

A Study on the Comparison of Recognition of Body Types in Korean and Chinese College Female Students

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Abstract

Ever since China adopted a free market economy, it has been basking in unprecedented economic growth. It has now emerged as one of the most promising markets in the world for the near future. The purpose of this study was to investigate of Chinese and Korea college female students's cognitive body type and to suggest basic informations for high quality clothing merchandising for china export.

The subjects in this study were 430 college female students, aged from 18 to 24 living in Beijing(215) and Seoul(215). The survey were taken from June to July, 1999. SAS(Statistical Analysis System) is used for frequency, percentage, average, standard deviation, X²-test.

The results of this study are as follows.

The 90% of Chinese college female students has under 4000 yuan for monthly income, and they consume less than 1000 yuan for clothing purchasing for one year. About 42% chinese students are interested in controlling of physical body shape. The Korean college female students has from 1,000,000 won to 10, 000, 000 won for monthly income, and the 84% of them consume less than 1,000,000 for clothing purchasing for one year. It represents of economical difference between China and Korea.

Examination on the Korean and Chinese self-perception on obesity of the body as a whole showed that both groups perceived themselves as normal or slightly overweight. More Korean respondents regarded their weight as normal than the Chinese did. The Chinese female college students perceived themselves rather overweight, and held a lower satisfaction level about their physical construction. While the Korean female college students showed low satisfaction level about specific bodily parts, they held a normal level of satisfaction about their physical construction as a whole. It is noteworthy that more Chinese respondents generally held lower satisfaction impressions about their physical construction than their Korean counterparts. It is needed to different merchandising project for export clothing in China.

Key words : cognitive body type, economical difference, self-perception, Chinese college female students.

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I. Introduction

Ever since China adopted a free market economy, it has been basking in unprecedented economic growth. It has now emerged as one of the most promising markets in the world for the near future.

Considering the fact that Korea is geographically and culturally close to this market of immense potential, it is imperative that further market analyses are done to open new channels of trade. Despite the geographical and cultural advantage, however, Korea has yet to develop products and services specifically tailored to the needs and tastes of Chinese consumers. To take advantage of China's growing economic power, and its attendant purchasing power, it would behoove the Korean business community to scrutinize the Chinese market for commercial opportunities.

With the objective of providing basic data in support of Korean exporters in their probe into the Chinese market, this paper specifically focuses on the clothing business and presents an analysis of the Chinese clothing market. The analysis is made vis-*vis* the physical construction of the Chinese people, or at least the self-perception of such, and the preferences and trends in the clothes they purchase. A comparative analysis is applied to explore for any parallels in the perception and preference between the Korean and Chinese consumers. Finally, the paper offers suggestions regarding the practical applicability of the related findings to further the prospective development of fashion products for export to China.

As research, the writer conducted a random sampling from Chinese and Korean female students aged 17 to 25. The subjects were asked to answer a questionnaire on their perception of their own physique, clothing purchase pattern, and preference in design. The responses were compared to extrapolate rel-

evant parallels and differences in the self-perception and the fashion pattern between the two groups.

The study includes research on the following subjects:

1. It examines the level of effort exerted and the importance placed on physique maintenance by Korean and Chinese female students specifically for the purpose of sustaining a desirable figure for fashion purposes.
2. It investigates and compares brassiere and corset wearing patterns in relation to the physical construction.
3. By examining the self-perception and satisfaction levels as regards specific body parts, the study determines and compares the significance of the self-perception level for the physical construction as a whole.
4. The study surveys the self-perception level of the physique in different geographical regions to determine regional differences in the physique self-perception.

II. Research Method

1. Data Collection

For the survey, the writer used the simple random sampling method on a sample distribution of 250 female college students living in Peking, China, aged 17 to 24. Discarding 35 samples for unresponsive answers resulting in insufficient data, the writer assessed the remaining 215 samples for analysis. The survey was conducted in the period from June 29 through July 15, 1999. The subjects of the survey were students at the Peking Dress Institution, Peking, China. In the Korean survey, 230 samples were taken from female college students from Sook-Myung Women's University, Kon-Kuk University and In-Chon University. As with the Chinese sample distribution, the Korean subjects also ranged from the age of 17 to 24. The survey was con-

ducted from June 15 to July 5, 1999. Of the 230 sampled subjects, 215 were accepted for analysis.

2. Data Analysis

For the measurement of the physique scales, the writer used the SAS (Statistical Analysis System) program, with analysis of the frequency configuration for the entire questionnaire. The implications were drawn through the 2 verification method on each specifications for the Chinese and Korean subjects.

III. Results and Discussion

1. Comparison of Demographic Variables between Korean and Chinese female students

1) Monthly income

Average monthly income of Korean and Chinese female students' families are compared in <Table 1> and <Table 2>. In that days, 1\$ is 1300won, and 160won is 1 yuan. As shown in the tables, Korean female students's average monthly family income levels ranged wide from 1 million(770\$) to 10 million wons(7700\$), while 66% of the families are distributed between 1.5 million and 5 million wons.

In contrast, 59.5% of the Chinese female students's families earned 2,000 yuans(246\$) or less every month, while about 90% of them earned 4,000 yuans(492\$) or less. Between two nations, there is large difference of economic level.

2) Yearly consumption of clothing

Korean female students spent between less than 200 thousand(1,538\$) and 1.5 million wons(11,538\$) on apparels annually. Half of them spent 400 thousand wons(307\$) or less, and 84.2% of them spent a million wons((769\$) or less.

Many of the Chinese female students did

<Table 1> Monthly income of Korean female students' families

Statistics	Frequency	Percent
Monthly income		
No answer	21	9.8
Under 1,000,000won	15	7.0
1,000,000~1,500,000won	17	7.9
1,500,000~2,000,000won	37	17.2
2,000,000~2,500,000won	34	15.8
2,500,000~3,000,000won	27	12.6
3,000,000~4,000,000won	22	10.2
4,000,000~5,000,000won	22	10.2
5,000,000~10,000,000won	16	7.4
Over 10,000,000won	4	1.9

<Table 2> Monthly income of Chinese female students' families

Statistics	Frequency	Percent
Monthly income		
No answer	3	1.4
Under 2,000yuan	128	59.5
2,000~4,000yuan	63	29.3
4,000~6,000yuan	14	6.5
6,000~8,000yuan	5	2.3
8,000~10,000yuan	1	0.5
Over 10,000yuan	1	0.5

not respond to this question, probably because they were reluctant to let their lower apparel spending known. Any way, 96.3% of the Chinese respondents said that they were spending 1,000 yuans(123\$) or less on their apparels annually, and only 3.8% of them spent between 1,000(123\$) and 6,000 yuans (738\$). Only this group spent a similar level of clothing consumption with Korea. But this percent means for 3.8% of 1 billion chinese people. Though the sampling size is not enough, the 3.8% has a large possibility of clothing consumption.

<Table 3> Yearly consumption of clothing for Korean female student

Statistics	Frequency	Percent
Yearly expenditure on apparels		
No answer	2	0.9
Under 200,000won	55	25.6
200,000~400,000won	55	25.6
400,000~600,000won	26	12.1
600,000~800,000won	20	9.3
800,000~1,000,000won	23	10.7
1,000,000~1,500,000won	19	8.8
1,500,000~2,000,000won	4	1.9
2,000,000~3,000,000won	7	3.3
Over 3,000,000won	4	1.9

<Table 4> Monthly consumption of clothing for Chinese female student

Statistics	Frequency	Percent
Yearly expenditure on apparels		
No answer	88	40.9
Under 500yuan	80	37.2
500~1,000yuan	39	18.1
1000~2,000yuan	6	2.8
2000~4,000yuan	1	0.5
4000~6,000yuan	1	0.5

3) Birth places

The Korean female students' birth places were as follows:

67% of them were born in Seoul and Kyonggi province, but such a result may be due to the fact that only the college women living in Seoul had been sampled for this study. About 25% of the Korean female students were from such southern provinces as Cholla and Kyongsang provinces.

The Chinese women's birth places were

<Table 5> Korean female students' birth places

Statistics	Frequency	Percent
Birth place		
Seoul	98	45.6
Kyonggi	46	21.4
Chungnam	11	5.1
Chungbuk	2	0.9
Kangwon	4	1.9
Chonnam	15	7.0
Chonbuk	11	5.1
Kyongnam	15	7.0
Kyongbuk	13	6.0

more diverse as follows:

The 28 women(13%) in China were from the Northern provinces: Heilungjiang (11), Jirin(7), Bianding(7) and Inner Mongolia(3). 142 women(66%) were from the middle provinces: Shensi(17), Shanxi(1), Shansi(10), Honan(13), Hupei(12), Beijing(15), Tianjin(6), Hopei(15), Shantung(31), Jiangsu(16), Shanghai(1) and Anhwei(6). It was conceived that such a high ratio of middle provinces might be due to the fact that the Chinese women had been sampled in Beijing. Meanwhile, 45 women or 20.9% were from southern China: Zhejiang(6), Fujian(7), Jiangsi(5), Hunan(16), Guangsi(4), Guangtung(6) and Hainan(1). 66% of them come from the middle area. The researchers expected different results of body recognition

<Table 6> Chinese female students' birth places

Statistics	Frequency	Percent
Birth place		
North	28	13.0
Middle	142	66.0
South	45	20.9

by area in China, but it was not significant difference by birth place. So for the body recognition, they has same recognition of body.

4) Management shape control

(1) Management of body shape

In both groups, less college women were managing their constitution (41.86% of Chinese women and 36.28% of Korean women were managing their body shapes, while 58.14% of former group and 62.80% of latter group were not.) Although the ratio of body-shape managing women was higher in the Chinese group, there was found no significant difference of the concern about body shape management between two groups. Any way, it can be interpreted that the higher ratio of body-shape managing women in the Chinese group may be related with the fact found by a preceding study that Chinese female students were obeser than their Korean counterparts.

(2) Methods of physical construction management

There was found no significant difference of body-shape managing methods between two groups. In both groups, exercise was favored most (30.23% of Chinese female students and 22.23% of Korean women), followed by diet.

5) Use of brassiere and corset

The use of the brassiere determining the shape of breasts importantly was surveyed as follows:

(1) Use of the brassiere

All the sample college women in both groups but four answered that there were not wearing brassieres. Namely, Chinese women were concerned about breast shape as much as Korean women.

(2) Time when brassiere had been first worn

There was a significant difference of the time when brassiere was first worn between two groups. 50.23% of the Chinese women had begun to wear brassieres between 16 and 18 years old, while the absolute majority (80.93%) of Korean women had begun to wear brassieres between 13 and 15 years old. Such result suggests that Korean women are concerned about their breast shape earlier. Even 11.16% of the Chinese women began to wear brassieres between 19 and 21 years old.

(3) Hours of brassiere wearing

There was also found a significant differ-

<Table 7> Management of body shape

Nation	Frequency Percent Row Pct	No answer	I manage constitution	I don't manage constitution	Total
China		0 0.00 0.00	90 20.93 41.86	125 29.07 58.14	215 50
Korea		2 0.47 0.93	78 18.14 36.28	135 31.39 62.80	215 50
Total		2 0.47	168 39.07	260 60.46	430 100

<Table 8> Methods of physical construction management

Nation	Frequency Percent Row Pct	No answer (I don't manage constitution)	Exercise	Diet	Pill	Corset for constitution management	Other	Total
	China	123 28.60 57.21	65 15.12 30.23	21 4.88 9.77	1 0.23 0.47	2 0.47 0.93	3 0.70 1.40	215 50
Korea	136 31.63 63.26	48 11.16 22.33	26 6.05 12.09	0 0.00 0.00	3 0.70 1.40	2 0.47 0.93	215 50	
Total	259 60.23	113 26.28	47 10.93	1 0.23	5 1.16	5 1.16	430 100	

<Table 9> Time when brassiere had been first worn

Nation	Frequency Percent Row Pct	No answer	Under 9 years old	10~12 years old	13~15 years old	16~18 years old	19~21 years old	Total
	Chins	4 0.93 1.86	1 0.23 0.47	8 1.86 3.72	70 16.28 32.56	108 25.12 50.23	24 5.58 11.16	215 50
Korea	4 0.93 1.86	0 0.00 0.00	21 4.88 9.77	174 40.47 80.93	16 3.72 7.44	0 0.00 0.00	215 50	
Total	8 1.86	1 0.23	29 6.74	244 56.74	124 28.84	24 5.58	430 100	
Chi-Square	143.414***							

<Table 10> Hours of brassiere wearing

Nation	Frequency Percent Row Pct	No answer	24 hours	16 hours	8 hours	little	Total
	China	1 0.23 0.47	40 9.30 18.60	159 36.98 73.95	7 1.63 3.26	8 1.86 3.72	215 50
Korea	3 0.70 1.40	141 32.79 65.58	56 13.02 26.05	13 3.02 6.05	2 0.47 0.93	215 50	
Total	4 0.93	181 42.09	215 50.00	20 4.65	10 2.33	430 100	
Chi-Square	112.103***						

<Table 11> Use of the corset

Nation	Frequency Percent Row Pct	No answer	Use corset	Not use corset	Total
China		1	28	186	215
		0.23	6.51	43.26	50
		0.47	13.02	86.51	
Korea		3	47	164	215
		0.70	10.93	38.37	50
		1.40	21.86	76.75	
Total		4	75	350	430
		0.93	17.44	81.63	100
Chi-Square		8.196*			

nance of brassiere wearing hours between two groups. 66.8% of the Korean women wore brassieres around the clock, while 73.5% of the Chinese women wore brassieres for 16 hours a day. Namely, the Korean women not only began to wear the brassieres at an earlier age but also wore them for longer hours.

(4) Use of the corset for management constitution of body shape

There was found some significant difference of corset wearing between two groups. Only 13.02% of Chinese women were wearing corsets, which was relatively lower than 21.86% of Korean women. In all, both groups seemed to be less concerned about the function of corset correcting the body shape.

2. Comparison of Self-perception Body Shape Between Korean and Chinese Female Students

Many women of both groups perceived that their head size was 'normal', and such perceptions did not differ significantly between two groups. (51.63% of Korean women and 53.49% of Chinese women perceived so).

The same ratios (26%) of two groups perceived that their head sizes were 'a little big'. In all, about 78% of both groups perceived that their head sizes were 'normal' or 'a little big'. There was found no significant difference of perceived neck length and circumference between two groups either. 65% of the Korean women and 73% of the Chinese women perceived that their neck sizes were 'normal'.

However, there was found some significant difference of perceived shoulder width between two groups. 39.07% of the Korean women and 52.56% of the Chinese women perceived that their shoulder width was 'normal', and more Korean women felt that their shoulder width was 'a little long'. Such findings are opposed to the fact found by the preceding study¹⁾ that Chinese women had a larger value of shoulder width (34.2 cm) than Korean women's (33.7%). In other words, Korea women's perceived shoulder width was wide than their actual width.

There was also found some significant difference of perceived bust circumference between two groups. 55.35% of the Chinese

¹ Sohn, Hee-Soon, Im Soon, A Study on the Comparison of Body Types between Chinese and Korean female students, *The International Journal of Costume Culture*, 1(1999), 43-53.

<Table 12> Self-perception of shoulder width

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	2 0.47 0.93	28 6.51 13.02	113 26.28 52.56	63 14.65 29.30	9 2.09 4.19
Korea	14 3.26 6.51	35 8.14 16.28	84 19.53 39.07	73 16.98 33.95	9 2.09 4.19	215 50	
Total	16 3.72	63 14.65	197 45.81	136 31.63	18 4.19	430 100	
Chi-Square	14.78**						

<Table 13> Self-perception of bust circumference

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	7 1.63 3.26	55 12.79 25.58	119 27.67 55.35	33 7.67 15.35	1 0.23 0.47
Korea	33 7.67 15.35	48 11.16 22.33	79 18.37 36.74	48 11.16 22.33	7 1.63 3.26	215 50	
Total	40 9.30	103 23.95	198 46.05	81 18.84	8 1.86	430 100	
Chi-Square	32.73***						

women perceived that their bust circumference was 'normal', and many of them felt that the circumference was 'a little small'. In contrast, 31.63% of the Korean women perceived that their bust circumference was 'normal', and 22.33% of them felt 'a little small or big' for their bust circumference, and 15.35% of them perceived that the circumference was small. Such findings agreed to the findings of the previous study²⁾. That is, the previous study found that Korean women's bust size

was smaller than their Chinese counterparts.

There was no significant difference of perceived waist circumference between two groups. 50% of both groups felt that their waist circumference was 'normal', and about 25% of them perceived that the circumference was 'a little big'.

There was found some significant difference of perceived hip circumference between two groups, however. 52.56% of the Chinese female students perceived that their hip cir-

² Sohn, Hee-Soon, *ibid*, p 45.

cumference was 'normal', while 43.72% of the Korean women felt that the circumference was 'a little big'. Such finding is opposed to the result of the preceding study³⁾ that Korean women's hip circumference was measured to be 90.6 cm and Chinese women's was 91.7 cm. In other words, Chinese women felt 'normal' for their a little big hip, while Korean women perceived 'a little big' for their small hip.

There was no significant difference of

perceived back length between Korean and Chinese female students. 78.60% of Korean women and 83.26% of Chinese women perceived that their back length was 'normal', and 13.49% of Korean women and 6.51% of Chinese women felt that the length was 'a little overweight'. In short, Korean women tended to perceive that their back length was 'a little longer'.

There was some significant difference of perceived upper arm circumference between

<Table 14> Self-perception of hip circumference

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	2 0.46 0.94	20 4.65 9.30	113 26.28 52.56	73 16.98 33.95	7 1.63 3.26
Korea	9 2.09 4.19	22 5.12 10.23	68 15.81 31.63	94 21.86 43.72	22 5.12 10.23	215 50	
Total	11 2.55	42 9.77	181 42.09	167 38.84	29 6.74	430 100	
Chi-Square	27.12***						

<Table 15> Self-perception of upper arm circumference

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	2 0.47 0.93	22 5.12 10.23	122 28.37 56.74	67 15.58 31.16	2 0.47 0.93
Korea	10 2.33 4.65	21 4.88 9.77	108 25.12 50.23	59 13.72 27.44	17 3.95 7.91	215 50	
Total	12 2.79	43 10.00	230 53.49	126 29.30	19 4.42	430 100	
Chi-Square	18.55***						

³ Sohn, Hee-Soon, *ibid*, p 45.

two groups. About 80% of both groups perceived that their upper arm circumference was 'normal' or 'a little big', but more Korean women felt that their upper arm circumference was 'small' or 'big' than their Chinese counterparts.

There was also found significant difference of perceived arm length between two groups. 77.21% of Chinese women felt that their arm length was 'normal', and only 14.88% of them perceived that the length was 'a little long'.

In contrast, 57.67% of Korean women perceived that their arm length was 'normal', and 16.05% of them felt that the length was 'a little long'. Such findings agreed to the preceding study⁴⁾ which had found that Korean women's arm was 55.2cm long and Chinese women's 52.6cm. Namely, Korean women had longer arms, and therefore, they felt that their arms were 'a little longer'.

There was also found some significant difference of perceived thigh circumference be-

<Table 16> Self-perception of upper arm length

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little long	Long	Total
		China	0 0.00 0.00	16 3.72 7.44	166 38.60 77.21	32 7.44 14.88	1 0.23 0.47
Korea	10 2.33 4.65	16 3.72 7.44	124 28.84 57.67	56 13.02 26.05	9 2.09 4.19	215 50	
Total	10 2.33	32 7.44	290 67.44	88 20.47	10 2.33	430 100	
Chi-Square	29.02***						

<Table 17> Self-perception of thigh circumference

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	1 0.23 0.47	17 3.95 7.91	91 21.16 42.33	96 22.33 44.65	10 2.33 4.65
Korea	6 1.40 2.79	9 2.09 4.19	64 14.88 29.77	99 23.02 46.05	37 8.60 17.21	215 50	
Total	7 1.63	26 6.05	155 36.05	195 45.35	47 10.93	430 100	
Chi-Square	26.29***						

⁴ Sohn, Hee-Soon, *ibid*, p 45.

⁵ Sohn, Hee-Soon, *ibid*, p 46.

tween Korean and Chinese female students. The preceding study⁵⁾ had found that Chinese women's average thigh circumference was 54.3cm and Korean women's 53.1cm. In contrast, 42.33% of Chinese women felt that their thigh circumference was 'normal' and 44.65% of them felt 'a little big' for their thighs. However, 46.05% of Korean women felt that their thigh circumference was 'a little big', and only 29.77% of them perceived that their thigh circumference was 'normal'. And 17.21% of Korean women felt that their thighs were 'big'. Such a contradiction between actual and perceived thigh size in Korean group may suggest that Korea women yearn for slimmer thighs.

There was found no significant difference of perceived leg length between two groups. About 60% of both groups perceived that their leg length was 'normal' and 23% of them felt 'a little small' for their leg length.

There was some significant difference of perceived stature between two groups. In the previous study, Chinese women had been found 158.4 cm high on average, while Korean women had been found 161.0 cm high on average. About 84% of both groups felt that their stature was 'normal' or 'a little short', but the Korean group's perceptions of their stature

was more widely distributed, while more Korean women than Chinese women felt that they were short or high.

There was also found some significant difference of perceived weight between two groups. The Chinese group weighed 52.1kg on average, while the Korean group weighed 49.9kg. Nevertheless, most of the Chinese women felt that their weight was 'normal' or 'a little overweight', and more Chinese women than Korean women perceived that their weight was 'a little light'. Such a finding suggests that Chinese women felt ideal for a little obese body shape. In contrast, most of Korean women who weighed a little less than Chinese women perceived that their weight was 'a little overweight' or 'weight', which suggests that Korean women are less satisfied with their weight.

There was found some significant difference of perceived breast size between two groups. In the previous study, Chinese women had been found to have big breasts than Korean women. Likewise, more Korean women than Chinese women perceived that their breasts were small or 'a little small'. 81% of Chinese women felt 'normal' or 'a little small' for their breast size.

There was no significant difference of

<Table 18> Self-perception of height

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little high	High	Total
China		10	57	125	20	3	215
		2.33	13.26	29.07	4.65	0.70	50
		4.65	26.51	58.14	9.30	1.40	
Korea		19	57	97	30	12	215
		4.42	13.26	22.56	6.98	2.79	50
		8.84	26.51	45.12	13.95	5.58	
Total		29	114	222	50	15	430
		6.74	26.51	51.63	11.63	3.49	100
Chi-Square		13.725**					

<Table 19> Self-perception of weight

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little over weight	Overw- eight	Total
		China	1 0.23 0.47	39 9.07 18.14	121 28.14 56.28	50 11.63 23.26	4 0.93 1.86
Korea	16 3.72 7.45	19 4.42 8.84	108 25.12 50.23	57 13.26 26.51	15 3.49 6.98	215 50	
Total	16 3.95	58 13.49	229 53.26	107 24.88	19 4.42	430 100	
Chi-Square	27.711***						

<Table 20> Self-perception of breast size

Nation	Frequency Percent Row Pct	Small	A little small	Normal	A little big	Big	Total
		China	10 2.33 4.65	48 11.16 22.33	128 29.77 59.53	28 6.51 13.02	1 0.23 0.47
Korea	32 7.44 14.88	56 13.02 26.05	78 18.14 36.28	38 8.84 17.67	11 2.56 5.12	215 50	
Total	42 9.77	104 24.19	206 47.91	66 15.35	12 2.79	430 100	
Chi-Square	34.124***						

perceived breast slackening between two groups. 71.63% of Korean women and 82.33% of Chinese women perceived that their breasts were not much slack.

There was also found no significant difference of perceived breast opening between two groups. 81.40% of Korean women and 73.49% of Chinese women perceived that their breasts were not much open.

3. Perceived Slimness and Obesity

1) Body shape

As a result of analyzing both groups' perceived obesity, there was found some difference between two groups. According to the preceding study⁶⁾, Chinese women's Rohrer index was 1.3, while Korean women's one was 1.2, which means that the latter group was slimmer. However, the perception was opposite. More Korean women than Chinese women perceived that their body shape was 'normal', and more Korean women

⁶ Sohn, Hee-Soon, *ibid.*, p 46.

<Table 21> Perception of whole body obesity

Nation	Frequency Percent Row Pct	Slim	A little slim	Normal	A little obese	Obese	Total
China	10	43	94	66	2	215	
	2.33	10.00	21.86	15.35	0.47	50	
	4.65	20.00	43.72	30.70	0.93		
Korea	18	16	116	54	10	215	
	4.42	3.72	26.98	12.56	2.33	50	
	8.84	7.44	53.95	25.12	4.65		
Total	28	59	210	120	12	430	
	6.74	13.72	48.84	27.91	2.79	100	
Chi-Square	24.48***						

than Chinese women felt that they were 'a little obese'. In contrast, many of Chinese women thought that they were 'a little slim', which suggests that Chinese women feel ideal for a little obese woman.

2) Perception of limb obesity

There was found some significant difference of perceived limb obesity between two groups at the level of $p < .05$. 46.98% of the Chinese women perceived that their limbs

were 'a little obese', which implies their high dissatisfaction with their limb shape. Meanwhile, 39.53% of Korean women felt 'normal' for their limbs, and 37.67% of them perceived that their limbs were 'a little obese'.

3) Perception of torso obesity

There was found no significant difference of perceived body obesity between two groups, which agreed to the preceding study⁷⁾ in which both groups had similar measur-

<Table 22> Perception of limb obesity

Nation	Frequency Percent Row Pct	Slim	A little slim	Normal	A little obese	Obese	Total
China	3	23	80	101	8	215	
	0.70	5.35	18.60	23.49	1.86	50	
	1.40	10.70	37.21	46.98	3.72		
Korea	16	20	85	81	13	215	
	3.72	4.65	19.77	18.84	3.02	50	
	7.45	9.30	39.53	37.67	6.05		
Total	18	43	165	182	21	430	
	4.19	10.00	38.37	42.33	4.88	100	
Chi-Square	12.74*						

⁷⁾ Sohn, Hee-Soon, *ibid*, p 46.

<Table 23> Perception of torso obesity

Nation	Frequency Percent Row Pct	Slim	A little slim	Normal	A little obese	Obese	Total
		China	13 3.02 6.05	47 10.93 21.86	103 23.95 47.91	49 11.40 22.79	3 0.70 1.40
Korea	18 4.18 8.38	34 7.91 15.81	100 23.26 46.51	51 11.86 23.72	12 2.79 5.58	215 50	
Total	31 7.21	81 18.84	203 47.21	100 23.26	15 3.49	430 100	
Chi-Square	9.10						

ements of bust, waist and hip circumferences.

4. Perception of Inter-regional Difference of Body Shapes

The results of analyzing Korean and Chinese female students's perception of inter-regional body shape differences can be summarized as follows.

There was found some significant difference of perceived inter-regional body shape differences between two groups. About 80% of the Chinese women answered that women's

body shapes might not differ much among regions, while 64.19% of Korean women answered so. On the other hand, 10.23% of the Chinese women said that women's body shapes might differ much among regions. In all, 49.76% of Chinese women felt that women's body shapes might differ more or less among regions in China, and only 21.39% of the Korean women felt so. Such a finding suggests that Chinese women had diverse body shapes depending on regions.

There was found no difference of percep-

<Table 24> I think that I have different body shape from the provinces in China(Korea)

Nation	Frequency Percent Row Pct	Not agree	Agree a little	Agree	Very agree	Don't know	Total
		China	7 1.63 3.26	89 20.70 41.40	85 19.77 39.53	22 5.12 10.23	12 2.79 5.58
Korea	15 3.49 6.98	138 32.09 64.19	42 9.77 19.53	4 0.93 1.86	16 3.72 7.44	215 50	
Total	22 5.11	227 52.79	127 29.53	26 6.05	28 6.51	430 100	
Chi-Square	41.50***						

tion of the other group's body shape between two groups.

That is, half of both group women perceived that Chinese women had different body shapes from Korean women or vice versa.

As a result of analyzing Korean and Chinese women's perception of other nations' women body shapes, there was found some significant difference between two groups. Namely, 80.46% of the Chinese women perceived that Chinese women had more or

less different body shapes from other Asian nations' women, while 65% of the Korean women perceived that their body shape might be different from other Asian nations' women.

5. Comparison of Satisfaction with Body Parts

The results of analyzing Korean and Chinese women's satisfaction with their body parts are summarized in (Table 27).

In all body parts (18 parts), there were significant differences of satisfaction between

<Table 25> I think that Korean women's body shape is different from Chinese's

Nation	Frequency Percent Row Pct	Not agree	Agree a little	Agree	Very agree	Don't know	Total
China	0	49	105	18	43	215	
	0.00	11.40	24.42	4.19	10.00	50	
	0.00	22.79	48.84	8.37	20.00		
Korea	0	55	120	14	26	215	
	0.00	12.79	27.91	3.26	6.05	50	
	0.00	25.59	55.81	6.51	12.09		
Total	0	103	225	32	69	430	
	0.00	24.18	52.33	7.44	16.05	100	
Chi-Square		6.93					

<Table 26> I think that Korean(China) women's body shape is different from Asian's

Nation	Frequency Percent Row Pct	Not agree	Agree a little	Agree	Very agree	Don't know	Total
China	0	26	139	34	16	215	
	0.00	6.05	32.33	7.91	3.72	50	
	0.00	12.09	64.65	15.81	7.44		
Korea	1	51	129	11	23	215	
	0.23	11.86	30.00	2.56	5.30	50	
	0.47	23.72	60.00	5.12	10.70		
Total	1	77	268	45	39	430	
	0.23	17.91	62.33	10.47	9.07	100	
Chi-Square		24.69***					

two groups.

On the other hand, many of both groups were satisfied with their head size. Only 26.98% of Chinese women and 22.32% of Korean counterparts were dissatisfied with their head size.

77.2% of both groups were satisfied with their neck length. But 56.28% of Korean women perceived that their neck length was 'normal', and 20.47% of them felt 'a little dissatisfied' with their neck length, which was higher than the ratio of Chinese women dissatisfied with neck length.

Many of Chinese women were satisfied a little with their neck circumference, while many Korean women felt normal for their neck circumference. In all, Chinese women were more satisfied with their neck circumference than their Korean counterparts.

Most of both groups were satisfied more or less with their shoulder width breadth. But Chinese women were more satisfied with the breadth compared with their overweight breadth than Korean women's.

Chinese women were more satisfied with their bust circumference than their Korean counterparts who perceived that their bust circumference was smaller.

Most of the Chinese women felt 'normal' or 'a little satisfied' for their waist circumference, while most of the Korean women were more or less satisfied with their waist circumference. In short, Korean women were more satisfied with their waist circumference than Chinese women, which suggests that Chinese women wanted to have a slimmer waist.

43.72% of the Chinese women were a little dissatisfied with their abdomen circumference, while 45.58% of the Korean women felt normal for their abdomen circumference. Also in actual measurements, Chinese women's average abdomen circumference had been 80.3 cm, while Korean women's been 78.6 cm.

72.09% of the Chinese women were dissatisfied more or less with their hip circumference, while 66.97% of the Korean women felt

'normal' or a little satisfied for their hip circumference. In short, Chinese women with a overweight hip circumference were more dissatisfied with their hip size.

Many of both groups felt 'normal' for their waist back length, but Chinese women having a shorter waist back were more satisfied with their waist back length than Korean women. Nevertheless, although Korean women had a longer waist back than Chinese women, their dissatisfaction with their waist back length was lower, considering that 67.44% of them felt 'normal' for the length.

Majority of both groups felt 'normal' or 'a little satisfied' for their upper arm length, but more Chinese women than Korean women were dissatisfied with the upper arm length.

Many of both groups felt 'normal' or 'a little satisfied' for arm length. The Chinese women with shorter arms were satisfied with their arm length as much as their Korean counterparts.

46.05% of the Chinese women were satisfied with their thigh circumference, while 39.07% of the Korean women were 'a little satisfied' with their thigh circumference. The actual circumference of Chinese women had been 54.3 cm, while that of Korean women been 53.1 cm. Because Chinese women had thicker thighs being more dissatisfied with their thigh size, they seemed to value thinner thighs.

34.67% of the Chinese women felt 'a little dissatisfied' with their leg length, and 30.70% of them felt 'normal' for the length. In contrast, 47.44% of the Korean women felt 'normal' for their leg length, and 25.12% of them were a little dissatisfied with their leg length. Chinese women's higher dissatisfaction with the leg length may be attributable to their preference of longer legs.

Most of Chinese women felt 'a little dissatisfied' for their stature, and second most of them felt 'normal' for their stature. In contrast, most of Korean women felt 'normal' for their stature, and second most of them felt 'a

<Table 27> Comparison of satisfaction with body parts

Statistics Body parts	Nation	Frequency	No	Dissa-	A little	Normal	A little	Satisfied	Total	Chi
		Percent								
		Row Pct			isified					
Head size	China	6 1.40 2.79	6 1.40 2.79	52 12.09 24.19	96 22.33 44.65	47 10.93 21.86	8 1.86 3.72	215 50 100	15.20**	
	Korea	14 3.26 6.51	18 4.19 8.37	30 6.98 13.95	98 22.79 45.58	48 11.16 22.33	7 1.63 3.26	215 50 100		
Neck length	China	5 1.16 2.33	0 0.00 0.00	37 8.60 17.21	83 19.30 38.60	83 19.30 38.60	7 1.63 3.26	215 50 100	51.81***	
	Korea	14 3.26 6.51	7 1.63 3.26	44 10.23 20.47	121 28.14 56.28	24 5.58 11.16	5 1.16 2.33	215 50 100		
Neck circumference	China	5 1.16 2.33	4 0.93 1.86	20 4.65 9.30	93 21.63 43.26	86 20.00 40.00	7 1.63 3.26	215 50 100	66.28***	
	Korea	14 3.26 6.51	10 2.33 4.65	26 6.05 12.09	145 33.72 67.44	18 4.19 8.37	2 0.47 0.93	215 50 100		
Shoulder width	China	5 1.16 2.33	3 0.70 1.40	43 10.00 20.00	81 18.84 37.67	78 18.14 36.28	5 1.16 2.33	215 50 100	16.75**	
	Korea	14 3.26 6.51	16 3.72 7.44	30 6.98 13.95	85 19.77 39.53	65 15.12 30.23	5 1.16 2.33	215 50 100		
Bust circumference	China	6 1.40 2.79	9 2.09 4.19	47 10.93 21.86	87 20.23 40.47	59 13.72 27.44	7 1.63 3.26	215 50 100	19.13**	
	Korea	15 3.49 6.98	27 6.28 12.56	56 13.02 26.05	70 16.28 32.56	40 9.30 18.60	7 1.63 3.26	215 50 100		
Waist circumference	China	5 1.16 2.33	7 1.63 3.26	52 12.09 24.19	68 15.81 31.63	70 16.28 32.56	13 3.02 6.05	215 50 100	24.93***	
	Korea	2 3.26 6.51	14 4.65 9.30	20 7.67 15.35	33 21.63 43.26	93 11.40 22.79	49 1.40 2.79	215 50 100		

<Table 27> Continued

Statistics	Frequency Percent Row Pct	No answer	Dissa- tisied	A little dissat- isified	Normal	A little satisfied	Satisfied	Total	Chi square
Body parts	Nation								
Abdomen circumference	China	6	14	94	49	44	8	215	65.75***
		1.40	3.26	21.86	11.40	10.23	1.86	50	
		2.79	6.51	43.72	22.79	20.47	3.72	100	
	Korea	14	17	22	98	54	10	215	
		3.26	3.95	5.12	22.79	12.56	2.33	50	
		6.51	7.91	10.23	45.58	25.12	4.65	100	
Hip circumference	China	5	5	78	77	43	7	215	61.75***
		1.16	1.16	18.14	17.91	10.00	1.63	50	
		2.33	2.33	36.28	35.81	20.00	3.26	100	
	Korea	14	22	21	65	79	14	215	
		3.26	5.12	4.88	15.12	18.37	3.26	50	
		6.51	10.23	9.77	30.23	36.74	6.51	100	
Back length	China	6	0	26	121	56	6	215	29.76***
		1.40	0.00	6.05	28.14	13.02	1.40	50	
		2.79	0.00	12.09	56.28	26.05	2.79	100	
	Korea	15	8	17	145	30	0	215	
		3.49	1.86	3.95	33.72	6.98	0.00	50	
		6.98	3.72	7.91	67.44	13.95	0.00	100	
Upper arm circumference	China	5	2	67	81	55	5	215	40.20***
		1.16	0.47	15.58	18.84	12.79	1.16	50	
		2.33	0.93	31.16	37.67	25.58	2.33	100	
	Korea	14	20	24	91	60	6	215	
		3.26	4.65	5.58	21.16	13.95	1.40	50	
		6.51	9.30	11.16	42.33	27.91	2.79	100	
Arm length	China	5	2	17	99	86	6	215	27.45***
		1.16	0.47	3.95	23.02	20.00	1.40	50	
		2.33	0.93	7.91	46.05	40.00	2.79	100	
	Korea	14	11	18	123	43	6	215	
		3.26	2.56	4.19	28.60	10.00	1.40	50	
		6.51	5.12	8.37	57.21	20.00	2.79	100	
Thigh circumference	China	5	14	99	54	39	4	215	89.73***
		1.16	3.26	23.02	12.56	9.07	0.93	50	
		2.33	6.51	46.05	25.12	18.14	1.86	100	
	Korea	14	21	19	54	84	23	215	
		3.26	4.88	4.42	12.56	19.53	5.35	50	
		6.51	9.77	18.84	25.12	39.07	10.70	100	

<Table 27> Continued

Statistics	Frequency Percent Row Pct	No answer	Dissa- tised	A little dissat- isfied	Normal	A little satisfied	Satisfied	Total	Chi square
Body parts	Nation								
Leg length	China	5 1.16 2.33	9 2.09 4.19	81 18.84 37.67	66 15.35 30.70	46 10.70 21.40	8 1.86 3.72	215 50 100	29.99***
	Korea	14 3.26 6.51	18 4.19 8.37	54 12.56 25.12	102 23.72 47.44	21 4.88 9.77	6 1.40 2.79	215 50 100	
Height	China	5 1.16 2.33	13 3.02 6.05	83 19.30 38.60	66 15.35 30.70	41 9.53 19.07	7 1.63 3.26	215 50 100	23.12***
	Korea	14 3.26 6.51	33 7.67 15.35	57 13.26 26.51	70 16.28 32.56	27 6.28 12.56	14 3.26 6.51	215 50 100	
Weight	China	5 1.16 2.33	8 1.86 3.72	62 14.42 28.84	102 23.72 47.44	35 8.14 16.28	3 0.70 1.40	215 50 100	31.94***
	Korea	14 3.26 6.51	25 5.81 11.63	28 6.51 13.02	90 20.93 41.86	49 11.40 22.79	9 2.09 4.19	215 50 100	
Breast size	China	5 1.16 2.33	7 1.63 3.26	53 12.33 24.65	113 26.28 52.56	32 7.44 14.88	5 1.16 2.33	215 50 100	25.91***
	Korea	15 3.49 6.98	30 6.98 13.95	60 13.95 27.91	82 19.07 38.14	24 5.58 11.16	4 0.93 1.86	215 50 100	
Breast slackening	China	6 1.40 2.79	4 0.93 1.86	33 7.67 15.35	124 28.84 57.67	46 10.70 21.40	2 0.47 0.93	215 50 100	33.90***
	Korea	14 3.26 6.51	202 4.65 9.30	24 5.58 11.16	142 33.02 66.05	14 3.26 6.51	1 0.23 0.47	215 50 100	
Breast opening	China	5 1.16 2.33	0 0.00 0.00	40 9.30 18.60	123 28.60 57.21	44 10.23 20.47	3 0.70 1.40	215 50 100	56.67***
	Korea	14 3.26 6.51	12 2.79 5.58	13 3.02 6.05	164 38.14 76.28	11 2.56 5.12	1 0.23 0.47	215 50 100	

little dissatisfied' for their stature. Chinese women who were shorter were more dissatisfied with their stature.

Many of the Chinese women felt 'normal' or 'a little dissatisfied' for their weight, while many of the Korean women felt 'normal' or 'a little satisfied' for their weight. Namely, the Korean women who weighed less were more satisfied with their weight than the Chinese women. However, the portion (11.63%) of the Korean girls 'dissatisfied' with their weight was higher than that (3.72%) of the Chinese women.

Majority of both groups were more or less dissatisfied with their breast size, but more Korean women having smaller breasts were much dissatisfied.

Majority of both groups felt 'normal' or 'a little satisfied' for their breast slackening. While 66.05% of the Korean women felt 'normal' for their breast slackening, 57.67% and 21.40% of Chinese women felt 'normal' and 'a little satisfied', respectively, for their breast slackening.

Meanwhile, 76.28% of the Korean women felt 'normal' for their breast opening, while 57.21% of the Chinese women felt 'normal' for their breast opening. More Chinese women than Korean women were 'a little satisfied' (20.47%) or 'a little dissatisfied' (18.30%) with their breast opening.

IV. Summary and Conclusion

The results of comparatively analyzing the perceived body shape management between two groups can be concluded as follows;

According to the comparative analysis of demographic variables, it was found that the average monthly income of Korean female students's families ranged wide from a million to 10 million wons, while that of Chinese female students's family was 4,000 yuans (about 400 thousand wons) or below. Korean female students were found to spend 400 thousand wons or less on their apparels, while most of

the Chinese women spent 1,000 yuans or less on their apparels. Only 3.8% of them spent between 1,000 and 6,000 yuans on their apparels. In short, there was a wide gap of apparel consumption between two groups. On the other hand, most of the Korean women surveyed were from Seoul and Kyonggi province, while most of the Chinese women were from the middle parts of China.

Although majority of both groups were not managing their body shapes, more Chinese women (about 40%) bothered to manage their body shapes, which suggests that Chinese women are more concerned about their body shape. Majority of both group members managing their body shapes preferred an exercise.

On the other hand, most of both groups wore brassieres, but Korean women began to wear brassieres earlier, while wearing them for longer hours a day. The ratio of wearing corsets was low in both groups.

As a result of analyzing Korean and Chinese women's perceived slimming or obesity, it was found that Chinese women's rohrer index was higher and that more Chinese women felt they were obese. However, both groups felt similar for their body obesity, which may be attributable to the fact that both groups had similar bust, waist and hip circumference.

Meanwhile, half of Chinese women answered that women's body shapes might be different depending on regions, while only 21% of Korean women felt so. Moreover, half of Chinese women felt that body shapes might be different between Chinese and Korean women. Many of both groups felt that their body shapes might be different from other Asian nation women, but more Chinese women felt so than Korean women.

As a result of analyzing both groups' perceived constitution, there were found significant differences of perception in 9 body parts out of 17 ones. As to the comparison of the self-perception levels on the physical construction between the Korean and Chinese

samples, the self-perception of their physique varied between the two groups on specific body parts. The Chinese female college students responded that they perceived their construction as normal in most of their specific body parts. They thought they were rather short in height, but normal in weight. To be more specific, many of the Chinese women felt 'normal' for their body parts, which suggests that Chinese women are more or less optimistic about their body parts. In contrast, Korean women's perceptions were distributed wide from 'small' to 'big'.

The differences of perception of body parts between two groups can be summed up as follows: More Korean women felt wider for their shoulder width breadth, while perceiving that their breasts were small, hip a little overweight and upper arm circumference was small or overweight. Moreover, more Korean women perceived that their arm length was long, thigh circumference overweight and stature was shorter or higher. Korean women having less obese body perceived that their weight was heavy, which suggests that Korean women wanted to be more slim. Korean women felt small for their breasts.

By contrast, the responses of Korean female college students were more varied in the perception of their specific body parts: slightly small, normal, or large. They perceived their backs and arms were long in length. In height, they perceived that they were rather tall or normal.

Examination on the Korean and Chinese self-perception on obesity of the body as a whole showed that both groups perceived themselves as normal or slightly overweight. More Korean respondents regarded their weight as normal than the Chinese did. The Chinese female college students perceived themselves rather overweight, and held a lower satisfaction level about their physical construction. While the Korean female college students showed low satisfaction level about specific bodily parts, they held a nor-

mal level of satisfaction about their physical construction as a whole. It is noteworthy that more Chinese respondents generally held lower satisfaction impressions about their physical construction than their Korean counterparts.

Accordingly, the writer suggests that Korean enterprises develop products for export to the Chinese market specifically designed to fit the Chinese physical construction as is surveyed by the current study. Such products should also be in line with the Chinese perception of their own physical construction as distinguished from that of Koreans.

There is overwhelming potential in the Chinese fashion market for Korean businesses to tap into. Through a cross-cultural analysis of the Chinese and Korean customers, this study has determined the significance of several variables. It would serve the Korean clothing manufacturers well to consider such variables in the development of marketable products in order to successfully and profitably export to the Chinese market.

This survey is a comparison of body recognition between China and Korea. But the sampling area of each nations are different. It is needed to attention for generalize of this result.

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