



## What should be Prioritized for Delivery Café Service in COVID-19?

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### Abstract

**Purpose:** Food delivery services are rapidly increasing due to the recent COVID-19 outbreak. This study examines how much taste, price, brand, and reliability affect the satisfaction of delivery apps and delivery companies in food delivery services, as well as its effects on repurchase intentions. **Research design, data and methodology:** Empirical analysis was conducted through questionnaire survey on a coffee shop that started delivery services. Reliability and validity were analyzed, and hypotheses were verified through confirmatory factor analysis, discriminant validity analysis, and path analysis using structural equation modelling. **Results:** The factors affecting the satisfaction of delivery apps at coffee shops were taste and brand image. Only 'taste' had a statistically significant effect on the factor that made consumers feel satisfaction. In addition, satisfaction with delivery apps of coffee shops and delivery companies had a statistically significant effect on repurchase intention. The company should focus on improving the image of the coffee application rather than the corporate image. **Conclusions:** Now and in the future, F&B companies will have to recognize and respond, as well as rethink on how to deliver satisfaction of delivery apps and delivery companies to consumers in the ever-increasing delivery competition. This study provides implications through satisfaction analysis of coffee delivery apps and companies.

**Keywords:** Food delivery, Delivery application, Delivery company, Repurchase

**JEL Classification Code:** D11, D12, L66, L8

### 1. Introduction<sup>a</sup>

Consumers are anxious and worried about the COVID-19 pandemic (Yıldırım & Güler, 2020). Corona-19 can be thought of as a kind of acute pneumonia, and in April, the cumulative number of confirmed cases in more than 100 countries around the world exceeded 100,000. The World Health Organization (WHO) has declared a pandemic (Remuzzi & Remuzzi, 2020). In Korea, as the number of confirmed cases in Gyeongsang Province has increased rapidly, the crisis level of the infectious disease has been raised to serious and a national response has been made.

Unlike MERS and SARS, COVID-19 caused major social and economic changes as it entered the long term (Lee & Lee, 2020). He was reluctant to use offline stores, so he chose an online store that does not require human contact. In fact, the number of orders for Starbucks' un-tact (non-face-to-face) ordering service exceeded 8 million between January and February of this year. It increased by 25% compared to the same period last year (The Food & Beverage News newspaper, 2020). According to the Financial Supervisory Service, Starbucks' sales last year increased by 3% from the previous year to 1.92 trillion won. Considering the high double-digit growth every year, it is

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analyzed that the impact of COVID-19 could not be avoided. Operating profit was also 164.4 billion won, down 6.1% from 2019. Ediya posted 223.9 billion won in sales last year, up 1.4% from the same period last year, but its operating profit was 14 billion won, down 27.6% from the same period last year.

As a result of conducting a planned survey on the impact of COVID-19 on the restaurant industry by the Korea Foodservice Industry Research Institute until the third quarter of last year, it was revealed that coffee shops saw a 30% decrease in sales at the time of social distancing step 2.5, when hall stores were suspended. Some businesses without delivery services have seen their sales drop by more than half, dramatically (NewDailyBiz newspaper, 2021). Entering the 21st century, the domestic restaurant industry is rapidly changing, reflecting food tech from the tertiary industry, which was brought about by the development of science and technology to a very high level, to the revolution of the fourth industry (Schwab, 2016). In particular, a new consumer market that has not been seen before with the Internet and smartphones, a market that connects online and offline has been formed (Jo & Cha, 2017). As a result, it has been possible to reduce the opportunity costs that consumers may incur offline, such as time, place, and product search. This changed consumers' existing purchasing behavior (Park, Chae, & Park, 2015). In the end, more and more consumers choose delivery apps for various reasons, which has made the growth of delivery apps and consumer demands diversified and complicated. To increase customer satisfaction, simply providing information or providing discounts is not enough. Therefore, delivery app companies analyze consumers' usage flow to provide reliable restaurants or food tailored to individual tastes, and supplement services such as notification of the scheduled delivery time. Through this, we strive to provide differentiation through an increase in experience (Cho & Chun, 2019).

The purpose of this study is to research the effect of delivery, which has energized the cafe industry, which has plummeted after COVID-19. Due to the recent COVID-19 situation, food service companies are reducing their sales, but they are offsetting sales to some extent as the use of delivery apps increases. However, the burden of delivery app fees is high. As such, consumers' perceptions of delivery apps and delivery companies are becoming more important in the food service industry, but there are still not many

related studies. We analyzed the satisfaction of delivery apps and delivery companies with a focus on coffee shops that are gaining popularity recently.

## **2. Theoretical Background**

### **2.1. Delivery App Satisfaction**

The delivery app is said to be defined as one of the food tech services provided by utilizing the 4th industrial technology that combines food-related services and information communication (Kim, 2015; Kim, 2010). It is said that service quality of restaurant apps affects customer satisfaction and re-use intention, and customer satisfaction has a significant effect on re-use intention (Choi, 2013). Satisfaction with restaurant app use is said to have a significant effect on re-use intention (Shon & Park, 2013). Some delivery companies run coffee shop apps, and some coffee shops run delivery apps as well. However, in this study, the satisfaction with the delivery company and the satisfaction with the delivery app itself are set as each variable.

### **2.2. Delivery Company Satisfaction**

The start of the delivery platform was the launch of the 'Baedal Minjok' of the Woowa Brothers company in 2010 and the 'Baedaltong' application of the German delivery hero company. After that, in 2011, a delivery hero company additionally launched the 'Yogiyo' application, and recently, e-commerce companies Coupang and WeMakePrice launched delivery applications called 'Coupang Eats' and 'Wemef O' to become latecomers. However, delivery platform companies that are latecomers are unable to expand their market share. The market share of delivery platforms launched in Korea is 66.0% for 'Baedal Minjok', 17.0% for 'Yogiyo', 13.6% for 'Coupang Eats' and 0.9% for 'Wemef O' (Kim, 2021). In a situation where 'Baedal Minjok' occupied an overwhelming market share, Delivery Hero Company acquired and merged 'Baedal Minjok' in 2019 to acquire an additional 66.0% market share, forming a monopoly. Online satisfaction is a subjective evaluation of purchase channels and service performance, and is said to be a determinant variable that affects repurchase intention (Shon & Park, 2013). Confidence in restaurant business and

social commerce for food service had a significant effect on customer satisfaction and social commerce users (Kwon, Jung, & Yi, 2013).

### 2.3. Taste

Each menu item has its own unique taste, and is closely related to the taste, sight, and smell of food. Food with excellent taste is an important factor in determining the quality of food because it increases appetite and also affects digestion and absorption (Jo, 2004). When analyzing the attributes that most affect the taste of a menu, there are harmony between the taste of food and the unique taste of ingredients (Park et al., 2004). In the restaurant business, the taste of food is one of the most important factors influencing consumer satisfaction and repurchase (Cha, & Seo, 2019; Cha, & Wang, 2020; Cha, & Shin, 2021; Cha, & Lee, 2021).

**H1-1:** Taste of cafe will have a positive (+) effect on the satisfaction of delivery application.

**H1-2:** Taste of cafe will have a positive (+) effect on the satisfaction of delivery company.

### 2.4. Price

In the restaurant industry, one of the most important variables when a customer makes a purchase decision is price (Kwak, & Cha, 2021; Cha, & Seo, 2018). The price of the menu is determined by combining various theories and methods. In this case, consumer price perception, cost ratio, margin, competition, demand, etc. should be considered. Two important factors to consider in pricing are the following (Na, 2006). First, consumers may have inaccurate and limited information on the standard price known to consumers. Second, consumers tend to follow the quality of products or services in their price judgment. Therefore, consumers may have different degrees of value for the results obtained by making sacrifices, and the higher the value of the reward obtained is higher than the degree of sacrifice, the higher the probability that consumers will feel that the price is cheap or reasonable (Jeong, 2019).

**H2-1:** Price of café will have a positive (+) effect on the satisfaction of delivery application.

**H2-2:** Price of café will have a positive (+) effect on the satisfaction of delivery company.

### 2.5. Brand Image

When they develop attachment and liking for a brand, they are more likely to purchase the brand continuously, and an important role in this case is differentiation from other brands (Yi & La, 2002). Brand image is a characteristic of individuals who value a brand and purchase a well-known brand (Shim & Gehrt, 1996; Kendall & Sproles, 1986). Brand awareness is used as a concept similar to brand sensitivity and refers to the degree to which an individual considers important and purchases a famous brand image (Shim & Gehrt, 1996; Kendall & Sproles, 1986). Consumers tend to buy well-known brands even if the price is high, and to buy brands that advertise a lot, that is, they tend to have strong brand image (Kendall & Sproles, 1986).

**H3-1:** Brand image of cafe will have a positive (+) effect on the satisfaction of delivery application.

**H3-2:** Brand image of cafe will have a positive (+) effect on the satisfaction of delivery company.

### 2.6. Reliability

It is the trust between the customer and the service provider that influences the stability of the problem-solving and mutual relationship between the customer and the service provider, and also the belief that the other's actions will meet their needs in the future. In other words, trust means having sincerity and trustworthiness toward the other person. It is the belief that you can trust the other person's words and promises, and that you will fulfill your obligations in the relationship of exchange. A counterparty can be expected to seek cooperation and fulfill its responsibilities and obligations in a bilateral relationship (Anderson & Weitz, 1989; Morgan & Hunt, 1994).

**H4-1:** Reliability of cafe will have a positive (+) effect on the satisfaction of the delivery application.

**H4-2:** Reliability of the cafe will have a positive (+) effect on the satisfaction of delivery company.

### 2.7. Repurchase

The importance of defensive marketing strategies to retain existing consumers, such as customer loyalty and satisfaction, is increasing (Ko, 2016). For consumers, repurchase intention means that there is a possibility of repurchasing other than the service product or

recommending the service product to other consumers (Park, 2010).

**H5:** Satisfaction with delivery apps will have a positive (+) effect on repurchase.

**H6:** Satisfaction with delivery companies will have a positive (+) effect on repurchase.

### 3. Research Method

#### 3.1. Establishing a Research Model

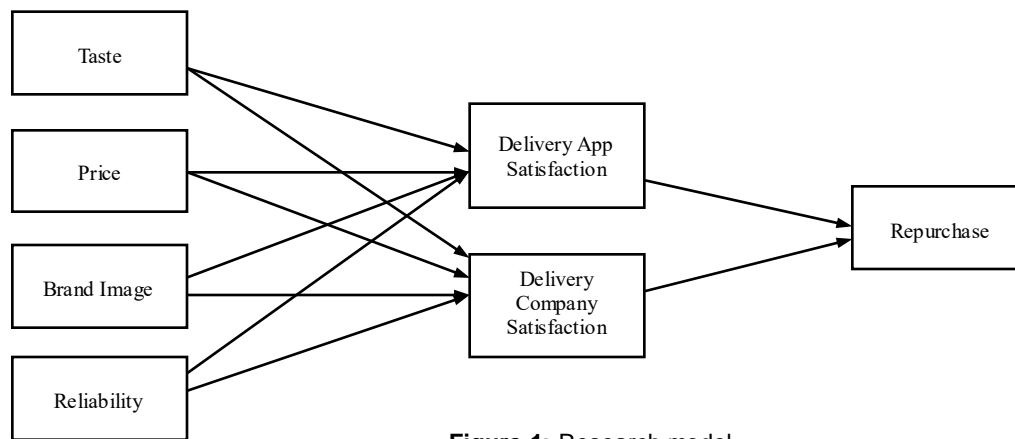


Figure 1: Research model

In this study, based on the study of the author Ko (2016), the taste of café delivery was defined as excellent, standardized, identical, and differentiated. Based on the study of the author Ko (2016), the price of café delivery was defined as reasonable price, comparison with other stores, appropriate quality, and ease of payment terms. Based on the research of authors such as Kim and Cho (2019) and Choi and Lee (2011), the brand of café delivery was defined as familiarity, liking, liking, and use value. Reliability was defined as overall reliability of café delivery, provision of reliable products, provision of reliable service, and prompt processing based on the research of authors such as Kim (2020), Lee and Yeo (2017). Delivery app satisfaction was defined as overall satisfaction, satisfactory information and service provision, and service satisfaction through the app, based on the study of the authors such as Kim (2020). Delivery company satisfaction was defined as overall satisfaction, satisfactory information and service provision, and service satisfaction through the company, based on the study of the authors such as Kim (2020). Repurchase was defined as the intention to repurchase the repurchase of café delivery based on the research of authors such as Kim (2020), the intention to purchase continuously, and the intention to recommend it to others.

#### 3.2. Data Collection and Analysis Method

A survey was conducted to test the research hypotheses. After modifying the questionnaire of previous researchers to fit the survey, the items were applied to the questionnaire. The survey started on May 2021 and was conducted online through Naver Form until June 2021. A total of 355 questionnaires were distributed, and 355 were used for the empirical analysis of the questionnaire. SPSS 20.0 was used for exploratory factor analysis and reliability analysis, and AMOS, a structural equation model, was used as a statistical method for hypothesis testing. In the demographic characteristics of the survey subjects, 74 men were 20.8%, and 281 women, 79.2%. By age, 9 people were in their teens (2.5%), 287 people in their 20s (80.8%), 12 people in their 30s (3.4%), 19 people in their 40s (5.4%), and 28 people in their 50s or older (7.9%). Occupation: 245 students, 69%, general office workers, 30, 8.5%, service industry, 15, 4.2%, professional, 13, 3.7%, self-employed, 7, 2%, housewife, 18, 5.1%, and others, accounting for 7.6% of the 27 people. Monthly income is 50.1% with 178 people with less than 500,000 won, 71 people with more than 500,000 won and

less than 1 million won, 20% with 46 people with more than 1 million won and less than 2 million won, 7.6% with 17 people with more than 3 million won and less than 4 million won, and 2.8% with 10 people with more than 4 million won. Monthly cafe spending is 14.9% with 53 people under 10,000 won, 51.8% with 184 people with more than 10,000 won and less than 50,000 won, 93 people with more than 50,000 won and less than 100,000 won, and 7% with 25 people with more than 100,000 won. Looking at the usage pattern, 216 people said they used cafe delivery, 60.8%, and 39.2%, did not use. Those who did not use delivery responded to the questionnaire on the assumption that they did. The number of monthly uses was 298 with more than 0 and less than 5 times, accounting for 83.9%, 41 with more than 5 and less than 10 times, 11.5%, 14 with more than 10 and less than 15 times, and 0.6% with 2 more than 15 times.

The types of cafes are 23.1% for Starbucks with 82, 11.5% for Twosome Place with 41, 10.1% for Mega Coffee with 36, 10.7% for Ediya with 38, 19.4% for Back Cafe with 90, 25.4% for private cafes and 49. As for the types of delivery apps, there are 253 Baedal Minjok, 71.3% Baedal Tong, 0.6% Baedal Tong, 21. Yogiyo, 5.9% with 21, Coupang Eats with 39, and others (our own apps) with 40, 11.2%. The average daily expenditure (including delivery fees) was 185 people with less than 15,000 won, 52.1% with 115 people with more than 15,000 won, 32.4% with 29 people with more than 25,000 won, 8.2% with 8 people with more than 25,000 won and less than 30,000 won, 3.1% with 11 people with more than 30,000 won and less than 35,000 won with less than 40,000 won.

## 4. Empirical Results

### 4.1. Confirmatory Factor Analysis

**Table 1:** Confirmatory factor analysis result

Variables	Measure	Standardized Coefficient	Regression	CR	AVE
Taste	Taste01	0.676		0.82	0.60
	Taste02	0.684			
	Taste03	0.717			
Price	Price01	0.778		0.79	0.50
	Price02	0.839			
	Price03	0.923			
	Price04	0.685			
Brand Image	Brand image01	0.684		0.89	0.67
	Brand image 02	0.786			
	Brand image 03	0.821			
	Brand image 04	0.789			
Reliability	Reliability01	0.634		0.80	0.52
	Reliability02	0.751			
	Reliability03	0.868			
	Reliability04	0.906			
Delivery App Satisfaction	DASat01	0.792		0.89	0.73
	DASat02	0.874			
	DASat03	0.785			
Delivery Company Satisfaction	DCSat01	0.856		0.92	0.81
	DCSat02	0.902			
	DCSat03	0.860			
Repurchase	Repurchase01	0.801		0.86	0.67
	Repurchase02	0.781			
	Repurchase03	0.737			

Chi-square = 704.262(p = 0.000, df = 236), NFI = 0.855, CFI = 0.898, RMSEA = 0.075

**Table 2:** Discriminant validity through correlation analysis

	Delivery Company Satisfaction	Taste	Price	Brand image	Reliability	Delivery App Satisfaction	Repurchase
Delivery Company Satisfaction	0.869						
Taste	0.326	0.685					
Price	0.048	0.014	0.849				
Brand Image	0.289	0.040	0.016	0.756			
Reliability	-0.025	0.033	0.448	0.054	0.797		
Delivery App Satisfaction	0.874	0.365	0.028	0.352	-0.013	0.818	
Repurchase	0.641	0.387	0.045	0.449	0.001	0.646	0.783

Note: The numbers along the diagonal are the square root of AVE

## 4.2. Results of Research Hypothesis

As a result of hypothesis testing, the taste and brand of a cafe have a positive (+) effect on satisfaction with delivery apps. The taste of a cafe has a positive (+) effect on the satisfaction of delivery companies. Delivery app satisfaction and delivery company satisfaction have a positive (+) effect on repurchase. Through this, taste affects the satisfaction of

the delivery app and the satisfaction of the delivery company. But brands only affect delivery app satisfaction, not both. And it is both delivery app satisfaction and delivery company satisfaction that influence repurchase. Therefore, the taste shows that the brand has a high intention to repurchase. Figure 2 is the result of expressing these results in a figure.

**Table 3:** Hypothesis test result

	Paths Hypothesis	Path Coefficient	t value	p value	Results
H1-1	Taste → Delivery App Satisfaction	0.5933	5.466	***	Support
H2-1	Price → Delivery App Satisfaction	-0.013	-0.378	0.706	Reject
H3-1	Brand Image → Delivery App Satisfaction	0.0180	2.498	*	Support
H4-1	Reliability → Delivery App Satisfaction	0.004	0.095	0.925	Reject
H1-2	Taste → Delivery Company Satisfaction	0.617	5.378	***	Support
H2-2	Price → Delivery Company Satisfaction	0.037	0.999	0.318	Reject
H3-2	Brand Image → Delivery Company Satisfaction	0.142	1.831	0.067	Reject
H4-2	Reliability → Delivery Company Satisfaction	-0.028	-0.670	0.503	Reject
H5	Delivery App Satisfaction → Repurchase	0.322	6.151	***	Support
H6	Delivery Company Satisfaction → Repurchase	0.327	6.908	***	Support

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

## 5. Conclusion

As the COVID-19 pandemic continues, sales at coffee shops have plummeted. So, with delivery emerging as an alternative, delivery appears to be a new market for coffee brands (Sedaily newspaper, 2021). According to the statistics of the Small Business Promotion Corporation, the average estimated sales of cafes in downtown Seoul in the first half of this year were about 50.89 million won, a decrease of more than 30% from the estimated sales of 75.61 million won in the same period last year, or about 24.72 million won. In addition, as of the first half of the year, the number of cafe openings nationwide was 6745, down 10.3% from the same period last year, 7517 (Thinkfood newspaper, 2020). In 2018, Ediya Coffee was the first to start delivery in Korea, and the number of delivery orders last year soared by nearly 500% compared to the previous year (Sporbiz newspaper, 2021). Therefore, it can be seen that the study on cafe delivery in the restaurant industry has appropriate value. Therefore, in this study, a model of the study was established after assuming that cafe delivery would have an effect on delivery app satisfaction, delivery company satisfaction, and repurchase. The main purpose is to find out repurchase according to taste, price, brand, and reliability of cafe delivery. Therefore, the summary results of this study are as follows.

First, according to Jo (2004), taste has its own unique taste for each menu product, and is closely related to the symbolic value of food such as touch, sight, and smell. Food with excellent taste is an important factor in determining the quality of food because it increases appetite and also affects digestion and absorption. According to the above results, in this study, both delivery app satisfaction and delivery company satisfaction were found to have a positive (+) effect. However, the price and reliability of the cafe do not affect the satisfaction of the delivery app. The Korea Consumer Federation directly surveyed a total of 65 companies registered in 'Baedal Minjok' from November 17 to 18, 2020, 5 for each type of food. As a result, 37 of them (56.9%) had higher selling prices on delivery apps than in stores. Among the surveyed subjects, five cafe and dessert stores set the selling price on the delivery app higher than the store price (Sportschosun newspaper, 2021). For this reason, price doesn't seem to affect delivery app satisfaction.

In the delivery app, there are cases of damage to restaurants due to manipulation reviews and malicious comments (Newstomato newspaper, 2021). Therefore, it seems that the reliability of the cafe service is low, and it does not seem to affect the satisfaction of the delivery app.

Second, according to Yi and La (2002), when they feel like and attached to a brand, they are more likely to continue to purchase the brand, and an important role in this case is differentiation from other brands. Petty and Cacioppo (1986) found that when a certain service or product is repurchased, there are image enhancement, recognition, and formed affinity for the brand, and there are also important factors including advertising, which is a company's marketing communication. Therefore, the brand image had a positive (+) effect on the satisfaction of the delivery app. The price, brand, and credibility of the cafe do not affect the satisfaction of the delivery company. When selecting a delivery restaurant company, it was found that the most important thing for customers to consider was the quality of the food delivered, and that they value delivery service more than price and variety (Yang & Lee, 2020). This ensures that price does not affect delivery company satisfaction. In some cases, the cafe's brand image delivers directly through their app, etc. For bundled delivery (Chosun newspaper, 2021), where you stop by several stores and deliver them one after the other, you may experience the absurdity of waiting for more than an hour even after paying the delivery fee (Heraldcorp newspaper, 2021). Therefore, the credibility of the cafe does not seem to affect the satisfaction of the delivery company.

Third, Kim (2015), Kim (2010) says that delivery apps are defined as one of the services of food tech provided by using the 4th industrial technology that combines food-related services and information and communication. And, according to Choi (2013), the service quality of restaurant apps affects customer satisfaction and re-use intention, and customer satisfaction has a significant effect on re-use intention. Therefore, it was derived from the satisfaction of the delivery app that had a positive (+) effect on repurchase.

Fourth, Shon and Park (2013) stated that online satisfaction is a subjective evaluation of purchase channels and service performance, and is a determinant variable that affects repurchase intention. Kwon et al. (2013) found that trust in restaurant business and social commerce had a significant

effect on customer satisfaction and social commerce customers.

## 6. Implications and limitation

This study proposes a theoretical contribution as follows.

First, it can be seen from Dong and Ki (2010) that the taste of coffee is the most important attribute. And in Yoo (2017), all sub-factors of service quality of delivery food were found to have a significant effect on 'positive customer emotional response', and among them, 'taste of food' and 'sauce' were the most influential factors. As a result of a study on the purchase patterns of delivery food, it was found that the most common reason for choosing delivery food was that the product tastes good (Chung, Choi, & Choi, 2017).

Second, delivery app customers are leaving due to the rise in delivery costs of delivery platform companies, and there were many customer complaints if the discount price was not applied due to the high minimum order amount and the delivery fee added (Park & Bae, 2020).

Third, customers' sensibility toward dessert cafes had a significant effect on trust and satisfaction, trust on satisfaction, and trust and satisfaction on revisit and recommendation intention, respectively (Lee & Yeo, 2017). There was a significant difference in trust in the delivery app itself. Therefore, various efforts are required to increase the reliability and recognition of delivery apps (Choi, 2013).

Fourth, unlike previous studies focusing on delivery apps, this study added the perspective of a delivery restaurant service provider to the outcome variable. It was possible to check how the quality of cafe delivery service affects the satisfaction of the delivery restaurant service providers, and it was possible to find out how the satisfaction of each delivery app and the satisfaction of the delivery restaurant service affect the repurchase. It was verified that each delivery app and delivery service provider are independently connected and do not influence each other (Kim, 2020).

Finding ways to improve the taste of coffee can increase customers' coffee purchases, and it can be inferred that increasing the taste in delivery has a great effect on positive emotional response. In addition, it is possible to improve the satisfaction of delivery food customers by setting an appropriate delivery fee and providing various discount benefits (Park & Bae, 2020), and brand differentiation of delivery apps is also important (Kim & Cho, 2019). From

the results of the study, it was found that each delivery app and delivery restaurant company must make an effort individually to lead to consumer satisfaction and repurchase (Kim, 2020).

In particular, although brand image did not have a statistically significant effect on satisfaction with delivery companies, it was verified that it had a statistically significant positive effect on satisfaction with delivery apps. This means that companies should pay a lot of attention to brand image advertising in order to increase its repurchase intention through delivery apps.

There are limitations in the course of this study, and we intend to suggest future research tasks and directions for cafe delivery by supplementing them.

First, people who had experience using cafe delivery were collected based on their own experiences, but those without experience collected online data for all under the assumption that they had used it. Therefore, follow-up studies need to be verified through people who have experience using them. Second, it is difficult to say that the survey is reliable because it is biased towards about 80% of the gender of the survey. Therefore, it is felt that it is necessary to investigate the gender in a similar proportion in future studies.

Third, this study conducted a survey mainly among those in their 20s who expected to use the coffee delivery app the most, so there may be a bias by age. Therefore, it seems necessary to verify the research targeting evenly distributed age groups from 10 to 50 years old in the future research.

Fourth, I think that other implications can be derived if economic variables such as price and promotion are studied together in addition to the variables set in this study. In the future, it is necessary to research and develop customer-centred values with interest in each of the cafe delivery service elements, delivery apps, and delivery service providers, going beyond the cafe catering industry. As a specific measure, it is assumed that delivery apps and delivery service providers will be trained, or the number of customer center employees will increase. In particular, taste affects delivery apps and delivery catering companies, so it seems necessary to develop how to deliver cafe delivery while maintaining the taste of beverages as much as possible. In summer, there is a risk that beverages may melt, so try to improve the packaging material or find a way to deliver more efficiently. Brands also influence delivery app satisfaction, satisfaction with delivery apps leads to customers repurchase of cafe delivery, so it is judged that



increasing the brand's publicity will increase the spread of the cafe delivery industry. By signing an agreement, there is a brand discount by day of the week, and an app feature that allows you to view reviews of the same brand at once.

## References

- Aderson, E., & Weitz, B. (1989). Determinants of Continuity in Conventional Industrial Channel Dyads. *Marketing Science*, 8(Fall), 310-323.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Boulding, W., & Kirmani A. (1993), A consumer-side experimental examination of signaling theory: do consumer perceive warranties as signals of quality. *Journal of Consumer Research*, 20(1), 111-123.
- Cha, S. S., & Lee, S. H. (2021). The Influence of Ramen Selection Attributes on Consumer Purchase Intention. *The Korean Journal of Food & Health Convergence*, 7(4), 1-11.
- Cha, S. S., & Seo, B. K. (2018). The Factors influencing Customer Satisfaction with and Revisiting Coffee Shops in Korea: The Moderating Roles of Psychological Value. *Culinary Science and Hospitality Research*, 24(2), 1-7.
- Cha, S. S., & Seo, B. K. (2019). Cafeteria Use by Students and Effect of Selection Attributes on Satisfaction. *The Journal of Asian Finance, Economics and Business*, 6(1), 187-194.
- Cha, S. S., & Shin, M. H. (2021). The effect of delivery food on customer emotional response and repurchase intention. *The Korean Journal of Food & Health Convergence*, 7(2), 1-10.
- Cha, S. S., & Wang, X. W. (2020). A Cross-National Study on Selection Attributes of Instant Noodle between China and Korea. *Journal of Food Products Marketing*, 26(1), 1-16.
- Cho, H. A., & Chun, H. J. (2019). The Effect of User Experience Factors on Satisfaction and Continuous Use Intention of Delivery Apps. *Journal of Tourism and Leisure Research*, 31(7), 323-340.
- Choi, H. M., & Lee, H. R. (2011). Research Articles: The Effect of Coffee Shop Customers' Experiential Value on Brand Attitude and Brand Loyalty: A Focus on the Moderating Effect of Brand Nationality. *Journal of Tourism Sciences*, 35(3), 243-266.
- Choi, Y. R. (2013). *A Study on Factors of Service Quality in Food Service industry Smartphone Applications and Their Effects on Customer Satisfaction and Return Intention*. Doctoral dissertation, Kyonggi University, Suwon, Korea. university.
- Chosun News (2021). 10,000 won black bean noodles, 4,500 won for delivery and commission... The reality of the restaurant 'Hangun Delivery', available at: [https://www.chosun.com/economy/2021/07/20/Q315PBFZRNDJHOYRGS6LJZHXJ4/?utm\\_source=naver&utm\\_medium=referral&utm\\_campaign=naver-news](https://www.chosun.com/economy/2021/07/20/Q315PBFZRNDJHOYRGS6LJZHXJ4/?utm_source=naver&utm_medium=referral&utm_campaign=naver-news) (accessed 20 July 2021).
- Chung, H. S., Choi, S. E., & Choi, D. K. (2017). The effect of perceived risk, perceived benefits on purchase intention for delivery food. *Journal of Hospitality and Tourism Studies*, 26(8), 71-86.
- Dong, J. K., & Ki, R. K. (2010). A Perceptual Mapping of Coffee Shop Brands and Preference Attributes. *Culinary Science & Hospitality Research*, 16(3), 66-75.
- FETV (2021). "Join hands with Hollys and Coupang Eats to promote... 'Delivery service expanded'", available at: <https://www.fetv.co.kr/news/article.html?no=92653> (accessed 02 August 2021).
- Heraldcorp (2021). 'Food cost 10,000 won and delivery fee 15,000 won' The story of the absurd delivery cost bomb, available at: <http://news.heraldcorp.com/view.php?ud=20210518000617> (accessed 18 May 2021).
- Jeong, Y. J. (2019). A study of the effects of brand images of cafes on price fairness perception and relationship continuance intention. *International Journal of Tourism and Hospitality Research*, 33(6), 159-172.
- Jo, M. N., & Cha, J. B. (2017). Consumer Attitudes and Behavioral Intentions on Delivery Application Quality: Focusing on Technology Acceptance Model (TAM). *International Conference of the Korean Tourism Association*, 81(0), 139-143.
- Kendall, E. L., & Sproles, G. B. (1986). Learning Styles among Secondary Vocational Home Economics Students: A Factor Analytic Test of Experiential Learning Theory. *Journal of Vocational Education Research*, 11(3), 1-15.
- Kim, J. H., & Cho, M. H. (2019). The Effect of Advertising Attributes of Mobile Application for Delivery Food on Attitude toward Advertisement, Attitude toward Brand and Purchase Intention. *Journal of Tourism and Leisure Research*, 31(3), 307-324.
- Kim, S. H. (2010). Effects of Perceived Attributes on the Purchase Intention of Smart-Phone. *The Korea Contents Association*, 10(9), 318-326.
- Kim, S. H. (2015). *Survey on the frequency of domestic and foreign food and the use of delivery apps*, Korea Food and Industry Research Institute.
- Ko, E. J. (2016). *Gauging effects of bakery cafe's menu quality on consumer satisfaction and repurchase intention*. Doctoral dissertation, Kyonggi University, Suwon, Korea.
- Kwak, M. K., & Cha, S. S. (2021). A study on the selection attributes affecting pet food purchase: After COVID-19 Pandemic. *International Journal of Food Properties*, 24(1), 291-303.
- Kwon, H. J., Jung, G. Y., & Yi, Y. S. (2013). Social Commerce Characteristics Influencing Customer Trust and Satisfaction for Food service products-Moderating effects of Social Commerce utilization periods. *Journal of Hospitality and Tourism Studies*, 15(3), 410-433.
- Lee, H.G., & Lee, H. Y. (2020). COVID-19 stress: Is the level of COVID-19 stress same for everybody? *Korea Logistics Review*, 30(4), 75-87.
- Money S (2021.05.17). Yogiyo' sold and 'Tmon' jumped in... Delivery app 'spring and autumn warring states period. Retrieved from <https://moneys.mt.co.kr/news/mwView.php?no=2021051314138091955>.
- Na, T. G. (2006). *The effects of menu products' external reference price on value perception, purchase intention and search intention*. Doctoral dissertation, Kyonggi University, Suwon, Korea.

- NewDailyBiz (2021). 'Delivery increased, but the ban on eating in stores'... Starbucks, Ediya, Hollys reverse extension, available at: <http://biz.newdaily.co.kr/site/data/html/2021/04/12/2021041200078.html> (accessed 12 April).
- Newstomato (2021). "Naver removes star ratings for restaurants and cafes... Delivery app companies are maintaining the current system", available at: <http://www.newstomato.com/ReadNews.aspx?no=1032301> (accessed 21 March 2021).
- Park, H. k. (2010). *The Effect of Brand Images on Relationship Quality and Revisit Intention: focusing on coffee shop*. Doctoral dissertation, Konkuk University, Seoul, Korea.
- Park, J. Y., Chae, D. B., & Park, K. H. (2015). The Effects of Retailer Social Responsibility on Customer Trust and Market Response. *Journal of Channel and Retailing*, 20(2), 1-31.
- Park, M. S., & Bae, H. J. (2020) Analysis of the factors influencing customer satisfaction of delivery food. *Journal of Nutrition and Health*, 53(6), 688-701.
- Park, O. J., Park, M. K., Yang, I. S., & Lee, M. J. (2004). Exploratory Case Study for Identifying Detail Attributes on the Food Taste & the Menu in Office Foodservice of Contract Foodservice Management Company. *Journal of the Korean Dietetic Association*, 10(4), 467-475.
- Remuzzi, A., & Remuzzi, G. (2020). "COVID-19 and Italy: What next?" *The Lancet*, 395: 1225-28. [https://doi.org/10.1016/S0140-6736\(20\)30627-9](https://doi.org/10.1016/S0140-6736(20)30627-9).
- Schwab, K. (2016). Fourth Industrial Revolution. Song Kyungjin Station Seoul: New Present. (Original publication date 2016).
- Sedaily (2021). "Coffee delivery market, 'Size Up'", available at: <https://www.sedaily.com/NewsView/22IJZMQ8PT> (accessed 16 February).
- Shim, S., & Gehrt, K. C. (1996). "Hispanic and Native American adolescents: An exploratory study of their approach to shopping," *Journal of Retailing*, 72(3), 307-324.
- Shon, J. K., & Park, Y. A. (2013). A Study on Effects of Service Quality and Usage Review of Smartphone "Majib" Application on User Satisfaction and Reuse Intention. *Journal of Marketing Studies*, 21(3), 1-26.
- Sporbiz (2021). "Franchise coffee at home...The food and beverage industry are fiercely competing in the delivery market", available at: <http://www.sporbiz.co.kr/news/articleView.html?idxno=524690> (accessed 25 May 2021).
- Sportschosun (2021). "'I thought you ordered it cheaply using a coupon'. Delivery apps are more expensive than stores.", available at: <https://sports.chosun.com/news/ntype.htm?id=202102010100001040013082&servicedate=20210131> (accessed 31 January).
- The Food & Beverage News (2020). "'Untact marketing worked' Settling the trend of 'non-face-to-face sales' in the food industry", available at: <http://www.thinkfood.co.kr/news/articleView.html?idxno=86819> (accessed 23 March 2020).
- Thinkfood (2020). "Coffee shop in crisis. Make up for it with 'Delivery'.", available at: <http://www.thinkfood.co.kr/news/articleView.html?idxno=89190> (accessed 18 November 2020).
- Yang, J. Y., & Lee, H. J. (2020). Analysis of Factors affecting Customer Repurchase Decisions in Food Delivery Services. *The Academy of Customer Satisfaction Management*, 22(4), 65-82.
- Yi, Y. J., & La, S. N. (2002). Brand Personality-Brand Identification-Brand Equity Model: An Exploratory Study on the Difference Between Users vs. Non-Users. *Journal of Korean Marketing Association*, 17(3), 1-32.
- Yıldırım, M., & Güler, A. (2020). "Factor analysis of the COVID-19 Perceived risk scale: A preliminary study," *Death Studies*, 1-8. <http://ps3.doi.org.libproxy.yu.ac.kr/10.1080/07481187.2020.1784311>.
- Yoo, D. K. (2017). A Study on Developing Better Franchise Delivery Food's Service Quality which influences on Customers' Emotional Response and Franchise Brand Equity. *Food Service Industry Journal*, 13(4), 195-206.