# A Study on the Men's Fashion Trend through the Statistical Analysis

Yoon Kyoung Kim<sup>†</sup> · Kyoung Hee Lee

Dept. of Clothing & Textile, Pusan National University

# 통계적 분석을 통한 남성 패션 트렌드 연구

김윤경<sup>†</sup>ㆍ이경희

부산대학교 의류학과

(2006, 8, 21, 접수)

#### Abstract

1,098 pieces of photographs( $1995 \sim 2002$ ) of men's suit style have been classified according to fashion images in order to examine features and change aspects with statistical analysis. The findings of examining features of the trend by year with test of homogeneity, correspondence analysis, biplots, correlation analysis and regression analysis are as follows: (a) there are significant differences on fashion images as the trend by year with test of homogeneity, (b) there are remarkable differences on the fashion trend by year with correspondence analysis and biplots. (c) There are significant correlations for appearance among fashion images by its frequency through correlation analysis, and (d) it is assumed that fashion images are going to be gradually outstanding according to regression analysis.

Key words: Fashion image, Fashion trend, Statistical analysis; 패션 이미지, 패션 트렌드, 통계적 분석

# I. Introduction

At the age of information and economy in the 21th century, a fashion-related company requires the mass order and production system to provide products to meet needs of consumers. The economical value of the mass production through the past simple designs and patterns does not satisfy customers who desire more sensual style, since a society has been diversified and complicated as well as the lifestyle has been changed in many ways.

Today the competitiveness of a fashion company depends on the keen insight to overview the trend and the proposition of a lifestyle of consumers that would be changed of the trend, in other words, the development of various designs to predict the trend.

<sup>†</sup>Corresponding author

E-mail: kyk1007@hanmail.net

A trend on the fashion indicates to a fashion tendency to next season. Therefore, a fashion trend is not simply a tool for either utility or pleasure of clothes but cultural codes deeply reflects on the trend(Yoon, 2002) and so that it is feasible to suggest the future trend with data analysis of the objective method about the past fashion tendency.

Previous studies on the fashion trend are insufficient to objectivity in the analysis method about positive data as well as subjective interpretations of the researcher has been too much influenced in those studies. Furthermore, it is assumed that the analysis about world famous collection data, which apply to planning and developing of a design in the fashion company is essential in order to utilizing of those analysis in the actual fashion industry.

Therefore, the purpose of this study is to provide reliable data for change aspects, features and also prediction of the trend by analyzing with the statistical method on men's clothes that have been recently arisen as a dark horse on the fashion field through positive data.

## II. Fashion and Trend

Nystrom(1928), an economist, in his book *Economic of Fashion* refers that a fashion is the style that is being popular to many people in the specific time and place. King(1963) mentioned that a fashion is the social propagation process by the time to be chosen by consumers since new products have been introduced by designers, while Horn(1968) referred that the fashion is an expression of collective behaviors and dominated style to be commonly accepted in the specific time.

In addition, a fashion has become a reflection to the times, which implies a meaning on the creation and distribution of unlimited value of information as the change of the times and a zeitgeist as well as an intermediary between human and social and cultural environments(Park, 2000).

Meanwhile, a trend refers to the fashion trend to be appeared in next as the term of fashion, which means 'a direction, a tendency, movement, vogue' and so on (Fashion dictionary, 1999). It indicates that the new tendency of a fashion can be seen in the fad. The reason that the trend considered seriously in the fashion is due to an influence of the society and culture about clothes of a human and its behavior. In addition, this opinion is supported by the view point that the shape of clothes has been changed according to the social and cultural environment and clothes is a kind of the symbol, as well as a human wears clothes as a tool to adapt oneself to a social participation and the world.

A trend has been set up the current society and it is the power that always exists to make our future from now on. Therefore, it is essential to examine current cultures thoroughly to figure out the future trend (Popcorn & Marigold, 1998/1999)

Hence, a fashion trend is the feature of the style to be wide-spread in the following season and the direction of a movement to be shown in the fashion. In addition, it is a tendency to be accepted by consumers in the end(Greenwood, 1987). Moreover, it is assumed that the analysis about the trend on a view of a fashion is absolutely necessary as the trend is to be accepted and taken by a great number of people in the definite times.

To review related studies related to the analysis on the fashion trend, they are the trend analysis focused on the fashion information publications(Lee, 2001; Nahm & Geum, 2001; Oh et al., 1999; Park, 2000) and the analysis on vocabularies of the trend(Yoon, 2002), the analysis on an acceptance rate of the trend to examine the degree to be influenced into consumers(Choi, 2002; Kim, 2001; Lee & Lee, 2002; Shin, 2001) and so forth. Those studies mentioned above, were either focused on the subjective interpretation of the researcher, which is based on the positive data through the frequency analysis or were mostly analyzed on the response of consumers on the view of the marketing, so that it is insufficient for the trend analysis to do the objective interpretation by proper statistical method.

According to related studies, a trend in the fashion regards as the feature of new fashion selected by most people in the following season. With this view point, the trend that is focused on in the recent fashion field, might be men's fashion.

A fashion for men who desire to work out their own style with a change of their lifestyle, helps to build up their unique and differential themselves. The change of men's clothes in the fashion field is truly remarkable and its possibility to develop is expected to be much bigger and various. Due to the change code of less complicated design compared to women's clothes, the objective analysis for fashion trend is considered to offer substantial supports to build up design planning and marketing strategy of the fashion field.

Since the style that presented in the seasonal collection out of a great deal of fashion information, is reflected on the fashion company, it might be very effective to analyze features of the trend through the statistical analysis with analyzing men's fashion shown in the collection. Therefore, the purpose of this study is to provide reliable data to figure out features and predict the trend by an objectification of the trend of men's fashion presented in the collection through statistical analysis.

#### III. Methods

On the design of fashion products, it is important to the value of an aesthetic image of users. Since the approach method with image is more suitable than technical and functional approach in order to develop designs to be close to consumers(Choi, 1997), a trend should be presented to be focused on the fashion image.

#### 1. Data Collection & Classification

In order to analyze the men's fashion trend, with consideration of the suit style of jacket and trousers, which was the basic prototype for the men's fashion, we have randomly collected 1,291 clothing photos according to year, season, and city. Those clothes were collected from the magazines for men's fashion collection, such as Men's Collections and Uomo Collezioni which has been used practically in the academic and business field and were not overlapped of year and season.

1996

143(13.02) | 157(14.30) | 100( 9.11)

1997

Before the photos were classified, the terms related to fashion images were extracted from men's fashion magazines, other materials related to fashion trend, clothing descriptions of collection magazines(1995  $\sim$ 2002), and so forth. Then, those data were analyzed of frequency.

Collected clothing photos were classified according to fashion image by 5 people who have degrees on fashion(3 Ph.D above, 2 M.A above), and then 1,098 clothes with 12 fashion images accounting for over 3% of the total were selected. Representative fashion images selected are Sophisticated, Casual, Elegant, Active, Natural, Classic, Romantic, Ethnic, Military, Marine, Colonial, and Avant-garde.

#### 2. Data Analysis

In order to understand the change in the men's fashion trend by year through the 12 representative fashion images, quantitative analysis using statistical methods was conducted. Therefore, in this study, it has examined change features of the trend by conducting the test of homogeneity, a correspondence analysis, a regression, a correlation analysis, biplots with the frequency sorted the fashion trend by fashion images. There are the statistical analysis method

2001

152(13.84)

2002

169(15.39)

year image	1775	1770	1777	1776	1///	2000	2001	2002	totai
Sophisticated	28(19.58)	35(22.29)	29(29.00)	29(34.52)	39(27.27)	59(39.33)	36(23.68)	51(30.18)	306(27.87)
Casual	20(13.99)	20(12.74)	10(10.00)	17(20.24)	31(21.68)	32(21.33)	32(21.05)	36(21.30)	198(18.03)
Elegant	20(13.99)	22(14.01)	12(12.00)	13(15.48)	20(13.99)	16(10.67)	12( 7.89)	8( 4.73)	123(11.20)
Active	16(11.19)	13( 8.28)	15(15.00)	4( 4.76)	13( 9.09)	14( 9.33)	15( 9.87)	23(13.61)	113(10.29)
Natural	16(11.19)	11( 7.01)	8( 8.00)	5( 5.95)	9( 6.29)	10( 6.67)	3( 1.97)	7( 4.14)	69( 6.28)
Classic	17(11.19)	21(13.38)	7( 7.00)	6( 7.14)	2( 1.40)	5( 3.33)	5( 3.29)	1( 0.59)	64( 5.83)
Romantic	9( 6.29)	5( 3.18)	1( 1.00)	4( 4.76)	4( 2.80)	6( 4.00)	12( 7.89)	18(10.65)	59( 5.37)
Ethnic	5( 3.50)	8( 5.10)	8( 8.00)	3( 3.57)	2( 1.40)	1( 0.67)	12( 7.89)	6( 3.55)	45( 4.10)
Military	3( 2.10)	2( 1.27)	1( 1.00)	0( 0.00)	3( 2.10)	4( 2.67)	11( 7.24)	8( 4.73)	32( 2.91)
Marine	9( 6.29)	8( 5.10)	4( 4.00)	0( 0.00)	1( 0.70)	1( 0.67)	3( 1.97)	4( 2.37)	30( 2.73)
Colonial	0( 0.00)	10( 6.37)	4( 4.00)	2( 2.38)	8( 5.59)	0( 0.00)	2( 1.32)	3( 1.78)	29( 2.64)
Avant-garde	0( 0.00)	2( 1.27)	1( 1.00)	1( 1.19)	11( 7.69)	2( 1.33)	9( 5.92)	4( 2.37)	30( 2.73)

Table 1. Distribution of fashion image regarding year

1999

143(13.02)

2000

150(13.66)

1998

(n(%))

total

1098(100)

degrees of freedom: 77  $\chi^2$ : 218.35(p<.001)

1995

vear image

total

84( 7.65)

to be used to interpret objectively the trend.

## IV. Results and Discussion

# 1. Homogeneity Test on Fashion Trend by Year

Homogeneity test was conducted to understand the difference of fashion images by year. The test showed that specific fashion images are relevant to year.

<Table 1> indicates the relationship between year and fashion image. Generally, Sophisticated and Causal image are dominant fashion trend through all the target year. While image of Sophisticated, Casual, Elegant, Active, and Classic are dominant fashion trend in 1995, Sophisticated, Casual, Elegant, Active, and Classic image are in 1996. In 1997, Sophisticated, Casual, Elegant, Natural, and Ethnic are leading images while Active image becomes more outstanding than the previous year. In 1998, with Sophisticated and Elegant image, Casual image are outstandingly popular. In 1999, while Sophisticated, Causal, Elegant, and Active image are precated.

dominant, Avant-garde image becomes relatively high in frequency although it is still low compared with other images. In 2000, Sophisticated, Casual, Elegant, and Active image are prominent.

Season 2001 has different aspects in that Romantic, Ethnic, Military, and Avant-garde image are relatively shown frequently while Sophisticated, Casual, and Active image are remarkable. In 2002, Sophisticated, Casual, and Active are main images. In addition, Elegant image becomes lower in frequency while Romantic image becomes outstanding.

# 2. Relationship between Year and Fashion Image

Correspondence analysis was conducted to find out the relevance between fashion image and year, and it was shown on <Fig. 1>.

<Fig. 1> shows that there is different fashion trend regarding fashion image between period of 1995  $\sim$  1998 and that of 1999  $\sim$  2002. Moreover, as to each quadrant, fashion trend is changed in each 2 years.

Regarding fashion image, Sophisticated, Casual,

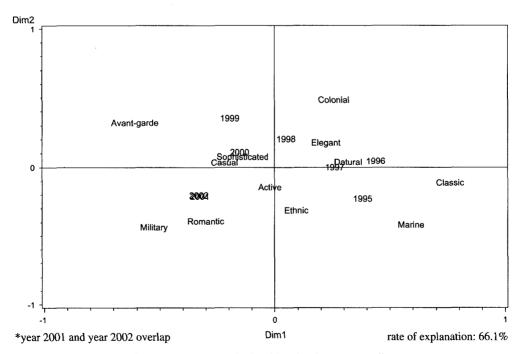


Fig. 1. Correspondence analysis of fashion image regarding year.

				_		•		
year image	1995	1996	1997	1998	1999	2000	2001	2002
Sophisticated	-0.91	-0.29	-0.82	-0.82	-0.07	1.85	-0.20	1.13
Casual	-0.52	-0.52	-1.60	-0.84	0.68	0.79	0.79	1.22
Elegant	0.94	1.35	-0.69	-0.48	0.94	0.13	-0.69	-1.50
Active	0.36	-0.22	0.17	-1.95	-0.22	-0.03	0.17	1.71
Natural	1.87	0.60	-0.16	-0.92	0.10	0.34	-1.42	-0.41
Classic	1.26	1.82	-0.14	-0.28	-0.84	-0.42	-0.42	-0.98
Romantic	0.30	-0.44	-1.17	-0.62	-0.62	-0.25	0.85	1.95
Ethnic	-0.17	0.65	0.65	-0.72	-0.99	-1.26	1.74	0.10
Military	-0.27	- 0.54	-0.81	-1.08	-0.27	0.00	1.89	1.08
Marine	1.60	1.29	0.07	-1.14	-0.84	-0.84	-0.23	0.08
Colonial	-1.00	1.76	0.10	-0.45	1.21	-1.00	-0.45	-0.17
Avant-garde	-0.92	-0.43	-0.68	-0.68	1.79	-0.43	1.29	0.06

Table 2. Z-score of fashion image regarding year

Elegant, and Active image are located together on the center of the map, which means that 4 fashion images are noticed as fashion trend regardless of year.

As to year, year of 1995 corresponds to image of Classic and Marine, which means that Classic and Marine image are outstanding as fashion trend in this year. Year of 1996 corresponds to Classic and Natu-

ral, 1997 to Natural, and 1998 to Elegant. Year of 1999 corresponds to Avant-garde, 2001 and 2002 to Military and Romantic in spite of low frequency, these images become trend. Besides, year 2001 and year 2002 overlap on the map. This means that 12 fashion images have similar frequencies for 2 years, so there is no difference in fashion trend between year 2001 and 2002.

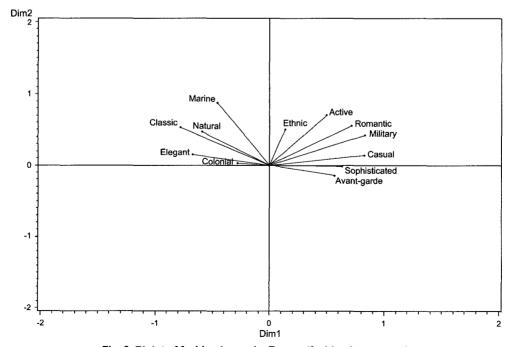


Fig. 2. Biplot of fashion image by Z-score(fashion image-year).

To understand fashion image whose frequency is comparatively lower than others on the map of correspondence analysis, Z-score was calculated and <Table 2> indicates the result.

Outstanding fashion images as fashion trend by year through Z-score of fashion image are as follows. In 1995, Natural, Marine, Classic, and Elegant image have positive values, which means that they become outstanding. Classic, Colonial, Elegant, and Marine image are prominent in 1996, while Ethnic, Active, Colonial image have smaller values than the previous year in 1997.

In 1998, Z-scores of all fashion images are negative. It means that there is no specific fashion image considered as main trend in this year. Thus, this year has different trend from previously. In 1999, Colonial, Elegant, and Casual are outstanding images while Avant-garde image are noticed as trend. In 2000, Casual and Natural, along with Sophisticated, are remarkable.

In 2001, along with Military image, Ethnic, Avantgarde, and Romantic are main trend, which means that other fashion images differing from previously become important. In 2002, while Romantic image are predominant, Active, Sophisticated, Casual, Military image are noticed as trend.

Yearly outstanding fashion images via Z-score show slightly different results from distribution result of frequency. It reflects the importance of change in fashion images, which are relatively low in frequency, as trend. Thus, it will be a helpful resource to induce social, cultural factors influencing trend. Biplots with Z-score was conducted to find out the relative relationship between year and fashion image.

<Fig. 2> shows the biplot in the row for fashion image. After checked if the slope of a straight line between two points is close to zero, Natural and Classic image, Sophisticated and Casual image, and Romantic and Military image have a relationship.

<Fig. 3> indicates biplot in the column for year. Like the result from correspondence analysis, the year movement is changed in 2 year unit. Year 1995 and year 1996 have a relatively similar tendency. Year 1999 and year 2000, and year 2001 and year 2002 have a similar tendency respectively as well.

<Fig. 4> shows the relative tendency from the combination of matrix for fashion image and that for year. In 1995 and 1996, Marine, Classic, Natural, Elegant, and Colonial are comparatively outstanding compared with other years. Avant-garde and Sophis-

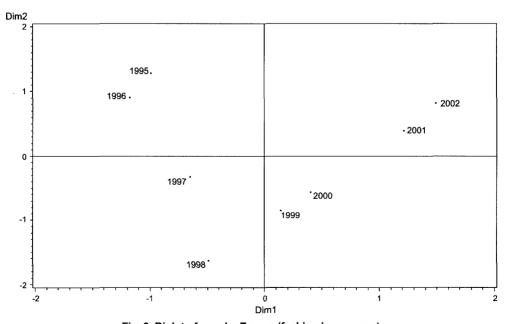


Fig. 3. Biplot of year by Z-score(fashion image-year).

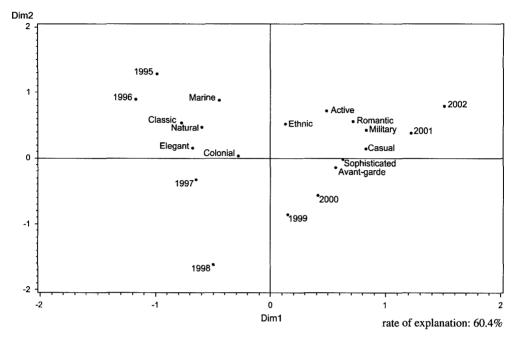


Fig. 4. Biplot of fashion image-year by Z-score.

ticated image are main trend in 1999 and 2000. Ethnic, Active, Romantic, Military, and Casual are leading trend in 2001 and 2002. In 1998, unlike other years, there is no relationship between this year and special fashion image, which shows a different aspect from others. These results make it possible to notice images, which are not remarkable in frequency, such as Marine, Colonial, Military, and Ethnic as trend.

## 3. Correlation among Fashion Images

Correlation among fashion images through the biplot in the row can be understood in detail by correlation coefficient through the correlation analysis among fashion images by Z-score. The distance between the origin and the point of biplot has relation to correlation coefficient.

The result of correlation analysis in <Table 3> shows that there is a strong relationship between Sophisticated and Casual; Causal and Military; Classic and Marine; and Romantic and Military respectively. Weak relationship is in between Casual and Romantic; Active and Romantic; and Natural and Marine,

and among Elegant, Classic, and Natural respectively. It can be interpreted that more Sophisticated images are there, more Casual images are shown. This result is helpful to predict which fashion images will together come into fashion.

### 4. Linearity of Fashion Images

In order to predict upcoming fashion trend by checking the change in fashion image by year, regression analysis was conducted with 8 years frequency of each fashion image. Although its not easy that fashion image becoming outstanding as fashion trend has a stable direction because of change in fashion environment, it is necessary to predict the tendency because it will be helpful in reducing the level of inventory in the fashion industry.

To understand the linearity of fashion image according to year, the result through the simple linear regression analysis is shown in <Table 4>. P-value in <Table 4> is a standard to determine the linearity of fashion image. If p-value of fashion image is lower than 0.1, the null hypothesis that there is no linear relationship with fashion image with smaller value

image	sophisti- cated	Casual	Elegant	Active	Natural	Classic	Romantic	Ethnic	Military	Marine	Colonial	Avant- garde
Sophisticated	1.00000		_									
Casual	0.76489 0.0270	1.00000										
Elegant	-0.22109 0.5988	-0.18660 0.6582	1.00000	!				-				
Active	0.43464 0.2819	0.47863 0.2302	-0.28681 0.4910	1.00000								
Natural	-0.07454 0.8608	-0.21832 0.6035	0.68895 0.0588	0.19003 0.6522	1.00000							
Classic	-0.45468 0.2577	-0.50765 0.1990	0.68124 0.0628	-0.13844 0.7437	0.64034 0.0872	1.00000						
Romantic	0.40847 0.3150	0.69965 0.0534	-0.47428 0.2351	0.68951 0.0585	-0.15798 0.7087	-0.24560 0.5577	1.00000					
Ethnic	-0.37199 0.3642	-0.12180 0.7739	-0.26033 0.5335	0.28819 0.4888	-0.34585 0.4014	0.22910 0.5852	0.28008 0.5017	1.00000				
Military	0.39786 0.3290	0.74991 0.0321	-0.43852 0.2771	0.60154 0.1147	-0.40894 0.3144	-0.36141 0.3791	0.80699 0.0155	0.51616 0.1904	1.00000			
Marine	-0.34614 0.4010	-0.28108 0.5001	0.41280 0.3094	0.40405 0.3208	0.67249 0.0677	0.82114 0.0125	0.17361 0.6810	0.41871 0.3019	-0.01175 0.9780	1.00000		
Colonial	-0.16916 0.6888	-0.10171 0.8106	0.44926 0.2641	-0.06547 0.8776	0.00871 0.9837	0.25915 0.5354	-0.30301 0.4657	0.13864 0.7434	-0.23425 0.5766	0.15909 0.7067	1.00000	
Avant-garde	0.17354 0.6811	0.61684 0.1033	-0.00178 0.9967	0.13033 0.7584	-0.44162 0.2733	-0.51145 0.1951	0.19200 0.6488	0.13685 0.7466	0.54131 0.1659	-0.39087 0.3383	0.34219 0.4067	1.00000

Table 3. Correlation coefficient among fashion images by Z-score

*p*<.1

than 0.1 is rejected. So the fashion image was interpreted that it has an increasing or decreasing tendency according to year.

P-value of Causal image is 0.02, which means that it has the linearity according to yearly change. The slope of the change is positive value(3.00), so it can be explained that Casual image has an increasing tendency in frequency. From this perspective, Military and Sophisticated image have a increasing trend according to year respectively.

P-value of Classic image is 0.01, which means it has the linearity according to year. However, the slope of the change is negative value(-2.41). It means that the frequency of appearance of Casual image is decreasing year by year. Similarly, Elegant and Natural image has a decreasing trend according to year respectively. With these results, the frequency value for the next years fashion image can be calculated through the regression formula.

Through the regression formula above, the fre-

quency forecast for Sophisticated image in 2003 can be computed as 24.000+3.166667x. X-value is 1, 2, 3, etc. By putting x=9 into the formula, the forecast for the frequency of Sophisticated image in 2003 is 52.50.

This regression formula is made out of frequencies of fashion image in the collection for 8 years. What should be considered is that various factors such as society and culture can affect trend. Thus, in case of predicting the quantity forecast in the fashion industry, it needs adjustment of the forecast according to image or concept which a brand publishes.

#### V. Conclusions

The purpose of this study is to make a basic resource for predicting future fashion trend and designing by examining the feature of fashion trend through the objective method statistical analysis.

The results of the study are as follows:

Table 4. Regression of fashion image regarding year

item image	Variable	DF	Parameter Estimate	Standard Error	t-value	Pr >  t
	Intercept	1	10.64	4.07	2.61	0.04
Active	year	1	0.77	0.81	0.96	0.37
	Intercept	1	-0.32	2.87	-0.11	0.91
Avant-garde	year	1	0.91	0.57	1.59	0.16
	Intercept	1	11.25	4.67	2.41	0.05
Casual	year	1	3.00	0.93	3.24	0.02
Ci :	Intercept	1	18.82	3.41	5.51	0.00
Classic	year	1	-2.41	0.68	-3.56	0.01
	Intercept	1	4.96	2.99	1.66	0.15
Colonial	year	1	-0.30	0.59	-0.50	0.63
	Intercept	1	21.54	3.04	7.09	0.00
Elegant	year	1	-1.37	0.60	-2.28	0.06
D.1.	Intercept	1	5.36	3.08	1.74	0.13
Ethnic	year	1	0.06	0.61	0.10	0.93
	Intercept	1	7.39	2.20	3.36	0.02
Marine	year	1	-0.81	0.436	-1.86	0.11
	Intercept	1	-0.92	2.15	-0.43	0.68
Military	year	1	1.10	0.43	2.57	0.04
National	Intercept	1	13.61	2.43	5.60	0.00
Natural	year	1	-1.11	0.48	-2.30	0.06
Domentic	Intercept	1	1.32	3.65	0.36	0.72
Romantic	year	1	1.35	0.72	1.86	0.11
Ch.ii.	Intercept	1	24.00	6.85	3.50	0.01
Sophisticated	year	1	3.17	1.36	2.33	0.06

p < .1

First, there are relations on certain fashion images by year as the result of the homogeneity test to examine a variation of the fashion trend by year. In general, the trend has presented that Sophisticated and Casual image were appeared as the dominated fashion trend and it has a tendency that a fashion image having its outstanding variation in every year. In 1995 Natural, Marine, and Classic image and in 1997 Ethnic, Active, Colonial image and there was no specific trend in 1998. Avant-garde image was shown remarkably in 1999 and Sophisticated and Casual in 2000, Natural image have mostly shown, and Military image in 2001 and Romantic, Active, and Casual image in 2002.

Therefore, in men's fashion, except from change in

detailed parts in design, Sophisticated, Casual and Elegant image are the predominant fashion trend. Other fashion images become trendy factors by fashion environment including society, politics, and culture.

Second, to examine an aspect of the combination how relations have been presented between the year and fashion image, the result of correspondence analysis is as follows. It is shown that mainly 1995~1998 and 1999~2002 have different figures that indicates that the year of 1998 and 1999 is a turning point that different fashion images were shown outstanding as the fashion trend. In addition, it shows that the fashion trend tends to change every two years. Furthermore, Sophisticated, Casual, Elegant, Active images

have shown remarkable as the fashion trend regardless of year.

Meanwhile, to examine an importance of fashion images as the trend, which have relatively low frequency, the result of biplots with Z-score reveals slightly different aspects compared to the earlier result of the distribution by frequency. In this part, marine, colonial, military, ethnic images can be seen as the trend, which were not significantly obvious to change due to relatively low frequency. This reflects the importance of change in fashion image, which is shown in relatively low frequency, as trend. It will be good resource to induce social, cultural factors influencing trend.

Third, to figure out correlation between fashion images, the result of correlation analysis is that there are strong relations in between Sophisticated-Casual, Casual-Military, Classic-Marine, Romantic-Military images, while weak relations in between Casual-Romantic, Elegant-Classic-Natural, Active-Romantic, Natural-Marine images.

Newly rising fashion images as trend have relevance with similarity or relevance given by the feature of design or image; with external fashion environment.

Fourth, the result of regression analysis to predict next seasons frequency through the linearity of seasonal fashion image shows that Causal, Military, Sophisticated image have an increasing trend year after year while Classic image is apt to decline.

Therefore, it can be predicted that Casual, Military, Sophisticated image will be strong continuously. Thus, it will be helpful to adjust the amount of products considered inventory and proportion of development in the fashion industry.

This study is meaningful in that it scientifically analyzed the features of the men's fashion trend through the collection analysis actually reflected in design planning in the fashion industry. The worth of the study would arise if the following studies analyzed and examined the changing cycle by expanding the range of study so that the database for predicting the men's fashion trend was completed. The other side, this paper was exclusive of the study for the complex image and so that it deems that more

specific study should be conducted for complex and delicate images.

#### References

- Choi, Y. D. (2002). A study on the fashion planing based on domestic consumer's lifestyle and preference of current fashion trends: Focused on the women's wear brands T and M. Unpublished master dissertation, Yonsei University. Seoul.
- Choi, W. C. (1997). Study on the sensitive approach in the product design-Giving emphasis to the materialization of the sound image in the faive senses-. Unpublished master dissertation, Kookmin University, Seoul.
- Fashion dictionary compilation committee. (1999). Fashion dictionary. Seoul: Kyomunsa Co. Ltd.
- Greenwood, K. M. (1987). Fashion innovation and marketing. N.Y.: MacMillan Pub Co.
- Horn, M. J. (1968). The second skin: An interdisciplinary study of clothing. Boston: Houghton Mifflin.
- Kim, S. H. (2001). A study on consumers' acceptance of the sportive fashion trends according to their lifestyle. Unpublished master dissertation, Yonsei University, Seoul.
- King, C. W. (1963). Fashion adoption: A rebuttal to the trickle down theory. In S. A. Greyser (Ed.), *Toward sci*entific marketing (pp. 108–125). Chicago: American Marketing Association.
- Lee, J. E. & Lee, J. H. (2002). A study of golfwear design based on the analysis of the sportswear trend and acceptance of domestic female golfers of it. Proceedings of the Korean Society of Clothing and Textiles Conference, 4, 26–26.
- Lee, J. J. (2001). Influences of fashion trend information on design plan for women's wear. Unpublished master dissertation, Sookmyung Women's University, Seoul.
- Nahm, J. K. & Geum, K-S. (2001). A study on the analysis of fashion trends in 1990s-Focus on the themes of women's fashion-. *Journal of the Korean Society of Clothing and Textiles*, 25(9), 1645–1654.
- Nystrom, P. (1928). *Economics of fashion*. N.Y.: The Ronard Press Co.
- Oh, J. H., Kim, Y. K., & Park, G. S. (1999). Originals: A study on the comparative analysis between '98 fashion trend and Korean women's dress in 1998. *Journal of* life & science researches: Chungnam University, Korea, 11(1), 115–134.
- Park, S. H. (2000). Comparative study on fashion trends between korean and foreign fashion collections in the 1990s. Unpublished master dissertation, Seoul National University, Seoul.
- Popcorn, F. & Marigold, L. (1999). Click! in the future (Cho, E. J. & Kim, Y. S., Trans.). Seoul: Book21. (Origi-

nal work published 1998)

Shin, H. S. (2001). An analysis of consumer's acceptance and needs for the recent fashion trends in domestic women's wear market-focused on 1998-2001's fashion trends-. Unpublished master dissertation, Yonsei University, Seoul.

Yoon, S. J. (2002). A qualitative research on the hybrid of fashion trends-Fashion trends of 1995 S/S~01/02 A/W-. Unpublished master dissertation, Yonsei University, Seoul.

# 요 약

남성 패션 트렌드의 특성 및 변화양상을 객관적으로 살펴보기 위해 남성복 수트 스타일의 사진 1,098 장(1995~2002)을 패션 이미지를 중심으로 분류하여 통계분석을 실시하였다. 연도별 패션 트렌드의 변화추이를 살펴보기 위해 동일성 검정을 실시한 결과, 전반적으로 Sophisticated와 Casual 이미지가 지배적인 패션 트렌드로 나타났다. 대응분석을 통해 연도와 패션 이미지사이의 연관성을 살펴 본 결과, 1995년~1998년과 1999년~2002년이 서로 다른 방향으로 분포되어 있어 1998년과 1999년을 기점으로 서로 다른 패션 이미지들이 패션 트렌드로 부각됨을 알 수 있었다. 한편 상대적으로 낮은 빈도의 패션 이미지에 대한 트렌드로서의 중요성을 살펴보기 위하여 Z점수를 산출하여 행렬도 분석을 한 결과, Marine이나 Colonial, Military, Ethnic 이미지의 부각이 나타났다. 패션 이미지 사이의 상관관계를 알아보기 위하여 상관분석을 실시한 결과, Sophisticated-Casual, Casual-Military, Classic-Marine, Romantic-Military 이미지 사이에 강한 연관성이 나타났다. 연도별 패션 이미지의 선형성을 통해 다음 시즌의 출현정도를 예측하기 위하여 회귀분석을 실시한 결과, Casual, Military, Sophisticated 이미지의 경우 연도에 따라 증가추세를 보이고 있으며 Classic은 감소하는 경향을 보이는 것으로 나타났다. 이 연구는 남성복 컬렉션에 나타난 패션 트렌드를 통계분석을 통한 객관적인 방법으로 그 특성과 차이를 살펴봄으로써 앞으로의 패션 트렌드를 예측하고 디자인을 기획하는데 기초 자료로 활용되고자 하는 목적에서 이루어 졌다.