

Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2019.vol6.no1.187

Cafeteria Use by Students and Effect of Selection Attributes on Satisfaction*

Seong-Soo Cha¹, Bo-Kyung Seo²

Received: November 27, 2018 Revised: November 31, 2018 Accepted: December 23, 2018

Abstract

This study examined that what attributes of student satisfaction are more important when students use university cafeterias. Factors that are considered to be more crucial when students use a cafeteria, such as menu, taste, price, and cleanliness, were tested. Based on the research of previous studies, it assumed that the selection attributes of students' cafeteria were menu, taste, price, and cleanliness. With 301 surveyed questionnaires, the study was carried out by AMOS 23.0 and the Structural Equation Model was used for examining the hypotheses as statistical method in this study. In consequence of the hypothesis test on the main effect, the factors such as the menu, taste, price and cleanliness were found to significantly affect satisfaction. Then, the moderating role of gender, age and allowance was analyzed. However, students' university cafeteria selection attributes differed depending on their allowance only. The path coefficients from menu to satisfaction were more significant in the group with a smaller allowance, while the path coefficient from price to satisfaction was more significant in the group with a larger allowance. The study analyzed that the effect of selection attribute of students' cafeteria on the satisfaction, and influence of students' allowance, and provide meaningful implications when they choose the attributes.

Keywords: Students Cafeteria, Selection attribute Importance, Moderating Role, Allowance.

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

1. Introduction

Universities have been interested in improving the quality of school facilities as part of their policy to strengthen competitiveness. In addition to offering education to students, schools also provide various services for student convenience, including bookstores, stationery stores, computer stores, and fast food stores (Jung, 2013). Among them, the student cafeteria is a place where time saving, affordable meals are served with a variety of healthy menus, and many staff members and students gather around lunch time (Ha & Ha, 2008). At the end of 1980, specialized foodservice companies appeared, and student cafeterias started to be operated by full-scale professional foodservice

companies around 1995. Currently, almost all universities offer consignment meals for student cafeterias (Eum & Lyu, 2003).

In the case of student cafeterias, the number of customers is almost fixed as students and staff, so they do not recognize the necessity of strengthening competitiveness, and they also have a relatively poor internal environment compared to outside restaurants. However, along with the increase in national income, college students now have been raised in a much better environment than before, and the students' cafeteria itself is different from the past due to the upgrading of the restaurant business.

The purpose of the consignment operation of the student cafeteria is to provide a high level of food satisfaction to the recipients through cost reduction by mass purchasing, and reduction of overhead costs with the systematic operation of various foodservices. However, most of the catering companies in the cafeteria business are not able to provide sufficiently satisfactory services to the customers due to a lack of management ability and lack of experience (Lee, 2004). In order to solve the problems of university food service centers, a systematic approach is required and it is

* This paper was supported by Eulji University in 2018.

1 First Author, Assistant Professor, Dept. of Food Science & Service, College of Bio-Convergence, Eulji University
Tel: +82-31-740-7274, E-mail: sscha@eulji.ac.kr

2 Corresponding Author, Professor, Dept. of Addiction Rehabilitation and Social Welfare, College of Bio-Convergence, Eulji University.
Tel: +82-31-740-7384, E-mail: 20160722@eulji.ac.kr

essential to strengthen the quality of food service, which focuses on customer expectations. In terms of establishing a strategic marketing plan and foodservice management, the relocation of restaurant facilities, training of employees and managers, and development training are necessary (Dorhman, 1993; Alvarez, 1994). As the interest in and demand for student cafeterias grows, U.S. university foodservice managers have tried various types of meal provision, including food courts, delis, etc., in a straight-line cafeteria. They also provide students with the opportunity to extend their student cafeteria hours, offer take-outs, and provide food delivery services upon request, allowing students to dine anywhere on campus. And it is important to select the location of the university foodservice to reduce the consumption of time for students going off campus to eat (Klassen, Trybus, & Kumar, 2005).

In the past, the role of the university student cafeteria was limited to simply providing food to students and staff, but due to the increased opportunities for dining out for college students in recent years, and the resulting diverse menu experience, interest in student cafeterias has expanded to include quality food, cleanliness and hygiene as well as meeting nutritional requirements for food. The increasingly diverse and expanded needs of customers have had a major impact on the operation and management of university student cafeterias and expected to change in the future. In order to meet the desires of consumers developed along with the evolution of the foodservice industry, specialized contract foodservice companies are required to provide various types of services that can meet customer expectations in various aspects. At this point, analyzing the factors that affect students' perception of student cafeterias will be very important for establishing the marketing strategies of student restaurant managers.

The purpose of this study is to find the factors affecting the selection attributes of university foodservices and to analyze the satisfaction of these factors and students' cafeterias. This study analyzes the relationship between the factors of selection attributes of students' cafeterias and the satisfaction and behavior of students regarding cafeteria food, and provides the information necessary for the operation of university foodservices in accordance with the needs of students.

2. Literature Review

2.1. University Cafeteria Selection Attributes

In a study on the service quality of student restaurants, Park, Song, Lee, and Paik (2000) proved that when

students used a restaurant, they considered "restaurant location," "taste," "price" and "waiting time." Kwun, Ellyn, and Choi (2013) reported that "quality of food," "price," "value," "service quality," and "menu type" have a meaningful oral effect in student restaurant service quality. Kim, Lee, and Yuan (2012) stated that students were satisfied with a cafeteria-style operation in which they could get a variety of food in a food-service area. Green (1992) presented an importance-performance analysis (IPA) as one of the ways to find customer feedback to set up a marketing strategy for a cafeteria. In the study, it was reported that the quality attributes that should be managed intensively for the quality of the cafeteria service are "food taste," and "menu diversity" (Jung, 2013).

In the case of university students in the Taejon area, "overall service quality" and "kindness of employees" are attributes of service quality that should be improved (Yi, 2012). In the case of foreign university foodservices, the qualities that should be concentrated on are "popular food," "food taste," "food temperature," and "fast food." In addition, it has been reported that "employees show a sincere regard for their customers," "maintaining service quality and fast food during busy times" (Aigbedo & Parameswaran, 2004). The factors that affect student satisfaction in cafeteria-run university foodservice centers were "food quality and price" and "employee friendliness" (Andaleeb & Caskey, 2007). Cha and Lee (2018) proved statistically that when it comes to buying home meal replacement (HMR) products, convenience, freshness and price had a significant effect on satisfaction.

Kim, Moreo, and Yeh (2006) suggested different ways to improve the utilization rate of the student cafeteria among college students, such as offering Asian, Mexican, and Italian food in a package menu in a university foodservice center. In 2017, student cafeterias introduced new trends, including customized service delivery, sustainability management, and special meals for students with food allergies. Domestic university foodservices are not receiving as much attention as primary, middle and high school meals and commercial foodservices. In this environment, university foodservice managers need to react sensitively to the needs of students as internal customers and changes in the external environment, and more efforts and marketing strategies are needed to deal with them. It has been reported that the students' values and attitudes toward student cafeterias can have a significant impact on student cafeteria performance. Cha and Yu (2018) showed that hedonic eating-out motivations have more influence on the importance of empirical attributes such as menu, service, and atmosphere than that of functional attributes such as price, cleanliness, and accessibility in restaurants.

Kwun (2011) suggested that food quality, menu, and service factors have a significant influence on customer value, which in turn influences customer satisfaction in student cafeterias. Among the quality attributes of the student cafeteria, food, menu, and convenience factor influenced the value perception of a foodservice and value recognition increased customer satisfaction (Ham, 2012). It has been reported that satisfaction with university meal service quality has the greatest effect on the value of student cafeterias and intention to return (Jung, 2013). Kim (2006) reported that satisfaction with food factors influenced students' intention to return and the recommendation intention of restaurant cafeteria service quality. The satisfaction with student cafeterias among generation Y has a direct positive effect on loyalty intention and the intention to reuse (Kim, 2013). Green (1992) suggested that creating a loyal customer through customer satisfaction, referral intention, and intention to return is an effective strategy (Cha & Seo, 2018).

Table 1: Previous Research

	Selection Attributes of Cafeteria or Food
Aigbedo and Parameswaran (2004)	Food Taste, Food Temperature, Fast Food, Service Quality
Park et al.(2000)	Location, Taste, Price, Waiting Time
Kwun et al.(2013)	Quality of Food, Price, Value, Service, Menu Type
Kim et al. (2012)	Variety of Food
Jung (2013)	Food Taste, Menu Diversity
Andaleeb and Caskey (2007)	Food Quality and Price, Employee Friendliness
Cha and Lee (2018)	Convenience, Price and Freshness
Ham(2012)	Food, Menu, and Convenience

The purpose of this study is to summarize comprehensively the selective attributes of students' cafeteria that have been shown in the previous study and to examine the effect of moderating role of gender, grade and allowance. This is distinctive feature of this study. Accordingly, the following hypotheses were formulated:

- H1a:** Cafeteria menu would have a positive effect on satisfaction of university students.
- H1b:** Cafeteria food taste would have a positive effect on satisfaction of university students.
- H1c:** Cafeteria food price would have a positive effect on satisfaction of university students.
- H1d:** Cafeteria cleanliness would have a positive effect on satisfaction of university students.

2.2. The role of customers' age, gender and allowance

In choosing beer at a convenience store, men considered the producer and brand as important purchasing criteria, and they purchased more discounted beer than women (Lee & Lee, 2018). Park (2018) showed that the gender-specific differences in the level of knowledge required for a healthy diet were significantly higher in women than men. Han and Kim (2008) compared the differences in eating out behaviors between men and women among college students. When eating out with friends, men preferred Korean food, while women preferred Western style food. They proved that there is a difference in menus between male and female students.

With a key role in promotion, market segmentation is an analytical approach needed to establish comprehensive hospitality-marketing strategies that are meaningful for individual subsets of consumers (Bruwer, Li, & Reid, 2002). Accordingly, many studies on hospitality market segmentation advocate the combined use of sociodemographic variables (e.g., gender, age, income, educational level, and stage of family life cycle) and psychographic factors such as lifestyles, activities, interests, and opinions (Plog, 2002; Hsu, Kang, & Wolfe, 2002; Moscardo, Pearce, & Morrison, 2001). To more thoroughly understand the wine promotion market, some researchers have investigated why consumers want to go to promoted wine-oriented restaurants in light of their sociodemographic variables (Dodd & Bigotte, 1997) and applied motivation as a basis for market segmentation (Mitchell & Hall, 2001; Nicolson, 1990; Van, 1994). Such studies have identified factors such as exploration, relaxation, socialization, learning about wine, interest in wine restaurants, and participation in wine culture as important motives for wine consumers. Accordingly, the following hypotheses were also formulated:

- H2a:** Cafeteria users' gender, grade, allowance significantly moderates the relationship between user satisfaction and menu.
- H2b:** Cafeteria users' gender, grade, allowance significantly moderates the relationship between user satisfaction and taste.
- H2c:** Cafeteria users' gender, grade, allowance significantly moderates the relationship between user satisfaction and price.
- H2d:** Cafeteria users' gender, grade, allowance significantly moderates the relationship between user satisfaction and cleanliness.

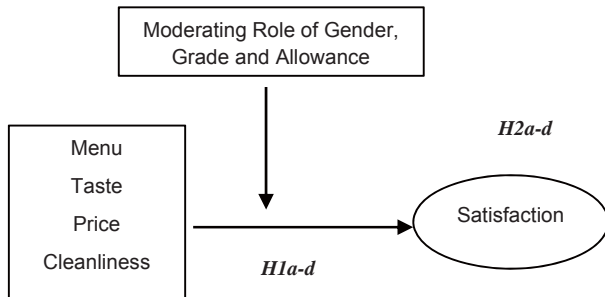


Figure 1: Research model

involved applying confirmatory factor analysis to test the construct validity of the proposed model within the sample. Second, SEM was performed to assess the structural model (Anderson & Gerbing, 1988). Additionally, to test the moderating role of age and gender, the multi-group analysis was used (Byrne, 2001). SEM was applied instead of regression analysis due to the former's ability to control measurement errors simultaneously (Ro, 2012) and, in terms of moderating effects, because its multi-group approach could be used to analyze the data (Cha & Park, 2017).

3. Methodology

3.1. Measurements

The measurements used were adopted from other studies and modified for the study reported here. Cafeteria selection importance was measured using 12 items, as suggested by Kwun et al. (2013), Jung(2013), Aigbedo and Parameswaran(2004), Andaleeb and Caskey(2007), and satisfaction was measured using 4 items, as suggested by Kim(2013) and Kim(2006). Survey respondents evaluated all items on seven-point Likert scale (one = very strongly disagree, seven = very strongly agree). The survey also included questions addressing respondents' demographics and social demographics.

3.2. Data collection

The study reported here was conducted among students using cafeteria. At the end of the survey, incentives in the form of small souvenirs were given to respondents. A field survey using a sampling approach for nonproliferation was selected as the most efficient method of data collection. Incomplete surveys were excluded from data analysis in their entirety, which resulted in no missing data points in the results. Prior to data collection, the survey with metrics was pretested by scholars in the hospitality field. The survey was intentionally brief to minimize the impact of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). When the survey was finalized, a pre-test was done to evaluate the internal consistency of construct with respondents (n = 30). Survey items were pretested for clarity, accuracy, and readability. In all, 325 responses were obtained, 24 of which were blank or incomplete and were removed. Ultimately, 301 valid responses remained for analysis.

3.3. Data analysis

Structural equation modeling(SEM) was done to test the model by following a two-stage procedure. The first stage

4. Results

4.1. Measurement models

Firstly, exploratory factor analysis was done to assess reliability, validity, and Cronbach's alpha was examined. Principal component analysis was done for factor extraction. VARIMAX method was applied to the factor rotation method. Table 2. shows the results of the analysis. As shown in Table 2. Cronbach's alpha coefficients are all over 0.8, which confirms reliability (Nunnally, 1967). Exploratory factor analysis(EFA) revealed that discriminant validity, convergence validity was verified, and the validity factor was analyzed by Amos 23.0.

Table 2: Exploratory factor analysis

	Variables				
	Price	Cleanliness	Menu	Satisfaction	Taste
pric03	.887	.193	.166	.188	.119
pric01	.886	.157	.214	.214	.164
pric02	.877	.170	.213	.252	.158
clea04	.166	.930	.114	.141	.122
clea05	.150	.928	.111	.135	.117
clea03	.158	.847	.103	.238	.188
menu01	.192	.170	.863	.263	.160
menu02	.239	.185	.827	.310	.144
menu03	.194	.018	.809	.263	.294
sat03	.254	.238	.320	.803	.260
sat02	.267	.213	.379	.782	.189
sat01	.307	.289	.330	.773	.179
tast02	.144	.251	.197	.120	.872
tast03	.216	.193	.302	.458	.702
tast01	.330	.095	.363	.492	.553
Variance (%) Total 89.7%	19.7	19.3	19.0	18.7	13.0
Cronbach's alpha	.95	.94	.92	.96	.88

Each factor of cafeteria selection importance was tested separately. To accurately evaluate the measurement model, a maximum likelihood estimation approach was employed. Results proved that the measurement structure of the proposed theoretical framework had an acceptable fit for the data ($\chi^2 = 216.839$, $df = 80$, $p < .001$, $NFI = .958$, $RFI = .937$, $IFI = .973$, $TLI = .959$, $CFI = .973$, $RMSEA = .076$). Table 3. provides the results of Confirmatory factor analysis (CFA). Convergent validity was used to measure the level of correlation among the variables partly because it can be assessed via SEM to review factor loadings and average variance extracted (AVE; Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994). Standardized factor loadings, construct reliabilities, composite reliabilities, and AVEs are listed in Table 3, which shows that all factor loadings could be used to measure their corresponding factors. That finding supports the convergent validity of the results. Additional testing revealed that AVEs in all constructs exceeded the critical level of .05. Discriminant validity was assessed by analyzing correlations among the constructs. Those results provided support for discriminant validity (Anderson & Gerbing, 1988).

Table 3: Confirmatory factor analysis result

Variables	Measure	Std. factor loadings	CR	AVE
Menu	Menu 01	.922	0.927	0.809
	Menu 02	.928		
	Menu 03	.846		
Taste	Taste 01	.874	0.887	0.726
	Taste 02	.731		
	Taste 03	.938		
Price	Price 01	.950	0.956	0.880
	Price 02	.962		
	Price 03	.901		
Cleanliness	Clean 03	.843	0.948	0.859
	Clean 04	.977		
	Clean 05	.955		
Satisfaction	Satis 01	.937	0.960	0.889
	Satis 02	.936		
	Satis 03	.956		

The values of the square root of AVE, as shown in Table 4, are larger than 0.5, which are greater than in the related row and column, the correlation value outside the diagonal line. Therefore, among the different constitutional concepts, the validity of the discrimination was suggested, and corresponding differences in the measurement results are to be shown.

Table 4: Discriminant validity through correlation analysis

	Satisfaction	Taste	Menu	Price	Cleanliness
Satisfaction	0.943				
Taste	0.801	0.852			
Menu	0.745	0.708	0.899		
Price	0.631	0.595	0.552	0.938	
Cleanliness	0.495	0.454	0.372	0.413	0.927

Note) The value shown at the diagonal are the square root of AVE

4.2. Research Hypothesis Verification

The research hypotheses were tested using Amos 23.0. The fitness index was satisfactory with chi-square = 216.839 ($df = 80$, $p = 0.000$), $NFI = 0.958$, $RFI = 0.937$, $IFI = 0.973$, $TLI = 0.959$, $CFI = 0.973$ and $RMSEA = 0.076$ for the study model. The results of hypotheses for the main effects from Hypothesis 1a. to Hypothesis 1d. were shown in table 5. In consequence of the hypothesis test on the main effect, the menu, taste, price and cleanliness showed a significant influence on the satisfaction. The results of the below verification are shown in Fig. 2.

Table 5: Results of research hypothesis

Hypothesis	Paths	Path Coefficient	t value	Results
H1a	Menu → Satisfaction	0.392	5.541***	support
H1b	Taste → Satisfaction	0.540	7.355***	support
H1c	Price → Satisfaction	0.180	3.336***	support
H1d	Cleanliness → Satisfaction	0.162	3.036**	support

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

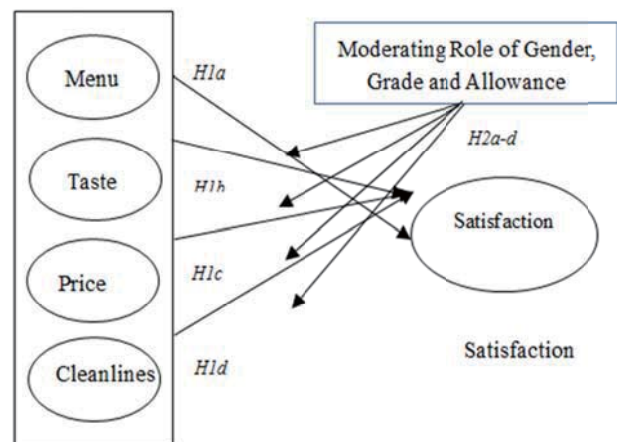


Figure 2: Results of research hypothesis

4.3. Structural relationships across groups

To test the moderating roles of students' gender, age and allowance across groups and to identify any differences among them, the multi-group analysis was used (Byrne, 2001). In order to examine the effect of students selection importance on the cafeteria, first, the total sample ($n = 301$) was divided into each groups (a. gender, b. grade, c. amount of allowance they spend per month) and the paths were compared. Based on the average value, students were divided into smaller allowance and larger allowance groups. The results for students' allowances revealed that it was a significant moderator between the importance of selection attributes and satisfaction for students, as shown in table 6. Students who get a larger allowance are more influenced by prices in cafeterias, while students with a smaller allowance are more influenced by menus. This implies that the larger allowance group is more sensitive to the effect of cafeteria prices on satisfaction, while the smaller allowance group is more sensitive to the effect of cafeteria menus on satisfaction.

5. Conclusion

The aim of the study was to find out which of the selection attributes of students who use university cafeteria are more

important factors in terms of satisfaction. Based on examination of literature overview, four selection factors were considered to be most suitable for the selection attributes of university cafeteria. The results suggest that cafeteria menu, taste, price and cleanliness have positive effects on satisfaction ($p < 0.001$). However, these relationships differed according to students' amount of allowance. In the effect of cafeteria menu on satisfaction, both the larger allowance group and the smaller allowance group had a positive influence, and the smaller allowance group had a greater influence statistically ($p = 0.026$). Also, the effect of taste on satisfaction was shown to have a plus effect on both groups. However, this influence did not reach statistical significance. The effect of the price on satisfaction was found to be affected by the both groups significantly and larger allowance group had a statistically greater influence ($p < 0.001$). The smaller allowance group and the larger allowance group had an influence on the satisfaction of the cleanliness of the cafeteria, but this influence did not reach statistical significance. This result suggests that the factors influencing satisfaction are affected by the amount of allowance while students' using university cafeteria. Therefore, students who get smaller allowance are more influenced by the menu of cafeteria, while students who get larger allowance are more influenced by cafeteria's food price.

Table 6: Comparison of gender, grade and allowance groups

	Standardized Regression Coefficient		Comparison Results	Chi-square increment	p - value
	Male Stud.	Female Stud.			
Men→ Sat	0.367	0.283	Male > Female	0.395	0.529
Tas→ Sat	0.293	0.461	Male < Female	2.613	0.106
Pri→ Sat	0.167	0.199	Male < Female	0.002	0.963
Cle→ Sat	0.219	0.057	Male > Female	2.959	0.085
	Standardized Regression Coefficient		Comparison Results	Chi-square increment	p - value
	Low Grade	High Grade			
Men→ Sat	0.242	0.403	Low G.< High G.	1.101	0.294
Tas→ Sat	0.508	0.321	Low G.> High G.	2.384	0.123
Pri→ Sat	0.128	0.222	Low G.< High G.	0.539	0.463
Cle→ Sat	0.111	0.119	Low G.< High G.	0.011	0.915
	Standardized Regression Coefficient		Comparison Results	Chi-square increment	p - value
	Smaller Allowance	Larger Allowance			
Men→ Sat	.349	.080	Smaller > Larger	4.968	0.026*
Tas→ Sat	.446	.290	Smaller > Larger	0.895	0.344
Pri→ Sat	.087	.663	Smaller < Larger	18.133	0.000***
Cle→ Sat	.141	.019	Smaller > Larger	2.304	0.129

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

6. Implications And Limitation

Taken together, the results of the present study provide the following implications for managing cafeteria. First, the cafeteria selection attributes that students consider important when using a cafeteria are menu, taste, price, and cleanliness. Second, congruently with our expectations, the student group that gets a smaller allowance was found to be more affected by the menu of a cafeteria, while the student group that got a larger allowance was found to be more influenced by price. In general, students with a smaller allowance were tolerant of food prices and students with larger allowances were generous about food prices in university cafeteria, but the findings here were reversed. Many university students have part-time jobs. They have enough disposable income compared to the students who just get an allowance from their parents. However, students with a large amount of disposable income were more sensitive to the prices in student cafeterias. This comes from motivations for students to save money for overseas trips during vacations or larger consumption activities, rather than simply eating and consuming like in the past. Therefore, specialized foodservice companies that operate student cafeterias should recognize that price competitiveness is the most important factor to improve student welfare, and a more strategic approach to cafeteria management is needed. The study has a few limitations that should be conducted in future research. First, only menu, taste, price, and cleanliness were judged to be the most important attributes of cafeteria selection in the model construction. In addition, more integrated and complex study would be needed by adding new attributes such as service, atmosphere, facility, etc. Second, the comparison of groups in this study was classified by gender, grade and different allowances. However, it would be necessary to study other value dimensions based on the research on students' consumption values regarding cafeterias in future research.

Reference

- Aigbedo, H., & Parameswaran, R. (2004). Importance-performance analysis for improving quality of campus food service. *International Journal of Quality & Reliability Management*, 21(8), 876-896.
- Alvarez, R. J. (1994). Managing total quality in foodservice. *Food technology (USA)*.
- Andaleeb, S. S., & Caskey, A. (2007). Satisfaction with food services: Insights from a college cafeteria. *Journal of Foodservice Business Research*, 10(2), 51-65.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Bruwer, J., Li, E., & Reid, M. (2002). Segmentation of the Australian wine market using a wine-related lifestyle approach. *Journal of wine research*, 13(3), 217-242.
- Byrne, B. M. (2001). Structural equation modeling: Perspectives on the present and the future. *International Journal of Testing*, 1(3-4), 327-334.
- Cha, S. S., & Park, C. (2017). Consumption value effects on shopping mall attributes: Moderating role of on/off-line channel type. *Journal of Distribution Science*, 15(6), 5-12.
- Cha S. S., & Lee, S. H. (2018). The effects of HMR selection attributes on repurchase intention by Shopping Channel. *Journal of Distribution Science*, 16(3), 13-21.
- Cha, S. S., & Yu, W. J. (2018). The Effect of Eating-Out Motives on Restaurant Attributes at Shopping Mall. *Journal of Distribution Science*, 16, 37-46.
- Cha, S. S., & Seo, B. K. (2018). The Factors influencing Customer Satisfaction with and Revisiting Coffee Shops in Korea. *Culinary Science & Hospitality Research*, 24(2), 1-7.
- Dodd, T., & Bigotte, V. (1997). Perceptual differences among visitor groups to wineries. *Journal of Travel Research*, 35(3), 46-51.
- Dorhman, S. K. (1993). Manager's profile and viewpoint. *Journal of College & University Foodservice*, 1(1), 63-69.
- Eum, Y. R., & Lyu, E. S. (2003). Analysis of Current Operational Practices and Issues of Contract Managed Foodservice Companies in Korea. *Journal of the Korean Dietetic Association*, 9(3), 197-208.
- Green, C. G. (1992). Using customer survey data to develop marketing strategies in college/university foodservices. *Journal of College & University Foodservice*, 1(1), 39-51.
- Ha, S. J., & Ha, M. K. (2008). Environment Improvement factors of the College Cafeteria by the Post Occupancy Evaluation - Focused on W college in Daejeon. *Journal of Korean Institute of Interior Design*, 17(5), 91-98.
- Ham, S. O. (2012). Rethinking University Dining Services: Role of Value in the Formation of Customer Satisfaction and Revisit Intention. *Journal of the East Asian Society of Dietary Life*, 22.
- Han, M. H., & Kim, K. J. (2008). Consumption Value and Eating Out Behavior of Male and Female Undergraduate Students. *Consumer Policy and Education Review*, 4(3), 105-118.
- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard business review*, 72(2), 164-174.
- Hsu, C. H., Kang, S. K., & Wolfe, K. (2002). Psychographic and demographic profiles of niche market leisure travelers. *Journal of Hospitality & Tourism Research*, 26(1), 3-22.

- Jung, H. Y. (2013). A study on utilization and perceived service quality of the university foodservice. *Journal of the Korean Society of Food Science and Nutrition*, 42(4), 633-643.
- Kim, H. A. (2006). Effect of the Consumers Perception of the University Foodservice Quality on the Consumer Attitude. *Journal of the Korean Society of Food Science and Nutrition*, 35(6), 815-822.
- Kim, H. S., Lee, S. M., & Yuan, J. J. (2012). Assessing college students' satisfaction with university foodservice. *Journal of foodservice business research*, 15(1), 39-48.
- Kim, H. S. (2013). Study on relationship between satisfaction, loyalty, and subjective quality of life: Generation Y consumers in university foodservice. *Journal of the Korean Data Analysis Society*, 15(1), 489-500.
- Kim, Y. S., Moreo, P. J., & Yeh, R. J. (2006). Customers' satisfaction factors regarding university food court service. *Journal of Foodservice Business Research*, 7(4), 97-110.
- Klassen, K. J., Trybus, E., & Kumar, A. (2005). Planning food services for a campus setting. *International journal of hospitality management*, 24(4), 579-609.
- Kwun, D. J. W., Ellyn, E., & Choi, Y. (2013). Campus foodservice attributes and their effects on customer satisfaction, image, and word-of-mouth. *Journal of foodservice business research*, 16(3), 276-297.
- Kwun, D. J. W. (2011). Effects of campus foodservice attributes on perceived value, satisfaction, and consumer attitude: A gender-difference approach. *International Journal of Hospitality Management*, 30(2), 252-261.
- Lee, J. J., & Lee, S. H. (2018). A study on selection of beers consumption and beers in convenience store of university students. *Tourism & Leisure Research*, 30(1), 5-19.
- Lee, K. (2004). Students' attitude and satisfaction towards university foodservices. *Korean Journal of Human Ecology*, 13(6), 1047-1053.
- Mitchell, R., & Hall, C. M. (2001). Lifestyle behaviours of New Zealand winery visitors: wine club activities, wine cellars and place of purchase. *International Journal of Wine Marketing*, 13(3), 82-93.
- Moscardo, G., Pearce, P., & Morrison, A. (2001). Evaluating different bases for market segmentation: A comparison of geographic origin versus activity participation for generating tourist market segments. *Journal of Travel & Tourism Marketing*, 10(1), 29-49.
- Nicolson, P. (1990). Gender, power and wine selection: A pilot study. *Journal of Wine Research*, 1(3), 235-242.
- Nunnally, J. C. (1967). *Psychometric theory*.
- Park, J., Song, Y., Lee, Y., & Paik, H. (2000). Assessment of customer satisfaction of service quality in university foodservices. *Korean Journal of Community Nutrition*, 5(2 Suppl.), 324-332.
- Park, J. O. (2018). Analysis of comparisons of eating-out, dietary lifestyles, and healthy dietary competencies among middle-aged consumers according to obesity status and gender for implications of consumer education. *Journal of Nutrition and Health*, 51(1), 60-72.
- Plog, S. C. (2002). The power of psychographics and the concept of venturesomeness. *Journal of travel research*, 40(3), 244-251.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879-903.
- Ro, H. (2012). Moderator and mediator effects in hospitality research. *International Journal of Hospitality Management*, 31(3), 952-961.
- Van Westering, J. (1994). The Cognac market: an examination of the Cognac market in the Far East. *International Journal of Wine Marketing*, 6(1), 5-19.
- Yi, N. Y. (2012). Importance-performance analysis (IPA) of service quality attributes of university foodservice-A comparison of male and female students' perceptions in Daejeon. *Korean Journal of Human Ecology*, 21(2), 389-405.