

A Study of Comparison Analysis on Online Visual Merchandising Practices between Korea and China

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한국과 중국의 온라인 비주얼 머천다이징 실행에 관한 비교분석 연구

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Abstract

The objective of this study is to investigate the differences in online visual merchandising practices of online apparel retailers between Korea and China. The 40 websites based on the sales were selected with 5 retail stores per website. Totally, 200 online retail stores were analyzed by content analysis and chi-square test. As a result, 8 online visual merchandising factors were extracted: convenience, product presence, product information, service, interest, participation, aesthetics, and fitness. There were significant differences in all 8 factors of online visual merchandising practices of apparel retail stores between Korea and China. The contribution of this study is to supply for understanding of what are the online visual merchandising composition items and factors and how they were used differently between Korea and China in a real situation of online visual merchandising.

Key words: Online visual merchandising, Apparel e-tailing, Product presentation, Cross cultural, Content analysis; 온라인 비주얼 머천다이징, 어패럴 이-테일링, 제품연출, 비교문화, 내용분석

I. Introduction

The Internet shopping mall is one of the rapidly growing distribution channels in the global market outpacing the growth speed of traditional store-based transactions. The Internet penetration rate of Korea has reached up to 70.7% while the rate in China was 19%, which is relatively low percentage of penetration, in 2008 (Internet World Stats., 2009). Specifically, in spite of the uniqueness of the fashion product that sensory experiences are more important in the

purchase decision than other product categories such as CDs, DVD, books, and computer software, online apparel sales have shown outstanding growth over time in both countries (Korea National Statistical Office, 2008).

However, there are many consumers who avoid purchasing apparel in an Internet shopping mall yet. The major reason is they cannot try an item on for size or fitting and they are not able to see the items well enough to examine the fabric or garments details. Therefore, there is a strong need for improvement and development of online visual merchandising techniques in order to satisfy a customer's needs for

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sensory experience, physical inspection and visual information in online (Khakimdjano va & Park, 2005).

E-shoppers are increasingly looking for websites providing optimal shopping experiences by using effective online visual merchandising skills. Recently, with an introduction of new technologies for product visualization, many apparel retail stores are executing various online visual merchandising technologies. The visualization features of fashion products on the websites enable e-shoppers to select fabric, color, and swatch as well as see their choice applies to the actual garment image instantly. Online visual merchandising practices allowed multiple presentations of the same apparel product contributed to the increased sales in e-business (Khakimdjano va & Park, 2005). It means that the apparel retailers in the e-market have to pay attention to the visual environment to enhance a retail store's performance as well as customer satisfaction and online store repeated visits.

Although there are strong needs concerning online apparel retailing, research investigating real situation of online visual merchandising is limited. On the other hand, cross-cultural study which investigates the similarity and difference between cultures through limited actual states is regarded as one of the most effective method to understand different countries' consumers in global market (Cho et al., 2006; de Mooij, 1998). Therefore, many cross-cultural comparisons between Korean and Chinese fashion consumers have been executed (Choi et al., 2003; Hwang et al., 2007; Lee, 2004). Despite these apparent cross-national differences in consumer attitudes and communication context between two countries in the previous literature, it is hard to find the cross-cultural study on the online visual merchandising. In response to the low level of online visual merchandising practices compared with other developed countries and the lack of cross-cultural research on online visual merchandising, this study takes an exploratory approach and hopes to investigate the online visual merchandising composition items and factors, and ultimately identify differences in current practices of online visual merchandising between Korea and China. The information from this study will contribute to more comprehensive understanding and knowledge about the real

situation of online visual merchandising in Korea and China. Moreover, the useful visual marketing materials will be provided to Korean and Chinese e-marketers.

II. Literature Review

1. Online Store Attributes

Previous studies regarding online shopping have shown various dimensions deemed to be important in the decision process involved in customers' selecting an online store to shop in. Jin and Park (2006) used six aspects of online store attributes - website design, order fulfillment, communication, merchandise, security/privacy, and promotion - based on the classification of Lindquist's (1974-75) nine store attributes categories such as merchandising, service, clientele, physical facilities, convenience, promotion, store atmosphere, institutional factors, and past transactions to examine the relation of online store attributes and market response outcomes (i.e., trust, satisfaction, and loyalty). Koo (2006) suggested seven important characteristics of online store atmospheric cues: design and visual appeal, purchase-related services (i.e., well-structured hyperlinks, information quality), product assortment, security, and after-sale services (i.e., fast delivery, exchange, and return services). Especially, during the search stage, visually attractive design and well-organized web structure are considered as important attributes (Koo, 2006). Eroglu et al. (2001) considered online store atmosphere as the sum of all the cues that are visible and audible to the online shopper, lacking sensory appeals derived from touch, smell, and taste. Lohse and Spiller (1998) claimed that information content and website design played an important role in building customer trust as these attributes replace the salesperson and physical surroundings of a traditional retail store. Mathwick et al. (2001) and Kim and Steol (2004) limit website atmosphere as visual appeal which includes the website's display attractiveness, aesthetic appeal, and general looks.

2. Online Visual Merchandising

Visual stimulation and communication through vari-

ous visual merchandising techniques have been treated as important factors in traditional store-based retailing (McGoldrick, 1990; Park et al., 2007; Pegler, 2001). However, there has been little attention given to visual merchandising in an electronic retail setting. In a traditional store, the merchandise physically displayed enables consumers to try on garments, feel the fabric, and read information on care and content labels. However, E-shoppers may avoid purchasing apparel because of the inaccuracy and uncertainty of garment color, fabric, and details (Ji & Pang, 2006). To reduce the perceived risks of purchasing a fashion product online, more e-tailers may need to place their emphasis on employing 3-D product presentation and using different angles for the whole view of the garment. In addition, the features which allow customers to create their own virtual models reflecting their own body shapes and appearances would be helpful to reduce the uncertainty for actual fit and final look of the garment (Khakimdjanova & Park, 2005). Dahan and Srinivasan (2000) also proposed that consumers could have a similar experience of a physical presentation in the traditional retail store by a three-dimensional animated presentation online.

Allen (2000) suggested that expanded product information, multiple photographs, and product collections for coordination would promote customers' online purchases. Then and DeLong (1999) found that the more information e-retailers can offer through the visual display of apparel, the more interested the consumer will be in purchasing the product online. Visual displays such as enlargement, and garment coordination with other items may positively contribute to consumer information gathering and processing. Park and Stoel (2002) insisted that if a customer is satisfied with the information provided by the online retailer, they are more likely to make a purchase.

About 89 percent of the respondents preferred a realistic human model to examine the garment silhouette among the garment presentations on a fashion model, a mannequin, and a flat surface. The majority of their participants (65%) also preferred a large variety and features of images to be available (as cited in Khakimdjanova & Park, 2005). Wolfenbarger and Gilly (2003) insisted that the most significant

antecedent of positive consumer behaviors is website design that serves consumers in finding what they want in an efficient way. Customer service over the web-based store is likely to be more consistent than the store-based retailing because the online retailer can provide more detailed and extended information to any shopper at any time (Silverman, 1998).

Furthermore, a recent study of catalog and Internet apparel shoppers found that aesthetic value is an important dimension of information quality. Specifically, promotion and design aspects of a website influence perceptions of aesthetic value derived from visiting a retailer's web site (Mathwick et al., 2001).

III. Methods

According to Babbie (1973), content analysis is the most appropriate method for descriptive research. Content analysis enables researchers to evaluate materials or phenomena on an impressionistic but systematic basis, and report patterns or illustrate phenomena (as cited in Khakimdjanova & Park, 2005). Moreover, nowadays, in order to develop an appropriate marketing strategy in the global fashion market, the importance of cross cultural study is emphasized. Therefore, in this study, content analysis was employed to investigate the difference of the current practices of online visual merchandising in Internet apparel retail stores between Korea and China.

1. Sample

Generally, the Internet shopping mall in the apparel market can be classified into four types: general shopping mall (ex. Interpark), online market place (e.g., G market), specialty shopping mall of brand (e.g., Halfclub), and specialty shopping mall of non brand (ex. Dongdamun 3B shopping).

General shopping malls are defined as large retailers that carry a wide variety of merchandise lines (ex. Apparel, books, electronics), while specialty stores focus on a specific type of a merchandise line (e.g., Apparel only) (as cited in Khakimdjanova & Park, 2005). Specifically, in this study, specialty shopping mall of brand focuses on the shopping malls which deal with

only a brand type of merchandise line, while specialty shopping malls of non-brand focus on the shopping malls which deal with only a non-brand type of merchandise line. The online market place serves as a hub that brings together buyers and sellers. This classification can also be employed to Chinese apparel market.

The selection steps of the online retail stores are as follows: First, a list of 5 Korean apparel websites based on the annual sales rank in 2008 was selected per 4 shopping mall types. The sales order of Korean websites was originated from announced data at www.rankey.com in January, 2009. Second, a list of 5 apparel Chinese websites per 4 shopping mall types was selected from www.1B2G.com which has lists of the most famous websites in China. Third, 5 retail stores were selected per 40 selected websites. In order to keep the equivalence of analysis sample, identical product category with similar price level were considered as the selection criteria of retail stores. The product category was limited to woman

jeans wear. The price range was 10,000-100,000 won in Korea while it was 50yuan-300yuan in China. And, the highest price level of woman jean in Chinese online market was 300yuan. Finally, a total of 200 online retail stores were selected. A list of 40 selected websites can be seen in <Table 1>.

2. Instrument

A coding sheet with 42 criteria was developed to describe various online visual merchandising techniques. A coding instrument previously used by Park and Stoel (2002) for apparel merchant websites and Khakomdjanova and Park (2005) for online visual merchandising were modified to reflect the Internet shopping mall situation in Korea and China.

3. Procedure

Internet Explorer was used as the web-searching and exploratory tool. The investigation was executed

Table 1. Selected websites according to 4 shopping mall type

name	Korean website		Chinese website	
General shopping mall	Interpark	http://www.interpark.com/	Dangdang	www.dangdang.com
	GSeshop	http://www.gseshop.co.kr/	Sina	mall.sina.com.cn
	Dnshop	http://www.dnshop.com/	80ebus	http://www.80ebus.com/
	CJmall	http://www.cjmall.com	M18	http://www.m18.com/
	Samsungmall	http://www.samsungmall.co.kr	Wumei	http://www.wumeiwan.com/
Online market place	Gmarket	www.gmarket.com	Taobao	www.taobao.com
	Auction	http://www.auction.co.kr	Eachnet	www.eachnet.com
	11st	http://www.11st.co.kr/	Paipai	www.paipai.com
	Minisum	http://www.minisum.co.kr/	Alibaba	http://china.alibaba.com/
	Onket	http://www.onket.com/	2688	http://www.2688.com/
Specialty shopping mall of brand	Halfclub	http://www.halfclub.com/	Zoshow	http://www.zoshow.com/
	Ogage	http://www.ogage.co.kr/	Maywon	http://www.maywon.com
	Fashionplus	http://www.fashionplus.co.kr/	Buyest	http://www.buyest.com
	OTTOshopping	http://www.otto.kr/	Mlbuy	http://www.mlbuy.com
	Istyle24	http://www.istyle24.com/	Yiditu	http://shop.yiditu.com/
Specialty shopping mall of non brand	Dongdamun 3B shopping	http://www.3b.co.kr	Togj	http://www.togj.com/
	Facoup	http://www.facoup.com/	Shishangqiye	http://www.shishangqiye.com
	Codi	http://www.codi.co.kr	Disiqu	http://www.disiqu.cn
	Sdking	http://www.sdking.com/	Ilovejamy	http://www.ilovejamy.com
	Pinepeach	http://www.pinepeach.com/	Wooha	http://www.wooha.com

during 15 days in January, 2009 and content analysis was used to investigate the current practices of online visual merchandising of apparel retail stores in Korea and China. First, three graduate students individually identified and listed coding sheet using a categorizing process developed by Lincoln and Guba (1985). It is related to sorting themes into categories based on similar characteristics. Then, the three members met to discuss the key themes from the data. The goal at this point was to search for commonalities that allowed for the most accurate representation of each domain and to develop conceptual definitions of online visual merchandising. In addition, labels for each online visual merchandising were constructed, and disagreements were resolved by discussion. Two fashion marketing instructors familiar with the topic area evaluated the online visual merchandising and the corresponding conceptual definitions for content validity. Through this procedure, 8 dimensions of online visual merchandising were developed: convenience, product presence, product information, service, interest, participation, aesthetics, and fitness. For the comparison analysis, a chi-square test was used.

IV. Results

1. Convenience

Search tools and useful linkages may provide a convenient experience to both browsers and purchasers. The websites which have effective search tools provide convenience for consumers by decreasing

the time spent searching for the right product they are looking for (Park, 2002).

On the aspect of convenience of web surfing, as shown in <Table 2>, there were significant differences in related category link and codi-product link. Korean Internet fashion shopping malls more frequently utilized related category links and codi-product links than Chinese Internet fashion shopping mall. However, there were no significant differences in search tools or related website links. Search tools were observed in all online retail stores in both countries, while a related website link was not frequently used in both countries.

2. Product Presence

In order to satisfy consumers' needs for the sensory experience of a fashion product in an online shopping mall, diverse practices of visual merchandising techniques are needed. Those would help evaluate fashion product in the environment similar to the traditional retail setting. Therefore, product presence in an online shopping environment includes size indication, textiles image, fiber content composition indication, laundering instruction indication, sewing quality indication, price indication, color information offer, detail indication, and product stock indication.

As the results of comparison analysis shown in <Table 3>, there were significant differences in the textiles image and sewing quality indication. Internet fashion shopping malls in Korea used a textiles image and sewing quality indication more frequently

Table 2. Content analysis for the convenience

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Search tool	Available	100(100)	100(100)	200(100)	
	Not available	0(0)	0(0)	0(0)	
Related website link	Available	15(7.5)	20(10)	35(17.5)	.866
	Not available	85(42.5)	80(40)	165(82.5)	
Related category link	Available	90(45)	54(27)	144(72)	32.143***
	Not available	10(5)	46(23)	56(28)	
Codi-product link	Available	45(22.5)	5(2.5)	50(25)	42.667***
	Not available	55(27.5)	95(47.5)	150(75)	

*** $p < .001$

Table 3. Content analysis for the product presence

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Detailed Size indication	Available	97(48.5)	91(45.5)	188(94)	3.191
	Not available	3(1.5)	9(4.5)	12(6)	
Textiles image	Available	40(20)	13(6.5)	53(26.5)	18.714***
	Not available	60(30)	87(43.5)	147(73.5)	
Fiber content composition indication	Available	4(2)	4(2)	8(4)	.000
	Not available	96(48)	96(48)	192(96)	
Laundering instruction indication	Available	7(3.5)	9(4.5)	16(8.0)	.272
	Not available	93(46.5)	91(45.5)	184(92.0)	
Sewing quality indication	Available	50(25.1)	29(14.6)	79(39.7)	8.911**
	Not available	50(25.1)	70(35.2)	120(60.3)	
Price indication	Available	100(100)	100(100)	200(100)	
	Not available	0(0)	0(0)	0(0)	
Color information offer	Color chip	5(2.5)	0(0)	5(2.5)	5.521
	Color image and written indication	2(1)	1(0.5)	3(1.5)	
	Only color image	93(46.5)	99(49.5)	192(96)	
Detail indication	Available	83(41.5)	74(37)	157(78.5)	2.400
	Not available	17(8.5)	26(13)	43(21.5)	
Product stock indication	Available	13(6.5)	15(7.5)	28(14)	.166
	Not available	87(43.5)	85(42.5)	172(86)	

** $p < .01$, *** $p < .001$

than Internet fashion shopping malls in China.

3. Product Information

In addition to offer a visual environment which can feel high product presence, they need to give additional product information. Product information refers to offering related information on the features of products carried by online store. Product information should be accurate, current, complete, timely, and understandable. Product information is likely to help customers compare shopping products, enhance shopping experience, take better purchase choices (as cited in Koo, 2006). Therefore, product information can include size measurement explanation, coordination, manufacture place indication, and product comparison information.

As shown in <Table 4>, there were significant differences in all items of product information between Korea and China. In the size measurement explanation, Korea frequently used both language and pic-

tures, while China utilized only language in most cases. In coordination information, Korea frequently used language and flat photos or model photos, while China utilized only model photos in most cases. Furthermore, the ratio of Chinese online retail stores which did not provide coordination information was higher than Korean online retail stores.

In manufacture place indication, most of the Korean Internet fashion shopping malls indicate the nation name, while the Chinese internet fashion shopping malls did not indicate the place of manufacture at all. In product comparison information, 12.5 percent of Korean Internet shopping malls supply information, while Chinese Internet fashion shopping malls did not provide the product comparison information at all.

4. Service

To be a successful online apparel retailer, services become more important under the online shopping

environment. Indication of reliable and timely service information has a tendency to decrease perceptions of risk. Online shoppers make their orders at their office or home anticipating quicker, timelier, and safer delivery on a convenient time of choice. Return and exchange services are important if customers change their mind after delivery, or a delivered product is damaged (as cited in Koo, 2006). Therefore, service included no interest information,

shipping cost indication, international shipping information, delivery term indication, return policy indication, selling agency information, or custom-made service.

As shown in <Table 5>, there were significant differences in all items of service between Korea and China. The results showed that Korean Internet fashion shopping malls provide more diverse and frequent service information than a Chinese Internet fashion

Table 4. Content analysis for product information

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Size measurement explanation	Image	31(15.5)	0(0)	31(15.5)	55.124***
	Written	45(22.5)	92(46)	137(68.5)	
	Not available	24(12)	8(4)	32(16.0)	
Coordination	Written	0(0)	0(0)	0(0)	7.825*
	Written and flat image	5(2.5)	2(1)	7(3.5)	
	Model image	44(22)	28(14)	72(36)	
Manufacture place indication	Not available	51(25.5)	70(35)	121(60.5)	87.770***
	Nation name	45(22.5)	0(0)	45(22.5)	
	Domestic or non-domestic	16(8)	0(0)	16(8)	
Product comparison information	Not available	39(19.5)	100(50)	139(69.5)	28.571***
	Available	25(12.5)	0(0)	25(12.5)	
	Not available	75(37.5)	100(50)	175(87.5)	

* $p < .05$, *** $p < .001$

Table 5. Content analysis for service

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
No interest information	Available	68(34)	0(0)	68(34)	103.030***
	Not available	32(16)	100(50)	132(66)	
Shipping cost indication	Available	95(47.5)	80(40)	175(87.5)	10.286**
	Not available	5(2.5)	20(10)	25(12.5)	
International shipping information	Available	27(13.5)	1(0.5)	28(14)	28.073***
	Not available	73(36.5)	99(49.5)	172(86)	
Delivery term indication	Available	100(50)	50(25)	150(75)	66.667***
	Not available	0(0)	50(25)	50(25)	
Return policy indication	Available	95(47.5)	81(40.5)	176(88)	9.280**
	Not available	5(2.5)	19(9.5)	24(12)	
Selling agency information	Available	72(36)	24(12)	96(48)	46.154***
	Not available	28(14)	76(38)	104(52)	
Custom-made service	Available	5(2.5)	0(0)	5(2.5)	5.128*
	Not available	95(47.5)	100(50)	195(97.5)	

* $p < .05$, ** $p < .01$, *** $p < .001$

shopping mall.

5. Interest

Interest is an important factor to provide consumers with a memorable shopping experience. Ernst and Young (1998) reported that Internet shopping is more convenient, fun and economical and it also has more choices than shopping through other distribution channels. Thus, interest included promotion and advertising.

As shown in <Table 6>, there were significant differences in interest levels between Korea and China. Most of the Korean internet fashion shopping malls provide promotion such as a reserve fund or reserve point and advertising, while the ratio of Chinese Internet fashion shopping malls which offer these kinds of promotion or advertising was very low.

6. Participation

One third of people shop online use a search engine to find what they are looking for and about one fourth find websites by word of mouth. Word of

mouth has become a leading way by which people find shopping websites (Wikipedia, 2008). So, many managers believe that a website must provide community content in order to build online store loyalty (McWilliams, 2000). Thus, the dimension of participation included a bulletin board, and a purchase postscript board. Moreover, in conventional retail stores, clerks are generally available to answer consumers' questions. However, since online retail stores have no clerks, some online retail stores have real-time chat features, but most rely on e-mail or phone calls to handle customer questions (Wikipedia, 2008). Therefore, in this study, interaction tools were included.

As shown in <Table 7>, there were significant differences in participation. Most Korean Internet fashion shopping malls had bulletin boards and purchase postscript boards, whereas only a few Chinese Internet fashion shopping malls had bulletin boards and purchase postscript boards. The interaction tools were used in most Internet fashion shopping malls in China. However, the utilization degree of interaction tool in Korea was very low. Specifically, the result showed that interaction through online chatting was the most frequently executed in China.

Table 6. Content analysis for interest

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Promotion	Available	80(40)	20(10)	100(50)	72.000***
	Not available	20(10)	80(40)	100(50)	
Advertising	Available	47(23.5)	10(5)	57(28.5)	33.591***
	Not available	53(26.5)	90(45)	143(71.5)	

*** $p < .001$

Table 7. Content analysis for participation

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Bulletin board	Available	100(50)	21(10.5)	121(60.5)	130.579***
	Not available	0(0)	79(39.5)	79(39.5)	
Purchase postscript board	Available	99(49.5)	6(3)	105(52.5)	173.414***
	Not available	1(0.5)	94(47)	95(47.5)	
Interaction tool	Chatting	5(2.5)	80(40)	85(42.5)	131.843***
	e-mail	5(2.5)	10(5)	15(7.5)	
	Not available	90(45)	10(5)	100(50)	

*** $p < .001$

7. Aesthetics

Several researchers suggested that aesthetics is an important criterion of successful websites (Allen, 2000; Khakimdjanova & Park, 2005; Park & Stoel, 2002).

Therefore, aesthetic was also included in this study.

As shown in <Table 8>, aesthetics factor contained 8 items such as website main color, retail store main color, photo total view, photo enlargement, presentation tool, used photo, screen presentation (first screen),

Table 8. Content analysis for aesthetics

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Website main color	Red	30(15)	9(4.5)	39(19.5)	73.736***
	Orange	10(5)	25(12.5)	35(17.5)	
	Yellow	0(0)	5(2.5)	5(2.5)	
	Green	15(7.5)	5(2.5)	20(10)	
	Blue	15(7.5)	5(2.5)	20(10)	
	Indigo blue	10(5)	0(0)	10(5)	
	Purple	10(5)	10(5)	20(10)	
	White	10(5)	10(5)	20(10)	
	Gray	0(0)	21(10.5)	21(10.5)	
Black	0(0)	10(5)	10(5)		
Retail store main color	Red	14(7)	4(2)	18(9)	44.838***
	Orange	1(0.5)	0(0)	1(0.5)	
	Yellow	4(2)	0(0)	4(2)	
	Green	8(4)	1(0.5)	9(4.5)	
	Blue	0(0)	0(0)	0(0)	
	Indigo blue	8(4)	0(0)	8(4)	
	Purple	6(3)	1(0.5)	7(3.5)	
	White	41(20.5)	82(41)	123(61.5)	
	Gray	14(7)	6(3)	20(10)	
Black	4(2)	6(3)	10(5)		
Photo total view	Available	99(49.7)	69(34.7)	168(84.4)	32.482***
	Not available	1(0.5)	30(15.1)	31(15.6)	
Photo enlargement	Available	75(37.5)	74(37)	149(74.5)	.026
	Not available	25(12.5)	26(13)	51(25.5)	
Presentation tool	People	74(37)	71(35.5)	145(72.5)	9.780*
	Mannequin	14(7)	5(2.5)	19(9.5)	
	Flat	12(6)	21(10.5)	33(16.5)	
	Hanger	0(0)	3(1.5)	3(1.5)	
Used photo	Directly photographing photo	93(46.5)	70(35)	163(81.5)	31.845***
	Copy photo	0(0)	27(13.5)	27(13.5)	
	Composite photo	7(3.5)	3(1.5)	10(5)	
Screen presentation (first screen)	2D static	77(38.5)	21(10.5)	98(49)	62.745***
	2D dynamic	23(11.5)	79(39.5)	102(51)	
	3D	0(0)	0(0)	0(0)	
Screen presentation (next screen)	2D static	100(50)	90(45)	190(95)	10.526**
	2D dynamic	0(0)	10(5)	10(5)	
	3D	0(0)	0(0)	0(0)	

* $p < .05$, ** $p < .01$, *** $p < .001$

and screen presentation (next screen). There were significant differences in all items of the aesthetic factor except for photo enlargement. The highest website main color of the Korean Internet fashion shopping malls was red, while the highest website main color of the Chinese Internet fashion shopping malls was orange. In addition, the Korean Internet fashion shopping malls used diverse colors such as blue, green, indigo blue, and purple, while Chinese internet fashion shopping malls frequently utilized a monochrome color such as white, gray, or black. In the retail store main color, both Korea and China most frequently used a white color and Korea used a greater variety of colors than China. In photo total view, most of the Korean Internet fashion shopping malls had photo total view, while only 2/3 of Chinese internet fashion shopping malls had this function. In the presentation tool, both Korea and China used most frequent people presentation and mannequin presentation in Korea and flat and hanger presenta-

tion in China were frequent. In used photo, both Korea and China used directly photographing photo in most cases and Korea also used a few composition photo and China utilized copy photo considerably. In screen presentation (first screen), Korea used mainly 2D static, while China used mainly 2D dynamic. In screen presentation (next screen), Korea used 2D static in all retail stores, while China used 2D dynamic in a few retail stores. These results imply the Chinese preferred dynamic image to static image.

8. Fitness

The fitness factor was found through the comparison analysis between two countries. The preferred position or number of images or bars was different between the two countries. Therefore, fitness included bulletin board position, purchase postscript board position, image position, image number, and searching bar position.

As shown in <Table 9>, there were significant dif-

Table 9. Content analysis for fitness

Criteria content		Nation		Total (n=200)	χ^2
		Korea (n=100)	China (n=100)		
Bulletin board position	Right above	50(41)	0(0)	50(41)	18.639***
	Center below	50(41)	22(18)	72(59)	
Purchase postscript board position	Right below	60(57.1)	0(0)	60(57.1)	7.0*
	Center below	40(38.1)	5(4.8)	45(42.9)	
Image position	Left above	99(49.5)	95(47.5)	194(97)	6.082*
	Center above	0(0)	5(2.5)	5(2.5)	
	Right above	1(0.5)	0(0)	1(0.5)	
Image number	1-2	7(3.5)	18(9)	25(12.5)	40.616***
	3-5	15(7.5)	37(18.5)	52(26)	
	6-10	17(8.5)	20(10)	37(18.5)	
	11-15	9(4.5)	10(5)	19(9.5)	
	16-20	12(6)	6(3)	18(9)	
	21-49	20(10)	9(4.5)	29(14.5)	
Searching bar position	Over 50	20(10)	0(0)	20(10)	39.654***
	Left above	20(10)	40(20)	60(30)	
	Center above	45(22.5)	10(5)	55(27.5)	
	Right above	25(12.5)	45(22.5)	70(35)	
	Left below	0(0)	0(0)	0(0)	
	Center below	5(2.5)	0(0)	5(2.5)	
Searching bar position	Right below	0(0)	0(0)	0(0)	39.654***
	Center above and below	5(2.5)	5(2.5)	10(5)	

* $p < .05$, *** $p < .001$

ferences in all items of fitness. In the bulletin board position, right above and center below were frequently used in the Korean shopping malls, while center below were frequently used in Chinese shopping malls. In purchase postscript board position, the frequency of right below is higher than center of below in Korea. China had just a few frequencies in only center below. The image position of both Korea and China was mainly placed in left above and a few Internet shopping malls of China placed their image in center above. In image number, Korea used more image photos than China. The number of Korean shopping malls using over 50 images was 20, while the number of Chinese shopping malls using over 50 images was 0. Most of the Chinese online shopping malls used 3-10 images. In searching bar position, center above was the most frequent in Korea and right above and left above was the most frequent in China.

V. Discussion and Implications

This study was intended to investigate the differences in online visual merchandising practices of apparel e-merchants between Korea and China. 40 websites were selected based on the sales and 5 retail stores were selected per each 40 websites. A total of 200 online retail stores were analyzed by content analysis and chi-square test.

As a result of content analysis, 42 items and 8 factors of online visual merchandising were developed: convenience (5 items), product presence (9 items), product information (4 items), service information (7 items), interest (2 items), participation (2 items), aesthetics (8 items), and fitness (5 items).

And, as a result of a chi-square test, there were significant differences in all factors. While the differences in product presence were in a few items, the differences in other factors were in many items. The reason why the differences in the product presence were not quite significant seems to be that online retailers preferentially pay attention to enhance the product presence since product presence is the most fundamental factor to sell apparel online.

For the aspects of convenience, service, product

information, and interest, there are large differences in online visual merchandising practices between the two countries. Korea had higher frequency in all factors than China. It seems that Korea got the lead in online visual merchandising practices than China since Korea has more developed technologies and marketing skills than China in online fashion retailing.

On the aspect of participation, aesthetics, and fitness, there were also significant differences. It can be predicted that the results originate from the differences of cultural backgrounds. Davis et al. (2008) also provided empirical support for the assertion that culture differences affect the customer's response to online store atmospherics. Especially, it had outstanding differences in participation and interaction tools between two countries. Korean internet shopping malls have a tendency to deal with the participation as being more valuable than China and make an effort to entice the customer to shop at the retail stores, while Chinese Internet shopping malls preferred direct interaction with the customer using chatting. So, on the aspects of participation, aesthetic and fitness, the proper strategy of online visual merchandising needs to be established considering different cultural backgrounds in question. In addition, the research period might influence the study results. If the research is performed in summer, the result in China, specifically aesthetic factor, might be different from what we found.

The future studies on the differences according to business operations method (click/click and mortar) or shopping mall type (general shopping mall/online marketplace/brand specialty store/non-brand specialty store) in online visual merchandising practices were suggested. They would provide a more comprehensive understanding and knowledge of online visual merchandising techniques used in various e-businesses and distribution channels of Korea and China.

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요 약

본 연구는 현재 한국과 중국의 온라인 어패럴 리테일러들이 실시하고 있는 온라인 비주얼 머천다이징 실행의 차이를 분석하기 위해 실시되었다. 매출액에 근거하여 40개의 웹사이트를 선정한 후, 40개 웹사이트마다 5개씩의 리테일 스토어가 선정되었다. 내용분석방법과 카이-스퀘어 검증을 통하여 총 200개의 온라인 리테일 스토어가 분석되었다. 그 결과, 편이성, 제품실재감, 제품정보성, 서비스, 흥미성, 참여성, 심미성, 그리고 적합성의 8가지 온라인 비주얼 머천다이징 요인이 추출되었다. 각 요인별로 한국과 중국의 어패럴 리테일 스토어의 온라인 비주얼 머천다이징 실행 현황을 살펴본 결과, 8개 요인 모두에서 유의한 차이가 있는 것으로 나타났다. 본 연구는 한국과 중국의 온라인 비주얼 머천다이징 현황분석을 통해 온라인 비주얼 머천다이징이 구체적으로 어떠한 항목과 요인으로 구성되어 있으며, 한국과 중국의 온라인 비주얼 머천다이징 실행에서 이러한 항목과 요인들이 어떻게 다르게 사용되는지에 대한 이해를 제공하는데 그 의의가 있다.
