

# Consumer Awareness and Switching Behavior Factors in Contact-Free Shopping

## Focusing on Means-End Chain Theory and Laddering Technique

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**Abstract** This study aimed to identify changes in fashion consumer awareness of contact shopping and contact-free shopping in line with the current environment, such as COVID-19 and the spread of digital living, and to derive their characteristics and end-value. To this end, specific factors that directly affect the switching intention of consumers when shopping during the COVID-19 pandemic were extracted. This study was conducted using the means-end chain theory and the laddering technique of qualitative research methods. It targeted 50 consumers aged between 20s–60s who have had experience in purchasing fashion products through contact-free shopping. The results showed that anxiety, discomfort, and unnecessariness were negative effects of contact shopping, and the positive effects of contact-free shopping were convenience, experience satisfaction, usability, and its economical nature. Finally, as the mooring factors for switching intention, the preference for familiarity, unnecessariness, and the pursuit of diversity were derived. This can be a key factor in providing a direction for a contact-free society that becomes the new normal. Therefore, this study sought a method to activate contact-free fashion stores and expects it to be utilized in a marketing method for potential customers in the post-COVID-19 era.

**Keywords** Consumer awareness, Contact-free shopping, Influencing factor, Means-end chain theory, Switching behavior

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## Introduction

The growth of contact-free consumption through “social distancing” in the COVID-19 environment has changed the central axis of services from offline to online. As a result, contact-free forms of consumption have become common in our daily lives, switching consumer intentions and behaviors. The domestic kiosk market has grown annually by 61.5%, reaching 22 billion won in 2020, and with the introduction of VR technology, non-face-to-face and unmanned services are also being promoted in the fashion and beauty fields, so contact-free services are expected to be expanded to customer-tailored services (Bae & Shin, 2020). In addition, contact-free marketing has also been a major consumption trend since 2018 and is gaining attention during the

COVID-19 pandemic. As such, interest in contact-free marketing is rising due to COVID-19 and the acceleration of the 4th Industrial Revolution, and it will be a part of our daily lives in the post-COVID-19 era we are facing. This suggests the need to explore various levels of contact-free marketing. However, when this study examined the prior contact-free studies from before the outbreak of COVID-19, it was found that the marketing-related research had been conducted in somewhat limited fields such as insurance, finance, medical care, and food services (Jung & Park, 2017; Lee, 2019; Lee & Lee, 2020; Lee & Lim, 2018).

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The studies related to the fashion industry conducted after the COVID-19 outbreak reveal that luxury brands are implementing online contact-free communication strategies as a marketing method to better convey their brand image to consumers (Xie & Youn, 2020). The global luxury brands that tried to communicate directly with consumers through contract-free media increased intimacy and preference along with rising brand awareness (Shim & Kim, 2021). In addition, various fashion brands have found opportunities to interact with consumers through experience marketing using a variety of digital techniques, which also increased brand awareness (Yang & Lee, 2020). Lee and Lee (2020) analyzed various previous studies and cases regarding contact-free topic to propose the concept of contact-free service and explain the importance of such service in terms of new opportunities and challenges. As previously mentioned, various studies have been conducted to suggest strategies for creating new customer values such as convenience and efficiency through technological innovation or targeting the technology platform from the digital services perspective (Brydges, Heinze, Retamal, & Henninger, 2021).

Consumer awareness and behavior can be changed and determined by the situations of the times such as the changing social and natural environments. But most studies on fashion shopping published after COVID-19 were studies analyzing the change in consumer shopping behavior with only the functional aspects of stores as the key factor (Dorie & Loranger, 2020; Flavián, Gurrea, & Orús, 2020; Oleárová, Bačík, & Fedorko, 2022), while few focused on the change in consumer awareness by applying the contextual factors faced by consumers due to environmental risks and social issues as a COVID-19. Therefore, at this point, it is necessary to identify changes in consumers based on more fundamental factors such as environmental risks of COVID-19, social issues, and direct experiences.

Therefore, the aims of this study were to identify the factors that have positive and negative impacts on the switching intentions and behaviors of consumer over time, to confirm the connections between those factors, and to extract the necessary elements for contact-free marketing so that it can present results that can be utilized in the fashion industry. To this end, this study examined consumer awareness

according to the social changes caused by COVID-19 through means-end chain theory and laddering technique, and this was expected to elucidate marketing measures and new directions for the fashion industry to activate efficient contact-free shopping in the post-COVID-19 era of the future.

## Literature Review

### Consumer Awareness and Switching Behavior

Distributors who failed to adequately respond to the digital innovation of the mobile commerce market after COVID-19 are in crisis (Oh, 2022). Choi and Lee (2020) analyzed the changes in consumer awareness regarding fashion products through big data in a pandemic situation and found that in the early days of the COVID-19 outbreak, the focus was on infection prevention or restraint, but the topic has shifted to online channels and platforms as people spend more time at home, and has further changed to various fashion-related topics such as digital fashion shows and distribution channels. Shopping motives vary between online and offline shoppers, and the choice of channel depends on the desired value, as diversity and price value are important attributes for online shoppers, and social interaction and personalization are important for offline shoppers (Haridasan & Fernando, 2018). Behavior can vary depending on how consumers perceive contact/contact-free shopping, and ultimately, it can be seen as a factor that determines switching behavior.

In addition, since the user experience of a system creates a new awareness to revalue a particular system, using the system after adopting it is not related to initial choice (Kim & Malhotra, 2005), and consumers' switching behavior is an important subject because they can stop the previously adopted method when new alternative methods are introduced (Hsieh, Hsieh, Chiu, & Feng, 2012). According to Oh (2022), the main shopping channel routes for each product group were different, and among them, in the case of clothing and fashion goods, consumers prefer offline stores, so it suggested that appropriate product experience and online/offline linkages that allow purchases at online prices should be further strengthened. As such, it is judged

necessary to investigate the main factors influencing the transition to contact/contact-free shopping in accordance with the awareness of fashion consumers changed due to COVID-19.

### Means-End Chain Theory and Laddering Technique

**Mean-End Chain Theory.** The means-end chain theory was first developed and applied in marketing and advertising (Gutman, 1982), and explains the link among product attributes and consequences or benefits of consumption, as well as personal values implied in the decision-making process based on consumer awareness (Gutman & Alden, 1985). It is divided into two conflicting theoretical perspectives, such as the traditional motivational perspective by Reynolds and Olson (2001) and the cognitive structure perspective by Grunert and Grunert (1995), summarized basically into three levels. In other words, the means-end chain theory assumes that personal values are based on the consequences and attributes of products and services (Hofstede & McCrae, 2004).

First, the attribute level can be obtained by the basic functions of products or services. The second is the consequence level, which is the benefit obtained from the outcome of product or service attributes. The third or the last is the value level, which is the value that is intended to be ultimately obtained from attributes and consequences. In other words, the means-end chain theory analyzes the linkages among personal values, consumer consequences, and product attributes that form a chain with a preference relationship tree, and these attributes, consequences, and values do not exist independently. However, they are interconnected, and thus the three levels are relationally linked to one another (Leitner, Wolkerstorfer, Sefelin, & Tscheligi, 2008).

Accordingly, the superordinate goals of consumers can be explored in terms of material benefits. Since it is judged that consumers can explore the higher value areas in terms of physical convenience, it is expected that the perception of contact-free shopping will be different depending on the type of value that individual consumers pursue. Therefore, in this study, using the mean-end chain theory, this research was

classified the values that consumers ultimately pursue through the shopping experience in the COVID-19 environment, and derived factors that affect the switching intention and behavior of contact-free shopping.

**Laddering Technique.** To conduct research in relation to the means-end chain theory, it is necessary to determine the motives implied in consumer behavior, which can be done by the laddering technique. The laddering technique is an in-depth interview technique that determines the structure of consumers' purchase decisions for products or services based on the means-end cognitive structure (Reynolds & Gutman, 1988). The subjects are asked why the attributes, anticipated consequences, and purpose (end) of certain products or services are important to them, after which the value system of consumers behind their purchase decisions is interpreted; and the means-end connection, that is, the hierarchical value structure, is analyzed (Reynolds & Olson, 2001).

Data analysis in this method begins by summarizing the key items based on standardized content analysis. After calculating the number of linkages among items and constructing a summary table, the concentrated relationships are extracted from the summary table and represented as a relational model referred to as the hierarchical value map. This qualitative and in-depth method is used to understand each value from potential motives of consumers and influencing factors for the given research purpose based on interpretation of the data (Reynolds & Olson, 2001).

According to Lee and Lee (2011), the laddering technique is mostly used to determine the cognitive structure of consumers toward products in marketing, and has been extended to various fields such as education service and political awareness structure. As shown in Table 1, recently, Park, Yap, and Makkar (2019) studied the complexity of motivations for mobile shopping through the laddering technique, and Haridasan and Fernando (2018) used the laddering technique to determine consumer motives in choosing an online channel or offline stores. Moreover, Lee (2019) studied social networking services-based commerce platforms as the shopping channels of the millennials, using the laddering technique. Lee and Choi (2010) analyzed the factors of product purchase on online media with laddering.

Table 1. Terminal values obtained from shopping-related studies using the laddering technique

Researcher	Content	Terminal value
Amatulli, Pino, De Angelis, & Cascio (2018)	Luxury vintage products' purchase determinants	Self-identification, Social acceptance, Self-confidence, Self-fulfillment
Haridasan & Fernando (2018)	Motives of online or offline in-store shopping	Variety, value for money and delivery, Convenience, affordability, gratification
Kim (2013)	Effects of online shopping mall attributes on shopping value, consumer satisfaction and customer loyalty	Utilitarian shopping values, hedonic shopping values
Kyung (2019)	Store attributes that cause crossover shopping of online and offline shopping malls	Convenience, ease of comparison, product composition, price / value, quality versus price
Lee & Choi (2010)	Online media's product purchase factor	Self-satisfaction, self-esteem, affluent life, sense of accomplishment, reasonable life
Park et al. (2019)	Motivational complexities in mobile shopping of consumers	Self-empowerment, altruism, relationships with others, self-fulfillment, hedonism
Park & Kang (2005)	Effects of online fashion shopping mall attributes and shopping values	Hedonic values, utilitarian values

This qualitative and in-depth laddering technique can understand the potential motives of consumers based on information interpretation and their respective values for the influencing factors (Reynolds & Olson, 2001).

In particular, it is judged to be a suitable way to prepare countermeasures for post COVID-19 (With COVID-19), which will bring another change in the future, based on the main cause leading to changes of consumer perception in variety situations. However, none of the studies conducted around COVID-19 verified changes in consumer awareness due to a disaster. Therefore, this study analyzed the switching behavior of fashion consumers caused by social/environmental changes due to COVID-19 with a focus on change in awareness.

## Research Method

### Hard Laddering

Laddering can be divided into the traditional in-depth technique called soft laddering and the quantified technique called hard laddering (Botschen & Hemetsberger, 1998). To overcome the limitations of traditional in-depth interviews

that require a great deal of time and cost, hard laddering collects data with a questionnaire instead of an interview. This study was conducted using a questionnaire with hard laddering based on previous studies as below Table 2.

For attribute, in the first level, the same question was asked for push, pull, and mooring. For a consequence, the second level, the question for the push was "Why are you currently not shopping offline, or why has the frequency of offline shopping decreased?" and the question for pull was "Why are you currently doing contact-free shopping, or why has the frequency of contact-free shopping increased?" The question for mooring was "If you are hesitant about contact-free shopping, why?" The question for value, the last level, was why the answers in the previous levels are important to responders. The items and responses of each level are as shown in Table 2.

The items listed in Table 2 are based on various previous studies on the intention and behavior toward shopping channels. These include the factors that significantly influenced switching intention in Handarkho and Harjoseputro's (2019) study on mobile payment services, factors influencing the intention to switch to mobile shopping in Chang et al. (2017), Lai et al. (2012) research on mobile

Table 2. Research measures, questionnaire, answer items and references

	Concept	Questionnaire	Answer item	References
Attribute	Means or method of contact-free shopping	How do you do contact-free shopping when purchasing a fashion product?	①By using the mobile apps of shopping malls ②By accessing online shopping malls ③On SNS ④By using offline kiosks/unmanned stores ⑤Other	
	Reason for not doing contact-free shopping/reason for the decrease in frequency	Why are you recently not doing offline shopping, or why has the frequency of offline shopping decreased?	①Because it is dangerous ②Because it is inconvenient ③Because it is exhausting ④Because the service is poor ⑤Because it was an unsatisfying experience ⑥Because I feel anxious ⑦Because I do not feel the need ⑧Other	
Consequences	Reason for doing contact-free shopping/reason for the increase in frequency	Why are you recently doing contact-free shopping, or why has the frequency of contact-free shopping increased?	①Because it is convenient ②Because it is safe ③Because it was a satisfying experience ④Because it is useful and practical ⑤Because it is worth investing time/effort ⑥Because it is fun and enjoyable ⑦Because it is economically feasible ⑧Because everyone else does it ⑨Other	Restructured based on Chang, Wong, & Li (2017); Chiu, Hsieh, Roan, Tseng, & Hsieh (2011); Choi & Yang (2016); Handarkho & Harjoseputro (2019); Haridasan & Fernando (2018); Kyung (2019); Lai, Debbarma, & Ulhas (2012); Lee & Choi (2010); Sun et al. (2017); Zhang, Cheung, & Lee (2012) and results of the preliminary study
	Reason for being hesitant about contact-free shopping	If you are hesitant about contact-free shopping, why?	①Because I prefer the familiar way ②Because I do not feel the need to change ③Because it is a hassle to change the way ④By habit ⑤Because the new way is inconvenient ⑥Because I like to use various methods ⑦Because I am afraid to try a new method ⑧Other	
Value		Which of the following values do you consider important so that you chose your answer (reason for not doing offline shopping)?		
	Why each Consequences (end) is important	Which of the following values do you consider important so that you chose your answer (reason for doing contact-free shopping)?	①Self-satisfaction ②Self-respect ③Self-expression ④Affluent life ⑤Pleasant/fun/exciting life ⑥Convenient life ⑦Healthy life ⑧Valuable life ⑨Pursuit of happiness ⑩Pursuit of economic interests ⑪Warm/good personal relationships (sociality) ⑫Sense of stability/security ⑬Social rights and interests ⑭Sense of belonging ⑮Sense of accomplishment	
		Which of the following values do you consider important so that you chose your answer (reason for being hesitant about contact-free shopping)?		

shopping channels, the factors that significantly influenced switching intention in Choi and Yang's (2016) study on webrooming behavioral intentions, and Chiu et al. (2011) study on the intention of switching in cross-channel free riding. These were selected through modification and supplements to suit the current study.

The laddering technique should target at least 20 respondents (Reynolds & Olson, 2001), and it is recommended not to exceed 50 or 60 people for laddering (Collen & Hoekstra, 2001), the subjects of this study were male and female consumers in their 20s to 60s who have experience purchasing fashion products through contact-free

shopping. The data of a total of 50 subjects, ten from each age group, were collected through a survey company.

### Implication Matrix

Content analysis was conducted using data collected through hard laddering, and the Attribute-Consequence-Value (ACV) sequence was completed. This step was intended to identify the new factors associated with COVID-19, and the frequency of each connection was checked using means-purpose and purpose-value. In a closed-ended questionnaire, the questionnaire itself already includes the concepts, and thus the researcher calculates the frequency of

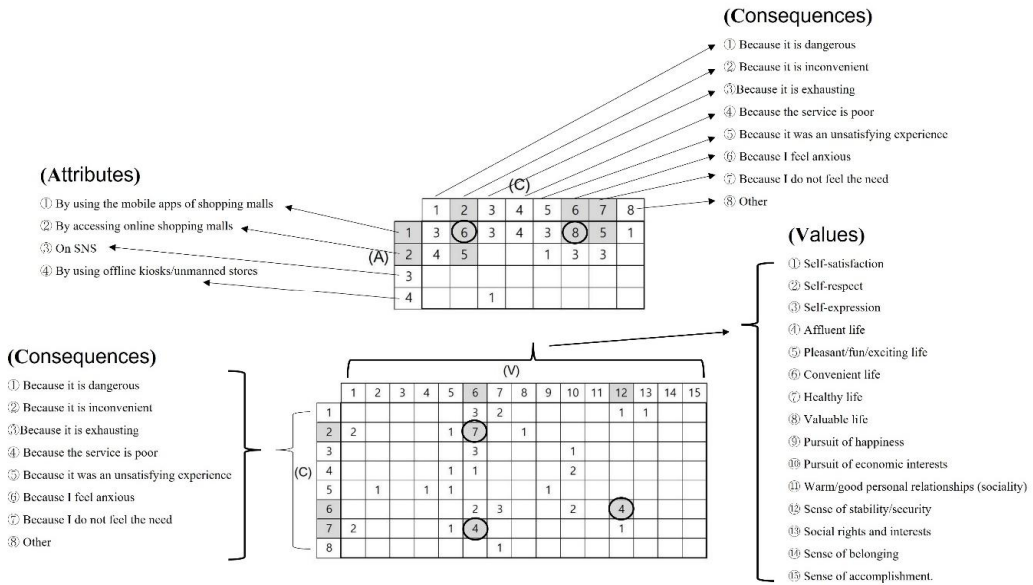


Figure 1. Negative effect matrix: Attribute-Consequence and Consequence-Value (A-C and C-V) of contact shopping

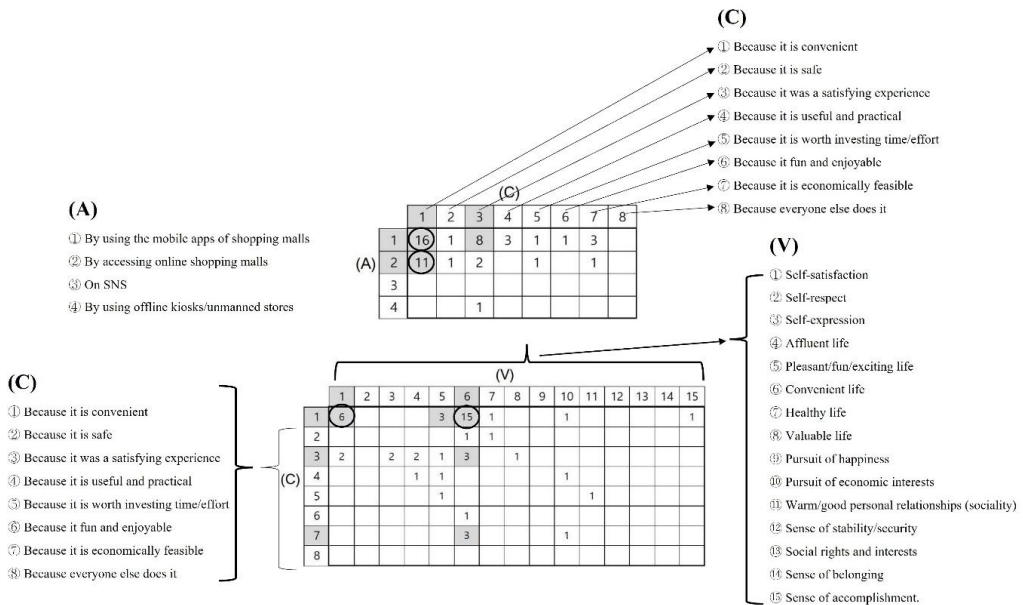


Figure 2. Positive effect matrix: Attribute-Consequence and Consequence-Value (A-C and C-V) of contact-free shopping

responses for the given concepts and creates an implication matrix.

The A-C matrix results on the negative aspects of

contact shopping are as shown in Figure 1. There were eight connections of 1(mobile apps)-6(anxiety), followed by six connections of 1(mobile apps)-2(inconvenient), and five

connections of 1(mobile apps)-7(no need) and 2(online shopping malls)-2(inconvenient). In the C-V matrix, there were seven connections of 2(inconvenient)-6(convenient life), followed by four connections of 6(anxiety)-12(sense of stability/security) and 7(no need)-6(health life).

The A-C matrix results on the positive aspects of contact-free shopping are as shown in Figure 2; there were 16 connections of 1(mobile apps)-1(convenient), followed by 11 connections of 2(online shopping malls)-1(convenient), and eight connections of 1(mobile apps)-3(satisfying experience). In the C-V matrix, there were 15 connections of 1(convenient)-6(convenient life), followed by six connections of 1(convenient life)-1(self-satisfaction), and three connections of 1(convenient)-5(pleasant/fun/exciting life), 3(satisfying experience)-6(convenient life), and 7(economically feasible)-6(convenient life).

For the switching to contact-free shopping, the A-C matrix results are as shown in Figure 3; there were six connections of 1(mobile apps)-1(familiar way), 1(mobile apps)-2(no need to change), and 1(mobile apps)-6(use various methods), followed by five connections of 1(mobile

apps)-4(habit) and 2(online shopping malls)-1(familiar way). In the C-V matrix, there were four connections of 6(various methods)-6(convenient life) and 7(afraid to try a new method)-12(sense of stability/security), followed by three connections of 1(familiar way)-1(self-satisfaction).

### Hierarchical Value Map

After analyzing the linkages among summarized codes through the implication matrix, a hierarchical value map (HVM) is created based on the analysis. In the HVM, attributes, consequences, and values are indicated in circles, and the levels are connected with lines. Here, higher concept frequency leads to bigger circles, and the number of linkages among the concepts is indicated by the thickness of the lines (Klenosky, Gengler, & Mulvey, 1993).

As shown in Figure 4, the means-end connection on the reason for not doing offline shopping showed the variables in the order of 1) anxiety, 2) inconvenience, and 3) not necessary, and the end-value connection showed pursuit of 1) convenient life and 2) stability/safety.

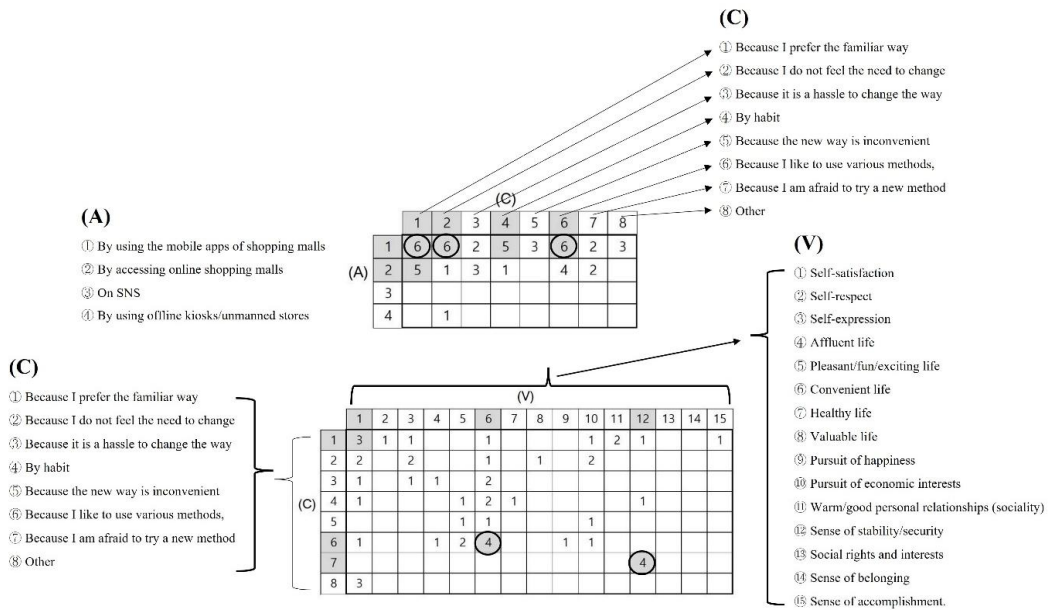


Figure 3. Mooring effect matrix: Attribute-Consequence and Consequence-Value (A-C and C-V) of contact-free shopping switching intention



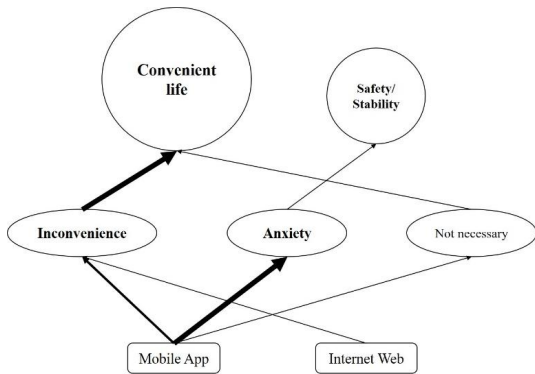


Figure 4. Hierarchical value map of negative factors on contact shopping

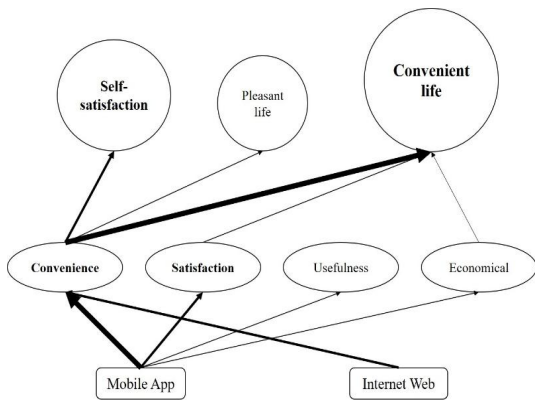


Figure 5. Hierarchical value map of positive factors on contact-free shopping

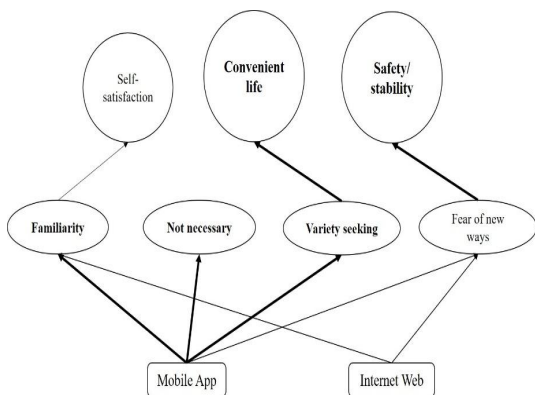


Figure 6. Hierarchical value map of mooring to switching intention

As Figure 5 shows, the means-end connection on the reason for doing contact-free shopping showed the variables in the order of 1) convenience, 2) satisfaction with the experience, 3) usefulness, and 4) economic feasibility, and the end-value connection showed pursuit of 1) convenient life, 2) self-satisfaction, and 3) pleasant life.

The means-end connection on the reason for hesitating switching behavior to contact-free shopping showed the same level of familiarity, not necessary, and variety seeking, while also showing ‘habitually.’ In the end-value connection, pursuit of convenient life and stability/safety were the same. The results are shown in Figure 6.

## Results

The analysis on all paths of negative effect shows the following results. Consumers that value convenient life feel that contact shopping is inconvenient and thus avoid it, choosing contact-free shopping via mobile apps. Moreover, consumers pursuing stability or safety as terminal values feel anxious about contact shopping offline and thus avoid it. Instead, they choose contact-free shopping, and as a result, they are considered as preferring shopping for fashion products on mobile apps. The analysis on all paths of positive shows the following results. Consumers pursuing convenient life choose contact-free shopping when purchasing fashion products because they think it is convenient or are satisfied with the experience, and for that, most consumers shopped for fashion products on mobile apps. Moreover, consumers attaching importance to the value of self-satisfaction choose contact-free shopping because of convenience, for which they shopped for fashion products on mobile apps and Internet websites. Finally, the analysis on all paths of mooring shows the following results. Consumers tend to be hesitant about switching from offline to contact-free shopping because they seek variety. This implies that consumers may selectively choose either contact or contact-free shopping depending on the circumstances, instead of not considering contact-free shopping at all.

Therefore, the following factors were ultimately derived. Anxiety, inconvenience, and not necessary were



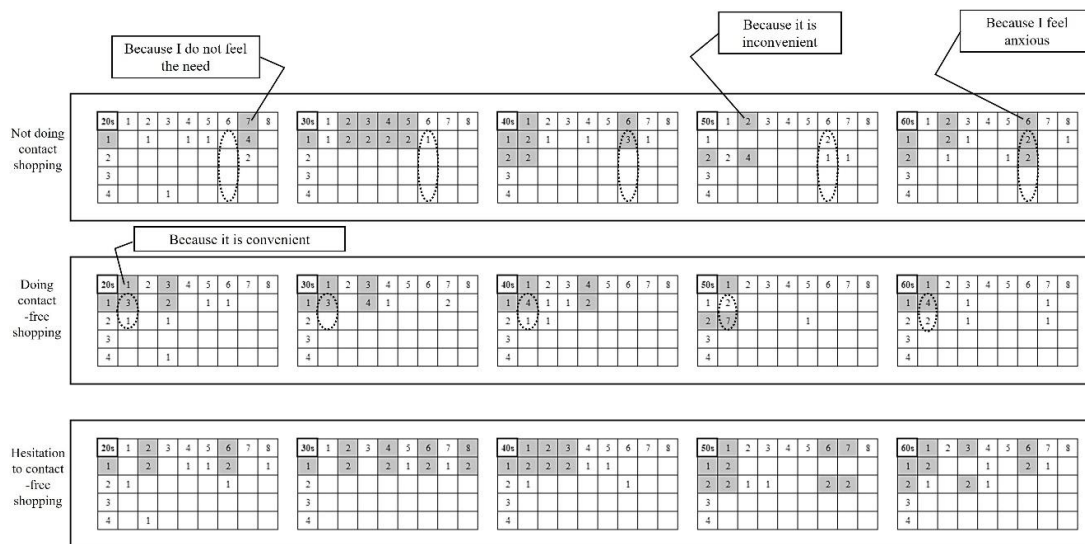


Figure 7. The Attributes-Consequences (A-C) Matrix by age group

derived as negative influencing factors of contact shopping, and positive influencing factors of contact-free shopping were convenience, satisfaction with the experience, usefulness, and economic feasibility. Finally, the mooring influencing factors on the switching intention were familiarity, not necessary, and variety seeking. Also, this study looked at changes in fashion consumers' shopping behavior due to the COVID-19 incident, and expected the results to vary depending on the age group of consumers. Therefore, it analyzed whether there were any differences between groups by age as shown Figure 7.

The analysis shows in Figure 7, in their 20s, there were many "not feeling the need" responses to why they did not do contact shopping, but in their 30s, various responses such as "inconvenient", "exhausting", "poor service", and "unsatisfying experience" were similar. In those in their 50s and 60s, "inconvenient" and "anxiety" were also answered. And what's distinctive here is that the frequency of "anxiety" responses increases as people in their 20s and 60s go. This can be determined that older generations perceive the risk of COVID-19 more than younger generations when they do contact shopping. The most common response to the reason for doing contact-free shopping was "convenient" for all ages. Finally, responses to hesitate to contact-free shopping

were derived with different response patterns for all ages. This is the result of confirming that different age groups have different causes of hesitation in changing behavior to contact-free shopping.

## Conclusion

### Discussion and Implications

The purpose of this study was to confirm the changes in fashion consumer awareness of contact shopping and contact-free shopping against the contemporary background and in the face of hazardous situations such as COVID-19. Among the many factors that led to consumers' switching behavior toward contact-free shopping that were identified by this study, anxiety and discomfort about offline shopping due to COVID-19 were derived as a negative influencing factor on contact shopping. Consumer anxiety has continued to be amplified by the many press reports mentioning a variety of issues related to COVID-19. According to statistics from the Korea Health Promotion Institute, when the health status of Korean adult men and women was surveyed during the COVID-19 pandemic, 40.7% of the total respondents

answered that they had experienced anxiety/depression due to COVID-19 (Korea Health Promotion Institute, 2020). As the pandemic stretches on, regardless of whether people were infected or not, the outbreak can be seen as having more negative impacts on people's psychological state, causing issues such as anxiety and depression, and the shopping situation of fashion consumers is no exception. The psychological anxiety that consumers experience when their safety is not ensured (Lee, 2008) can be viewed as a psychological interpretation that affects consumers' attitudes and behaviors (Smith & Lazarus, 1990). Also, social anxiety is caused by the social environment rather than individual characteristics (Wilkinson, 2002), and since personal anxiety induces specific behaviors (Muse, McManus, Hackmann, Williams, & Williams, 2010), it can be seen that special circumstances such as COVID-19 make consumers anxious. On the other hand, as for the positive influencing factors on contact-free shopping among the various factors that caused consumers to switch to contact-free shopping, convenience, satisfaction with the experience, and usefulness were derived. These factors can be interpreted as reflecting consumer awareness of the technical aspects of the system of contact-free shopping channels.

The results derived from Lee and Rha's (2012) study on multi-channel selection revealed that, as a result of confirming the age-based channel behavior, the online search group was relatively large in the 20s, while the ratio of the multi-channel high search group and offline search group was relatively large in the 50s. Comparing this with the results of the current study, it is possible to infer the direct cause of consumers by age group for choosing the relevant channel through the response of 20s that they do not feel the need for contact shopping, which is the offline method, and the response of 50s and 60s that they want various ways for shopping but fear of new methods. In addition, their findings that there was no significant difference between online search groups in 30s and 40s appear similar to the 30s of this study, which had relatively different responses than in other generations. Moreover, as suggested by Hsieh et al. (2012), this study confirmed the importance of switching behavior that consumers stop the previously adopted method when new alternative methods are introduced. Although Oleárová

et al. (2022) found age-specific differences in shopping channel selection are not statistically significant, which is contrary to the results of the current study, this result may arise from differences in analysis methods and interpretations in a somewhat different context from the main factors to be confirmed.

In order to specifically identify factors that change consumer intentions or behaviors, the factors affecting switching behavior related to shopping were derived based on the means-end chain theory, and the relationships between the factors were confirmed. Existing studies using the mean-end chain theory and laddering technique examined consumer behavior in general situations before the outbreak of COVID-19 (Haridasan & Fernando, 2018; Kyung, 2019; Park et al., 2019), therefore, these studies did not confirm the switching intention based on changed consumer awareness in the post-COVID-19 situation. In addition, the majority of studies analyzing shopping channels published after the outbreak of COVID-19 were conducted by classifying channels according to physical stores and technical characteristics, rather than analyzing direct factors affecting switching from the consumer's point of view (Dorie & Loranger, 2020; Flavián et al., 2020).

Therefore, this study has practical significance in that it identified the causes for consumer channel selection in the context of the diversification of the distribution environment due to COVID-19 from a consumer behavior perspective and derived the results for an appropriate way of marketing that can provide new values and utility to consumers by reflecting the changed desires of consumers in switching behaviors. Since marketing and distribution strategies can be judged based on consumer satisfaction and benefits (Lee & Rha, 2012), this study is meaningful in that it discovered the highest value consumers pursue in transition to contact-free shopping is the "value for a convenient and safe life" by reflecting the "seeking value" that can better understand their behaviors in selecting and switching intentions. In particular, the various consequences (convenience/inconvenience, anxiety, satisfaction, familiarity, variety seeking, etc.), which were the bridges, derived for the connection of final values and attributes are judged to be important results that can be beneficially utilized in business.

This study is meaningful in that it supplemented the limitations of previous studies that verified the effect of each attribute of various stores. The study was intended to help increase purchases of fashion products by examining the empirical factors of consumers' perceptions of the new environment of COVID-19 and how they affect their contact/contact-free shopping behaviors. In particular, it expanded the theoretical framework of the value that consumers pursue through the means-end chain and laddering technique. Therefore, the results of this study are expected to provide useful implications for fashion brands and companies that plan to pursue offline or online shopping in the post-COVID-19 era.

## Limitations and Future Research

Since the factors identified through this study form a relationship centered on emotional responses such as awareness, recognition, and value, there is a limitation in that the exploration of the factors that can explain the technical aspects of contact-free shopping was insufficient. In addition, it is expected that a follow-up study will be needed on whether consumers who have seen the value of contact-free shopping for more than two years in the era of COVID-19 will switch back to contact shopping when a safe shopping environment is in place or will stick with the familiar contact-free shopping approach. Therefore, future studies may need to supplement these areas and validate additional quantitative studies that distinguish common risk perceptions from situation-specific risk perceptions and identify each factor in greater detail.

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