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A Study on the Use of Cosmetics by Male Consumers in South Korea, China, and Japan and the Direction for Development

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한국, 중국, 일본 남성 소비자의 화장품 사용 실태와 발전방향에 대한 연구

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Abstract This study compared and analyzed Japan and China, two major competitors to Korea, in the male cosmetics market, which has been shifted dramatically by the outbreak of COVID-19, with implications for the ASEAN market in mind. Questionnaire copies collected from 300 men in Generation MZ living in Korea, China, and Japan were used for analysis, and SPSS 21.0 was used to conduct a statistical analysis of the collected questionnaires. The following are this study's results: First, this study identified their purchase behaviors. The average amount of money the male respondents spent on buying cosmetics was below KRW 30,000 in Korea, China, and Japan. Functionality and texture ranked as top factors contributing to cosmetics purchases in all the three countries. Second, with regard to brands preferred by the respondents, Korea and China were open to foreign brands, while Japan mostly preferred its domestic brands. Functionality and texture ranked as top factors contributing to cosmetics purchase in all the three countries. Second, with regard to brands preferred by the respondents, Korea and China were open to foreign brands, while Japan mostly preferred its domestic brands. Third, this study found changes in the use of cosmetics since the outbreak of COVID-19. The respondents' biggest skin concern since COVID-19 was acne in Korea and Japan and increased sebum excretion in China. Concerns about sebum were commonly ranked high across the three countries. Based on these results, this study is suggested as a reference to improve the export competitiveness of Korean male cosmetics in the ASEAN market.

Key Words : ASEAN cosmetics market, Generation MZ, Male cosmetics, Post COVID-19

요 약 본 연구는 아세안 시장을 중심으로 코로나19의 창궐로 인해 급격하게 달라진 남성 화장품 시장 중 주요 경쟁국인 일본, 중국과 비교 분석하였다. 한중일에 거주하는 MZ세대 남성 300명에게 설문을 받은 결과를 연구 분석자료로 활용하였으며, 수집된 자료의 통계 SPSS 21.0 버전을 이용하여 분석을 진행하였다. 연구결과 첫째, 먼저 구매행동분석에 대한 결과이다. 한중일 3개국 남성 소비자의 화장품 평균 구매비용은 모두 30,000원 미만으로 나타났다. 화장품 구매요인으로는 3개국 모두 기능성, 사용감이 상위를 기록했다. 둘째, 선호하는 브랜드에 대한 답변에서는 한국과 중국은 해외브랜드에 개방적인 반면 일본은 주로 자국 브랜드를 선호하는 것으로 나타났다. 화장품 구매요인으로는 3개국 모두 기능성, 사용감이 상위를 기록했다. 선호하는 브랜드에 대한 답변에서는 한국과 중국은 해외브랜드에 개방적인 반면 일본은 주로 자국 브랜드를 선호하는 것으로 나타났다. 셋째, 코로나19 이후의 화장품 사용 변화에 대한 결과이다. 코로나19 이후의 피부고민에 대한 답변으로 한국, 일본의 경우 여드름이 가장 높게 나타났으며 중국의 경우 피지 분비 증가가 가장 높게 나타났다. 피지에 대한 고민은 3개국 모두 상위로 나타났다. 이러한 연구 결과를 토대로 아세안 시장에서 한국 남성 화장품의 수출 경쟁력을 확대하기 위한 기초자료로 제안하고자 한다.

주제어 : 아세안 화장품 시장, MZ 세대, 남성 화장품, COVID_19 이후

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1. Introduction

Originated at China in December 2019, coronavirus disease (COVID-19) has spread around the world, infecting and killing countless people. This has led the World Health Organization (WHO) to declare the novel coronavirus (COVID-19) outbreak a global pandemic in March 2020. This is the third time a pandemic has been declared after Hong Kong flu and influenza A (H1N1)[1].

The spread of COVID-19 had a negative impact on world economy. South Korea is also suffering damages second to the so-called IMF crisis. Due to the restrictions on outdoor activities, the economic growth rate of Q1 2020 dropped down to -1%, which is the lowest since the financial crisis [2]. This is also the lowest in 10-and-a-half years since Q3 2009 (0.9%). Exports also decreased by 2% as a result of the decrease in automobiles, machinery, and chemical products due to the global spread of COVID-19 and the plunging oil prices. However, some experts forecasted that, since other major countries were affected by COVID-19 later than Korea, the damage from exports will actually hit South Korea in Q2[3]. In the future, the digital trend based on individualism and information technology (IT) will be the new normal (a new situation that has become standard due to changes of the times)[4]. The spread of COVID-19 forced consumers to adopt contactless consumption and experience the convenience of online services, thereby resulting in the expansion of online services.

The male cosmetics market also could not avoid this aftermath of COVID-19. Since people constantly wear face masks because of the pandemic, the use of cosmetic products also decreased. According to Changes in purchasing patterns in the beauty market due to Post-COVID-19: Literature review(Y Ma, KH Kwon. 2021), while the focus was on face-to-face services with testers and samples in stores, the COVID-19 pandemic has forced the industry to offer a variety of contactless services, either through delivery or online.

In particular, high performance is expected from cosmetics sales in the Chinese market. China's economic growth rate was 2.3% last year, and domestic consumption during the Chinese New Year Spring Festival that is equivalent to the Lunar New Year's Day in South Korea rapidly increased by nearly 30%, suggesting that China's real business is showing a strong recovery[5]. Thus, this study analyzed the spending patterns changed by COVID-19 in the general cosmetics market, especially male cosmetics and predicted the spending patterns that will remain in the future and situations in which there would be a change in the future, thereby establishing specific strategies.

Therefore, the goal of this study is to select and analyze male cosmetics markets in South Korea, China, and Japan that have been changed rapidly due to the global spread of COVID-19 and predict the future of the cosmetics market of each country after the pandemic ends.

1.1 The male cosmetics market in South Korea

According to the Men’s Beauty Category Report 2020 surveyed among 3,000 South Korean male consumers in their 20-50s by Opensurvey, male consumers had less brand influence than female consumers, especially when they were young. Over 40% of men in their 20s purchased products regardless of the brand, whereas less than 30% of men in their 40-50s did that[6]. Therefore, it seems necessary to study consumer behavior of Generation MZ with low brand influence.

Male consumers purchasing cosmetics are

recently showing higher preference for color cosmetics beyond skincare products. According to Statista, younger men have more experience with makeup. A recent survey by Opensurvey on 750 men in their 20-30s showed that 1 out of 4 men wore makeup, and 84.3% of them said they wear makeup and groom themselves for self-satisfaction[7].

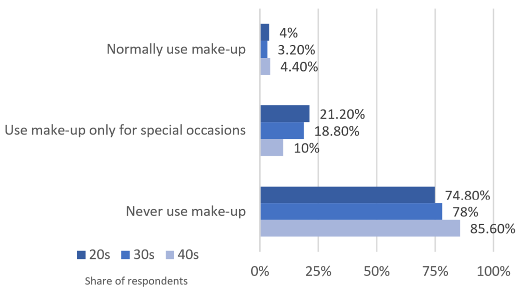

Fig. 1. Makeup usage among male consumers in South Korea in 2021, by age group

Recently, male consumers in South Korea have changed from preferring all-in-one products that are convenient to use to preferring more functional products with specific needs for cosmetics, thereby using female cosmetics. This phenomenon is also found in Japan in line with the genderless trend.

1.2 The male cosmetics market in China

As emphasized by the Chinese government, consumption upgrade is retained as a major part of dual circulation, and ‘higher-quality consumption’ is turning China into the hub of high-quality global consumption and increasing the opportunity to develop China’s own brands. Their purpose is to become the global base of cosmetics production and sales. The cosmetics consumption structure in China is gradually becoming more premium, but China’s local brand quality and R&D are showing slow innovation compared to the increasing purchasing power, and thus import will continue to be greater than export[8].

In particular, consumers mostly purchasing Chinese products and brands (Guochao, national tide) are younger consumers born after 1995, and the percentage is much higher than sales in the 60-70s. According to Fig. 2 to the Annual Chinese E-commerce Report 2021[9], Chinese brands are producing domestic products that meet consumer individualities and diversified needs and implementing marketing strategies that satisfy consumers in terms of identity, belonging, value, consciousness, and stability.

Moreover, due to the nature of the current times, Generation MZ (millennials and Gen Z) consumers are now spending more and more time online in 2021, seeking diverse personalities that can no longer be classified into just a few categories.

Fig. 2. Expansion of the live commerce market in China, 2017-2021e

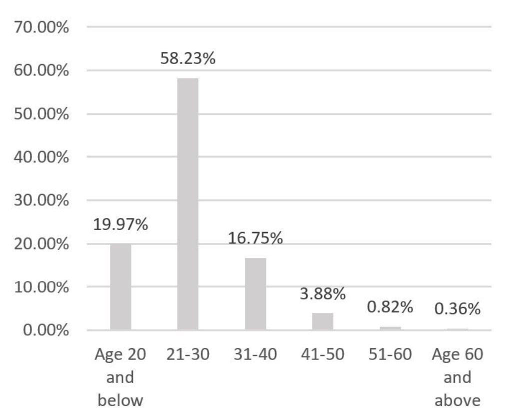

Fig. 3. Major users of live commerce by age

The male cosmetics market is still at an early stage in this saturated Chinese cosmetics market. There are relatively diverse brands coexisting instead of a few brands monopolizing the market, all showing high growth rates, which is why the market can still be regarded as a blue ocean[10]. According to Fig. 4, the size of the male cosmetics market in China increased from 10.441 billion yuan in 2013 to 14.485 billion yuan in 2018, which will show a 6-8% growth rate and surpass 20 billion yuan by 2023 [11]. Chinese male consumers mostly purchase toiletries, which account for 78.8% of total sales of men's grooming in China (10.48 billion yuan out of total 13.3 billion yuan)[12].

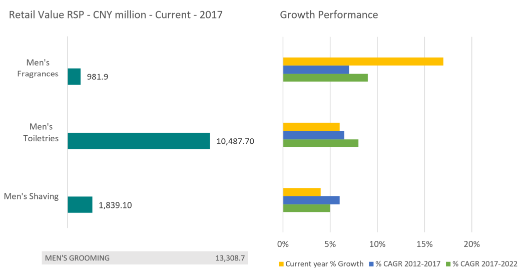

Fig. 4. Men's Grooming in the China, May 2018

According to the Taobao and Tmall platform data in 2019, the sales of men's foam cleansers were significantly higher than others, indicating that male consumers had higher demand for skincare products and creams than other products. They seem to prefer more simplified skincare than female consumers. In particular, for sunscreen that is considered essential for both men and women, the sales ratio of men's sunscreen is much lower according to the same data.

However, the male cosmetics market in China has a great potential for growth, as it shows a rapid growth although it is still a blue ocean. Sales of men's makeup products on Taobao and Tmall in 2019 was 330 million yuan, showing a 67.9% increase year on year. According to Beauty Economy Report 2019 by Tmall, purchase of lipstick out of men's makeup products increased by 278% year on year, and consumption of makeup products increased overall among Chinese male consumers. Moreover, as live commerce and social networking service (SNS) became more popular with the influence of beauty platform contents, the contents and demand for men's beauty also increased, especially men's makeup contents that showed an 80% increase[13].

1.3 The male cosmetics market in Japan

According to the SCI® (National Consumer Panel Survey) on 52,500 consumers aged 15-79 in Japan by INTAGE, the total size of the cosmetics market in 2020 decreased to 89% year on year, but the size of the male cosmetics market rather increased to 104% year on year. Like South Korea, According to Fig. 6, Japan's male cosmetics market is also showing more and more younger male consumers purchasing female cosmetics. The percentage of consumers purchasing only men's products was 35% in the 10s, 50% in the 20s, 60% in the 30s, and 70% in the 40-60s, indicating that older consumers purchased only men's products. Consumers aged 15-34 showed a higher purchase ratio of women's cleansing products, toner, and lotion. Consumers aged 35-69 showed a significantly higher purchase ratio of men's toner and lotion, but the growth of cosmetics purchase was stagnant. According to Fig. 5, the male cosmetics market has been constantly growing, showing a growth rate even in the economic recession caused by COVID-19. The male cosmetics market is growing to 111% for 5 years since 2016 and even showed growth to 104% year on year in 2020. Shaving products decreased in sales by 93% year on year due to face masks and restricted outdoor activities, but sales of skincare products increased to 107% year on year, showing a significant growth compared to the overall cosmetics market[15].

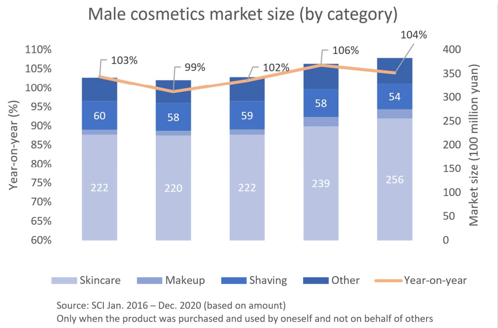

Fig. 5. Male cosmetics market size, 2016-2020

Fig. 6. Men's purchase of skincare products, 2020

As a result of comparing the purchase ratio of men's and women's skincare products and the annual amount spent per consumer by classifying the consumers into ages 15-34 and ages 35-69, it was discovered that consumers aged 15-34 showed an increase in both the purchase ratio and amount of women's cleansing products, toner, and lotion, whereas the purchase ratio of men's skincare products decreased significantly in 2020. Consumers aged 35-69 showed a significant increase in the purchase amount of men's toner and lotion, but the growth in the purchase ratio of cosmetics was stagnant. The market size for ages 15-34 increased due to the increase in new consumers of toner and lotion. Consumers aged 35-69 showed an increase in market size as the existing consumers purchased higher-priced products, rather than the inflow of new consumers[16].

2. Survey method

2.1 Subjects and period

This study selected Generation MZ men living in South Korea, China, and Japan as the samples. The survey was conducted from October to December 2021, distributing 100 copies of the questionnaire each to the three countries. Total 300 copies were used in the final analysis excluding 28 copies with redundant or inadequate responses.

To analyze the use and needs of Generation MZ men in South Korea, China, and Japan for male cosmetics, this study used the questionnaire developed for the research purpose with reference to previous studies. The questionnaire is comprised of 4 types of factors and total 33 items: 4 items on the sociodemographic factors, 8 items on lifestyle of male consumers, 13 items on use of male cosmetics by male consumers, 3 items on use of makeup products by male consumers, and 6 items on cosmetics brand awareness of male consumers by country.

2.2 Data processing and analysis

The collected data were analyzed using SPSS Statistics V21.0. Sincere responses were deleted. Frequency and percentage were calculated to identify the general characteristics of respondents. Cross-tabulation was obtained, and a chi-square test was conducted to test the correlation. One-way ANOVA was conducted to verify the difference in the effect on skin among the three countries.

Cross-tabulation was obtained, and a chi-square test was conducted to test the correlation between beauty patterns and countries.

Items with multiple responses were processed to obtain the cross-tabulation and examine the correlation with countries. Simple linear regression was used to identify how skin concerns due to COVID-19 affect the average amount spent on cosmetics.

3. Results

The general characteristics of subjects are as shown in Table 1 below.

For marital status, the percentage of singles in China and Japan was 88.3% and 72%, respectively, which is lower than South Korea at 98%, but there was not much of a difference. For occupation, there were many office workers in China (32.85%) and Japan (66%), whereas in South Korea there were many students (76.6%) (p<.001). Since there was a difference among groups in occupation, specific amount of income or consumption on beauty was excluded from the analysis.

Table 1. General characteristics of subjects

		South Korea		Japan		China		Total		x2(p)
Marital status	Single	98	97.0	72	72.0	94	82.5	264	83.8	23.441*** (0.000)
	Married	3	3.0	28	28.0	20	17.5	51	16.2	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Occupation	Student	77	76.2	17	17.0	16	14.0	110	34.9	161.116*** (0.000)
	Office worker	15	14.9	66	66.0	35	30.7	116	36.8	
	Self-employed	4	4.0	7	7.0	14	12.3	25	7.9	
	Unemployed	5	5.0	9	9.0	45	39.5	59	18.7	
	Other	0	0.0	1	1.0	4	3.5	5	1.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

* p<0.05, ** p<0.01, *** p<0.001

Table 2. Lifestyle factors of male consumers ANOVA

		N	Mean	Standard deviation	F	p	Scheffe
Smoking_ effect on skin	South Korea	20	3.30	0.98	1.956	0.147	-
	Japan	45	3.78	0.93			
	China	31	3.77	0.99			
	Total	96	3.68	0.97			
Drinking_ effect on skin	South Korea	69	3.29	0.81	1.346	0.263	-
	Japan	66	3.50	1.00			
	China	45	3.53	0.87			
	Total	180	3.43	0.90			
Stress_ effect on skin	South Korea	101	4.15	0.77	2.198	0.113	-
	Japan	100	3.90	1.08			
	China	114	4.11	0.88			
	Total	315	4.06	0.92			
Skin concerns due to COVID-19	South Korea(a)	101	3.50	1.07	6.663**	0.001	a>b
	Japan(b)	100	2.97	1.17			
	China(c)	114	3.32	0.92			
	Total	315	3.27	1.07			
Sleep_ effect on skin	South Korea(a)	101	4.13	0.80	3.908*	0.021	c>b
	Japan(b)	100	3.87	1.04			
	China(c)	114	4.19	0.80			
	Total	315	4.07	0.89			

* p<0.05, ** p<0.01, *** p<0.001

The Lifestyle factors of male are as shown in Table 2 below.

Skin concerns due to COVID-19 showed a statistically significant difference at the significance level less than 0.05 depending on the country (F=6.663, p<0.01). The Scheffe test showed a higher result in South Korea than Japan.

Sleep_ effect on skin showed a statistically significant difference at the significance level less than 0.05 depending on the country (F=3.908, p<0.05). The Scheffe test showed a higher result in China than Japan.

3.1 Environmental factors of male consumers

Skin concerns due to COVID-19 showed a statistically significant difference at the significance level less than 0.05 depending on the country (F=6.663, p<0.01). The Scheffe test showed a higher result in South Korea than Japan.

Sleep_ effect on skin showed a statistically significant difference at the significance level less than 0.05 depending on the country (F=3.908, p<0.05). The Scheffe test showed a higher result in China than Japan.

Smoking_ effect on skin, drinking, eating late at night, and skin concerns showed a statistically significant difference (p<0.001), whereas there was no significant difference in terms of average daily sleep (p>0.05).

Table 3. Lifestyles and habits of male consumers

		South Korea		Japan		China		Total		x2(p)
Smoking status	Yes	20	19.8	45	45.0	31	27.2	96	30.5	15.967*** (0.000)
	No	81	80.2	55	55.0	83	72.8	219	69.5	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Number of cigarettes smoked per day	1-5	5	25.0	12	26.7	10	32.3	27	28.1	10.400 (0.238)
	6-10	9	45.0	9	20.0	6	19.4	24	25.0	
	11-15	4	20.0	11	24.4	4	12.9	19	19.8	
	16-20	1	5.0	8	17.8	4	12.9	13	13.5	
	More than 1 pack	1	5.0	5	11.1	7	22.6	13	13.5	
	Total	20	100.0	45	100.0	31	100.0	96	100.0	
Drinking status	Yes	69	68.3	66	66.0	45	39.5	180	57.1	22.886*** (0.000)
	No	32	31.7	34	34.0	69	60.5	135	42.9	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Drinking frequency	Every day	2	2.9	24	36.4	15	33.3	41	22.8	58.522*** (0.000)
	4-5 times a week	1	1.4	12	18.2	3	6.7	16	8.9	
	2-3 times a week	22	31.9	12	18.2	11	24.4	45	25.0	
	Once a week	19	27.5	7	10.6	0	0.0	26	14.4	
	Once every other week	13	18.8	1	1.5	6	13.3	20	11.1	
	Less than once a month	12	17.4	10	15.2	10	22.2	32	17.8	
	Total	69	100.0	66	100.0	45	100.0	180	100.0	
Eating late at night	Every night	5	5.0	18	18.0	25	21.9	48	15.2	32.127*** (0.000)
	5-6 times a week	5	5.0	13	13.0	17	14.9	35	11.1	
	3-4 times a week	29	28.7	20	20.0	19	16.7	68	21.6	
	1-2 times a week	38	37.6	18	18.0	20	17.5	76	24.1	
	No	24	23.8	31	31.0	33	28.9	88	27.9	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Average daily sleep	4 hours or less	1	1.0	3	3.0	1	0.9	5	1.6	6.269(0.617)
	5 hours	11	10.9	12	12.0	11	9.6	34	10.8	
	6 hours	28	27.7	33	33.0	31	27.2	92	29.2	
	7 hours	48	47.5	38	38.0	60	52.6	146	46.3	
	8 hours or more	13	12.9	14	14.0	11	9.6	38	12.1	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Skin concerns	Acne scars	68	67.3	36	36.0	37	32.5	141	44.8	60.746***(0)
	Pigmentation	8	7.9	7	7.0	16	14.0	31	9.8	
	Wrinkles, elasticity	0	0.0	22	22.0	18	15.8	40	12.7	
	Lack of water and rough skin	18	17.8	32	32.0	34	29.8	84	26.7	
	None	2	2.0	3	3.0	9	7.9	14	4.4	
	Other	5	5.0	0	0.0	0	0.0	5	1.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

* p<0.05, ** p<0.01, *** p<0.001

3.2 Consumption of cosmetics by male consumers

The channel to purchase cosmetics since COVID-19, online purchase was the highest at 57%, 41%, and 76%, and the internet (blogs) also showed the highest ratio for the channel for beauty information.

Table 4. Consumption of cosmetics by male consumers

		South Korea		Japan		China		Total		x2(p)
Average amount spent on cosmetics	Less than 30,000	59	58.4	66	66.0	87	76.3	212	67.3	18.879** (0.004)
	30,000- less than 50,000	27	26.7	16	16.0	20	17.5	63	20.0	
	50,000- less than 100,000	13	12.9	17	17.0	3	2.6	33	10.5	
	100,000 or more	2	2.0	1	1.0	4	3.5	7	2.2	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Daily hours spent wearing a mask	None	5	5.0	4	4.0	9	4.5	0	0.0	14.622* (0.012)
	Less than 1 hour	3	3.0	11	11.0	14	7.0	0	0.0	
	1- less than 3 hours	18	17.8	12	12.0	30	14.9	0	0.0	
	3- less than 5 hours	17	16.8	18	18.0	35	17.4	0	0.0	
	5- less than 7 hours	28	27.7	12	12.0	40	19.9	0	0.0	
	7 hours or more	30	29.7	43	43.0	73	36.3	0	0.0	
	Total	101	100.0	100	100.0	201	100.0	0	0.0	
Channel to purchase cosmetics since COVID-19	Department stores	4	4.0	10	10.0	12	10.5	26	8.3	37.245*** (0.000)
	Online	57	56.4	41	41.0	81	71.1	179	56.8	
	Specialty beauty stores	38	37.6	46	46.0	15	13.2	99	31.4	
	Door-to-door sales	0	0.0	3	3.0	3	2.6	6	1.9	
	Other	2	2.0	0	0.0	3	2.6	5	1.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Channel for beauty information	Internet (blogs)	43	42.6	57	57.0	57	50.0	157	49.8	45.153*** (0)
	Friends of the opposite sex	19	18.8	6	6.0	8	7.0	33	10.5	
	Friends of the same sex	14	13.9	8	8.0	23	20.2	45	14.3	
	Store, beauty salespersons	4	4.0	9	9.0	14	12.3	27	8.6	
	Magazines	1	1.0	4	4.0	7	6.1	12	3.8	
	SNS	16	15.8	11	11.0	3	2.6	30	9.5	
	Family	2	2.0	3	3.0	0	0.0	5	1.6	
	TV commercials	0	0.0	2	2.0	0	0.0	2	0.6	
	Other	2	2.0	0	0.0	2	1.8	4	1.3	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Preferred products	Men's products	42	41.6	74	74.0	87	76.3	203	64.4	48.866*** (0)
	Women's products	6	5.9	2	2.0	11	9.6	19	6.0	
	Products for both men and women	37	36.6	13	13.0	8	7.0	58	18.4	
	Use both	16	15.8	11	11.0	8	7.0	35	11.1	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Reason for preference	There are diverse products	8	7.9	15	15.0	19	16.7	42	13.3	54.974*** (0)
	The products are suitable for men's skin.	29	28.7	56	56.0	69	60.5	154	48.9	
	The products have good quality.	21	20.8	13	13.0	18	15.8	52	16.5	
	I don't care whatever products I use.	38	37.6	16	16.0	8	7.0	62	19.7	
	Other	5	5.0	0	0.0	0	0.0	5	1.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

* p<0.05, ** p<0.01, *** p<0.001

3.3 Change in skincare among male consumers since COVID-19

According to Table 5, In terms of major selection criteria for cosmetics, South Korea mostly chose the price of the product (93 respondents, 30.7%), and both Japan (92 respondents, 30.7%) and China (93 respondents, 27.2%) chose the convenience in using the product.

Table 5. Change in skincare among male consumers since COVID-19

		South Korea		Japan		China		Total		x2(p)
Skincare steps	Use an all-in-one product	23	22.8	47	47.0	34	29.8	104	33.0	14.693** (0.005)
	Use only basic skincare products (toner, lotion)	51	50.5	38	38.0	54	47.4	143	45.4	
	Use basic skincare products and then essence or cream	27	26.7	15	15.0	26	22.8	68	21.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Change in skincare since COVID-19	Yes	32	31.7	29	29.0	41	36.0	102	32.4	1.213 (0.545)
	No	69	68.3	71	71.0	73	64.0	213	67.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

(Continued)
Table 5. Change in skincare among male consumers since COVID-19

cost skincare COVID-19	Less than 30,000	9	40.9	4	57.1	40	81.6	53	67.9	34.653*** (0)
	30,000- less than 60,000	12	54.5	0	0.0	6	12.2	18	23.1	
	60,000- less than 90,000	1	4.5	3	42.9	1	2.0	5	6.4	
	90,000 or more	0	0.0	0	0.0	2	4.1	2	2.6	
	Total	22	100.0	7	100.0	49	100.0	78	100.0	
Interest COVID-19	Yes	13	12.9	28	28.0	18	15.8	59	18.7	8.570* (0.014)
	No	88	87.1	72	72.0	96	84.2	256	81.3	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

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

3.4 Use of makeup by male consumers

According to Table 6, For the area of interest in beauty since COVID-19, most respondents in South Korea selected makeup (5, 38.5%), followed by body care (fitness, etc.) (4, 30.8%) and plastic surgery and procedures (2, 15.4%). Most in Japan selected haircare (18, 35.3%), followed by body care (fitness, etc.) (13, 25.5%) and makeup (12, 23.5%), while most in China selected body care (fitness, etc.) (12, 42.9%), followed by makeup (10, 35.7%) and plastic surgery and procedures (4, 14.3%).

Table 6. Use of makeup by male consumers

		South Korea		Japan		China		Total		x2(p)
Makeup	Yes	16	15.8	13	13.0	29	25.4	58	18.4	6.141* (0.046)
	No	85	84.2	87	87.0	85	74.6	257	81.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Frequency of makeup	1-2 times a week	8	50.0	4	30.8	12	41.4	24	41.4	9.436 (0.15)
	3-4 times a week	6	37.5	4	30.8	5	17.2	15	25.9	
	5-6 times a week	2	12.5	5	38.5	7	24.1	14	24.1	
	Every day	0	0.0	0	0.0	5	17.2	5	8.6	
	Total	16	100.0	13	100.0	29	100.0	58	100.0	
Makeup steps	Brightening cream or sunscreen with a brightening function	4	25.0	2	15.4	8	27.6	14	24.1	26.682** (0.001)
	Base makeup (BB cream, foundation, and other skin correction products)	4	25.0	9	69.2	0	0.0	13	22.4	
	Base makeup and lip makeup (colored lip balm, etc.)	4	25.0	2	15.4	8	27.6	14	24.1	
	Base makeup and eye makeup (included brows)	1	6.3	0	0.0	3	10.3	4	6.9	
	Full makeup (using all steps of makeup)	3	18.8	0	0.0	10	34.5	13	22.4	
	Total	16	100.0	13	100.0	29	100.0	58	100.0	
Average monthly cost in makeup	Less than 30,000	11	68.8	4	30.8	19	65.5	34	58.6	8.332 (0.08)
	30,000- less than 60,000	5	31.3	6	46.2	5	17.2	16	27.6	
	60,000 or more	0	0.0	3	23.1	5	17.2	8	13.8	
	Total	16	100.0	13	100.0	29	100.0	58	100.0	
First time using a cosmetic product	10s	70	69.3	37	37.0	67	58.8	174	55.2	53.942*** (0.000)
	20s	31	30.7	43	43.0	46	40.4	120	38.1	
	30s	0	0.0	19	19.0	0	0.0	19	6.0	
	40s	0	0.0	1	1.0	1	0.9	2	0.6	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
First skincare product	Cleansing product	21	20.8	61	61.0	77	67.5	159	50.5	106.053*** (0.000)
	Shaving product	4	4.0	17	17.0	13	11.4	34	10.8	
	toner, lotion	76	75.2	16	16.0	20	17.5	112	35.6	
	Essence, serum, cream	0	0.0	6	6.0	4	3.5	10	3.2	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	
Country of male cosmetic brands	US	10	9.9	1	1.0	19	16.7	30	9.5	226.659*** (0.000)
	Europe	6	5.9	1	1.0	15	13.2	22	7.0	
	Japan	5	5.0	96	96.0	20	17.5	121	38.4	
	South Korea	73	72.3	2	2.0	49	43.0	124	39.4	
	Country does not matter	7	6.9	0	0.0	11	9.6	18	5.7	
	Total	101	100.0	100	100.0	114	100.0	315	100.0	

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

3.5 Use of cosmetics by male consumers

According to Table 7, the area of interest in beauty since COVID-19, In terms of major selection criteria for cosmetics, South Korea mostly chose the price of the product (93 respondents, 30.7%), and both Japan (92 respondents, 30.7%) and China (93 respondents, 27.2%) chose the convenience in using the product.

For factors for purchase of cosmetics, most respondents (91, 30%) in South Korea selected functionality. For skin concerns due to COVID-19, most respondents in South Korea (75, 49%) and Japan (49, 34%) selected increased acne and blemishes, and most in China (53, 27.5%) selected increased sebum excretion.

For changes in skincare since COVID-19, most respondents in South Korea (23, 54.8%) changed the basic skincare products (toner, lotion, etc.), most in Japan (13, 30.2%) and China (20, 37%) purchased functional products such as eye cream, essence, nourishing cream, etc. For products replaced since COVID-19, most respondents in South Korea selected moisturizing products (11, 34.4%) and soothing products (11, 34.4%). Most in Japan selected moisturizing products (6, 46.2%) and hydrating (nourishing) products (6, 46.2%), while most in China selected hydrating (nourishing) products (28, 57.1%), followed by moisturizing products (12, 24.5%) and soothing products (9, 18.4%).

For the area of interest in beauty since COVID-19, most respondents in South Korea selected makeup (5, 38.5%), followed by body care (fitness, etc.) (4, 30.8%) and plastic surgery and procedures (2, 15.4%). Most in Japan selected haircare (18, 35.3%), followed by body care (fitness, etc.) (13, 25.5%) and makeup (12, 23.5%), while most in China selected body care (fitness, etc.) (12, 42.9%), followed by makeup (10, 35.7%) and plastic surgery and procedures (4, 14.3%).

Table 7. Use of cosmetics by male consumers

Multiple response crosstabs		South Korea		Japan		China		Total	
Major selection criteria for cosmetics	Convenience in using the product	92	30.4	92	30.7	93	27.2	277	29.3
	Price of the product	93	30.7	87	29.0	93	27.2	273	28.9
	Fragrance of the product	63	20.8	65	21.7	62	18.1	190	20.1
	Design of the product	19	6.3	47	15.7	75	21.9	141	14.9
	Effect and quality of the product	12	4.0	4	1.3	10	2.9	26	2.8
	Ingredients of the product	9	3.0	1	0.3	9	2.6	19	2.0
	None	1	0.3	2	0.7	0	0.0	3	0.3
	Other	14	4.6	2	0.7	0	0.0	16	1.7
	Total	303	0.0	300	0.0	342	0.0	945	100.0
Factors for purchase of cosmetics	Functionality	91	30.0	76	25.3	88	25.7	255	27.0
	Recommended by others	62	20.5	41	13.7	62	18.1	165	17.5
	Brand	39	12.9	49	16.3	64	18.7	152	16.1
	Advertising model	3	1.0	10	3.3	17	5.0	30	3.2
	Texture	65	21.5	70	23.3	74	21.6	209	22.1
	Recommended by sales staff	5	1.7	17	5.7	14	4.1	36	3.8
	Design	7	2.3	18	6.0	14	4.1	39	4.1
	SNS reviews	27	8.9	17	5.7	6	1.8	50	5.3
	Price	2	0.7	2	0.7	2	0.6	6	0.6
	Other	2	0.7	0	0.0	1	0.3	3	0.3
	Total	303	0.0	300	0.0	342	0.0	945	100.0
Skin concerns due to COVID-19	Enlarged pores	21	13.7	39	27.1	47	24.4	107	21.8
	Increased winkles, lack of elasticity	14	9.2	30	20.8	45	23.3	89	18.2
	Increased acne and blemishes	75	49.0	49	34.0	45	23.3	169	34.5
	Increased sebum excretion	36	23.5	25	17.4	53	27.5	114	23.3
	None	4	2.6	1	0.7	3	1.6	8	1.6
	Other	3	2.0	0	0.0	0	0.0	3	0.6
	Total	153	0.0	144	0.0	193	0.0	490	100.0

(Continued)

Table 7. Use of cosmetics by male consumers

Multiple response crosstabs		South Korea		Japan		China		Total	
Changes in skincare since COVID-19	Receive treatment from a dermatologist	6	14.3	11	25.6	19	35.2	36	25.9
	Visit a skin clinic (aesthetics, spa, etc.)	2	4.8	12	27.9	5	9.3	19	13.7
	Purchase functional products such as eye cream, essence, nourishing cream, etc.	11	26.2	13	30.2	20	37.0	44	31.7
	Change the basic skincare products (toner, lotion, etc.)	23	54.8	7	16.3	10	18.5	40	28.8
	Total	42	0.0	43	0.0	54	0.0	139	100.0
Products replaced since COVID-19	Moisturizing products	11	34.4	6	46.2	12	24.5	29	30.9
	Hydrating (nourishing) products	9	28.1	6	46.2	28	57.1	43	45.7
	Soothing products	11	34.4	1	7.7	9	18.4	21	22.3
	Other	1	3.1	0	0.0	0	0.0	1	1.1
	Total	32	0.0	13	0.0	49	0.0	94	100.0
Area of interest in beauty since COVID-19	Makeup	5	38.5	12	23.5	10	35.7	27	29.3
	Plastic surgery and procedures	2	15.4	8	15.7	4	14.3	14	15.2
	Haircare	2	15.4	18	35.3	2	7.1	22	23.9
	Body care (fitness, etc.)	4	30.8	13	25.5	12	42.9	29	31.5
	Total	13	0.0	51	0.0	28	0.0	92	100.0

Table 8. Regression model

	Unstandardized coefficient		Standardized coefficient	t	p-value
	B	Standard error	Beta		
(Constant)	1.070	0.137		7.781	0.000
Skin concerns due to COVID-19	0.124	0.040	0.173	3.112**	0.002
R2	0.03				
F(p)	9.686(0.002)				

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

Hypothesis: More skin concerns due to COVID-19 will increase the average amount spent on cosmetics.

According to Table 8, For the area of interest in beauty since COVID-19, Skin concerns due to COVID-19 had a positive effect on the average amount spent on cosmetics at the significance level less than 0.05 (β=.124, $p<.001$). More skin concerns due to COVID-19 led to an increase in the average amount spent on cosmetics.

4. Conclusion

The keywords of this study are Asian beauty, male cosmetics, and prospects after the end of COVID-19.

In the Asian market that is becoming the global hub of beauty, South Korea, China, and Japan are showing distinct characteristics of their own. The patterns of men's beauty also vary depending on each country's culture, income levels, and acceptance of the online platform. Men's beauty, which is a relative latecomer in the cosmetics market, is expected to grow much more rapidly than the existing beauty market. The industry is paying close attention to how men's beauty will develop both in form and size, since it is the only blue ocean that gives hope to this oversaturated market.

Generation MZ are the youth in their late teens to 30s as of 2021 and are familiar with the digital environment such as smartphones and the internet. They are flexible to change, seek new and different things, and tend to be generous with money or time spent on the things they like. These generational characteristics are fully applied to the market due to COVID-19, making us experience more rapid market changes.

The results of analyzing the purchase behavior are as follows. The average amount spent on cosmetics by male consumers in the three countries was less than 30,000 KRW. Most respondents in South Korea and China purchased cosmetics online, while most in

Japan purchased from specialty beauty stores, which may have been affected by Japan's pay-as-you-go policy. But the ratio of online purchase in Japan was also high, implying that the online market will continue to grow. All three countries also responded that they obtain information online. The major factors for purchasing cosmetics were functionality and texture in all three countries. For preferred brand, South Korea and China were open to global brands, whereas Japan mostly preferred their own.

Next are the results of changes in use of cosmetics since COVID-19. Most respondents in South Korea and Japan responded that the major skin concern they have since COVID-19 is acne, whereas in China it was increased sebum excretion. Concerns about sebum were ranked high in all three countries. For changes in skincare due to COVID-19, most respondents in South Korea said they replaced the basic skincare products, whereas most in Japan and China additionally purchased functional products. For area of interest aside from skincare, respondents in South Korea showed a greater interest in makeup, whereas those in Japan showed more interest in haircare, and those in China in body care, which proved a clear difference among the countries. This also shows the possibility that the male cosmetics market can be expanded from skincare products to color cosmetics, hair products, and body products.

This study supported the hypothesis that more skin concerns due to COVID-19 will lead to an increase in the average amount spent on cosmetics. This indicates that skin concerns due to COVID-19 affected the cosmetic purchase behavior and can be a factor that can promote expansion of the male cosmetics market. It is necessary to prepare for new needs of male consumers based on these skin concerns due to COVID-19 and establish differentiated strategies by identifying different cultural characteristics of each country in the online market that is becoming more and more important. To this end, future studies must examine more specific information channels.

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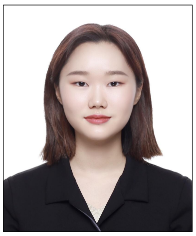

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