Gender Differences in Fashion Awareness and Clothing Expenditures

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유행 인지도와 의복비 지출에 대한 남녀 차이 연구

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요 약

본 연구는 미국 CBS 뉴스에서 수집한 자료를 사용하여 라이프스타일이 남녀 외복행동에 미치는 영향을 조사하였다. 의복과 관련된 4가지 라이프스타일이(레크레이션, 경제적, 편의적, 외모에 신경을 쓰는) 자료에 입자하여 고안되었다. 인구통계학적 변인과 라이프스타일과의 관계분석에 따르면, 여성이 남성보다 레크레이션, 편의적, 외모에 신경을 쓰는 라이프스타일을 갖는 경향이 높았다. 또한, 젊은층은 레크레이션, 평제적, 외모에 신경을 쓰는 라이프스타일을, 반면 저소득층은 경제적 라이프스타일을 갖는 경향이 있었다. 유행 인지도와 의복비 지출의 남녀 차이 분석결과, 유행인지도에서 여성이 남성보다 높았으나, 의복비 지출에 있어서는 남녀 차이가 없었다. 레크레이션 라이프스타일을 가진 남녀 모두 유행을 더 많이 인지하고 있었으며, 경제적 라이프스타일을 가진 여성이 의복비 지출이 높은 것으로 나타났다.

I. INTRODUCTION

Marketers need to define their target audience and make informed marketing/media decisions. Over the years, lifestyle analysis has been widely used as a reliable market segmentation tool. The influence of lifestyle on consumer behavior has been studied as a reflection of distinct lifestyle patterns that emerge from the different modes of consumption activities. As described by Plummer¹⁾,

"lifestly deals with everyday, behaviorally oriented facets of people as well as their feelings, attitudes, and opinions." He also argued that "lifestly patterns combine the virtues of demographics with the richness and dimensionality of psychological characteristics and in-depth research." Some studies used psychographics in conjunction with demographics to illustrate the complementary nature of these two market segmentation tools^{2,3)}. Furthermore, lifestyle analysis was found to be an important determinant of evaluative criteria by which consumers select a

product4).

Despite the recognized usefulness of lifestyle analysis in marketing, few studies have investigated the consumer's lifestyle with respect to clothing behavior. Most of the studies were concerned with verifying the relationship between lifestyle and evauative criteria for apparel selection. For instance, Shim and Drake⁵⁾ found relationships among evaluative criteria, lifestyle, and four consumer information search patterns.

Another area of clothing studies that has been considerably neglected by researchers is gender difference in clothing behavior. As noted by Stith and Goldsmith⁶⁾, most studies in the literature used either male or female subjects. This lack of research on gender issues in clothing may hinder understanding of clothing behavior as it manifests itself in modern lifestyles that increasingly demand active participation from men as well as women.

In the tradition of the previous lifestyle studies, the present study examined the relationship between clothing-related lifestyles and clothing behavior. More than confirming the relationship, however, this study attempted to investigate whether a complementary relationship existed between demographics and lifestyles in gender based clothing behavior. Specific to clothing behavior, fashion awareness and clothing expenditure variables were explored. The objectives of this study were therefore twofold:

- 1) To apply lifestyle analysis to understanding consumer's clothing behavior by gender.
- To verify the complementary relationship between lifestyles and demographics.

Specifically, the importance of this study may be found in its attempt to ascertain the effectiveness of lifestyle analysis incorporating demographics in enhancing the predictive power of the consumer behavioral model on clothing. Also, the notable scarcity in the literature of studies which investigated consumers of both genders makes this study a

worthwhile contribution. Furthermore, this study may provide important marketing/retailing implications based upon understanding consumer's clothing behavior as it directly relates to clothing purchases.

II. REVIEW OF LITERATURE

Since the primary focus of this paper is on the application of lifestyle analysis to its understanding of two specific aspects of consumer clothing behavior, the current literature was reviewed in three areas: lifestyle analysis, fashion awareness, and clothing expenditures.

Most studies applying lifestyle analysis were aimed at identifying major psychographic and/or demographic characteristics associated with each lifestyle segment^{7,8)}. For example, Bellenger, Robertson and Greenberg⁹⁾ identified two shopper types based upon shopping behavior: "recreational shoppers" and "convenience shoppers." The former enjoyed shopping and spent more time shopping while the latter were interested in convenience and price. And "convenience shoppers, in general, were better educated and had higher incomes than "recreational shoppers." Using employment orientation for social apparel evaluative criteria, Cassil and Drake4) found that career-oriented women were more interested in "appropriateness" (suitability to individual and good fit), while job-oriented women were more interested in "economy" (good buy and price).

Previous literature on fashion awareness was mostly concerned with identifying the inherent attributes of people with a high level of fashion consciousness. For instance, Horridge and Richards¹⁰⁾ found people with interest in fashion placed importance on the social acceptance of clothing.

Only a few studies on fashion awareness have demonstrated differences in clothing behavior between men and women. For example, Solomon and Schopler¹¹⁾ concluded that men showed more public self-consciousness in various clothing measures than women, and that men were more anxious to present themselves as a valuable social commodity. Goldsmith, Stith, and White¹²⁾ found that female consumers scored higher on both fashion innovativeness and fashion consicousness than male consumers. Stith and Goldsmith⁶⁾, in a replication study with an improved sampling method, confirmed the previous finding that women reported greater fashion innovationess and fashion opinion leadership.

Previous cross-sectional studies on clothing expenditures have generally investigated the effects of demographic variables (e.g., income, education, sex, occupation, race, age, residential location) upon consumer's spending on clothes. The results of these studies have been generally inconsistent. However, income has been found to play a major role in explaining the variations of clothing expenditures^{13,14}).

Ryan¹⁵⁾ concluded from a literature review that income and women's employment were positively related to clothing expenditures. Also, people between sixteen and twenty-five years old in this sample were prone to spend more on clothing than any other age group. Erickson¹⁴⁾ found that people in the age group 18 to 24 had the highest clothing expenditures of any age group and that women spent more on clothing than did men. Frisbee¹⁶⁾ investigated the relationship between clothing expenditures and demographic characteristics. He found that clothing expenditures increased with age, in contrast to the findings by Ryan¹⁵⁾ and Erickson¹⁴⁾.

Dardis, Derrick, and Lehfeld¹³⁾ examined factors influencing clothing expenditures. They found that clothing expenditures were positively related to income and education, and negatively related to age. Their findings showed that blacks spent more

than non-blacks and that working wives spent more than non-working wives. Norum¹⁷⁾ noted that income, education, occupation, age and marital status had singnificant effects on clothing expenditures. However, no significant difference in clothing expenditures between blacks and non-blacks was observed. Also, Goldsmith, Stitch, and White¹²⁾ did not find a significant effect of race on clothing expenditures.

HYPOTHESES

The following hypotheses were established in order to carry out the two study objectives set forth earlier:

- H1. a. Demographics and clothing lifestyles influence fashion awareness by gender.
 - b. The full model (including demographics plus lifestyles) will predict fashion awareness
 better than the restricted model (including demographics only).
- H2. a. Demographics and clothing lifestyles influence clothing expenditure by gender.
 - b. The full model (including demographics plus lifestyles) will better predict clothing expenditures than the resticted model (including demographics only).

III. PROCEDURE

1. Data

The data used in this study were made available by the Inter-university Consortium for Political and Social Research (ICPSR). The data were originally collected and prepared by CBS News under the title, "CBS Morning News" Shopping Habits and Lifestyles Poll, January 1989. The sample included 594 U.S. adults over age 18. Respondents were selected in the CBS News/New York Times nation-wide telephone survey through a variation of random-digit dialing. The data contained 67 survey ques-

tions which focused on the individual values, interests, and attitudes related to clothing habits and lifestyles.

2. Variables

Using survey questions, the four clothing-related lifestyle segments representing respondent's clothing values, interests, and attitudes were constructed (see Table 1). For example, those who described shopping for clothes as a pleasure were classified into recreational shoppers while those who described it as a chore were classified into nonrecreational shoppers. The terms for the lifestyle segments were partially adopted from the shopper classifications used by Bellenger, Robertson, and Greenberg⁹⁾. They based the shopper types upon the two criteria of information seeking and time/money value. For instance, recreational shoppers were more prone to seek shopping information and to enjoy shopping than convenience shoppers, while convenience or economic shoppers emphasized saving time or money. The outlook-minded lifestyle was added to reflect the shoppers' buying motiva-

Table 1. Lifestyle Survey Questions

Recreational
Those who answered
"pleasure" to a question
"In general, would you
describe shopping for
clothes as more of a plea-
sure or more of a chore?"
Economic
Those who answered
"always or most of the
time" to a question, "When
you buy clothes, how often
do you make a point o

buying clothes on salealways, most of the time,

only some of the time, or

hardly ever?"

Convenient

Those who answered "yes" to a question "Have you ever bought clothes from a mail-order catalog?"

Outlook-Minded

Those who answered "yes" to a question "Does what you wear ever make you feel better or worse about yourself?

tion as it relates to enhancing their physical attractiveness.

These four clothing-related lifestyle variables, in addition to demographic variables as shown in Table 2, were used to explain two dependent variables: fashion awareness and clothing expenditures. Descriptive summary statistics of the respondents' demographic and lifestyle characteristics are shown in Table 2.

Table 2. Demographic and Lifestyle Profile (%)

Variables %	Variables %
Demographics	10 ==0.
Gender	Race
Male42%	White90%
Female58%	Black5%
	Other4%
Marital Status	
Married60%	Education
Not Married40%	High School Grad 49%
	Some College ·····25%
Employment	College and Beyond 26%
Empolyed·····69%	
Not Employed31%	Age
	18-2919%
Income	30-44 ······41%
Under \$25,00042%	45-6425%
Over \$25,00058%	Over 6515%
Lifestyles	
Recreational ·····52%	Convenient·····42%
Non-Recreational48%	Non-Convenient58%
Economic45%	Outlook-Minded ······47%
Non-Economic ······55%	Non-Outlook-Minded 53%

3. Analyses

Two statistical methods were applied to test the hypotheses. First, to determine the relationship between the four lifestyles and major demographic factors that characterized those lifestyles, a series of logistic regression analyses were performed using each of the four lifestyles as a dependent variable of a dichotomous nature (i, e., recreational vs. non-

recreational). Second, to find the influential factors (both demographics and lifestyles) affecting fashion awareness and clothing expenditures, logistic analyses and multiple regression analyses based upon total population subdivided into each gender group were applied respectively. Finally, to determine the complementary variables (i, e., fashion awareness and clothing expenditures), the goodness-of fit indices of the full model using both demographics and lifestyles were compared with those of the restricted model including only demographics.

IV. RESULTS

In order to verify the relationship between demographics and clothing lifestyles, logistic analyses were applied. According to the results as shown in Table 3, recreational consumers tended to be female and younger while economic consumers were likely to be young and on the low income level. Both

Table 3. Logistic Analysis on the Relationship Between
Demographic Variables and Lifestyle
Segments

Demographics	Recr	Econ	Conv	Outlook
Demographics	Meci	EÇOII	Conv	Outlook
Gender (female)	0.45*	0.21	0.57**	1.70**
Marital Status	0.49	-0.33	-0.03	-0.08
(never married)				
Employment	0.12	0.15	-0.01	-0.11
(not employed)				
Education	-0.32	0.03	80.0	-0.42
(college graduate)				
Age (over 64)	-0.80*	-0.87**	0.07	-1.03**
Race (black)	0.72	-0.03	-0.73	0.65
Income (over \$50,	0.07	-0.97**	0.51	-0.08
001)				
-2 (log likelihood)	540.12	582.84	584.82	529.64
p-value	0.01	0.003	0.04	0.0001
Rho2	0.03	0.04	0.03	0.13

Parenthesized categories were coded as zeros

convenient and outlook-minded consumers were likely to be female. Among demographic variables, gender influenced lifestyle segments most consistently as evident in its distinct effects on the three lifestyles: recreational, convenient, and outlook-minded. It was also revealed that age and income, as well as gender, could be distinguished among some lifestyles at a statistically significant level. The salient gender difference in three lifestyles warranted further investigation of specific clothing behavior based on gender.

Effects of Demographics and Lifestyles on Fashion Awareness

The logistic analyses were performed in order to examine the relationship between fashion awareness and consumer characteristics including both demographics and clothing lifestyles. For the purpose of discerning a gender effect, a separate logistic analysis was run on each gender group. Demographic variables were recoded using a reference cell coding (or dummy variable).

The survey question from which the dependent variable, fashion awareness, was constructed was, "How much attention do you pay to trends in women's fashion?" The answer to this four-point scale question was recoded to represent consumers with high fashion awarencess (a lot or some attention) and low fashion awareness (not much attention or none at all).

The results of gender-based logistic analyses are presented in Table 4. A demographic variable (marital status) showed a significant effect on fashion awareness. The married men exhibited more fashion awareness compared to never-married men. In contrast, widowed women were more fashion conscious than were never-married women. A lifestyle variable (recreational) was statistically significant at a 0.05 level for both genders, that is, recreational men and women were more likely to be fashion conscious than non-recreational men and

^{*} significatn at 0.05 level

^{**} significant at 0.01 level

Table 4. Gender-Based Logistic Analyses on Fashion
Awareness

		
Independent	Men's	Women's
Variables	Fashion	Fashion
	Awareness	Awareness
Demographics		
Marital Status (never mari	ried)	
married	1.17*	0.46
widowed	1.91	1.66*
divorced/separated	0.40	0.53
Employment (not employed	1)	
full time	0.32	0.71
part time	1.02	0.84
Education (college grad)		
not high school grad	-0.42	-0.62
high school grad	0.37	-0.28
some college	0.13	-0.51
Age (over 65)		
18 to 29	1.46	0.19
30 to 44	0.88	0.47
45 to 64	0.19	0.15
Race (Black)	-0.68	-1.84
Income (over \$50,001)		
under \$12,500	-0.35	-0.71
\$12,501 to \$25,000	-0.44	-0.03
\$25,001 to \$35,000	-0.49	-0.38
\$35,001 to \$50,000	-0.45	-0.14
Lifestyles		
Recreational	0.89**	0.62*
Economic	-0.32	0.12
Convenient	0.24	-0.19
Outlook-Minded	-0.03	0.53
-2 (log likelihood)	212.09	256.32
p-value	0.37	0.15
Rho ²	0.09	0.09

^{*} significant at 0.05 level

women.

Furthermore, the presence of a gender difference in fashion awareness was independently supported when the gender variable was added to the logistic model to predict fashion awareness on the total population. Gender was significant at less than a 0. 05 level (Chi-square=5.9), with women significantly

more consious of fashion trends than men. Thus H1a predicting the relationships between consumer characteristics and fashion awareness by gender was accepted.

Table 5 was constructed in order to determine the incremental effects of lifestyle segments on predicting fashion awareness by comparing the goodness-of-fit indices of the full (or unrestricted) model and the restricted model. The full model included demographics (age, income, economical, convenient, and outlook-minded consumers). The restricted model included only demographic variables.

Based upon the log likelihood values which asymptotically distribute as chi-square, both p-value and rho² (informal goodness-of-fit index analogous to R² in multiple regression) indicated improved statistics in the full model over the resticted model, suggesting that using lifestyles in conjunction with demographics contributed to accurately predicting consumers' fashion awareness better than using only demographics. The superiority of the full model over the restricted model was statistically significant as a result of the likelihood ratio test)see equation 1).

$$G = -2 \times \ln \frac{(likelihood of the restricted model)}{(likedlihood of the full model)}$$
(Eq 1)

Table 5. Comparison of the Full and Restricted Logistic Models

0.0	- A.M	~·	
-2 (log likelihood)	df	p-value 	rho²
1			
212.09	20	0.37	0.09
256.32	20	0.15	0.09
model			
228.71	16	0.52	0.06
292.52	16	0.07	0.08
	likelihood) 1 212.09 256.32 model 228.71	likelihood) 1 212.09 20 256.32 20 model 228.71 16	likelihood) 1 212.09 20 0.37 256.32 20 0.15 model 228.71 16 0.52

^{**} significant at 0.01 level

were G statistic with chi-square distribution is analogous to the F statistic used in regression¹⁸. The calculation of G statistic with df=4 indicated that the full model was significantly superior to the restricted model for both gender groups (at the 0.005 level). Therefore, H1b was accepted.

2. Effects of Demographics and Lifestyles on Clothing Expenditures

Clothing expenditures, a dependent variable, came from a survey question asking the dollar amount of annual spending on clothes on a five-category interval scale (i.e., under \$500, \$501-\$1000 -\$1500, \$1500-\$2000, over \$2001). T-test were used to determine whether regression coefficients were significantly different from zero. The F statistics of regression equation were used to determine the significance of all the explanatory variables. The results of the gender-based regression analyses are shown in Table 6.

The results indicated that for men, only age and income were significantly related to clothing expenditures. Men's clothing expenditures increased with age, except for those over 65 years. This result was consistent with Frisbee's15) findings. As expected, income was positively associated with clothing expenditures. Women's clothing expenditures appeared to be significantly related to marital status. Interestingly, no lifestyle was significantly related to clothing expenditures for men while women with economic lifestyle were likely to spend more on clothes. Those who are interested in good value purchases are willing to spend time in finding good quality and low price products. Although they do not need a certain item but find it a good value they are stimulated to buy it. That may result in spending more money on clothes. Twenty percent of the variance in the men's expenditures on clothing was explained by independent variables, while thirty percent of the variance was explained in the women's. The gender varible was nonsignificant in

Table 6. Regression Analyses on Clothing Expenditures

Independent	Men's	Women's		
Variables	Fashion	Fashion		
	Awareness	Awareness		
Demographics				
Mariatral Status (n	ever married)			
married	0.31 ^a (-1.41) ^b	0.20 (0.91)		
widowed	-0.16 (-0.22)	0.15 (0.39)		
divorced/separated	-0.43 (-1.07)	0.52 (1.99)*		
Employment (not en	mployed)			
full time	-0.40 (-1.40)	0.33 (1.89)		
part time	-0.59 (-1.57)	-0.20 (-0.90)		
Education (college)	grad)			
not high school gra	d-0.19 (-0.60)	-0.02 (0.06)		
high school gradu	0.06 (0.25)	-0.16 (-0.79)		
some college	0.33 (1.20)	-0.40 (-1.82)		
Age (over 65)				
18 to 29	0.83 (1.24)	-0.04 (0.13)		
30 to 44	0.80 (2.90)	-0.38 (-1.49)		
45 to 64	-0.85 (-2.05)*	-07 (-0.27)		
Race (Black)	-0.56 (-1.54)	0.14 (0.66)		
Income (over \$50.0	01)			
under \$12,500	-0.93 (-2.51)	-1.01 (-3.23)**		
\$12,501 to \$25,000	-0.35 (-1.40)	-0.71 (-3.19)**		
\$25,001 to \$35,000	-0.46 (-1.78)	-0.16 (-0.76)		
\$35,001 to \$50,000	-0.28 (-1.08)	-0.28 (-1.18)		
Lifestyles				
Recreational	0.27 (1.52)	0.25 (1.77)		
Economic	0.08 (0.92)	0.30 (3.93)**		
Convenient	0.08 (0.48)	0.23 (1.63)**		
${\bf Outlook\text{-}Minded}$	0.20 (0.08)	0.26 (1.63)		
R2	0.21	0.30		
F value	1.72*	4.14**		
Parenthesized categories were coded as zeros				

a=a regression coefficient

b=a t-value

affecting clothing expenditures when it was taken into account in an independent regression model using the total population. Therefore, H2a predicting the relationships between consumer characteristics and clothing expenditures was partially

^{*} significant at 0.05

^{**} significant at 0.01

accepted.

To test the incremental effect of lifestyle segmentation on clothing expenditures, the full model and the restricted model were compared using Fvalues which were obtained from equation 2.

$$F = \frac{SSE(R) - SSE(F)}{df_R - df_F} / \frac{SSE(F)}{df_F} (Eq.2)$$

Where SSE (R)=the sum of squares error from the restricted euqation

SSE (F)=the sum of squares error from the full equation

 df_R =the degree of freedom from the restricted equation

 df_F =the degree of freedom from the full equation

The statistics required for computing F-values are shown in Table 7. The F-value (=5.68 for women) from Eq.2 showed that lifestyle variables helped to reduce substantially the variation of clothing expenditures, whereas the F-value for men (F=1.26) was not significant. Therefore, H2b was accepted.

Table 7. Comparison of the Full and the Restricted Regression Models

Models	SSE	df	R²
Full model			
men	134598	132	0.21*
women	132071	186	0.31*
Restricted model			
men	139731	136	0.18*
women	148192	190	0.22*

^{*} significant at 0.05

In short, the analytical results indicated that the regression models predicted the women's clothing expenditures better than the men's. Further, the comparison of the full and the restricted models substantiated the superiority of the full model for women.

V. DISCUSSION AND CONCLUSION

The major purpose of this study was to examine the usefulness of lifestyles in understanding consumer's clothing behavior with particular emphasis on gender difference. Gender was found to be the most effective among the demographic variables in distinguishing among the four clothingrelated lifestyles. Specifically, women were more likely to possess recreational, convenient, and outlook-minded lifestyles than were men. Besides gender, age, and income were also significant demographic determinants such that young people tended to be recreational, economic, and outlookmined, while lower-income people were likely to be economic. Furthermore, gender was statistically significant significant in predicting fashion awareness., which suggested that women were more conscious of fashion trends than were men. However, gender was not a significant determinant for clothing expenditures.

The investigation of the relationships between consumer characteristics (demographics and lifestyles) and the two dependent variables (fashion awareness and clothing expenditures) revealed interesting results. First, marital status was closely associated with fashion awareness for both men and women. Recreational men and women were more likely to be fashion conscious than were non-recreational men and women. This finding was not unexpected in the light that recreational lifestyle, by definition, referred to a group of consumers who considered shopping for clothes as more of a pleasure than a chore.

Age and income were significant demographic variables affecting clothing expenditures for men, while it was income for women. Also, women with 98 韓國衣類學會誌

an economic lifestyle tended to spend more on clothing than did non-economic women. This finding may be interpreted that the more interested women were in good value purchases, the more likely they were to spend on clothes. This finding indicates that apparel retailers' promotional strategy may benefit from targeting women customers who appreciate bargain deals.

The usefulness of the gender specific marketing approach as suggested here warrants further empirical research involving specific apparel products. Overall, the presence of gender effect on lifestyles found in this study implies the importance of considering gender in market segmentation based on clothing lifestyles.

Finally, the significant statistical differences between the two models (full and restricted) with and without lifestyle variables suggested that lifestyles, used together with demographics, considerably enhanced the overall predictive power of the statistical models designed to measure fashion awareness and clothing expenditures.

In conclusion, this study offers an implication that retailers and marketers in the apparel business can use to develop effective marketing strategies based upon the market segmentation utilizing both demographics and lifestyles. Furthermore, by taking into account the relationship between demographic characteristics and lifestyles, marketers may be able to refine their marketing strategy aimed at identifying their target audience.

Using the secondary data for this study resulted in limiting the research realm and the relevant statistical analyses. In addition, since this study used four lifestyles which were not exclusive and were classified based on only four questions its findings may require restrictive interpretation. Also, this may have had a negative effect on the reliability of the four survey questions used to represent lifestyles. In this respect, future studies utilizing more comprehensive surevey questions

characteristic of each lifestyle may improve the usefulness of this type of study in understanding the relationship between clothing behavior and consumer characteristics including lifestyles.

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