

**THE INFLUENCE OF STORE ATMOSPHERE AND DISPLAY LAYOUT ON CUSTOMER REPURCHASE INTENTION IN SUPERMARKET  
(A SURVEY IN JAWA BARAT PROVINCE, INDONESIA)****Mei Andriani Situmorang<sup>1</sup>, Suresh Kumar<sup>2</sup>**<sup>1</sup>Wings Group Indonesia, meilandriani123@gmail.com<sup>2</sup>Faculty of Business, President University, sureshkumar@president.ac.id**ABSTRACT**

*The purpose of this study is to identify the factors which influence customer repurchase intention based on store atmosphere and store display layout. This study applied a survey method which was distributed in the form of a questionnaire as the instrument tool. By using the purposive sampling technique, the questionnaire was filled up by 400 respondents who were usually shopping at a supermarket in the Bekasi region, Indonesia. The data collected were analyzed with the structural equation model. This research revealed that repurchase intention was affected by store atmosphere, which comprises six sub-dimensions: cleanliness, music, scent, temperature, lighting, and color. Store display layout which also divided into three sub-dimensions; product assortment, store design/layout, and window display. It was found that both variables, store atmosphere and display layout play a significant role in affecting repurchase intention in supermarkets. This study was the first study that assessed whether store atmosphere and display/layout have a significant impact on customers' repurchase buying in the supermarket context.*

**Keywords:** Store environment, Store atmosphere, Store display/layout, Retail store, Repurchase Intention

**1. Introduction**

The growth of the retail industry in 2020 is currently in a declining condition. This condition is proven by the report in some countries indicating that the closures of retail stores are increasing. The Centre for Retail Research shows that 18,466 jobs have been lost in U.K. retail up to 27 February 2020, with store closures at 1,213 (Goodley, 2020). The decline in retail stores also occurred in the United States. As reported by CNBC, U.S. retail sales have fallen 0.3% for the first time in September, raising fears that a decline in the American manufacturing industry could begin to influence the economic sector. (Franck, 2019). Like what was happening in the U.S., Indonesia is also experiencing a decline in the number of retail stores. Based on the report released in September by Retail Sales Survey (SPE), retail sales grew 0.7% year on year and became the lowest growth since July 2019 (CNBC Indonesia T.V., 2019).

Conversely, mini-mart stores located in the neighborhood housing complex are growing rapidly. As reported by Nielsen's What's Next for Southeast Asia that the number of mini-marts in Indonesia reached 43,826 stores in 2017, and this growth has increased by around 3.2%, or 1,000 new mini-marts each year (Bella, 2019). In contrast, Hypermart has declined any thoughts of adding new outlets since the consumption of households in Indonesia was slowing down in the third quarter of 2019. It was reported that Hypermart's sales declined from IDR 8,28 trillion last year to IDR 6,64 million in the third quarter of 2019 (Sidik, 2019). In Bekasi, Giant closed down 6 of its outlets on 28 July 2019, which led to their workers' layoffs (Lidyana, 2019). The HERO supermarket reduced its employees by as many as 2,880 in 2019, and 10,854 employees resigned at the end of 2018 (Binekasri, 2019). Further, retail stores were closing down one by one in Indonesia, and the latest news was the closing down of Department Stores, for instance: Neo SoHo and Hero (Hasibuan, 2019).

The main factor that led to a decline in sales is the changes in people's shopping behavior. Other than going to the nearest mini-mart, they are also fond of buying online (Executive, 2018). Hence, many online retail stores have sprung up, for instance: BerryBenka, Zara, Pull and Bear, etc. Thus, due to this tight competition, many retail

stores are closing down (Cahyani, 2020). Hence, offline retailers need recommendations on how to lead their customers to repurchase to survive in this tight competition. It is believed that improving the quality of retail stores and changing the store's atmosphere affect customers' emotions and encourage them to make repeat purchases (Azhagan & Nithya, 2020). Not only focusing on creating an online store but also trying to increase the atmosphere inside of the store and creating an attractive window display to attract customers (Soomro et al., 2017). When a customer feels satisfied with the retail environment of a store, they begin to spend more time in a store and buy more products because of pleasant environmental excitement (Gupta, 2020). The atmosphere has a big impact on consumers' emotions and satisfaction. The pleasant atmosphere of the retail outlets increases the customer satisfaction level and purchase experience (Silva & Giraldi, 2010). Also, the unique and attractive store display layout tends to attract customers, increase the customer's arousal, and lead to unplanned buying (Venter de Villiers et al., 2018). There are previous studies that examined the influence of store atmosphere and store layout on customer behavior and repurchase intention (Bide, 2018; Elmashhara & Soares, 2020; Hussain & Ali, 2015; Thirumalazhagan & Nithya, 2020), but none of them focus on the role of product assortment as a dimension of window display. Hence, the authors believe this is the first study integrating multidimensional construct store atmosphere (cleanliness, music, scent, temperature, lighting, color) and display layout (product assortment, store design/layout, window display) and its relation to customer repurchase intention in supermarket context. Further, the aim of this research is to analyze the role of store atmosphere (cleanliness, music, scent, temperature, lighting, color) on customer repurchase intention. Also, the impact of store display layout to repurchase intention by using dimensions' product assortment, design layout, and window display as the measurement. This study is arranged into five chapters. It begins with a discussion of the background, followed by hypotheses and variables that have been adjusted to become a framework. Then, it discusses the methods to be applied in this research, and next is the survey result. Last but not least, this study provides conclusions and suggestions from the findings, analysis, discussions from all chapters, and recommendations.

## 2. Literature Review

### 2.1 Theoretical background

Meyer et al. (2017) define repurchase intention as an action from customers to willingly revisit and make purchases after having a good experience at the retail store. According to Khoa et al. (2020), positive atmosphere factors in the store can create a positive experience with the store and lead to customer purchase intention and consider making a new purchase in the future. Customer repurchase decision often depends on a general assessment of the service and the store based on multiple service transaction experiences in the store (Hellier et al., 2003). According to Ismael and Kumar (2020), repurchase intention is an intention to buy and willingly repeat purchases and recommend them to others. Hence, it is important to know from the customer's perspective which aspect of their shopping experience creates satisfaction and delighted feelings (Simanjuntak et al., 2020).

The store environment for a customer nowadays is defined as entertaining experiences that provide musical, visual, and attractive design in the store (Singh et al., 2014). The retail store environment provides many elements that can be used as a cue to help customers' shopping process (Baker & Parasuraman, 1994). For example, a retail store with high-quality service and offered high-quality merchandise usually use thick carpeting and dim lighting but highlights the products offered and plays classy music. Hence, the importance of the store environment can affect the time, and money customers spend in the store (Comber et al., 2020; Donovan et al., 1994). Moreover, Singh et al. (2014) also stated that the store environment could encourage customers to stay longer in the selling environment and to make an unplanned purchases. In addition, Gilboa and Rafaeli (2003) argue that retailers design their store environments in a manner to enhance customer's positive feelings and lead to desired customer behaviors, such as higher willingness to purchase (Nikhashemi et al., 2019; Ray & Chiagouris, 2009), affecting customers' expectations of the store (Baker et al., 2002; Coffey & Kabadayi, 2020) and spend time longer in the store (Kent & Kirby, 2009; Roggeveen et al., 2020). Looking at the complexity of the store environment, Baker et al. (1992) developed a multi-dimension construct to measure the store environment, which is ambient and social factors. Ambient factors consist of physical attraction, which can affect the emotional states of pleasure and arousal and the approach or avoidance of customer behaviors, for instance, lighting and music. Social Factors consist of the operationalization of retail salespeople. Baker et al. (1992) assume that retailers should pay more attention to how to serve customers to increase their competitive advantage.

Hussain and Ali (2015) developed seven dimensions to measure the store environment: cleanliness, music, scent, temperature, lighting, color, and display/layout. Further, Elmashhara and Soares (2020) developed a second-order approach to measure Hussain and Ali's store atmosphere with three dimensions which are atmospheric, customers' emotions, and General Interior Variable (GIV). There are sub-dimensions in an atmospheric general interior variable, consisting of flooring and carpeting, color schemes, lighting, music, scent, temperature, cleanliness, and physical characteristics. Another approach was also studied by Siddhibhongsa and

Kim (2017) to measure store atmosphere that consists of three variables such as ambient cue (music, color, lighting), display and layout cue (traffic flow and space allocation), and display cue (product display and window display). The previous study didn't use layout cues as part of the store atmosphere.

In this study, the store environment is measured through a multi-dimension construct consisting of store atmosphere (cleanliness, scent, lighting, music, color, and temperature) and display layout (product assortment, design layout, and window display) (Elmashhara & Soares, 2020; R. Hussain & Ali, 2015; Siddhibphongsa & Kim, 2017; Singh et al., 2014; Soomro et al., 2017).

According to Azhagan and Nithya (2020), the store atmosphere is an atmosphere that has adjusted for the customers' market segment to attract customers to make purchases. Further, they state that a pleasant store atmosphere creates a positive mood among customers and eventually increases customers' willingness to revisit as they have a good shopping experience in the store before. A retail store with a unique atmosphere can create a fantastic and entertaining customer experience which can affect customer behavior (Han et al., 2011). Store atmosphere in this study was measured using six dimensions: cleanliness, music, scent, temperature, lighting, and color.

The "display" can be interpreted as a "cinematographic representation" in the store that was used by retailers to represent the products (Pellegrini et al., 2020). In comparison, the key feature of store layout is how it is used to try to influence the movement of consumers in the store, guiding them to more merchandise and providing communication cues to the consumer (Barnes & Lea-Greenwood, 2010). This study was measured using three dimensions: product assortment, design/layout, and window display.

## 2.2 Hypothesis

### 2.2.1 Store Atmosphere

According to Elmashhara and Soares (2020); Hussain and Ali (2015), the attractive and impressive atmosphere of retail chain outlets creates an enjoyable experience among the consumers, which directly affects consumers' purchase intention and decision-making process. Also, according to Singh et al. (2014), Soomro et al. (2017), and Siddhibphongsa and Kim (2017), the variable of store atmosphere includes store design/layout. Farias et al. (2014) argue that an array of retail atmosphere features influences the subjective experience of consumers, especially their pleasure and arousal; this experience can lead to their purchase intention. Thirumalazhagan and Nithya (2020) also state that store atmosphere positively affects customers' purchase intention with two elements: store atmosphere and store layout.

*H1: Store atmosphere (cleanliness, music, scent, temperature, lighting, color) influencing repurchase intention.*

### 2.2.2 Store display/layout

Based on the previous journal by Saran et al. (2017), store design in the physical store environment, defined as visual aesthetics, represents an important part of store design that is most visual to consumers. A poorly designed layout may cause the customer not to make purchases due to the confusing store layout (Baker et al., 2002). Thus, Store layout can affect consumers' perceptions of a retail environment, and thus there is a possibility of approaching or avoiding the product or store (Singh et al., 2014). Moreover, a well-arrange layout can also increase the performance in the working environment and the stock replenishment, control, and promotional activities (Pellegrini et al., 2020)

*H2: Display layout (product assortment, design/layout, window display) influences repurchase intention.*

Hence, Figure 1 is the theoretical framework of this study:

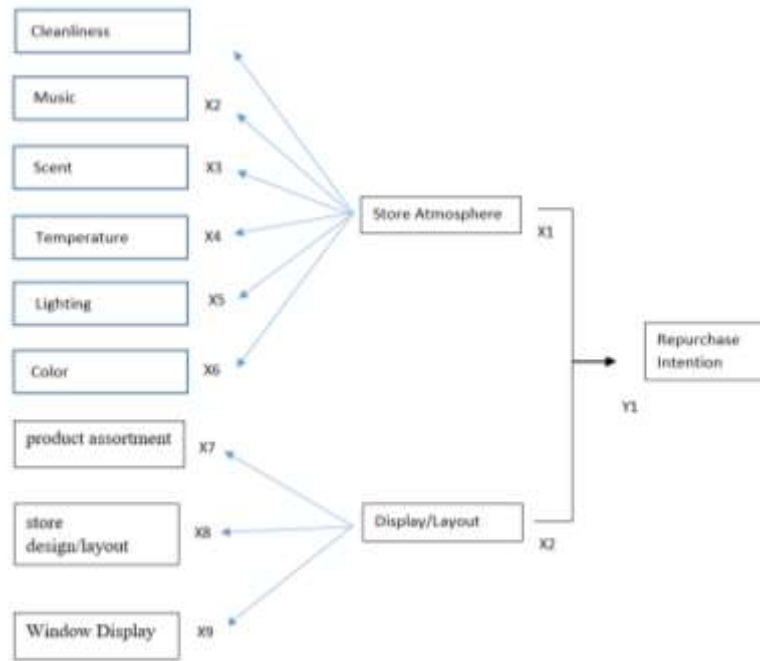


Figure 1. Theoretical Framework

**3. Research Method**

This study uses questionnaires to collect the data. There are three variables in this study which consist of 1 dependent variable and two independent variables with dimensions consisting of cleanliness, music, scent, temperature, lighting, color, product assortment, design layout, and window display. The selection of units in the sample shall be carried out impartially in this method. Personal or any kind of bias in the selection process shall be avoided by purposive sampling. The demographic profile consists of gender, occupation, and monthly expenses.

The appropriate sample size is when it can represent the general population; the right amount of sample size is important for quantitative research (Omair, 2014). According to MacCallum et al. (1999), the sample size that is eligible to reach a higher probability is between 200 and 400 samples. Since the item statements in this study were 35; hence, the minimum required sample size was 175 (5 x 35) and 350 (10 x 35) samples (Dhisasmitho & Kumar, 2020; Enomoto et al., 2020). Therefore, the questionnaire was distributed to 500 people, and 400 questionnaires were filled-up. From this result, this study has qualified and reached the required respondents.

The item statements for store atmosphere were adopted from (Elmashhara & Soares, 2020; Hussain & Ali, 2015; Wang & Wu, 2017). According to them, the store atmosphere is divided into six dimensions which were cleanliness (5 item statements), music (3 item statements), scent (3 item statements), temperature (3 item statements), lighting (4 item statements), and color (3 item statements). Then, item statements for display/layout were adjusted (Han et al., 2011; Soomro et al., 2017), and it was divided into two dimensions which were design layout (3 item statements) and window display (3 item statements). Lastly, for product assortment, it was adjusted by Aspfors (2010), who used 3 item statements, and repurchase intention was adjusted by (Han et al., 2011; Hellier et al., 2003; Wang & Wu, 2017) used 5 item statements.

The questionnaire in this study was analyzed by two academic experts in retail industries. The adjustments were made by translating the questionnaires into the Indonesian language to ease the respondents to answer the questionnaire. The measurement used in this study is a 7-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree). As Pescaroli et al. (2020) stated that in multidisciplinary research, optimal results might require broader scales, which as the 7-point Likert scale.

**4. Results and Discussion**

**4.1. Respondent’s Profile**

In this study, the questionnaire was spread to loads of people and ended in 400 valid responses. The respondents were people from any background who were shopping at the supermarket and were categorized based on gender, occupation, and monthly expenses for shopping at the supermarket. Based on the respondents, results showed that

66.8% (267 Respondents) of the respondents were female. Then 33.3% (133 respondents) were male. It meant that the majority of respondents in this study were female. The majority of respondents were college students, with 65% (260 respondents). Then, it's followed by an employee with 17.3% (69 respondents). As for civil servants, 5.2% (21 respondents), and housewife with 4% (16 respondents). Lastly, there are entrepreneurs with 7.3% (29 respondents). There are variations of how much people's monthly expenses in the supermarket. And, to make it easier for people to realize how much their spending is, we make a range of choices. Frequently, 127 respondents answered IDR 50,000 – IDR 150,000 (13.8%) for their expenses, followed by IDR 150,000 – IDR 300,000 (32.5%) which surprisingly was the most answered by 130 respondents, then IDR 300,000 – IDR 500,000 (23%) was chosen by 92 respondents, then as many 29 respondents expend IDR 500,000 – IDR 750,000 (7.3%) per month, then 13 respondents answered IDR 750,000 – IDR 1,000,000 (3.2%), lastly the highest expenses was greater than IDR 1,000,000 (2%). In the top 3 for the most answered favorable supermarket is Farmer's market with 64.3% (257 respondents). Then the second most favorable supermarket is Giant with 47.5% (190 respondents), and the last is Hero supermarket with 57% (228 respondents). Then, it was followed by Tip-Top, Lulu Hypermarket and Department store, Naga supermarket, Hari-Hari, and last Hypermart, respectively 47.3% (189 respondents), 16.3% (65 respondents), 17% (68 respondents), 23.5% (94 respondents), 23.8% (95 respondents).

#### 4.2 Model Fit

The store Environment is a multidimensional construct, with each dimension exercising a different influence on customer repurchase intention (Elmashhara and Soares, 2020). This study used second-order confirmatory factor analysis (CFA) with multidimensional scaling to test the model measurement (Carl et al., 2020). The second-order factor analysis was performed to examine whether or not all factors fit with the requirements' value (Marofi et al., 2020). However, some indices did not reach the required threshold value (Marofi et al., 2020), leading to an insignificant hypothesis.

Reassessment was done by correlating each error indicator that belongs to the same variable by looking at modification indices with higher unacceptable values (SC2, SC1, LGT4, LGT1). After correlation between errors, the model was re-tested and resulted in the value of the minimum sample discrepancy function divided by degrees of freedom (CMIN/DF) was 1.508, incremental fit index (CFI) was 0.957, incremental fit index (IFI) was 0.967, Tucker-Lewis index (TLI) was 0.95, root means the square error of approximation (RMSEA) was 0.041, goodness-of-fit index (GFI) was 0.903, adjusted goodness-of-fit index (AGFI) was 0.881. However, the AGFI value did not qualify the requirement ( $>0.9$ ) (MacCallum & Hong, 1997), but the measurement model was still fitted because 6 out of 7 model fit exceeded the requirement value (MacCallum & Hong, 1997).

#### 4.3 Measurement Assessment

For assessing internal model fits, such as reliability and validity, certain types of measurement can be used (Heale and Twycross, 2015). In this study, we use Composite Reliability (CR), Average Variance Extracted (AVE), and Cronbach's alpha ( $\alpha$ ) (Thomas et al., 2020) and calculated separately. CR and AVE with Cronbach's alpha ( $\alpha$ ) respectively using AMOS and IBM SPSS Statistic 25. An acceptable Cronbach's alpha score is  $> 0.7$  (Heale and Twycross, 2015),  $> 0.8$  is good, and  $> 0.9$  is excellent (Goodman et al., 2020). Also, the criteria average variance extracted (AVE)  $> 0.5$  and composite reliability (CR)  $> 0.7$  (Hamid et al., 2017; Triwidyati et al., 2020). After running the AMOS and SPSS, all the results passed the minimum criteria (Table 1).

Table 1 Measurement Assessment

	CR	AVE	Cronbach Alpha
Cleanliness	0.81	0.5	0.80
Music	0.87	0.69	0.87
Scent	0.81	0.59	0.77
Temperature	0.89	0.73	0.88
Light	0.89	0.66	0.88
Color	0.89	0.74	0.89
Product assortment	0.87	0.69	0.86
Design Layout	0.87	0.7	0.87
Window display	0.76	0.52	0.76
Repurchase intention	0.91	0.66	0.91

#### 4.4 Discriminant Validity

Discriminant Validity is referring to the extent to which the construct is actually differing from one and another (Ab Hamid et al., 2017). To assess the discriminant validity, the entire dimension from both variables were compared between the store ambience and store display layout (Straaten et al., 2020). Higher factor loading and lower correlations between constructs attested construct discriminant validity (Ferreira et al., 2020). The result of discriminant validity (Table 2) showed that factor loading value was higher than the lower correlations between constructs which are qualified the requirement. 1 = cleanliness, 2 = music, 3 = scent, 4 = temperature, 5 = lighting, 6 = color, 7 = product assortment, 8 = design layout, 9 = window display, 10 = repurchase intention.

Table 2. Discriminant Validity

	1	2	3	4	5	6	7	8	9	10
<b>1</b>	<b>0.67</b>									
<b>2</b>	0.09	<b>0.83</b>								
<b>3</b>	0.06	0.61	<b>0.77</b>							
<b>4</b>	0.07	0.44	0.36	<b>0.85</b>						
<b>5</b>	0.17	0.6	0.63	0.44	<b>0.81</b>					
<b>6</b>	0.28	0.46	0.36	0.45	0.36	<b>0.86</b>				
<b>7</b>	0.22	0.09	0.01	0.1	0.06	0.14	<b>0.83</b>			
<b>8</b>	0.24	0.07	-0.04	0.09	0.1	0.11	0.68	<b>0.83</b>		
<b>9</b>	0.24	0.37	0.36	0.37	0.4	0.39	0.36	0.4	<b>0.72</b>	
<b>10</b>	0.17	0.28	0.24	0.36	0.3	0.33	0.39	0.31	0.59	<b>0.81</b>

#### 4.5 Hypothesis Testing

The hypothesis testing suggests that the data were deemed fit. The first hypothesis shows that there is a significant influence between store atmosphere and repurchase intention (CR = 3.552;  $p < 0.05$ ) (see Table 7), which is in line with the previous study (Elmashhara & Soares, 2020; Hussain & Ali, 2015; Siddhibphongsa & Kim, 2017) that store atmosphere is significantly affecting repurchase intention.

The second hypothesis significantly influences store display layout and customer repurchase intention (CR = 6.723;  $p < 0.05$ ). This finding was supported by (Han et al., 2011; Soomro et al., 2017; Wang & Wu, 2017) that store display layout is proven to significantly influence repurchase intention.

Store atmosphere (cleanliness, music, scent, temperature, color, and lighting) positively influence repurchase intention based on the result of hypothesis testing (Estimate: 0.231). This result was in line with previous research that indicates a positive influence between store atmosphere and customer repurchase intention (Elmashhara & Soares, 2020; Hussain & Ali, 2015; Thirumalazhagan & Nithya, 2020).

According to the result of hypothesis testing in this study, it can be concluded that store display layout (product assortment, design/layout, window display) has more impact on repurchase intention (Hypothesis testing: Estimates 0.503), and this result was supported by previous research that store display layout positively influences customer repurchase intention (Han et al., 2011; Hussain & Ali, 2015; Siddhibphongsa & Kim, 2017).

Table 3. Hypothesis testing results

Latent Construct		Pvalue	CR	Estimate	
Store atmosphere	→	Repurchase intention	***	3.552	0.231
Store display layout	→	Repurchase intention	***	6.723	0.503

#### 5. Conclusion and Implications

Store atmosphere (cleanliness, music, scent, temperature, color, and lighting) positively influences repurchase intention based on the result of hypothesis testing (Est= 0.231). This result was in line with previous research that indicates a positive influence between store atmosphere and customer repurchase intention (Elmashhara & Soares, 2020; Hussain & Ali, 2015; Thirumalazhagan & Nithya, 2020). The results of the R-square value, cleanliness has a moderate strength relationship with Store Atmosphere (R-Square=49%), which is in line with the previous study

that indicated cleanliness has a positive impact on store atmosphere (Husain & Siddiqui, 2019; Hussain & Ali, 2015; Lim et al., 2020). Also, store display layout with supporting dimensions (product assortment, design/layout, and window display) has proven to be the most significant impact on repurchase intention (Est=0.503), and this result was supported by previous research that store display layout positively influences customer repurchase intention (Han et al., 2011; Hussain & Ali, 2015; Siddhibhongsa & Kim, 2017).

This study analyzes the correlation between store atmosphere, display layout, and customer repurchase intention. The findings resulted in a significant correlation between store atmosphere to repurchase intention and store display layout to repurchase intention. According to composite reliability and AVE results, the biggest impact on customer repurchase intention is temperature, followed by product assortment and design/layout. Hence, a good retail environment is a store with a suitable temperature, organized product assortments, and a spacious layout with an attractive store design. Therefore, this study has contributed to the body of knowledge as an integrated model regarding the store atmosphere and store display layout to increase purchase decisions.

This research aims to help companies establish and manage corporate innovation communities successfully to become more innovative. The framework offered in this thesis suggests that the store atmosphere and display layout are complex and need to be active for a managerial position. Some divisions are particularly important for successful community management; (1) The store's management could utilize the lighting and create an attractive display, such as using lighting techniques and creative displays to attract customers. Play videos for product education, customer entertainment, and other upsell or promotional tie-in. (2) The management could create a creative window display adjusted with the year's season; they can create an ornament used for the season, such as a Christmas tree for Christmas and a variant of color adjusted with the Christmas.

This study has several limitations which need to be carefully interpreted and could be addressed in future research. First, as in most empirical studies, this research was limited by the measures used. Because measurements for the store environment and store display layout have a broader influence variable to repurchase intention that couldn't be tested all in one research, lastly, the store atmosphere in this study has six dimensions (cleanliness, music, lighting, temperature, color, scent) which service quality is not included. While Lim et al. (2020) developed the theoretical framework that service quality is the important in-store atmosphere. Hence, the service quality in the retail context is considered to be added for future study.

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