checked with the question, “How much did you think of ‘failure’ and ‘negative result’ while participating in the survey?” Respondents warmed up with promotion focus showed $M_{\text{promotion focus check question}} = 4.97 < M_{\text{prevention focus check question}} = 3.40$, which showed higher average in promotion focus check question compared to prevention focus check question, and it was significant with $T = 10.529, p < 0.05$. Respondents warmed up with prevention focus showed $M_{\text{promotion focus check question}} = 3.14 < M_{\text{prevention focus check question}} = 4.22$, which showed higher average in prevention focus check question compared to promotion focus check question, and it was significant with $T = -9.483, p < 0.05$. The results are shown in Table 14.3.

Results

This study set up Hypothesis 1 to examine the main effect between product assortment and perception of variety. For validation, the hypothesis was divided into sub hypotheses number of brands, number of flavors, and brand \times number of flavors, and regression analysis was performed for each. As a result of the analysis, perception of variety increase with increasing number of brands was significant at the level of significance of 0.05, $\beta = .325, R^2 = .106$, and hypothesis 1-1 was supported. The increase in perception of variety with increasing number of flavors was not significant, at significance level 0.05 at $\beta = -.005$ and $R^2 = .106$, and hypothesis 1-2 was supported. The increase in perception of variety with increasing brand \times number of flavors was significant at level of significance 0.05, $\beta = .608$ and $R^2 = .133$, and hypothesis 1-3 was supported Table 14.4. This shows that the respondents utilize well-differentiated brands as evaluation criteria to perceive variety while simultaneously considering ‘brand’ or ‘brand and flavor’, and that flavors with low degree of differentiation are not used as evaluation criteria for perception of variety. This signifies that in perception of variety in consumers, the role of differentiation of assortment of products is very important rather than the brand or flavor itself.

For the moderating effect of regulatory focus, it was predicted that if degree of brand differentiation is high and degree of flavor differentiation is low, consumer perception of variety would increase with increased number of brands regardless of regulatory focus. As a result of regression analysis, as shown in Table 14.5, both promotion-focused consumers ($\beta = .288, R^2 = .083, p < 0.05$) and prevention-focused consumers ($\beta = .367, R^2 = .134, p < 0.05$) showed increases in perception a variety with the increase of number of brands, and Hypothesis 2 was supported.

In Hypothesis 3, it was predicted that if degree of brand differentiation is high and degree of flavor differentiation is low, the perception of variety would not increase with increase in number of flavors regardless of regulatory focus. As a result of regression analysis, as shown in Table 14.6, both promotion-

focused consumers ($\beta = .156, R^2 = .024, p > 0.05$) and prevention-focused consumers ($\beta = -.139, R^2 = .019, p < 0.05$) showed no increase in perception of variety with increase of number of flavors, and Hypothesis 3 was supported. This signifies that consumers do not perceive diversity based on flavor, regardless of regulatory focus, in the absence of differences in flavor uniqueness.

In Hypothesis 4, it was predicted that there would be differences in perception of variety according to regulatory focus with increase of brand \times number of flavors. As a result of testing, as shown in Table 14.7, both promotion-focused consumers ($\beta = .344, R^2 = .118, p < 0.05$) and prevention-focused consumers ($\beta = .231, R^2 = .053, p < 0.05$) showed increase in perception of variety with an increase of brand \times number of flavors, and Hypothesis 4-1 was supported and Hypothesis 4-2 was rejected. Therefore, it was found that when the degree of brand differentiation is high and the degree of differentiation of flavor is low, the perception of variety of the consumer has no moderating effect according to the regulatory focus. The reason for rejection is predicted to be because prevention-focused consumers did not necessarily use only one piece of information to judge diversity, but rather used the minimum number of criteria within which the validity was met. However, since 'flavor' is important information in food and beverage categories, prevention-focused consumers seem to have judged diversity by complementing 'flavor' and 'brand' information without overlooking it. Therefore, perception of variety is thought to have increased when brand and number of flavors increased simultaneously.

The results of the hypothesis test for the moderating effect of the thinking style are as follows. It was predicted that, if the degree of brand differentiation is high and the degree of differentiation of flavor is low, the consumer's perception of variety will increase with the increase of number of brands regardless of thinking style. As a result of testing, as shown in Table 14.8, both holistic thinkers ($\beta = .340, R^2 = .115, p < 0.05$) and analytic thinkers ($\beta = .265, R^2 = .070, p < 0.05$) showed increases in perception of variety with increase of number of brands, and Hypothesis 5 was supported.

The result of testing of Hypothesis 6, where it was predicted that if degree of brand differentiation is high and degree of flavor differentiation is low, perception of variety will not increase with increase of the number of flavors regardless of thinking style, is as follows. As shown in Table 14.9, both holistic thinkers ($\beta = .049, R^2 = .002, p > 0.05$) and analytic thinkers ($\beta = -.111, R^2 = .012, p > 0.05$) showed no increases in perception of variety with increase of number of flavors, and Hypothesis 6 was supported. This signifies that consumers do not perceive diversity based on flavor, regardless of the thinking style, when there is no uniqueness difference in flavor.

It was predicted that there would be differences in perception of variety according to thinking style with the increase of brand \times number of flavors. It was predicted that holistic thinkers would perceive variety higher with increase of brand \times number of flavors, and it was predicted that analytic thinkers would not show differences in perception of variety, even with the increase of brand \times number of flavors. As a result of testing, as shown in Table 14.10, holistic thinkers ($\beta = .294, R^2 = .086, p < 0.05$) showed increases in perception of variety with increase in number of brand \times flavor but analytic thinkers ($\beta = .182, R^2 = .033, p > 0.05$) did not show increases, and Hypothesis 7-1 and Hypothesis 7-2 were supported. Therefore, it was found that when the degree of brand differentiation is high and the degree of differentiation of flavor is low, the perception of variety of the consumer has a moderating effect according to the thinking style.

Table 14.4
Result of H1

<i>Independent variable</i>	<i>Dependent variable</i>	<i>Non-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>R</i> ²	<i>F</i>	<i>P</i>
		<i>B</i>	<i>S.E</i>	β				
Number of brand	Variety perception	.154	.028	.325	5.479	.106	30.022	.000**
Number of flavor	Variety perception	-.002	.030	-.005	-.077	.106	14.955	.939
Brand \times flavor		.033	.012	.608	2.834	.133	12.925	.005**

Table 14.5
Result of H2

<i>Regulatory focus</i>	<i>Non-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>R</i> ²	<i>F</i>	<i>P</i>
	<i>B</i>	<i>S.E</i>	β				
Promotion	.124	.036	.288	3.411	.083	11.632	.001**
Prevention	.179	.041	.367	4.369	.134	19.092	.000**

Table 14.6
Result of H3

<i>Regulatory focus</i>	<i>Non-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>R</i> ²	<i>F</i>	<i>P</i>
	<i>B</i>	<i>S.E</i>	β				
Promotion	.069	.038	.156	1.797	.024	3.230	.075
Prevention	-.076	.049	-.139	-1.553	.019	2.411	.123

Table 14.7
Result of H4

<i>Regulatory focus</i>	<i>Non-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>R</i> ²	<i>F</i>	<i>P</i>
	<i>B</i>	<i>S.E</i>	β				
Promotion	.017	.004	.344	4.158	.118	17.288	.000**
Prevention	.013	.005	.231	2.627	.053	6.903	.010**

Table 14.8
Result of H5

<i>Thinking style</i>	<i>Non-standardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	<i>R</i> ²	<i>F</i>	<i>P</i>
	<i>B</i>	<i>S.E</i>	β				
Holistic	.154	.036	.340	4.257	.115	18.120	.000**
Analytic	.129	.044	.265	2.925	.070	8.553	.004**

Table 14.9
Result of H6

Thinking style	Non-standardized coefficients		Standardized coefficients	t	R ²	F	P
	B	S.E	β				
Holistic	.025	.043	.049	.583	.002	.340	.561
Analytic	-.055	.046	-.111	-1.188	.012	1.412	.237

Table 14.10
Result of H7

Thinking style	Non-standardized coefficients		Standardized coefficients	t	R ²	F	P
	B	S.E	β				
Holistic	.015	.004	.294	3.626	.086	13.148	.000**
Analytic	.011	.006	.182	1.964	.033	3.856	.052

** p < .05

Table 14.11
Summary of the Results

H1	H1-1	If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands increases.	Support
	H1-2	If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will not increase even if the number of flavors increases.	Support
	H1-3	If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands × flavors increases.	Support
H2		If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands increases, regardless of regulatory focus.	Support
H3		If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will not increase even if the number of brands increases, regardless of regulatory focus.	Support
H4	H4-1	If the degree of brand differentiation is high and that of flavor differentiation is low, the variety perceived by promotion-focused consumers will increase as the number of brands × flavors increases.	Support
	H4-2	If the degree of brand differentiation is high and that of flavor differentiation is low, the variety perceived by prevention-focused consumers will not increase even if the number of brands × flavors increases.	Rejected
H5		If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will increase as the number of brands increases, regardless of thinking style.	Support
H6		If the degree of brand differentiation is high and that of flavor differentiation is low, the consumer's perception of variety will not increase even if the number of flavors increases, regardless of thinking style.	Support

H7	H7-1	If the degree of brand differentiation is high and that of flavor differentiation is low, a holistic thinker's perception of variety will increase as the number of brands × flavors increases.	Support
	H7-2	If the degree of brand differentiation is high and that of flavor differentiation is low, an analytic thinker's perception of variety will not increase even if the number of brands × flavors increases.	Support

5. CONCLUSION AND IMPLICATIONS

The above results are contrary to the findings by Sanjay and William (2010). In *Experiment 1* of their study, increasing the number of flavors increased variety regardless of regulatory focus, but in this study, increasing the number of flavors did not increase perceived variety in either group. This is because the degree of flavor differentiation was different, which means that flavor or brand would not increase variety itself, but the degree of differentiation of each product assortment would be important. In other words, a flavor does not increase a variety unconditionally, but it should be differentiated well to increase variety. In addition, in the existing study, through *Experiment 2*, the moderating effect of regulatory focus was observed in a product category with high brand differentiation, but in this study, instead of regulatory focus, thinking style had a moderating effect. Thus, this means that in a category with high brand differentiation and low flavor differentiation, the moderating effect of thinking style should be considered, rather than that of regulatory focus. Despite these differences, this study shares an opinion with Sanjay and William (2010) that uniqueness and differentiation play an important role in the perception of variety. This study has the following meanings academically: *First*, it further strengthened the existing argument that 'uniqueness and differentiation of product assortment' have significant impacts on the perception of variety. Especially, according to Inman (2001), consumers considered information about variety of attributes like flavor in a sensory product category like snack more valid than information about variety of the brand. This is because a brand cannot satisfy sensory needs itself while a flavor can satisfy consumer sensually enough. Actually, it has been observed through historical data that consumers would shift between flavors rather than brands in the category of snack. Judging from these preceding studies, it is found that how important criterion 'flavor' is in the snack category; however, if the degree of flavor differentiation was low, consumers would take 'brand' with relatively high differentiation as a criterion of their perception of variety. As such, the impacts of uniqueness and differentiation are great. *Second*, it provided studies on variety with diversity by dealing with intangible factors such as the uniqueness of product assortment and consumer perception, apart from studies focused on characteristics. *Third*, by adding the variable, 'flavor uniqueness,' which was not included in a study on the uniqueness of the perception of variety by Sanjay and William (2010), it further subdivided and developed such a study. *Fourth*, it revealed a new fact that in a category with high brand differentiation and low flavor differentiation, the perception of variety would be affected by the moderation of thinking style rather than that of regulatory focus. In practice, distributors like convenience store, which should provide with a perception of a great variety in a confined space, can refer to the details of this study when they establish their assortment strategy. This study suggests that they should learn from such hands-on workers, which domain is at a higher level of differentiation, brand or flavor in the target product category and then increase the product assortment with better differentiation. In spite of theoretical and practical significances, this study has limitations as follows: *First*, when actual consumers perceive the variety of a product assortment, the perception of variety might appear different from this study as physical factors affecting the perception in the existing studies (e.g. whether to have a preferred product,

weight of product category and arrangement) simultaneously act. **Second**, the stimulus was presented in the order of brand and flavor, and since the order that the brand was presented first might affect the result, it will be necessary to test if there was any effect of the order by presenting in the order of flavor and brand. In addition, it made an experiment on a stimulus with a virtual menu, which might not be fit with reality. **Third**, the manipulation check on the degrees of flavor differentiation in ice cream and coffee was carried out in preliminary research separately instead of the main research. Accordingly, it has limitations in that respondents were different, and the perception of the degree of flavor differentiation in coffee would be likely to differ when the questions were asked together with ice cream (preliminary research) from when asked alone (main research). In the future, a follow-up study should be carried out on how the perception of variety would differ according to regulatory focus with a product category with low brand differentiation and high flavor differentiation as a stimulus.

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