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# A Study on HMR Selection Attributes and Health Values of College Students\*

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## Abstract

**Purpose:** The purpose of this study is to narrow the target down to college students representing single-person households to identify the main attributes of their choice of Home Meal Replacement(HMR) and to look at the impact on satisfaction and repurchase intentions. **Research design, data and methodology:** An online survey was conducted for consumers who purchased HMR products at least once and a total of 264 questionnaires were used for demonstration analysis. The collected data have verified for validity and reliability between measurement variables through exploratory factor analysis and reliability analysis. **Results:** As a result, curiosity, economy, safety, and brand, which are HMR selection attributes that university students' value, have a significant impact on satisfaction, and satisfaction has a significant impact on the intention of repurchase, a variable of behavior. In addition, the adjustment effect of health value pursuit was significant only in safety attributes. **Conclusions:** This study divided the target group to examine what the HMR selection attributes of single-person college students are, the main consumer of HMR, and how selective attributes affect satisfaction and willingness to repurchase. In the process, we wanted to find out if there was a moderating effect on the health-oriented values in the dietary lifestyle.

**Keywords :** Home Meal Replacement, Selection Attribute, Health Value Seeking, Single Household College Student

**JEL Classification Code :** D11, D12, L66, L81

## 1. Introduction

Due to the rapid change in the social population structure, single-person households have become the most important form of residence. According to the National Statistical Office, the ratio of single-person households was 29.6 percent in 2019, accounting for one of the three households, bringing about major changes in economic and social life

patterns such as consumption, housing and leisure. In order to respond to this solo economy, a change in strategy is indispensable for the entity. The increase in single-person households has a significant impact on especially dining culture. Due to the characteristics of single-person households, it has become the biggest challenge to solve a single meal, becoming the main buyer of Home Meal Replacement (HMR). According to the Korea Agro-Fisheries & Food Trade Corp., the local HMR market is estimated to grow 53 percent to 4 trillion won in 2018. The growth rate is three times that of Japan in the 1990s, and if the trend continues, the domestic HMR market will expand to 17 trillion won in 10 years.

According to CJ analysis, HMR market has been passed through the first generation of three-minute products and instant rice in the early 2000s, followed by the second generation of refrigerated noodles, cold bean porridge, and frozen dumplings. The third generation, represented by CJ's Bibigo and E-Mart's Peacock, has released various products

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such as "quality" and "category diversification" under the keywords, and recently developed up to the fourth generation where people can experience high-quality food culture at home through collaboration with famous restaurants. Those in their 20s, who account for 25 percent of single-person households in the fast-growing HMR market, prefer HMR for reasons of economic efficiency, simplicity and convenience, and they use convenience stores as HMR's main purchasing and distribution channel. Due to the nature of the convenience store business, it has become an optimal distribution channel for HMR purchases due to its proximity to consumers and convenience regardless of time. According to a survey on the lifestyle of single-person households at the research institutes in the College Tomorrow of the Youth Generation, single-person households' dependence on convenience stores is higher than others.

The average rate of visits more than once a day was also much higher for single-person households in their 20s (28.6 percent) than multi-family households in their 30s (19.2 percent). Currently, many single-person households in their 20s have snacks or meals at convenience stores four to five times a week. Due to the phenomenon of "Solo-Dining," which solves meals alone, younger generations are increasingly preferring to eat "One-Meal" menus without side dishes. Even if you eat a meal, you can take care of nutrition and taste at the same time, and the need for quality products that embody home-style taste and quality is increasing. There has been a study on HMR optional attributes of single-person households (Lee & Lee, 2016; Kim, 2016), but there is a lack of research on subdividing the target group into college students in their 20s, the main consumer group of HMR food. Therefore, in this study, we would like to limit this study to university students only and verify their HMR food selection attributes and their impact on purchasing satisfaction and behavior through empirical analysis.

In particular, it is intended to reflect the characteristics of the millennial generation, which has recently invested in health and diet, and to verify that the dietary lifestyle of the pursuit of health value has a significant impact between the properties of choice and satisfaction of HMR products as a control effect. Therefore, we would like to present marketing implications to distributors and food manufacturers.

## **2. Theoretical Background**

### **2.1. Selection Attributes of HMR Products for Single Person Households**

HMR is the main dish and definition of a staple or pre-combined main dish designed to completely and quickly

replace the main meal, such as a home-made meal (Ana et al., 2007). Based on the cooking time and process, they were classified as Ready to Eat, Ready to Eat, Ready to End-cook, and Ready to Cook. HMR products are defined as instant, processed, packaged and new convenience foods so that consumers can eat them without going through separate cooking or simple processes. Bum et al. (2009) called selection attributes a characteristic of a product that consumers consider important when choosing a product or trademark among the many attributes that a product or trademark has. Therefore, selective attributes of HMR are characteristic that has an important effect on consumers who purchase HMR to decide. Analysis of the importance and satisfaction of HMR selection attributes using the Importance-Performance Analysis (IPA) found that quality, health, hygiene, country of origin indication and safety items were less satisfactory than materiality, reliability, quality and convenience were suggested as factors for HMR selection attributes.

Bhatt and Bhatt (2015) proposed health, convenience, proximity, price, brand and sensory appeal as the factors of Indian consumers' choice of HMR processed foods. The important factors of selection attributes vary depending on age group or household member characteristics. The usual meaning of a single-person household is who leads a daily life alone, such as a food, clothing and shelter, in an independent space (Kim, 2016). The reason for the increase in single-person households is due to complex social changes, such as the trend of single preference, the increase in late marriage, the divorce rate of middle-aged people, and the increase in the number of elderly people living alone due to an aged society, which is rapidly increasing.

According to the National Statistical Office, young people in their 20s and 30s accounted for 34 percent of the nation's single-person households, 33 percent of the elderly in their 40s and 50s, and 33 percent of the elderly in their 60s and older. In a study of college students in their 20s, the priority in choosing HMR was taste, price and convenience, and five factors in determining their willingness to purchase were safety, appearance, taste, price and experience (Kang & Jo 2015).

### **2.2. Curiosity**

Among HMR's various distribution channels, single-person college students are more likely to solve meals or snacks at convenience stores because of their lack of financial resources, lack of opportunity or experience to prepare their meals, and prefer to spend time on personal leisure activities rather than preparing food. According to an analysis of 280,000 financial spending data by mobile financial platform, people in their 20s and 30s use convenience stores more often than supermarkets or supermarkets. Twenty percent of those in their 20s spent in

convenience stores during the analysis period, compared with 12 percent in their 30s and 10 percent in their 40s, the report showed.

Recently, convenience stores have been the only offline channel that has continued to grow. In the meantime, new products in the food industry have been first released mainly in large discount stores, but convenience stores are now emerging as the hottest channel. It quickly releases products tailored to tastes of those in their teens and 20s and promotes on social media. With more TV programs about convenience store food, such as "restaurant" where the menu of celebrities is selected through evaluation by menu evaluators, or "blow out convenience store" where convenience store food is re-combined to create a new recipe, curiosity is expected to be an important factor as a college student's ability to choose HMR products that use convenience stores as the main channel.

Curiosity is defined as a desire to acquire new sensory experiences and new information or knowledge (Litman & Spielberg, 2003), or as a state in which additional interest in the product is expressed (Smith & William, 1988). In other words, when a curious person comes across a new product, it will show interest in the product and lead to purchases. Kim et al. (2015) examined the impact on the intention to repurchase convenience stores by dividing them into five factors: health, taste, convenience, meal management, and food exploration in the study of convenience store products by single people's dietary lifestyle. Therefore, the following hypothesis is presented.

**H1:** The curiosity of HMR would have a positive effect on satisfaction of the university students.

### 2.3. Brand Pursuit

When a customer is satisfied with a particular brand, they have preference for that brand and therefore make a purchase decision for the particular brand they prefer the most, resulting in actual purchases (Brown & Stayman, 1992; Low & Lamb, 2000; Cha & Lyu, 2019). Kim and Ha (2010) divided the selection attributes of fishery processed foods into brands, prices, product information, recipes, etc. No (2017) found that the quality of food, packaging, and willingness to repurchase among the selective attributes of Home Meal Replacement (HMR) played a role in controlling the brand image of the company. Han and Lee (2017) confirmed that the brand image had a mediating effect between the corporate image and the attitude of the Home Meal Replacement (HMR) product.

Luo et al. (2019) interviewed 30 British consumers in the study "The Impact of Colors and Images on Intention to

Purchase Convenience Food", and found that women aged 25 to 34 years of age had a specific brand associated with the best in a particular product and that it also proved its quality. At a time when HMR products are considered to be convenient but insufficient in safety, college students' brand pursuit will serve as a major attribute of HMR product selection. we set the following hypothesis.

**H2:** The brand pursuit of HMR would have a positive effect on satisfaction of the university students.

### 2.4. Economic Efficiency

Economic efficiency is a profitable property that means maximum effect at a certain cost, and the study of HMR optional attributes defined price discounts or events, mileage and reserve schemes as reasonable prices in the study of family restaurant optional attributes (Cha & Lee, 2018; Cha & Lee, 2020). Kim and Jeon (2015) defined HMR's optional attributes on social commerce as characteristics that presented such as information, diversity, speed, price, and convenience. Among them, convenience, diversity and price fairness were found to have significant effects on satisfaction. Lee and Jeon (2018) classified 19 items of convenience store lunch box selection attributes as attractive quality factors, uninterested quality factors, and uninterested quality factors in the classification of HMR lunch box selection attributes using the Kano Model. Most college students in single-person households rely on their parents' support. Therefore, economic efficiency will be an important choice for price-conscious single-person college students. Based on the preceding studies, the following hypothesis is suggested.

**H3:** The economic efficiency of HMR would have a positive effect on satisfaction of the university students.

### 2.5. Safety

As the HMR food industry expands in size, it is important for HMR to be positioned as a single meal replacement for home-cooked meals, not just convenience foods, to satisfy consumers' growing needs for manufacturing, processing and product safety. In a study of single-person households using restaurant services, Yang (2018) divided HMR selective properties into product safety, convenience, product quality. And convenience stores had a significant effect on the satisfaction of the product quality among HMR selective properties, and in the case of large discount stores, only convenience had a significant effect on satisfaction. Therefore, the following hypothesis is provided.

**H4:** The safety of HMR would have a positive effect on satisfaction of the university students.

## 2.6. Satisfaction and Intention to Repurchase

Satisfaction comes from comparisons between the cost of purchase and the compensation for expected outcomes of consumer purchasing or use experience and the aggregate nature of satisfaction with the various selection attributes of the product or service (Churchill & Surprenant, 1982). Westbrook and Oliver (1991) defined customer satisfaction as how much consumers experience favorable or unfriendly feelings in the course of a series of comparisons, evaluations and purchases of products or services, and they are more or more satisfied with the actual use experience than they expect with the goods or services. Cha and Seo (2018) analyzed that convenience, food quality, and price, which are selection attributes of consumers, have positive effects on satisfaction Cha and Seo (2019), and the intention of purchasing again. Kim (2016) stated that the selective attributes of HMR products had a significant positive effect on the consumer intention of single-person households, and Yang (2018) also demonstrated that HMR's selective attributes had a positive effect on the repurchase intention. Based on the preceding studies, the hypothesis was proposed as follows.

**H5:** Satisfaction of HMR will have a positive effect on the repurchase intention of the university students.

## 2.7. Moderating Effect of Health Pursuit Value

Depending on the lifestyle of the diet, the food consumed, eating out behavior, and eating habits are different, and the overall level of satisfaction with the diet is expected to vary depending on the type of diet lifestyle. With the increasing trend of single-person households, a variety of prior studies are also being carried out on major sub-dimensions that make up the dietary lifestyle of single-person households. Kim et al. (2015) divided the dietary lifestyle of the single-family convenience store convenience food target into health-oriented, convenience-oriented, taste-oriented, and meal-management types. Lee and Lee (2016) divided the dietary lifestyle of single-person households into three types: health-seeking, saving, and convenience-seeking. The dietary satisfaction was higher in order of health-seeking, saving, and convenience-seeking. Kim and Han (2017) analyzed the types of dietary lifestyle and found that the HMR selective attributes show significant differences in price, convenience, and diversity between groups. They are classified as universal consumption-

seeking groups, health-seeking groups, taste-oriented economic groups, and convenience-seeking groups.

**Table 1:** Summary of Previous Research on Dietary Lifestyle

Previous Researcher	Type of Diet Lifestyle
Jung and Yoon (2007)	Health follow-up type, Taste follow-up type, Trend follow-up type, Safety follow-up type, Atmosphere follow-up type
Lee and Na (2014)	Health follow-up type, Taste follow-up type, Adventure follow-up type, Convenience follow-up type, Rational follow-up type
Wycherl ey et al. (2008)	Rational food consumers, Adventurous consumers, Careful food consumers, Simple food consumers, Conservative food consumers
Kim et al. (2015)	Health follow-up type, Taste follow-up type, Economy follow-up type, Challenge follow-up type, Convenience follow-up type
Grunert et al. (1993)	Convenience pursuit type, Experience pursuit type, Health pursuit type, Economic pursuit type

Ana et al. (2007) presented not only the taste and health of the product but also the health orientation as the main factors of the motivation for using take-out food. Diet lifestyle types have been grouped by many researchers into market classifications, and the significance of the impact of cluster-specific HMR selective attributes on behavior has been identified. In this study, the most common type of diet lifestyle presented in prior studies reflects the changing trend of the millennial generation. As young people tend to stay away from alcohol and cigarettes and seek healthy food, they believe that the impact of independent variables on dependent variables will be controlled according to the health-seeking dietary lifestyle. Therefore, the following hypothesis is presented.

**H6:** The effect of selection attributes with HMR on the satisfaction by groups of health-value seeking would be different.

## 3. Research Method

### 3.1. Research Model

This study attempts to narrow the target down to college students represented by single-person households in HMR selection attributes, to examine the important attributes

when they choose HMR and to empirical analysis of the effects of these attributes on satisfaction and willingness to repurchase. In particular, we would like to see if the attributes representing the characteristics of the millennial generation, such as curiosity and economics, have a significant impact, and analyze whether the pursuit of health values among diet lifestyle adjusts the impact relationship from independent variables to dependent variables. This research model is shown in Figure 1.

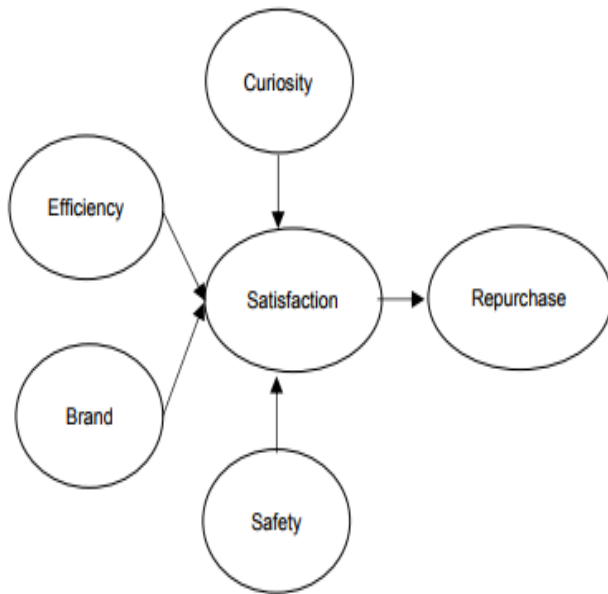


Figure 1: Research Model

### 3.2. Sampling and Survey Method

A survey was conducted to verify the research hypothesis. The questionnaire questions were modified and applied to suit the previous use by other researchers. The survey targets consumers who have purchased HMR (Home Meal Replacement) products at least once. The survey was distributed through Google online questionnaire from October 1 to October 28, 2019, with a total of 268 surveys being collected, and a total of 264 questionnaires were used for empirical analysis, excluding four that were insincere or incomplete. This study was conducted through the following analysis methods. First, the validity and reliability of measurement variables were verified through exploratory factor analysis and reliability analysis using SPSS 22.0. The Structural Equation Model (SEM) was then used as a statistical method to verify the hypothesis. According to the demographic characteristics of the survey respondents, men accounted for 70.4 percent with 186 and women accounted

for 29.5 percent with 78. The number of people in their 20s was 253 (95.8 percent) and those in their 30s (3.7 percent), representing the age group of university students who were subject to the study. Monthly spending costs between 50,000 won and 100,000 won were the highest at 47.7 percent, while those below 50,000 won were found to be 28.0 percent, the survey showed.

Table 2: Demographic Characteristics of Respondents

Measurement Category	Details	Number of Samples	Percentage (%)
Gender	Male	186	70.5%
	Female	78	29.5%
Age	Teen	1	0.3%
	20's	253	95.8%
	30's	10	3.7%
Frequency of use (per month)	Once a month	55	20.8%
	2~5	147	55.6%
	6~9	48	18.1%
	Over 10	14	5.3%
Expenditure on purchase (thousand KRW)	Below 50	74	28.0%
	50~100	126	47.7%
	100~150	56	21.2%
	Over 150	8	0.3%

## 4. Empirical Analysis

### 4.1. Measurement Item Evaluation

Feasibility analysis and reliability analysis of configuration concept measurement items were conducted (Churchill & Surprenant, 1982). The Cronbach's coefficient was verified by performing an exploratory factor analysis to analyze the validity and reliability factors. As a factor extraction method, the Principal Component Analysis method was used, and the factor was extracted based on Eigenvalue 1. VARIMAX rotation is applied to the rotation method of the factors. Table 3 results show the results of the analysis of the exploratory factors, and the Cronbach's alpha coefficient is 0.7 or higher, thus verifying reliability.

**Table 3: Exploratory Factor Analysis 1**

	Variables			
	BRAN	CURI	SAFE	EFFI
BRAN 1	.796	.002	.230	.162
BRAN 2	.856	-.146	.240	.242
BRAN 3	.843	-.076	.235	.180
BRAN 4	.822	-.110	.189	.279
CURI 1	-.035	.895	-.067	-.042
CURI 2	-.031	.877	-.003	-.084
CURI 3	-.119	.883	.020	-.035
CURI 4	-.120	.881	-.202	.048
SAFE 1	.205	-.128	.803	.105
SAFE 2	.377	-.116	.872	.097
SAFE 3	.129	.053	.798	.202
SAFE 4	.191	-.082	.799	.189
EFFI 1	.106	.084	.141	.842
EFFI 2	.230	-.029	.144	.792
EFFI 3	.257	-.102	.212	.827
EFFI 4	.467	-.157	.114	.597
variance (%): Total variance 62.3%	21.526	20.508	18.920	16.891
Cronbach's Alpha	0.911	0.846	0.917	0.887

EFFI= Efficiency, BRAN= Brand, SAFE=Safety, CURI= Curiosity

**Table 4: Exploratory Factor Analysis 2**

	Variables	
	Repurchase	Satisfaction
Satisfaction 1	.837	.412
Satisfaction 2	.815	.473
Satisfaction 3	.810	.458
Satisfaction 4	.788	.507
Repurchase 1	.392	.857
Repurchase 2	.458	.828
Repurchase 3	.537	.763
Repurchase 4	.552	.720
variance (%): Total variance 80.7%	37.6	43.1
Cronbach's Alpha	0.953	0.948

The exploratory factor analysis secured the intrinsic relevance of the measurement variables, and confirmed factor analysis was conducted using Amos20.0 to verify convergence validity and discriminant validity. Table 5 shows that the composite reliability (C.R) of 0.8 or higher and the average variance extracted (AVE) of 0.5 or higher presented statistically significant ( $p < 0.01$ ) with appropriate factor loadings for all items. Therefore, convergent validity was verified. Table 5 is the result of a confirmatory factor analysis.

**Table 5: Confirmatory Factor Analysis Result**

	Measuremnt Items	Standardized Path Coefficient	CR	AVE
Brand	BRAN 1	0.84	0.88	0.62
	BRAN 2	0.91		
	BRAN 3	0.871		
	BRAN 4	0.84		
Curiosity	CURI 1	0.876	0.86	0.59
	CURI 2	0.882		
	CURI 3	0.826		
	CURI 4	0.839		
Safety	SAFE 1	0.907	0.85	0.55
	SAFE 2	0.886		
	SAFE 3	0.758		
	SAFE 4	0.705		
Econ omic efficienc y	EFFI 1	0.752	0.82	0.50
	EFFI 2	0.842		
	EFFI 3	0.831		
	EFFI 4	0.679		
Satis faction	SATI1	0.902	0.95	0.83
	SATI2	0.931		
	SATI3	0.872		
	SATI4	0.976		
Rep urchase	REPU1	0.920	0.950	0.826
	REPU2	0.895		
	REPU3	0.908		
	REPU4	0.925		

Chi square = 474.865 ( $p = 0.00$ ,  $df = 120$ ),  $GFI = 0.872$ ,  $AGFI = 0.837$ ,  $NFI = 0.882$ ,  $CFI = 0.934$ ,  $RMR = 0.056$ ,  $RMSEA = 0.054$  ( $p < 0.001$ )

The square root of the average variance extracted (AVE) was used to verify the validity of the discriminant between factors with proven single dimensionality. The results showed that the AVE square root values were all greater than 0,5 and greater than the non-diagonal correlation values in the rows and columns involved. Therefore, it can be said that the discriminant validity has been verified that the measurements between different constructions.

**Table 6:** Discriminant Validity through Correlation Analysis

	REPU	EFFI	BRAN	SAFE	SATI	CURI
REPU	0.90					
EFFI	0.65	0.77				
BRAN	0.69	0.62	0.86			
SAFE	0.61	0.48	0.61	0.81		
SATI	0.92	0.60	0.66	0.60	0.91	
CURI	0.08	-0.15	-0.25	-0.26	-0.07	0.85

Note: The values presented on the diagonal line are the square root of AVE.

REPU=Repurchase, EFFI= Efficiency, BRAN= Brand, SAFE=Safety, SATI= Satisfaction, CURI= Curiosity

### 4.2. Research Theory Verification

Verification of the research theory was made using Amos 20.0. The goodness-of-fit index for the study model indicated a satisfactory value with Chi square = 732.447 (df=241,  $p = 0.000$ ), IFI=.919, TLI=.907, CFI=.919, NFI=.884, RMSEA = 0.088. Table 7 shows the results of the verification of the main effects from hypothesis 1 through hypothesis 5.

**Table 7:** Research Hypothesis Verification Result

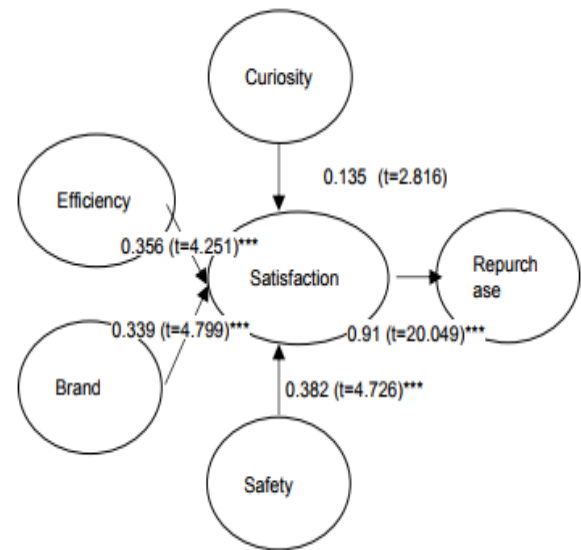
Hypothesis	Path	Factor Loadings	t -Value	Result
H1	CURI → SATI	0.135	2.816***	Support
H2	EFFI → SATI	0.356	4.251***	Support
H3	BRAN → SATI	0.339	4.799***	Support
H4	SAFE → SATI	0.382	4.726***	Support
H5	SATI → REPU	0.91	20.049***	Support

$p < 0.05$  \*,  $p < 0.01$  \*\*,  $p < 0.001$  \*\*\*

REPU=Repurchase, EFFI= Efficiency, BRAN= Brand, SAFE=Safety, SATI= Satisfaction, CURI= Curiosity

Hypothesis verification of the main effects showed that the selection attributes of brand pursuit, economic efficiency,

curiosity and safety had positive effects on satisfaction, and satisfaction had a significant effect on repurchase. In particular, among the four optional attributes, the safety factor was 0.382, the highest. In order for HMR products to become popular, it suggests that safety of product hygiene, regardless of age, should be a guarantee. The second important attribute is the high economic efficiency, apparently reflecting the frugal characteristics of college students. Figure 2 shows the results of the research.



**Figure 2:** Results of the Research Model

### 4.3. Moderating Effects in the Pursuit of Consumer Health Value

In order to verify the moderating effect of HMR food purchase according to consumer health pursuit, the path coefficient was divided into the health value-seeking group and the health value-not-seeking group. Health value-seeking measures were taken on a 7-point scale of "I tend to put priority on health." Table 8 compares the path coefficients of the health value-seeking and non-seeking groups. The two group comparisons show that the impact of economic efficiency, brand and safety on satisfaction is all more affected by the group seeking health value. On the other hand, the impact of curiosity on satisfaction was more affected by health values no seeking group. However, a comparison of the p values showed that only the effects of safety on satisfaction were statistically significant differences. The regulatory effect of health value-seeking groups being more sensitive to the safety of HMR foods has been proven.

**Table 8:** Comparison between Health Value Seeking Group and Non-Health Value Group

	Path coefficient		ComparisonResult of healthvalue seeking	Chi-square Incremental value	P -Value
	Health valuesseeking	Health value non-seeking			
CURI → SATI	0.096	0.182	Yes < No	0.540 (d.f.=1)	0.462
EFFI → SATI	0.295	0.236	Yes > No	0.085 (d.f.=1)	0.771
BRAN → SATI	0.486	0.213	Yes > No	3.201 (d.f.=1)	0.074
SAFE → SATI	0.583	0.095	Yes > No	7.907 (d.f.=1)	0.04*

## 5. Conclusion and Implications

As a rapid growth of HMR changes food culture patterns, important selection attributes vary by age group and family members. This study divided the target group to examine what the HMR selection attributes of single-person college students, the main consumer of HMR, are and how selective attributes affect satisfaction and willingness to repurchase. In the process, we wanted to find out if there was a moderating effect on the health-oriented values in the dietary lifestyle. As a result, the HMR selection attributes that university students' value, such as curiosity, economic efficiency, safety, and brand preference, have a positive influence on the satisfaction and repurchase. And the moderating effect of the safety was significant on satisfaction in health value seeking group. These results can lead to the following implications:

First, when single-person household college students purchase HMR, it is shown that curiosity and economics are differentiated among selection attributes. Economic feasibility seems to reflect the characteristics of college students with light pockets, and since the HMR main purchase and distribution channel of college students is a convenience store, curiosity to test the new taste seems to affect the purchase due to the characteristics of the convenience store where trendy new products are continuously released. Therefore, from the HMR survey perspective, it is necessary to focus on convenience stores for products that are released for young consumers.

Second, safety has the highest path coefficient of 0.382 out of the four properties, suggesting that the safety of product hygiene, etc., regardless of age, should be guaranteed in order for HMR products to become popular items. Although HMR products have developed up to the fourth generation where customers can experience the food culture of famous restaurants and famous chefs at home, the most important thing is emphasizing hygiene for HMR products. The fact that brand pursuit has resulted in

satisfaction is also interpreted as an attempt to ensure safety through the brand.

Third, based on the pursuit of health value among food culture lifestyles, some selective attributes of HMR products by health value non-seeking group and health value seeking group were found to moderate the impact on satisfaction. The more college students with seeking health value, the more sensitive and affected the safety of HMR products. This seems to reflect the recent millennials' eco-friendly and eco-oriented tendencies, and in terms of marketing, HMR could appeal to college students if it is positioned as a healthy meal replacing a meal.

Nevertheless, this study has several limitations, and the future direction of the study can be presented as follows:

First, it has not become a deep study by measuring lifestyle classifications for health value-seeking and non-seeking groups as a single moderating effect. Second, as the age group of single-person households has recently become more prominent in the composition and growth of the silver than the younger generation, research on the silver class is needed. Therefore, by looking at the differences in HMR selection attributes by age group (Cha, 2020), such as young people, senior citizens, and silver people, it is also necessary to look for implications for the development of HMR products for the targets.

## References

- Ana, I. D. A., Schoolmeester, D., Dekker, M., & Jongen, W. M. (2007). To cook or not to cook: a means-end study of motives for choice of meal solutions. *Food quality and preference*, 18(1), 77-88.
- Bhatt, S., & Bhatt, A. (2015). Consumer Behavior Towards Packaged Food in Rural Areas: An Empirical Study in Ahmedabad District, Gujarat. *IUP Journal of Marketing Management*, 14(1), 7-20.
- Cha, S. S., & LYU, M. S. (2019). Influence of SNS Characteristics on the Brand Image of Infant Food Products. *Journal of Industrial Distribution & Business*, 10(8), 7-15.



- Cha, S. S. (2020). Customers' intention to use robot-serviced restaurants in Korea: relationship of coolness and MCI factors. *International Journal of Contemporary Hospitality Management*, 32(9), 2947-2968.
- Cha, S. S. & Seo, B. K. (2019). The effect of brand trust of home meal replacement on repurchasing in online shopping. *The Journal of Business, Economics, and Environmental Studies (JBEEES)*, 9(3), 21-26.
- Cha, S. S., & Seo, B. K. (2019). Cafeteria Use by Students and Effect of Selection Attributes on Satisfaction. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 6(1), 187-194.
- Cha, S. S., & Lee, S. H. (2018). The effects of HMR selection attributes on repurchase intention by shopping channels. *The Journal of Distribution Science*, 16(3), 13-21.
- Cha, S. S., & Lee, S. H. (2020). The Effect of Convenience Store Dessert on Consumers Value and Satisfaction. *The Journal of Asian Finance, Economics, and Business*, 7(3), 191-199.
- Churchill Jr, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of marketing research*, 19(4), 491-504.
- Grunert, K. G., Brunsø, K., & Bisp, S. (1993). *Food-related life style: Development of a cross-culturally valid instrument for market surveillance* (pp. 1-41). Århus, Denmark: MAPP.
- Han, J. S., & Lee, H. J. (2017). Effects of corporate image on HMR brand image, HMR product attitude and HMR behavioral intention. *Culinary Science & Hospitality Research*, 23(3), 77-88.
- Jung, H. S., & Yoon, H. H. (2007). A study on the dining-out consumption pattern of undergraduates by food-related lifestyle. *Journal of Foodservice Management Society of Korea*, 10(2), 93-117.
- Kang, H. Y., & Jo, M. N. (2015). Key buying factor and improvement point according to HMR use characteristic by college students. *Journal of Tourism and Leisure Research*, 27(8), 335-356.
- Kim, H. Y. (2016). The effect of selection attribute of HMR product on the consumer purchasing intention of a single household Centered on the regulation effect of consumer online reviews. *Culinary science and hospitality research*, 22(8), 109-121.
- Kim, J. H., & Jeon, Y. J. (2015). The effect of HMR selection attributes on customer satisfaction and behavioral intentions: Focused on social commerce. *The e-Business Studies*, 16(6), 425-447.
- Kim, J. S., & Ha, K. S. (2010). Selection attributes and pursuit benefits of processed fishery products. *Journal of the Korean Society of Food Culture*, 25(5), 516-524.
- Kim, S. S., & Han, J. S. (2017). Effects of selection attributes for HMR on satisfaction and loyalty: Focused on moderating role of the customer value. *Culinary science and hospitality research*, 23(4), 10-21.
- Kim, Y. A., Lee, B. C., & Youn, H. W. (2015). A study on single people's satisfaction of convenience foods and repurchase intention according to food-related lifestyle. *The Tourism Sciences Society of Korea*, 27(1), 433-452.
- Lee, I. O., & Na, J. K. (2014). Effects of food-related lifestyle on consumer nutrition attitude and food preference-focused on a married woman with young children. *Foodservice Management Society*, 17, 201-227.
- Lee, J. H., & Jung, L. (2018). Classification of selective attributes in home meal replacement packed meal products in CVS based on Kano Model: A case of one-person household of undergraduates. *Journal of Foodservice Management Society of Korea*, 21(1), 73-93.
- Lee, S. L., & Lee, S. J. (2016). The effects of eating habit and food consumption lifestyles on dietary life satisfaction of one-person households. *Journal of Consumer Culture*, 19(3), 115-133.
- Litman, J. A., & Spielberger, C. D. (2003). Measuring epistemic curiosity and its diverse and specific components. *Journal of personality assessment*, 80(1), 75-86.
- Low, G. S., & Lamb, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 9(6), 350-370.
- Luo, D., Yu, L., Westland, S., & Mahon, N. (2019). The influence of color and image on consumer purchase intentions of convenience food. *Journal of the International Color Association*, 24, 11-23.
- No, B. K. (2017). A study on the influence of HMR's selection on repurchasing intention: Business brand image centers focused on control effect. *Journal of Tourism & Leisure Research*, 29(6), 119-132.
- Smith, R. E., & William, R. S. (1988). Cognitive response advertising and trial: Belief strength, belief confidence and product curiosity. *Journal of Advertising*, 17(3), 3-14.
- Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of consumer research*, 18(1), 84-91.
- Wycherley, A., M. McCarthy, and C. Cowan (2008), "Specialty Food Orientation of Food Related Lifestyle (FRL) Segments in Great Britain.," *Food Quality and Preference*, 19(5), 498-510.
- Yang, D. H. (2018). The effects of selection attributes for HMR on satisfaction and repurchase intention: Comparative analysis of convenience store and large market. *Culinary science and hospitality research*, 24(3), 204-214.