Study on a model of street vended food choices by Korean high school students

Kiwoong Cho¹, Sanghyun Park² and Nami Joo²§
¹Myungduck Foreign Language High School, Seoul 157-280, Korea
²Department of Food and Nutrition, Sookmyung Women’s University, 52 Hyochangwon gil, Yongsan-gu, Seoul 140-742, Korea

Abstract
Street vended food (SVF) includes food and beverages prepared and sold outdoors or in public areas by street merchants for consumption on the scene or later without further preparation. Due to its low price and convenience, SVF has been popular in Korea for a long time, particularly with high school students. Beyond Korea, SVF is also popular in southeast Asia and southern Africa in the form of ready-to-eat food. This study on high school students, who are main consumers of SVF in Korea, focused on the factors that affect consumer loyalty. The study was performed by questionnaire and used AMOS software to develop a structural equation model. The results of verifying the model’s fidelity were χ² = 685.989, df = 261, GFI = 0.851, AGFI = 0.814, NFI = 0.901, CFI = 0.907, RMR = 0.048, indicating a satisfying structural model. SVF quality and service, emotional response, and the physical environment had a statistically significant effect on consumer loyalty. In contrast, SVF sanitation had no statistically significant effect on consumer loyalty. Based on these results, the sanitary management of SVF needs to be addressed immediately combined with education for SVF providers to maintain a clean environment.

Key Words: SVF (Street Vended Food), AMOS, consumer loyalty, sanitation

Introduction
Street vended food (SVF) includes food and beverages that are prepared and sold outdoors or in public spaces by street merchants for consumption on the scene or later without further preparation [1]. SVF is usually cheap and convenient with unique attributes that make it popular. Business start-up costs are also low making it a popular and important business model, a source of income, and a jobs creator [2]. In Korea, SVF is an attractive and popular distraction and offers unique tastes with a friendly atmosphere, making it popular among tourists and regular folk [3]. SVF is also popular in southeast Asia and southern Africa in the form of ready-to-eat food and is inexpensive with lots of variety, making it a popular snack and a substitute for meals [4]. However, SVF has a negative reputation and image of being nutritionally unbalanced and unsanitary; thus, SVF vendors are regularly inspected or banished [5].

The regulatory definition for street vendors differs between government agencies, and the statistics vary; thus, a definitive report on the state of SVF sales is difficult to find. Nevertheless, the period during the early to mid 1990s saw a decrease in street vendors until 1998 when the foreign currency crisis occurred, and a large increase in street vendors was seen. Thus, the number of street vendors has varied with the economic and social environment and its scope is expected to expand [2].

SVF has not been well studied in Korea. Notable studies have mostly focused on SVF consumption and status [3-7] followed by studies on sanitary management [2,6] and nutritional value [8]. But, studies on SVF consumers are absent. Food prepared and sold on streets or in public areas by street vendors is almost entirely determined to be illegal by national law [2], but a clear definition is absent, so control has been intermittent; thus, SVF continues to be sold. Even the Korean Food and Drug Administration (KFDA) in 2008 prepared and distributed nationwide picture manuals on the sanitary management of SVF for merchants.

Point of service is an important factor that directly and indirectly influences consumer satisfaction at the moment of service and, thus, holds an important position in marketing [9]. The point of service begins with the face-to-face contact between the seller and consumer, and this person-to-person interaction has a major influence on consumer satisfaction [10]. The point of service can be divided into interactions with the seller and the physical environment [11,12]. The evaluation by the consumer of the service they receive is an indication of the overall evaluation of the seller or corporate entity and is a fundamental element that makes up consumer satisfaction [10].

This study investigated the consumption of SVF by high school students who have easy access to SVF. The level of quality, service, and satisfaction with SVF were measured, and a way

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Corresponding Author: Nami Joo, Tel. 82-2-710-9467, Fax. 82-2-710-9469, Email. namij@sookmyung.ac.kr
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to increase consumer satisfaction through quality improvements is presented.

Subjects and Methods

Investigated subjects and investigation period

This study was performed by questionnaire between October 4 and 14, 2010 with randomly selected high school students residing in the Seoul metropolitan area. In total, 320 questionnaire were distributed, and 310 were returned (response rate, 96.9%).

Investigated content and data collection

The questionnaire was developed and refined considering previous studies on SVF [6,7] and the research on point of service factors and consumer satisfaction [13-17]. The structure of the questionnaire was divided into general questions, consumption of SVF, questions on the point of service and its quality as well as consumer satisfaction. Responses to questions on SVF quality, point of service, and satisfaction were scored using a five-point Likert scale, with 1 indicating strong disagreement and 5 indicating strong agreement.

Statistical analysis

The scores were analyzed using PASW 18.0 (SPSS, Inc., Chicago, IL, USA). The correlation between consumption of SVF and general factors was investigated to determine the relationship between the two. The relationships between general factors and perceived quality of SVF, point of service factors, and consumer satisfaction were analyzed with an analysis of variance (ANOVA) and a t-test. A Duncan's multiple range test was performed to verify the group results. Analyses on causal factors were performed to verify the results on perceived SVF quality and consumer satisfaction. The responses were also analyzed using AMOS (v. 18.0) to verify the confirmatory factor analysis and structural equation model [18].

Results

Consumption of SVF

The results on consumption of SVF are presented in Table 1. A significant difference was observed between the genders for frequency, preferred SVF, persons interacting with the consumer, level of preference, reasons for liking or disliking SVF, and average cost per purchase. The frequency of purchase was highest at 1-2 times per week for women (62.4%), which was higher than that of men (40.4%), and men (25.8%) responded that they do not consume SVF more often than that of women (18.6%). Previous studies [5] on middle school and university students in the Seoul area showed that 43.5% of high school students consume SVF more than 4-5 times per month, which is higher than that for middle school and university students. This was consistent with the results of this study and confirmed the high frequency of SVF purchases by high school students. The foods of choice 2-3 times a week were Ddukbokki, Sundae, and Uhmok, and more women (80.5%) than men (56.2%) purchased them. Those making SVF purchases were mostly friends with women (89.1%), which was higher than that of men (69.7%). In contrast, purchases made alone or with family were significantly higher for men than those for women (P < 0.001). The level of preference was higher for women than that for men and indications of no preference or dislike were significantly higher for men than those for women (P < 0.05). Among men, only 26.8% stated that they liked SVF because of its easy access, which was the top response, compared to 34.6% of women. This reason was followed by SVF being a substitute for a regular meal, and 25.4% of men and 22.9% of women stated this as their reason. The low cost of SVF was the third reason for 22.3% of women compared to 19.7% of men. The response of easy access as the top reason was consistent with the results obtained by [3] whose study was performed on university students. The top reason for disliking SVF was its unsanitary status by 72.9% of women and 34.1% of men (P < 0.01). The unsanitary status of SFVs was the top reason, which was consistent with previous studies [4] and [5]. The average budget per SFV purchase was 1,000-2,000 for 48.3% of men and 30.3% of women (P < 0.01). The next highest response was 2,000-3,000 for women (39.4%), which was greater than that of men (33.7%). Overall, these two budget ranges combined made up 70% of the responses. This was also consistent with previous results [4] in which 71.79% of respondents used 1,000-3,000 as a budget range per purchase. Significant differences were also found for the type of preferred SVF and the people taking part in the purchase when the average monthly allowance was considered. Of those who most frequently purchased Ddukbokki, Sundae, and Uhmok, the average monthly allowance was 40,000-60,000 for 81.1% of the respondents. The lowest group was those with monthly allowances < 20,000 at 53.1% (P < 0.01). The number of respondents who purchased SVF with friends was less for those with monthly allowances < 40,000 compared to those with higher monthly allowances (P < 0.001). Of those who purchased SFV alone, the smallest group was those with monthly allowances < 20,000 at 18.8% (P < 0.01).

Quality of SVF, point of service, and consumer satisfaction

The SVF results by gender and monthly allowance are given in Table 2. Overall, the response to “SVF is sanitary” had the lowest score of 2.27. The next lowest was for the “environment in which SVF is sold is sanitary”, which scored 2.39 followed by “utensils served with SVF are sanitary” (2.55), “I will still buy SVF even if the cost rises” (2.63) “and providers of SVF
## Table 1. Consumption of street vended food

| Gender          | Monthly allowance (₩) | N (%) | \( \chi^2 \) |
|-----------------|-----------------------|-------|-------------|
|                 | Men                   | Women | Total       |
| Frequency       |                       |       |             |
| Do not consume  | 23 (25.8)             | 41 (18.6) | 64 (20.6) | 15.417** |
| 1-2times a week | 36 (40.4)             | 138 (62.4) | 147 (61.1) | 28 (43.8) |
| 3-4times a week | 17 (19.1)             | 30 (13.6) | 47 (15.2) | 13 (20.3) |
| 5-6times a week | 8 (9.0)               | 6 (2.7)  | 14 (4.5)  | 4 (6.3)   |
| Over 7times a week | 5 (5.6)           | 6 (2.7)  | 11 (3.5)  | 3 (4.7)   |
| Preferred SVF1) |                       |       |            |
| Ddukbokki, Sundae, Uhmok | 50 (56.2) | 178 (80.5) | 228 (73.5) | 34 (53.1) |
| Hotteok         | 3 (3.4)               | 1 (0.5)  | 4 (1.3)   | 0 (0.0)   |
| Bungeoppang     | 5 (5.6)               | 8 (3.6)  | 13 (4.2)  | 3 (4.7)   |
| Toast           | 3 (3.4)               | 11 (5.0) | 14 (4.5)  | 4 (6.3)   |
| Etc.            | 28 (31.5)             | 23 (10.4) | 51 (16.5) | 13 (14.0) |
| Companion       |                       |       |            |
| Alone           | 9 (10.1)              | 8 (3.6)  | 17 (5.5)  | 23 (11.3) |
| Family          | 14 (15.7)             | 14 (6.3) | 28 (9.0)  | 6 (9.4)   |
| Friend          | 62 (69.7)             | 197 (89.1) | 259 (83.5) | 43 (67.2) |
| Etc.            | 4 (4.5)               | 2 (0.9)  | 6 (1.9)   | 3 (4.7)   |
| Location of the street stall |       |       |            |
| By main roads   | 43 (48.3)             | 92 (41.6) | 135 (43.5) | 30 (46.9) |
| In alleys       | 11 (12.4)             | 20 (9.0) | 31 (10.0) | 2 (6.7)   |
| In residential streets | 7 (7.9)      | 10 (4.5) | 17 (5.5)  | 1 (1.6)   |
| In shopping streets | 21 (23.9)     | 84 (38.0) | 105 (33.9) | 25 (39.1) |
| Etc.            | 7 (7.9)               | 15 (6.8) | 22 (7.1)  | 6 (9.4)   |
| Degree of preference |                   |       |            |
| Dislike very much | 9 (10.1)         | 7 (3.2)  | 16 (5.2)  | 5 (7.8)   |
| Dislike        | 10 (11.2)             | 15 (6.8) | 25 (8.1)  | 6 (9.4)   |
| Indifferent     | 43 (48.3)             | 108 (48.9) | 151 (50.0) | 54 (53.1) |
| Like           | 24 (27.0)             | 73 (33.0) | 97 (31.3) | 25 (24.0) |
| Like very much  | 3 (3.4)               | 18 (8.1) | 21 (7.1)  | 3 (4.7)   |
| Reasons for liking SVF |             |       |            |
| Cheap price    | 14 (19.7)             | 40 (22.3) | 54 (21.6) | 12 (25.0) |
| Economy of time | 10 (14.1)             | 5 (2.8)  | 15 (6.0)  | 5 (10.6)  |
| Accessibility   | 19 (26.8)             | 62 (34.6) | 81 (32.4) | 18 (38.3) |
| Can eat anytime | 18 (25.4)             | 41 (22.9) | 59 (23.6) | 7 (14.9)  |
| Others         | 10 (14.1)             | 31 (17.3) | 41 (16.4) | 5 (10.6)  |
| Total          | 71 (28.4)             | 79 (14.6) | 150 (100.0) | 47 (20.4) |
| Reasons for disliking SVF |         |       |            |
| Unsanitary     | 14 (34.1)             | 62 (27.9) | 76 (30.3) | 17 (54.8) |
| Taste          | 8 (19.5)              | 5 (4.7)  | 12 (9.5)  | 2 (6.5)   |
| No companion   | 3 (7.3)               | 4 (4.7)  | 7 (5.6)   | 1 (3.2)   |
| Lack of menu   | 7 (17.1)              | 8 (9.4)  | 15 (11.9) | 6 (19.4)  |
| Etc.           | 9 (22.0)              | 7 (8.2)  | 16 (12.7) | 5 (16.1)  |
| Total          | 41 (25.3)             | 75 (41.7) | 126 (100.0) | 31 (27.7) |
| Average budget per purchase (₩) |       |       |            |
| Under 1,000    | 2 (2.2)               | 32 (14.5) | 34 (11.0) | 9 (14.1)  |
| 1,000-2,000    | 43 (48.3)             | 67 (30.3) | 110 (35.5) | 22 (44.4) |
| 2,000-3,000    | 30 (33.7)             | 87 (39.4) | 117 (37.7) | 25 (39.1) |
| 3,000-4,000    | 9 (10.1)              | 28 (12.7) | 37 (11.9) | 8 (12.5)  |
| Over 4,000     | 5 (5.6)               | 7 (3.2)  | 12 (3.9)  | 0 (0.0)   |
| Total          | 89 (28.7)             | 221 (71.3) | 310 (100.0) | 64 (22.8) |

\*P<0.05, **P<0.01, ***P<0.001

SVF1): street vended food

are sanitary” (2.69). All responses to sanitation and cleanliness questions except those related to cost were low, indicating a negative opinion of SFV on those topics. This result was similar to the results obtained by [6] on middle school and university students and [3] on university students alone. In contrast, the response to “stores selling SVF are easily accessible” scored the highest with 3.64, followed by “I am satisfied with SVF” (3.49), “I do not think consuming SFV is a waste of time” (3.47), “I am satisfied with the taste of SVF” (3.40), “The location of SVF stores is appropriate” (3.39) and “I will continue to consume SVF” (3.35). Thus, despite their dissatisfaction with SFV sanitation and cleanliness, they considered SFV easy to access, were
Judged to be suitable, and continued to purchase SVF.

When analyzing differences in responses by gender or monthly allowance to questions such as "thesvf stores are appropriate" (£< 0.05) and "stores selling SVF are easily accessible" (£< 0.01). The response to "the environment in which SVF is sold is sanitary", students with lower allowances showed higher scores (£< 0.05). Those with allowances <20,000 gave lower scores to the question "I do not think consuming SFV is a waste of time" than that of the other groups (£< 0.001). Students with larger allowances provided higher scores on the question "the service related to SVF is good" (£< 0.05) as well as to the questions "the cost of SVF is appropriate" (£< 0.001), "I am satisfied with the taste, and will continue to purchase SVF."

Women responded higher to "location of SVF stores is appropriate" (£< 0.05) and "stores selling SVF are easily accessible" (£< 0.01). In contrast, the response to "SVF provides me pleasure" (£< 0.01), "SVF makes me happy" (£< 0.001), and "SVF satisfies me" were higher for women than for men. Men (3.43) showed a higher score for taste satisfaction than that of women (3.39) as well as for the overall level of service, with men scoring 3.19 and women scoring 3.07. Overall satisfaction for SVF purchases was higher for women (3.26) than for those for men (3.24), although satisfaction with SVF providers was higher for men (3.13) than that for women (3.09). Men responded more to "I still will buy SVF even if the cost rises" (£< 0.05) and women responded more to "I am willing to give a positive opinion of SVF" (£< 0.001).

When analyzing the differences in the responses to monthly average allowance, the higher the allowance, the higher the scores were for "the locations of the SVF stores are appropriate" (£< 0.05), and "stores selling SVF are easily accessible" (£< 0.001). For the question "the environment in which SVF is sold is sanitary", students with lower allowances showed higher scores (£< 0.05). Those with allowances <20,000 gave lower scores to the question "I do not think consuming SFV is a waste of time" than that of the other groups (£< 0.001). Students with larger allowances provided higher scores on the question "the service related to SVF is good" (£< 0.05) as well as to the questions "the cost of SVF is appropriate" (£< 0.001), "I am satisfied with the taste, and will continue to purchase SVF."
than that of other groups \( (P < 0.05) \). Scores to the question “I am willing to give a positive opinion of SVF” rose as the average monthly allowance rose \( (P < 0.001) \).

**Reliability and accuracy of the questionnaire results**

To verify the reliability and accuracy of the questionnaire results, reliability analysis and investigative factor analysis were performed, and the results are shown in Table 3. After conducting a factor analysis on the 25 questions, five primary factors were identified with a total percent accumulation of 65.405\%. The Cronbach's alpha value for each factor was >0.6, indicating acceptable reliability.

The first factor, hereafter referred to as the “quality of SVF and service” was identified from the responses to the service related to “SVF is good”, “providers of SVF are friendly”, “I do not think consuming SVF is a waste of time”, “I am satisfied with the providers of SVF”, “I am satisfied with the taste of SVF”, “I am satisfied with the purchase of SVF”, “I am satisfied with the overall service of SVF”, “the condition of SVF served is satisfactory”, “the cost of SVF is adequate”, “Utensils and facilities for consuming SVF are well prepared”. The second factor, hereafter referred to as the “emotional response”, was identified from the responses to “SVF provides me pleasure”, “SVF makes me happy”, “SVF satisfies me”, and “consuming SVF is fun and comforting”. The third identified factor was linked to the responses to “I wish to introduce friends to SVF”, “I will still buy SVF even if the cost rises”, “I am willing to give a positive opinion of SVF”, “I will continue to consume SVF” and is referred to hereafter as “consumer loyalty”. The fourth factor was “SVF cleanliness” and was linked to the responses to “the environment in which SVF is sold is sanitary”, “utensils served with SVF are sanitary”, “SVF is sanitary”, and “SVF providers are sanitary”. The last factor was the “physical environment”, which was related to the responses to “the location of SVF stores is appropriate” and “stores selling SVF are easily accessible”.

**Table 3. Reliability and exploratory factor analyses**

| Question                                               | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 |
|--------------------------------------------------------|----------|----------|----------|----------|----------|
| The services related to SVF are good.                  | 0.739    |          |          |          |          |
| Providers of SVF are friendly.                         | 0.653    |          |          |          |          |
| I do not think consuming SVF is a waste of time.       | 0.624    |          |          |          |          |
| I am satisfied with the providers of SVF.              | 0.586    |          |          |          |          |
| I am satisfied with the taste of SVF.                  | 0.581    |          |          |          |          |
| I am satisfied with the purchase of SVF.               | 0.641    |          |          |          |          |
| I am satisfied with the overall service of SVF.        | 0.643    |          |          |          |          |
| The condition of SVF served is satisfactory.           | 0.538    |          |          |          |          |
| The cost of SVF is adequate.                           | 0.459    |          |          |          |          |
| Utensils and facilities for consuming SVF are well prepared. | 0.434    |          |          |          |          |
| SVF provides me pleasure.                              |          | 0.878    |          |          |          |
| SVF makes me happy.                                    |          | 0.873    |          |          |          |
| SVF satisfies me.                                      |          | 0.846    |          |          |          |
| Consuming SVF in itself is fun and comforting.        |          | 0.492    |          |          |          |
| I would like to introduce SVF to friends.              |          |          | 0.773    |          |          |
| I will continue to consume SVF.                        |          |          | 0.750    |          |          |
| I am willing to speak positively of SVF.               |          |          | 0.684    |          |          |
| I will still buy SVF even if the cost rises.           |          |          | 0.619    |          |          |
| I am satisfied with SVF.                               |          |          | 0.524    |          |          |
| The environment in which SVF is sold is sanitary.      |          |          |          | 0.875    |          |
| Utensils served with SVF are sanitary.                 |          |          |          | 0.817    |          |
| SVF is sanitary.                                       |          |          |          | 0.812    |          |
| Providers of SVF are sanitary.                         |          |          |          | 0.775    |          |
| The location of SVF stores is appropriate.             |          |          |          |          | 0.889    |
| Stores selling SVF are easily accessible.              |          |          |          |          | 0.854    |
| Factor loading                                         | 4.262    | 3.490    | 3.395    | 3.341    | 1.862    |
| Percent accumulation                                   | 17.049   | 31.010   | 44.591   | 57.956   | 65.405   |
| Cronbach's alpha                                       | 0.880    | 0.905    | 0.836    | 0.878    | 0.782    |

SVF*: street vended food

A confirmatory factor analysis was conducted based on the results of the exploratory factor analysis. As a result of the confirmatory factor analysis, factor loading for the response to “I do not think consuming SVF is a waste of time” was <0.5.
Table 4. Confirmatory analysis results

| Factor | Factor loading | Error | Reliability | Average Variance Extracted |
|--------|----------------|-------|-------------|---------------------------|
| The quality of food and service quality of SVF | The services related to SVF are good. | 0.561 | 0.439 | 0.910 | 0.570 |
| | Providers of SVF are friendly. | 0.665 | 0.395 | | |
| | I am satisfied with the providers of SVF. | 0.738 | 0.255 | | |
| | I am satisfied with the taste of SVF. | 0.747 | 0.297 | | |
| | I am satisfied with the purchase of SVF. | 0.781 | 0.219 | | |
| | I am satisfied with the overall service of SVF. | 0.729 | 0.265 | | |
| | The condition of SVF served is satisfactory. | 0.714 | 0.296 | | |
| | The cost of SVF is adequate. | 0.526 | 0.522 | | |
| | Utensils and facilities for consuming SVF are well prepared. | 0.570 | 0.409 | | |
| Emotional response | SVF makes me happy. | 0.933 | 0.110 | 0.856 | 0.605 |
| | SVF provides me pleasure. | 0.952 | 0.081 | | |
| | SVF satisfies me. | 0.883 | 0.193 | | |
| | Consuming SVF in itself is fun and comforting. | 0.601 | 0.524 | | |
| Sanitation of SVF | The environment in which SVF is sold is sanitary. | 0.833 | 0.242 | 0.909 | 0.715 |
| | Utensils served with SVF are sanitary. | 0.786 | 0.304 | | |
| | SVF is sanitary. | 0.789 | 0.250 | | |
| | Providers of SVF are sanitary. | 0.799 | 0.231 | | |
| Physical environment | The location of SVF stores is appropriate. | 0.789 | 0.287 | 0.825 | 0.702 |
| | Stores selling SVF are easily accessible. | 0.814 | 0.258 | | |
| Consumer loyalty | I would like to introduce SVF to friends. | 0.773 | 0.370 | 0.866 | 0.567 |
| | I will continue to consume SVF. | 0.680 | 0.362 | | |
| | I am willing to speak positively of SVF. | 0.748 | 0.400 | | |
| | I will still buy SVF even if the cost rises. | 0.559 | 0.573 | | |
| | I am satisfied with SVF. | 0.778 | 0.229 | | |

\[ \chi^2 = 792.400 \text{ (} P = 0.000\text{), df = 242, GFI = 0.830, AGFI = 0.790, NFI = 0.833, CFI = 0.877, RMR = 0.053} \]

SVF: street vended food

Table 5. Results of hypothesis testing

| Path | Regression coefficient | Standard error | t | Result |
|------|------------------------|----------------|---|--------|
| The quality of food and service quality of SVF | 1.106 | 0.155 | 7.133 | Support |
| Emotional response | 0.323 | 0.065 | 4.943 | Support |
| Sanitation of SVF | 0.021 | 0.040 | 0.529 | Rejection |
| Physical environment | 0.085 | 0.037 | 2.283 | Support |

SVF: street vended food

Analysis of the structural equation model

Thus, another confirmatory factor analysis was performed after excluding that question. The results are presented in Table 4.

The goodness-of-fit-index was insufficient for the recommended level, but reliability (> 0.7) and average variance extracted (> 0.5) related to all factors was over the critical value [19]. This affirmed the reliability and convergent validity.

Analysis of the structural equation model

The results of the effects of the quality of SVF food and service, emotional response, SVF sanitation, and physical environment on consumer loyalty are presented in Fig. 1 and Table 5. The results of verifying model fidelity were \[ \chi^2 = 685.989, \text{ df} = 261, \text{ GFI} = 0.851, \text{ Adjusted Goodness of Fit Index, AGFI} = 0.814, \text{ Normed Fit Index, NFI} = 0.901, \text{ Comparative Fit Index, CFI} = 0.907, \text{ Root Mean square Residual, RMR} = 0.048 \]

\[ *P < 0.05, **P < 0.01 \]

Fig. 1. Structural equation for the research model. \[ \chi^2 = 685.989, \text{ df} = 261, \text{ GFI} = 0.851, \text{ AGFI} = 0.814, \text{ NFI} = 0.901, \text{ CFI} = 0.907, \text{ RMR} = 0.048, \text{ }^*P < 0.05, \text{ }^{**}P < 0.01 \]
The effects that SVF food and service quality had on consumer loyalty (Table 5) had statistical significance with a regression coefficient of 1.106 and a t-value of 7.133. The effects that emotional response had on consumer loyalty were also statistically significant with a regression coefficient of 0.323 and a t-value of 4.943. These results are consistent with those of another study stating that consumer emotional response to Korean restaurants has positive impacts on consumer satisfaction (Jung and Yoon, 2010). The effects that SVF sanitation had on consumer loyalty were not statistically significant with a regression coefficient of 0.021 and t-value of 0.529. The satisfaction level of SVF sanitation was low, because the average score for four questions about sanitary of SVF was < 3 (Table 2). However, it seemed that such a factor did not have a significant effect on consumer loyalty. Another study reported that Korean middle school, high school, and college students think that SVF sanitation is poor, yet they want SVF preserved [6]. The effects that physical environment had on consumer loyalty were statistically significant with a regression coefficient of 0.085 and a t-value of 2.283. Taken together, the quality of SVF food and service, the emotional response, and the physical environment had a statistically significant effect on consumer loyalty.

Discussion

This study investigated the consumption, quality, point of service factors, and consumer satisfaction of SVF by high school students who have easy access to SVF; thus, helping to improve SVF quality and increase consumer satisfaction.

Of the 310 students that answered the questionnaire, 28.7% were men and 71.3% were women. In total, 30.6% received allowances of 20,000-40,000; 26.3% received 40,000-60,000, 22.8% received < 20,000, and 20.3% received > 60,000. Those who purchased SVF one to two times per week were the largest group followed by those who did not purchase SVF at all. The most popular SVFs were Ddukboeki, Sundae, and Uhmok. The purchaser was usually accompanied by a friend, and the most common store location was on the pavement or sidewalk of a larger street. The largest group indicated no particular preference for SVF, whereas the next largest group indicated that they liked SVF. The reasons for liking SVF were because it is readily accessible followed by because it substitutes as a meal, and because it is low cost. The most popular reason for not liking SVF was due to its unclean reputation. Overall, the scores for four questions about sanitary of SVF was < 3 (Table 2). However, it seemed that such a factor did not have a significant effect on consumer loyalty. Another study reported that Korean middle school, high school, and college students think that SVF sanitation is poor, yet they want SVF preserved [6]. The effects that physical environment had on consumer loyalty were statistically significant with a regression coefficient of 0.085 and a t-value of 2.283. Taken together, the quality of SVF food and service, the emotional response, and the physical environment had a statistically significant effect on consumer loyalty.

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