

A Study on the Impact of Coffee Service Quality on Customer Satisfaction and Loyalty

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Abstract: Coffee is a representative food service industry that commonly satisfies basic human needs. Among the consumers, the younger generation consumption is relatively higher than the middle and elderly generations. Their purchase decision is based on the individuality and unique characteristics of the coffee shop e.g., sophisticated internal environment, quality drinks, discriminatory marketing, and diverse menus. Coffee shops serve a variety of purpose including providing simple meals, a place to study, an area to work, and a comfortable rest area. This study conducted an empirical analysis on the factors affecting the purchase decisions of the coffee consumers. The results imply the following hypothesis: (H1-1) interaction influences positive emotions was adopted; (H1-2) the physical environment influences positive emotions was rejected; (H1-3) the result quality influences positive emotions was adopted; (H1-4) representativeness affects positive emotions was adopted; (H1-5) diversity influences positive emotions was adopted, and; (H2) positive emotions influence loyalty was adopted.

Keywords: Swiftness of the transaction, Autonomy of choice, Competitiveness of insurance premiums, Quality of information, Intention to use, Users satisfaction, Intention to purchase

1. Introduction

Eating out has long been a daily routine for modern people. Coffee is a representative restaurant industry that satisfies basic human needs. The sophisticated physical environment of coffee shops, the sophistication of beverages, emotional marketing, and diversification of menus provide a wider range of choices for customers' visit and revisit decisions. Coffee consumers make purchasing decisions based on characteristics of the coffee shop. It is thought that the characteristics affecting purchase decision of the younger generation, who are relatively high in visiting coffee shops, will be different from those of the middle-aged and older generations. Thus the coffee shops have various purposes, such as serving coffee and a simple meal, a place to study and work, and a comfortable rest area. In 1888, a hotel in Incheon, the port of opening, opened an annexed coffee shop selling coffee, which was said to have led the nation's coffee industry.

The domestic coffee market was dominated by instant coffee developed as a military food for the U.S. military during the Korean War until the mid-1990s, but the domestic coffee market changed greatly in 1996 due to Starbucks' entry into the country and the spread of espresso coffee. The size of the domestic coffee market has been expanding rapidly recently, with new products that maintain the luxurious taste and quality of coffee beans pouring in and brand coffee shops aggressively marketing them[1]. According to a survey conducted by the Hyundai Research Institute on "Five Trend Changes and Prospects in the Coffee Industry," the domestic coffee industry's market size grew from 5.9 trillion won in 2016 to about 6.8 trillion won in 2018, and is expected to reach about 8.6 trillion won in 2023. As the domestic coffee market grows and subdivides, the number of brands and stores offering "specialty coffee" has expanded significantly. Hyundai Research Institute predicts that this trend will be maintained. Specialty Coffee is a product rated above 80 (out of 100) by the International Specialty Coffee Association (SCA). Starbucks Reserve Bar, Blue Bottle, Coffee At works, Angelinus Specialty, and Ediya Coffee Lab are representative brands. In terms of the opening of high-end stores, Starbucks has opened 50 of them in Korea, the second largest number after China. This is the highest among major countries, with 9.8 per 10 million people. Meanwhile, the Hyundai Research Institute analyzed the five trends in the coffee industry by expanding the number of new revenue models such as the growth of specialty coffee, the pursuit of viral marketing, the deepening price differentiation, and subscription models [2].

A lot of research has been conducted on the quality of service in the coffee field. Until now, most of the preceding studies have examined the relationship between price sensitivity and service quality, customer satisfaction, service quality and behavior, but not many have empirically analyzed the relationship between the service quality of coffee and the positive emotion and of the consumers. Since the provision of excellent service quality can increase positive emotion and loyalty, it is necessary to evaluate quality status through measurement of coffee service quality and to establish and implement strategies for improving service quality accordingly. In other words, measurement of service quality is an essential element for providing high levels of service quality. Therefore, based on prior research, the factors of coffee service quality affecting positive emotion and loyalty were divided into interaction, physical environment, result quality, representativeness, and diversity. It is expected that this research will contribute to establishing policies related to coffee service quality in the future. Structural equation models were used to test the relationships with the factors described earlier.

2. Theoretical Background

2.1 Service Quality

In general, service quality is defined as 'the degree of inconsistency between consumer expectations of service and perception'. So far, three models - SERVQUAL, SERVPERF and RSQS - have been most widely used, and generally the most frequently used service quality measurement tool is the SERVQUAL model [3]. Parasuraman et al. initially divided the sub-factors into 10 categories for measuring service quality: tangibility, responsiveness, reliability, ability, etiquette, creditworthiness, stability, accessibility, communication, and understanding of customers. The overlapping factors were then grouped together into five types of Service Quality (SERVQUAL) metrics: tangibility, reliability, responsiveness, certainty, and empathy [4]. Cronin and Taylor recognized the problems with SERVQUAL measurement tools and argued that the conceptualization and manipulation of service quality was inappropriate. In addition, the SERVPERF model, which measures the quality of service only by service performance excluding expectations, was presented in the service quality measurement. They compared the existing SERVQUAL model, which compares expectations and performance, with the SERVPERF model, which is measured only by a single performance indicator. Both models used the same 5 dimensions and 22 questions. According to these studies, the SERVQUAL model is suitable only for two of the four industries studied: fast food stores, pest control businesses, bank, and laundry. On the other hand, the SERVPERF model was found to be suitable for all four industries. And the result of the regression analysis, the coefficient of determination, was higher in the SERVPERF model. Thus, the SERVPERF model, which measures the perception of service performance, proved suitable for measuring service quality [5]. In the 2000s, Brady and Cronin (2001) proposed a three-dimensional service quality hierarchical structure model. The three dimensions are composed of three sub-dimensions again, with interaction quality, physical environmental quality, and result quality. Interaction quality consists of attitude, behaviour, and professionalism; physical environment quality consists of surrounding environment, design, and social factors, and; result quality consists of waiting time, typicality, and favourability. To Brady and Cronin's (2001) three-dimensional model considers environmental quality as an independent dimension of service quality, away from previous studies that have bisected outcome quality and process quality, reflecting consumers' growing interest in the environment. This logic is considered to reflect consumer perception and market phenomena better than the SERVQUAL model centered on process quality and the two-dimensional service quality measurement model of course quality and outcome quality [6]. Park and Yoon (2006) developed a service quality measurement tool that can be used in coffee shops for customers of espresso coffee shops at S University in Seoul. To this end, measurement questions were developed based on two expert interviews, surveys, and prior studies, and reliability analysis and factor analysis were conducted several times to develop 21 questions of 5 dimensions (physical characteristics, main characteristics, and characteristics, reliability, and representativeness of beverages other than their original characteristics). The tool was then called the CoffeeSERV model [7]. The five dimensions of the CoffeeSERV model are the very important factors that measure the quality of service in coffee shops due to the coffee taste, quality, variety, consistency, and nutrition in the coffee industry.

2.1.1 Interaction

Interaction refers to image aspects such as providing skilled service by employees, solving customer orders and demands with friendly response, excellent service response from employees to customers, and smooth communication between employees and customers. In other words, it refers to the formation of close mutual relationships between employees and customers. As a result of an empirical analysis of the effect of service quality on store loyalty through store attitudes for undergraduate students in Seoul and H University, the three-dimensional factors of service quality, physical environmental quality, interaction quality, and result quality all have a significant effect [3]. Coffee shops, like other service companies, have a close relationship between employees and consumers, so the fairness perceived by consumers is very important. Particularly, fairness management is very important so that consumers do not perceive unfairness because they react more sensitively to those who perceive a service as unfair than to those who perceive it as fair [8]. Among the service quality execution factors (typicality, responsiveness, and empathy) of franchise coffee shops conducted for college students living in the metropolitan area, empathy was found to have a positive effect on emotional commitment. On the other hand, it was found that tangibility and reactivity did not have a positive effect on emotional commitment. This result is believed to be due to the clear reason for consumers who use coffee shops. In other words, customers who use coffee shops consider it more important to use coffee shops than to provide services according to the order of the staff corresponding to responsiveness such as facilities of coffee shops corresponding to tangible characteristics of service quality, staff's clothing, in-store information display, etc. It is believed to be because of the comfort and consideration of the staff. Therefore, it can be said that the provision of a comfortable atmosphere and place for customers to use is the most important service than the physical facilities in the coffee shop or the service determined by regulations [9].

2.1.2 Physical Environment

Physical environment means convenient access, convenient parking, clean and pleasant environment, indoor atmosphere, and bathroom comfort. In other words, physical evidence of the service is the careful attention and consideration of the provider providing the service to the customer, such as the appearance of physical facilities, equipment, and communications data. In a study on the impact of service quality on store loyalty through the medium of store attitude on undergraduates of Seoul-based H University, the standard coefficient beta (β) was

checked, and among the three factors of service quality, physical environmental quality was higher than interaction quality or result quality, which had a relatively greater impact on store behavior than other two variables. Regarding the quality of service at coffee shops, university students confirmed that the quality of the physical environment was greatly affected by the formation of store attitudes. Therefore, further efforts will need to be made to raise the perceived level of service quality through physical environmental factors, including the interior of coffee shops, a clean and pleasant environment, and the arrangement of tables inside [3]. Itaewon defined tangibility as interior elements, pleasant atmosphere, and cleanliness inside and outside the building, suggesting that more attention should be paid to managing or arranging the brand image of the coffee shop from a marketing perspective[10].

Ju et al. divided the factors that consumers consider important in choosing coffee shops into types, comfort, cleanliness, kindness, and creditworthiness [9]. Specifically, it can be said to be part of the recognition of visual appeal outside the building, location of coffee shops, ease of access, convenience of parking lots, attractive interior decoration, overall cleanliness of coffee shops, prompt response of employees, and kindness of employees.

2.1.3 Result Quality

The result quality means the temperature of the appropriate coffee, the freshness of the coffee, the optimal taste, the maintenance of the consistent taste, the maintenance of always balanced taste, etc. In other words, when employees are interested in the quality of the service deliverables, the customer's attitude will be more positive, and the customer's perception and experience will lead to customer loyalty. Cheon et al. conducted a study to examine the relationship between quality of service and perceived value, satisfaction, and behavior of coffee shop visiting customers through a hierarchical service quality model of Brady and Cronin for the general public [6]. Through multi-recursive analysis, the relationship between quality of service and customer satisfaction was verified, but the interaction quality and result quality did not have a significant impact on each other, and the physical environment have significant impact[11]. As a result of analyzing the impact of the quality of service in domestic coffee shops on positive emotional responses, the quality of coffee, the quality of side menus, and the tangible factors had statistically significant effects, but the guarantee, responsiveness and cleanliness showed no significant results. These results have a greater impact on the customer's positive emotional response than on the quality, responsiveness and cleanliness of the coffee shop and the side menu served with the coffee [12].

2.1.4 Representativeness

Representation means the best service offering, external reputation, best image, best value, etc. In other words, it refers to a brand image (in recognition) that can be associated with a representative beverage and food. Brand image is defined as a consumer's psychological structure system in which the consumer's feelings for a particular company's brand are combined with indirect elements of various information related to the product to form a good or bad feeling. The brand image had a significant impact on customer satisfaction and willingness to repurchase. Brand images have been identified as helping to differentiate and secure loyal customers in competition with competitors and play an important role in attracting new customers [13]. The coffee shop's optional attributes of the physical environment, human services, study and work environment, ease of access and brand awareness all significantly affect customer satisfaction [14]. For both native and overseas brands, the results were derived in which partial factors of service quality had a significant impact on customer satisfaction. Domestic and foreign brands are expected to provide useful information in establishing efficient marketing strategies for domestic and foreign brand coffee shops at a time when they are investing in the development of various products and improving service quality to increase their brand market share to gain an edge in terms of number of stores and to strengthen their competitiveness in terms of size of sales [15]. Kwon compared and analyzed the efficiency of service quality between individual coffee shops and franchise coffee shops [16]. According to the study, the service quality efficiency of private coffee shops was higher, contrary to the social common belief that franchise coffee shops would have higher service quality efficiency than private coffee shops. This can be estimated because customers who use franchise coffee shops have high expectations for quality of service. High expectations result in a relatively poor quality of service. On the contrary, customers who use private coffee shops have lower expectations for private coffee shops than franchise coffee shops, so when they receive the same service, they are more satisfied, visited again, and recommended by others than franchise coffee shops. Therefore, it is possible to analyze that service quality efficiency has a relative advantage.

2.1.5 Diversity

Diversity means various flavors of coffee, various beverages other than coffee, various dessert menus, and representative menus. In other words, there are various kinds of coffee beans, different kinds of coffee menus, and different kinds of food other than coffee. The consumer's choice of coffee shop attributes is determined by the consumer's attitude, indicating what factors are important when visiting coffee shops. If the coffee shop's optional attributes are determined, it can be useful in revitalizing its marketing strategy, which is also directly related to profits. In the preceding study on the optional attributes of coffee shops, the research was conducted by deriving service quality, coffee quality, facilities, accessibility, coffee promotion, menu diversity, and brand factors. In another study, attributes such as brand, diversity, material services, prices, facilitation activities, and location were derived and analyzed [17]. Among the service quality factors of coffee shops, the quality and physical environment of coffee have a significant impact on customer satisfaction and willingness to repurchase. With the expansion of

the coffee market and the increase in consumption, consumers have been able to see that they are pursuing quality coffee, and the taste and aroma of coffee and various menus contribute greatly to the satisfaction of consumers. In addition, the physical environment has become more important as a place where coffee shops can feel relaxed and romantic, not just a place to drink coffee. The physical environment is the driving force for the tangible of intangible products, stimulating the customer's sense of sight, touch, and hearing. [13]

2.2 Positive Emotions

Positive feelings mean overall preference for the coffee shop in question, providing the best taste and quality, meeting the customer's taste, and meeting the customer's expectations. In the service area, the quality of service perceived by the customer is a very important area, and the focus is on the positive feelings felt by the customer because improving customer satisfaction is also related to the company's sales. This quality of service is an abstract concept of the customer's judgment of the service provided by measuring the customer's perception. Service quality is to induce a positive attitude of consumers by giving customers good feelings, comfort, pleasure and satisfaction, and the evaluation of service quality often compares consumers' expectations with the services received. There is a growing perception that consumer feelings are both intellectual and emotional, and research on them has been conducted since the 1980s in connection with consumer behavior. Unlike traditional consumer behavior in the past, where consumers' rational decision-making was dominant, recent studies have shown that the temporary sensitivity experienced by consumers may affect consumer behavior or attitudes, referring to positive emotional responses as a measure of consumers' subjective feelings of liking services after consumer purchasing behavior [17]. Store attitude is an overall assessment of a consumer's store, which refers to a case in which he or she is aware of the unique attributes of a particular store within the consumer's perception system or forms a belief. Consumers form attitudes toward the store by various factors while shopping at a particular store, and when they choose the store, they are influenced by the store's friendly or unfriendly attitude, and the more favorable the store's attitude, the more likely it is to be purchased. At this time, consumers choose a store that meets their own criteria, which is formed by faith in the consumer's perception system, which eventually affects loyalty. Therefore, consumers' favorable attitude toward a particular store leads to store loyalty [3].

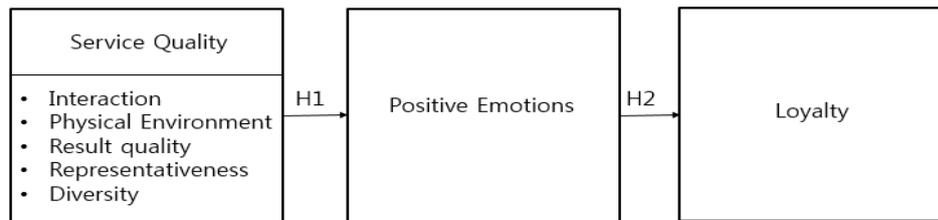
2.3 Loyalty

Loyalty refers to the intention of revisiting, the degree of frequent use, the degree of top consideration when choosing a coffee shop, and the willingness to visit continuously. In other words, the tendency to continue to visit or use the store is to be formed in the customer's mind through repeated purchase actions with a favorable attitude toward the store and is defined as the level of customer immersion formed for a particular brand or store based on the consumer's favorable attitude. Prior studies on service quality and loyalty have confirmed that there is a significant causal relationship. This means that the customer's future purchasing potential may depend on the degree of recognition of service quality, and that the higher the level of customer satisfaction, the better the customer's attitude toward service quality is formed and the higher the customer's intention to repurchase it, which is correlated with each other. Since the intention of repurchase is closely related to the actual purchase behavior of the customer in the future, it is very important to make efforts to improve the intention of repurchase by enhancing service quality and customer satisfaction. Loyalty can be defined as the level of customer immersion formed for a particular store. Store loyalty can be measured by continuous visits, recommendations, etc., and repurchase intent means repeated repurchase for a period of time when the entity uses and is satisfied with its services or products [9]. Store loyalty is considered a very important concept in the highly competitive coffee shop market environment as it acts as key factors such as reduced marketing costs, increased customer recommendation, increased price premium, and competitive advantage. According to a review of prior research on store loyalty, this dimension can be measured by the ratio of purchases at a particular store, the frequency of internal stores, the intention of repurchase, and the intention of recommendation, and the measure most used to measure store loyalty is the intention of repurchase and recommendation. Customers are an important factor in forming the relationship of the service benefit chain that, when benefits are gained based on in-store experience, the attitude toward the store changes favorably, leading to revisit or friendly oral action [3].

3. Research Design

3.1 Research Model

This study focuses on analyzing the relationship of the impact of coffee quality on positive emotion and loyalty. Based on the hierarchical service quality model (HSQM) of Brady and Cronin and the CoffeeSERV model of Park and Yoon, interaction, physical environment, outcome quality and representativeness, and diversity were expected to have a significant impact on positive feelings and loyalty, and the service quality decision factors were selected [6, 7]. The proposed research model is shown in [Figure 1].



[Fig. 1] Research Model

3.2 Research Hypothesis

3.2.1 Hypothesis On Service Quality And Positive Emotions

The three dimensions of the quality of coffee shop service, interaction quality, physical environmental quality, and outcome quality, were all found to have a positive and significant effect on attitudes toward coffee shops [3]. The causal relationship between service quality and positive emotion was confirmed by classifying customer feelings perceived as satisfaction after consuming products and services as positive feelings, assuming that the higher the quality of service is perceived to the customer, the higher the positive feelings become [18]. A comparative analysis of the service quality of coffee shops in Korea and global brands confirmed that the physical environmental quality of coffee shops, the taste of coffee and barista's service quality increase customer satisfaction in both brands [15]. In this study, the following hypotheses were established based on prior studies.

Hypothesis H1-1 interaction will have a significant effect on positive emotions.

Hypothesis H1-2 physical environment will have a significant impact on positive emotions.

Hypothesis H1-3 result quality will have a significant effect on positive emotions.

Hypothesis H1-4 representativeness will have a significant effect on positive emotions.

Hypothesis H1-5 diversity will have a significant effect on positive emotions.

3.2.2 Hypothesis About Positive Emotions And Loyalty

Using positive emotions as a measure of consumer sentiment to identify positive feelings as a result of the recovery of hotel services, it was derived that variables in positive emotions affect consumer purchasing behavior [19]. Emotional immersion will have a positive effect on the intention of repurchase. Based on these findings, it will be necessary to understand the quality of service required by franchise coffee shops and to establish marketing strategies to strengthen customers' willingness to purchase [9]. It has been confirmed that the positive feelings customers feel about the quality of service at low-cost coffee shops affect their service evaluation and willingness to reuse, directly affecting behaviors such as repurchase [12]. In this study, the hypothesis below was established based on prior studies.

Hypothesis H2 positive feelings will have a significant impact on loyalty.

3. Empirical Analysis And Results

3.3.1 Data Collection and Sample Characteristics: A total of 120 people responded to the survey. The basic statistical survey is as follows. 100% of the respondents are university students, and they are enrolled in a department specializing in service. The gender distribution is 100% for all women, and the age distribution is 91.6% for those in their 20s, and 8.4% for those in their 40s and 50s. In terms of annual income, less than 20 million won accounted for 90%, and 100% of respondents were experienced in positive emotions and loyalty of coffee service quality.

3.3.2 Method of Analysis of Data: For the questionnaire analysis, SPSS 22.0 and Smart PLS 2.0, a structural equation package was used for the basic statistics. Concentration validity tests the factor load value, construction reliability (CR) and average variance extraction (AVE) of each factor. Generally, the factor load value is more than 0.6, the construction reliability value is more than 0.7 and average variance extraction is more than 0.5. The discriminant validity is not affected because the root mean square values of the average variance extraction are greater than the correlation coefficient. As a result of exploratory factor analysis, 6 of the 30 questions that measured each variable were removed because the factor loading amount was not significant, leaving a total of 24 questions.

[Table 1] Reliability and Internal Consistency

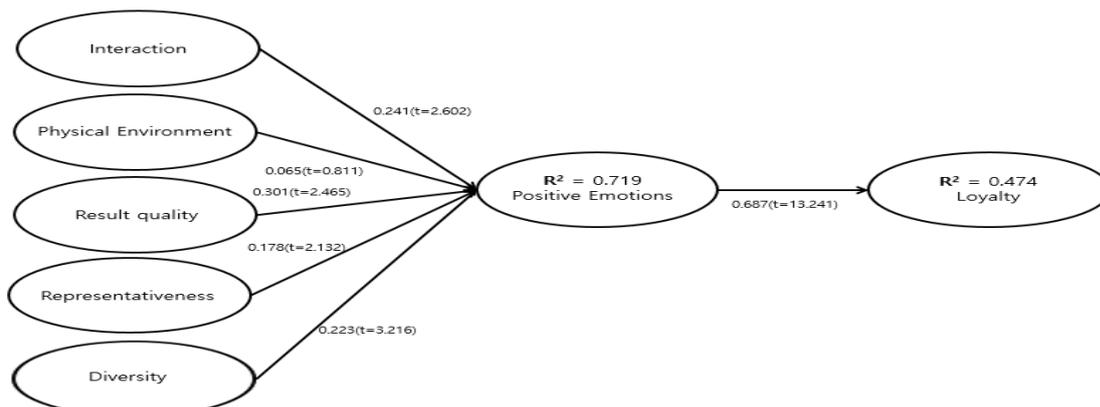
Variable	Factor loading	AVE	C. R.	Cronbach's α
Interaction	0.783	0.638	0.841	0.717
	0.782			
	0.829			
Physical Environment	0.784	0.603	0.819	0.675
	0.828			
	0.713			

Result quality	0.725	0.623	0.891	0.848
	0.782			
	0.832			
	0.830			
	0.771			
Representativeness	0.862	0.787	0.881	0.733
	0.911			
Diversity	0.785	0.612	0.825	0.687
	0.784			
	0.778			
Positive Emotions	0.680	0.679	0.785	0.635
	0.626			
	0.690			
	0.764			
Loyalty	0.849	0.732	0.916	0.878
	0.842			
	0.856			
	0.875			

[Table 2] Correlation and Discriminant Validity

Variable	AVE	1	2	3	4	5	6	7
Interaction	0.638	0.725						
Physical Environment	0.603	0.556	0.736					
Result quality	0.623	0.725	0.723	0.789				
Representativeness	0.787	0.583	0.621	0.652	0.887			
Diversity	0.612	0.484	0.688	0.591	0.597	0.782		
Positive Emotions	0.679	0.707	0.681	0.771	0.688	0.669	0.824	
Loyalty	0.732	0.641	0.614	0.699	0.575	0.497	0.688	0.855

3.3.3 Verification Of The Structural Model: The structural model uses Smart PLS 2.0, and the structural coefficient is used to derive the path coefficient and the coefficient of determination (R²) between the variables of the research model. If the R² value is 0.26 or more, the degree of fitness can be expressed as 'high', and if it is 0.26 to 0.13, the degree of fitness is expressed as 'middle', and if it is less than 0.13, the degree of fitness can be expressed as 'low'[16]. The coefficient of determination (R²) for intent to use (0.814) and the act of abuse (0.149) was shown as high and medium.



[Fig. 2] The Results of Research Model

The proposed hypothesis H1 was sub selected, and H2 was adopted. First, hypothesis H1-1 which implies that "interaction will have a significant effect on positive emotions" was adopted. Interaction has been shown to have significant effects on positive emotions ($\beta=0.241$, $t=2.602$, and $p<0.05$). This means that interactions in coffee service quality have a significant effect on positive feelings. Second, hypothesis H1-2 "the physical environment will have a significant effect on positive emotions" was rejected. The physical environment was shown to have no significant effect on positive emotions ($\beta=0.065$, $t=0.811$, $p<0.05$). This means that in coffee service quality, the physical environment has no significant effect on positive feelings. This supports the same results in the preceding study [9,11]. Third, hypothesis H1-3 which implies that "result quality will have a significant effect on positive emotions" was adopted. The resulting quality has been shown to have a significant effect on positive feelings ($\beta=0.301$, $t=2.465$, $p<0.05$). This means that in coffee service quality, result quality has a significant effect on positive emotion. Fourth, hypothesis H1-4 which implies that "representativity will have a significant effect on positive emotions" was adopted. The representation was shown to have a significant effect on positive feelings ($\beta=0.178$, $t=2.132$, $p<0.05$). This means that representativeness in coffee service quality has a significant impact on positive feelings. Fifth, hypothesis H1-5 which implies "diversity will have a significant effect on positive emotions" was adopted. Diversity has been shown to have significant effects on positive emotions ($\beta=0.223$, $t=3.216$ and $p<0.05$). This means that diversity in coffee service quality has a significant impact on positive feelings. Sixth, hypothesis H2 which implies that "positive feelings will have a significant impact on loyalty" was adopted. Positive emotions were shown to have a significant effect on loyalty ($\beta=0.687$, $t=13.241$, and $p<0.0005$). This means that positive feelings in coffee service quality have a significant impact on loyalty.

[Table 3] Hypotheses Testing Results

Hypotheses Path	Coefficient(β)	t-value	Result
H1-1: Interaction→Positive Emotions	0.241	2.602	Accept
H1-2: Physical Environment→Positive Emotions	0.065	0.811	Reject
H1-3: Result quality→Positive Emotions	0.301	2.465	Accept
H1-4:Representativeness→Positive Emotions	0.178	2.132	Accept
H1-5: Diversity→Positive Emotions	0.223	3.216	Accept
H2 : Positive Emotions→Loyalty	0.687	13.241	Accept
t=1.97*, p<0.05			

4. Conclusion

In this study, female university students in Busan were selected as the determinants of service quality of coffee by interaction, physical environment, result quality, representativeness, and diversity, and the impact relationship on loyalty was demonstrated through medium of positive emotion. To summarize the results of the empirical analysis in this study, H1-1 was adopted, where, the hypothesis that interactions affect positive emotions. Second, the hypothesis H1-2 that the physical environment affects positive emotions was rejected. Third, the hypothesis H1-3 that the resulting quality affects positive emotions was adopted. Fourth, the hypothesis H1-4 that representation affects positive feelings was adopted. Fifth, the hypothesis H1-5 that diversity affects positive emotions was adopted. Sixth, the hypothesis H2 that positive emotion affects loyalty was adopted. Based on the empirical analysis results, the following implications were derived: first, regarding the service quality of coffee, female university students in Busan confirmed that they were not affected by the physical environment in forming positive emotions and loyalty. Therefore, coffee shops offer skilled service to employees rather than physical environment factors such as accessibility, parking, clean and pleasant environment, indoor atmosphere, and toilet comfort, handling customer orders and requirements with friendly responses, interaction factors such as employees' excellent service reception to customers, smooth communication between employees and customers, temperature of appropriate coffee, maintaining the freshness of coffee, optimal taste, maintaining the best taste, and providing the best external quality, etc. More attention to the diversity factors will enhance the customer's positive feelings, which will lead to store loyalty. It is necessary to make further efforts to raise the perceived level of service quality of coffee through this empirical study. Second, the preceding studies of Cheon and Ju of university students show the same results as this study[9, 10] because they are not affected by physical environmental factors in service quality, but the prior studies of university students of Kang have been found to be affected by physical environmental factors [3]. Third, for franchise coffee shops, customers must be able to immerse themselves emotionally to lead to the intention of repurchase, which requires strategies to develop various service quality factors and continuously improve the quality. Fourth, the number of customers who use coffee shops is mostly in their 20s and there are many women attending college, so managers should pay attention to preferred products and services. Based on the above analysis, the practical direction is suggested including the continuous upgrade of the service quality manual to improve customer service, the development of new products according to the changing

environment of the coffee industry, and the development of various menus preferred by women in their 20s. These have direct impact on management. In addition, it can be said that continuous quality control, such as the use of high-quality ingredients, is required to provide consistent quality coffee. The limitations of this study are that the survey was conducted on some university students in the Busan area, and the number of samples was somewhat insufficient, so there is a limit to generalizing the analysis results to the general coffee consumers. The sample target college students are considered to have limitations in representing the younger generation, the core customers of coffee shops. Broader sampling is needed to generalize the analysis results. However, since the service quality of coffee shops is correlated with the intention of revisiting customers and recommending others, continuous research should be conducted according to changes in the market environment of coffee shops. In addition, more determinants of service quality that influence positive emotions and loyalty in relation to the service quality of coffee should be developed and verified. Despite these limitations, this study has practical significance where it can provide a meaningful practical basis for establishing and executing marketing strategies for the preferences of female college students.

Reference

1. S. Lee, S. Y. Park, A Study on the Present Situation and Development Strategies of the World Coffee Industry: Focused on the Korean, American, European, and Japanese markets, *Journal of the Korean society of international agriculture*, (2014), Vol.26, No.3, pp.226-231.
2. S. Lee, J. Lee, J. Kim, S. Park, H. Kim "A Study on the Impact of Coffee Service Quality on Customer Loyalty." *Journal of Advanced Researches and Reports*, 1.1 (2021), pp.25-32.
3. H. S. Kang, A Study on the Effect among the Service Quality of Coffee Shop, Store Attitude and Store Loyalty: Focusing on the Construal Level, *Journal of Franchise Management*, (2018), Vol.9, No.2, pp.39-52.
 - A. Parasuraman, V. A. Zeithaml, and L. L. Berry, SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, *Journal of Retailing*, (1988), Vol.64, No.0, pp.12-40.
4. K. Chae, Lim and B. Kyeng, "The Effect of Service Quality of Legal Services on Customer Satisfaction." *International Journal of Smart Business and Technology*, 5.2 (2017), pp.7-14.
5. M. K. Brady, and J. J. Cronin, Some New Thoughts on Conceptualizing Perceived Service Quality, A Hierarchical Approach, *The Journal of Marketing*, (2001), Vol.65, No.3, pp.34-49.
6. K. H. Park, and J. H. Yoon, CoffeeSERV: Multiple-item scale for measuring service quality of specialty coffee shop. *Journal of Foodservice Management Society of Korea*, (2006), Vol.9, No.3, pp.7-26.
7. S. H. Lee, The Impact of Low-Price Coffee Shop Service Quality, Brand Image on Revisit Intention, *Culinary Science & Hospitality Research*, (2016), Vol.22, No.3, pp.44-54.
8. N. Yi. "The effects of sustainability management on brand attitude of coffee specialty shops." *International Journal of IT-based Management for Smart Business*. 6.1 (2019), pp.13-20.
9. T. W. Lee, A Study on the Choice and Factor and Customer Satisfaction of Coffee Shop, Thesis for a Master, Graduate School of Yonsei University, (2004).
10. D. H. Cheon, K. W. Hong, and H. C. Kim, Adapting the hierarchical service quality model (HSQM) proposed by Brady and Cronin to analyze the relationship among service quality, perceived value, satisfaction, and behavioral intention. *Journal of Korea Service Management Society*, (2013), Vol.14, No.3, pp.243-261.
11. J. H. Kim, S. H. Hwang, The Effects of Service Quality of Low-price Coffee Brand on Positive Emotional Response, Attitude and Behavioral Intention, *Culinary Science & Hospitality Research*, (2018), Vol.24, No.8, pp.59-69.
12. H. Zhang, H. E. Kim, and B. S. Kim, Effects of Application Attributes of Coffee Chains on Consumer's Repurchase Decision-Making Processes, *Journal of Digital Convergence*, (2017), Vol.15, No.9, pp.137-146.
13. C. S. Lee, and J. W. Lee, The Influence of Coffee Shop Selection Attributes on Customer's Satisfaction - Focusing on Moderating Function of Perceived Service Quality, *Food Service Industry Journal*, (2015), Vol.11, No.1, pp.119-128.
14. J. Y. Suh, and H. J. Lee, A study on the coffee shop's service quality impacts on the customer's satisfaction, trust and recommend convention: Comparison of homemade and foreign coffee shop brands. *Journal of Foodservice Management*, (2011), Vol.13, No.3, pp.151-172.
15. Y. H. Kwon, A Comparative Study Between Private and Franchise Coffee Shop: Using DEA and ANP Tools, *Journal of Management Consulting*, (2015), Vol.15, No.3, pp.47-56.
16. Y. Park, The Effect of Service Quality of Coffee Shop on Customer Revisit and Recommendation Intention - Focusing on Gyeongin Area -, *Journal of Hotel & Resort*, (2019), Vol.18, No.1, pp.277-292.
17. H. Chung, H. Choi, "A Study of Physical Environment and Medical Service Quality on Customer Satisfaction of Domestic Medical Tourism for Foreigners." *International Journal of IT-based Public Health Management*. 5.2 (2018), pp.55-62.

18. J. Barsky, and L. Nash, Evoking emotion: affective keys to hotel loyalty. *Cornel Hotel & Restaurant Administration Quarterly*, (2002), Vol.43, No.1, pp.39-46.
19. Mahela, O. P., & Ola, S. R. (2013). Optimal capacitor placement for loss reduction in electric transmission system using genetic algorithm. *TJPRC-International Journal of Electrical and Electronics Engineering Research*, 3(2), 59-68.
20. ALHOSANI, F. A., & TARIQ, M. U. (2020). Improving Service quality of smart banking using quality management methods in UAE. *International Journal of Mechanical Production Engineering Research and Development (IJMPERD)*, 10(3), 2249-8001.