

성인비만여성의 체중조절행동에 따른 의복구매행동에 관한 연구

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Study on the Apparel Shopping Behavior of Obese Women in Relation to Interest in Weight Control

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(2001. 9. 30 투고)

국문요약

현대사회에서는 시각적 이미지를 표현수단으로 하는 대중매체의 등장으로 자기 신체에 대한 미의식이 고조되어 있으며, 체형의 불균형으로 인한 신체적 불만족을 보상하기 위해 여성복은 이미 여성의 신체를 사회적 이상에 맞게 수단으로 이용되어 과거 어떤 시기보다도 신체이미지를 바꾸기 위해 옷을 사용하고 있다. 이에 반해 비만체형의 소비자들은 자신의 외모를 향상시킬 수 있는 의복구입에 어려움을 겪고 있으며 그들에게 잘 맞는 의복을 선택할 기회를 제공받지 못하고 있는 실정이다.

따라서 본 연구의 목적은 여성의류시장에서 소외되어온 비만 체형 소비자를 대상으로 첫째, 체중조절행동과 의복쇼핑행동간의 상관성을 규명하고 둘째, 인구통계학적 특성에 따른 쇼핑행동의 차이를 파악하고자 한다.

본 연구의 결과는 다음과 같다. 체중조절 행동에 따른 쇼핑행동 요인과의 관계에서 다이어트 경험의 유무, 자기지각체형, 체중조절 관심정도, 체중조절 동기에 있어서 부분적으로 유의적인 차이가 있는 것으로 나타났다. 한편 인구통계학적 특성에 따른 쇼핑행동의 차이를 파악해 본 결과 연령, 결혼여부, 학력, 직업, 가계수입에서 모두 유의적인 차이가 나타났다.

본 연구결과의 시사점은 관련업계에 잠재된 중요한 여성복 시장임을 인식시킬 수 있는 계기를 제공함과 아울러 침체된 패션산업의 새로운 틈새시장으로서의 여성복 시장 개발을 위한 기초자료를 제공할 수 있다.

Key Word : Obese Women : 비만여성, Behavior of weight control : 체중조절행동,

Shopping Behavior : 쇼핑행동, Tele-shopping : 통신구매

I. Introduction

The mass media in the modern society has influenced women's perception of beauty in many ways. Among many influences, perceiving thin as the standard of beauty has caused dissatisfaction about their physical appearance among women. Ironically, obese population has been steadily growing due to the improvement of the living standard causing more convenient life style and changed eating habit.

In addition, recent survey taken of 3,337 women both the single and married shows 90.2% of the respondents having to attempt to lose weight(The Jungang Ilbo, Dec 7, 2000). The obese population has been increasing 3% each year for the last 5 years resulting in one out of three adults being overweight now(The Jungang Ilbo, Jan 27, 2001).

In the modern society, many women are trying desperately to lose weight, and it's resulting in social problem such as eating disorder : loss of appetite and voracity. In addition, obesity has discouraged women from being socially active(Lee, 2000). More people are aware of their physical appearance, and through the development of fashion industries, more than ever, apparels are used to adjust the physical image correcting its imperfection in today's society. However, it has been the recent trend in present fashion industries to produce apparels that are fitted to idealized body. As a result, obese consumers are having difficulty in purchasing clothes that may improve their physical appearance, and they are trying to change their appearance by adjusting their weight(Choi, 2001).

However, the previous studies carried out until now have primarily centered on the middle-age women restrictedly, and it can be said that there has hardly been any studies performed in the past particularly on the apparel purchasing behavior giving considerations to various body types to lead to subdivision of ready-made clothes for obese people.

The purposes of this study were to identify: firstly, the relationship in shopping behavior resulting from behavior of weight control and secondly, to examine the difference in shopping behavior according to demographic characteristics, targeted on obese women.

II. Review of Literature

1. Behavior of weight control

Behavior of weight control is defined as the interest level in losing weight on purpose(Jo, 1996). Today's perception of beauty is being thin is regarded as beautiful, healthy and complete. And is influenced by aesthetics, psychology, and mass media(Lee, 1997).

This phenomenon has been shown by Kim(1987)'s study that being thin was preferred even among the average young people resulting in diets, and Higgins(1991) stated that young people were trying to lose weight because they considered thin body type as the ideal body type. In addition, Jacobi(1994)'s study presented that female college students think themselves to be fatter than they really are, and Lee & Lim(2001)'s study in the relationship between behavior of weight control and satisfaction level of fitness of apparels presented 85.5% of the female college students questioned were on diet.

Lee & Lim(2001)'s study also showed that overall female college students are not satisfied about their

body, and as the satisfaction level is low, more people are adjusting weight and are unsatisfied about the fitness of apparels. Such results are shown through the recent trend in diet being a popular women's method in improving their physical appearance, and the ideal body shape is being thinner. Sim (1996)'s study in relationship between adjusting weight and the preferred apparels presented adjusting weight has negative effect on choosing apparels that suits them and has positive effect on choosing more trendy apparels. Most of the studies conducted until now concentrated exclusively on behavior of weight control, and studies on eating habits related to the interest level in behavior of weight control and preference level(Bak, 1988) and studies on influencing factors in behavior of weight control(Kim, 1992 : Song, 1992) made up the most of the studies conducted.

Through examining not yet investigated area such as the study related to apparel purchasing behavior, this study attempted to help develop a potential market for obese women since they also showed the identical demographic characteristics and the interest level in behavior of weight control.

This study limited the interest level in adult female's interest level in losing weight to the existence of diet history, self-perceived body type, interest level in behavior of weight control, the reason for being interested in behavior of weight control, and the reason for trying to lose weight. Through such, this study attempts to prove the relationship between behavior of weight control and the apparel shopping behavior.

2. Apparel Shopping Behavior

Shopping includes the process that consumers' trips to the store to purchase the wanted product and the comparison of the prices and the qualities in many different stores. Shopping behavior is somewhat similar to shopping propensity and is defined as the behavior presented both before shopping and after shopping(Sim & Lee, 1999). Shopping propensity is defined as shopping style of each consumer to emphasize on their preference in shopping activity(Hawkins, 1989).

Previous studies regarding shopping propensity are as follows : Kim (1994) stated that the most important shopping propensities are shopping for pleasure and economical shopping and categorized her sample of women of 20 years of age or older to indifference toward shopping type, shopping for pleasure type, economical shopping type, and highly concerned about shopping type.

Shim & Kotsiopoulos(1992) categorized shopping orientation to 11 different parts :

confident shopper, brand conscious, mall shopper, convenience/time conscious,

local store shopper, apathetic toward "made-in-usa", catalog shopper, appearance manager, credit user, economic shopper, fashion conscious.

Su(1994) examined shopping propensity by categorizing it to leisure shopping propensity, rational shopping propensity, convenience sensitive shopping propensity, and price sensitive shopping propensity.

Choi(1996) categorized the apparel shopping propensity to store royal consumers, leisure consumers, highly concerned about shopping consumers, economical consumers, and less concerned about shopping consumers, and she stated that apparel shopping propensity is an important variable in choosing the store. Sin & Lee(1999) studied apparel shopping behavior among shopping mall credit card carriers and found that consumers who have positive impression of the store credit cards were more trend sensitive, and

consumers who had negative impressions were more economical. As the above show, studies in categorizing consumers return different results depending on different study groups. Shopping propensity included activities, interests, and opinions regarding shopping to emphasize the importance in dividing the market and understanding of the characteristics of consumers.

However, studies in shopping propensity regarding obese consumers have not been conducted throughout. This study attempts to show the difference between relationship of shopping propensity in buying apparels and adjusting weight and the characteristics shown in population statistics. Examining such difference is vital in explaining the shopping behavior of obese consumers.

III. Methods

1. The subject of the study and the collection of research materials

This study targeted Korean adult female between the ages of 18 and 59. The survey included a measure of obesity in the questionnaire and had participants follow a self-report format. The data was collected in March, 2000, and 379 Korean adult female whose Broka value was greater than 110% and BMI value greater than 25 were used in the study.

2. Instrument

The survey consists of questionnaires concerning consumers age and measurements, interest in weight control, and shopping behavior was used in the study. The interest in behavior of weight control questionnaire includes 5 questions regarding past diet experience, self-perception of his/her body shape, level of interest in behavior of weight control, reasons for having interest in behavior of weight control, and reasons for trying to lose weight. The credibility was calculated to be Cronbachs' α .6116. The questionnaire concerning obese consumers shopping behavior consists of 18 questions was measured using the 5 point Likert scale, and the credibility was calculated to be Cronbachs' α .7429.

To get hold demographic information, the questionnaire asked on ages, marital status(married or non-married), education, occupation, and monthly household income.

3. Data analysis

The collected data was analyzed using SAS statistics package. In addition, Cronbachs' α reliability, frequency analysis, and Pearson's correlation coefficient was performed.

IV. Results and Discussion

1. Characteristics of respondents

Demographic characteristics for respondents are as follows:

Age groups were divided into: 18-22(17.7%), 23-27(7.9%), 28-37(26.9%), 38-49(33.2%), and over(5014.2%). The age group of 38-49 thereby showed the heaviest distribution. Concerning the marital status factor, the unmarried indicated 29.7% and the married 70%, and therefore there were twice as many married people compared to the unmarried. Education wise, high school graduates showed 45.6%, college students 18.9%, and people having over the college degrees 35.6%. In regard to occupation types, students showed 18.5%, office workers and specialists 38.3%, and housewives 43.3%. Concerning household income level, less than 1 million Won showed 13%, from 1.01 to 2 million Won 31.6%, from 2.01 to 3 million Won 26.9%, from 3.01 to 4 million Won 16.9% and above 4.01 million Won 11.9%.

2. Shopping behavior analysis

Primary factor analysis was performed in order to study the shopping behavior of obese consumers. The primary factor was collected by varimax rotation using principal component analysis. The number of the factor was determined by scree test taking whose eigen value was more than 1.0. As a result, 4 factors were selected, and total explanation was calculated to be 54.5%.

Factor 1 is categorized as Tele-shopping consisting questions regarding propensity to use Tele-shopping.

Factor 2 is composed of items related to Preference for trendy garments and inclination to brand value. Factor 3 consists of chief causes correlated to Economical Shopping. Factor 4 is categorized as Planned Shopping as described in the Table 1.

<Table 1> The result of factor analysis of obese groups shopping behavior

Factors/ Factor items	Factor Loading			
	Factor 1	Factor 2	Factor 3	Factor 4
Factor I : Tele-shopping				
- If any clothing available to fit into my body shape at an internet shopping mall, I'll buy.	.951			
- Having intention to buy from Tele-shopping if any clothing available to cover ones body shape.	.943			
Factor II : Preference for trendy garments and inclination to brand value				
- Having much interest in new product or service		.720		
- Rather to buy new product earlier than others when they appear on the market		.665		
- Prefer famous brands even if with higher costs		.651		
- Seldom buy any product unknown		.650		
Factor III : Economical shopping				
- Prefer installment rather than lump sum payment			.851	
- More readily shop during discount sale period			.794	
- Cards are mainly used			.596	
- Enjoy shopping generally at a shop for buying garments			.381	
Factor IV: Planned shopping				
- Buying taking place after visiting many outlets and drawing price comparisons				.789
- Make a buying list before shopping				.771
Eigen Value (Percent of Variance)	2.012 (17%)	1.967 (16%)	1.967 (16%)	1.531 (13%)
Cronbach's α	.643	.939	.658	.545

3. Correlation between shopping behavior and the level of interest in weight control.

In order to find out the relationship between shopping behavior and the level of interest in weight control, the correlation was calculated. As a result, the level of interest in weight control and the tele-shopping propensity ($r = .231, p < .001$) had a positive correlation (Table 2).

Considering the level of interest in weight control of participating obese consumers, higher the interest level and more they consider themselves to be fat, more likely they will use tele-shopping. Moreover, the participants that answered the reason for going on a diet was to have easier time shopping for clothes showed a similar trend preferring tele-shopping.

<Table 2> Correlation between shopping behavior and the level of interest in weight control

Shopping behavior	Level of interest in weight control
Tele-shopping	.231***
Preference for trendy garments and inclination to brand value	.096
Economical shopping	.087
Planned shopping	-.014

*** $p < .001$

4. Difference of shopping behavior according to the level of interest in weight control

In order to examine the different shopping behaviors that result from past diet experience, self-perception of his/her body shape, and the level of interest in weight control, primary factor points were used. In addition, ANOVA and Duncan's Multiple Range Test was used to verify the differences among groups.

According to the relationship that was examined between shopping behavior and the level of interest in weight control, meaningful differences emerged as past diet experience, self-perception of his/her own body shape, level of interest in weight control, reasons for having interest in weight control, and reasons for trying to lose weight were considered (Table 3, 4).

4-1. Regarding the past diet experience, more meaningful distinction was found in preferring trendy merchandise and brand name values ($p < .01$). Obese consumers with diet history showed more interest in newer products and services, and they preferred for trendy garments and inclination to brand value more than obese consumers without any diet history.

<Table 3> Level of interest in past diet history and the shopping behavior

Shopping behavior	Interest in weight control	Past diet history		Mean	F Value
		present	Not present		
Tele-Shopping		2.89	2.70	2.27	1.48
Preference for trendy garments and inclination to brand value		3.30 A	3.00 B	3.11	6.42**
Economical shopping		3.07	2.90	2.96	1.65
Planned shopping		4.36	4.21	1.61	4.24

** $p < .01$

the groups display any meaningful distinction according to the Duncan's Multiple Range Test are indicated with different letters.

4-2. The shopping behavior related to self-perception of his/her body shape showed meaningful correlation with tele-shopping($p<.01$). The participants that considers themselves to be fat preferred tele-shopping when shopping for clothes compared to the participants that considers themselves to be skinny.

<Table 4> Level of interest in weight control and the shopping behavior

Shopping behavior	Interest in weight control				Mean	F Value
	Very fat	Slightly fat	Medium build	Skinny		
Tele-Shopping	3.17 A	2.71 AB	2.31 AB	1.75 B	2.76	4.19**
Preference for trendy garments and inclination to brand value	3.01	3.15	3.09	2.73	3.11	0.42
Economical shopping	2.87	3.00	2.86	3.35	2.96	0.41
Planned shopping	4.42	4.28	4.23	4.95	4.27	0.46

** $p<.01$

the groups display any meaningful distinction according to the Duncan's Multiple Range Test are indicated with different letters.(A>B)

4-3. Shopping behavior influenced by the level of interest in weight control displayed a meaningful correlation with tele-shopping($p<.01$) and trendy merchandise and brand name values($p<.001$). The consumers that show stronger interest in weight control are more likely to use tele-shopping or internet shopping mall to purchase clothing that can cover their weak figure.

<Table 5>Level of Interest in weight control and the shopping behavior

Shopping behavior	Interest in weight control				Mean	F Value
	Very strong interest	Slightly strong interest	Not really interest	Not interest		
Tele-Shopping	3.14 A	2.46 B	2.24 B	2.57 AB	2.76	7.84**
Preference for trendy garments and inclination to brand value	3.17 A	3.07 A	3.33 A	1.32 B	3.11	5.47***
Economical shopping	3.03	2.97	2.48	2.59	2.96	1.37
Planned shopping	4.26	4.29	4.20	4.59	4.27	0.20

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

4-4. Regarding the reasons for trying to lose weight, significant difference was found in tele-shopping($p<.01$) With the most popular reason for trying to lose weight being the difficulty when shopping for clothes, looking less stylish when clothes are worn and being perceived by others to be fat were answered second and third respectively. These consumers preferred tele-shopping.

<Table 6> Level of Interest in weight control and the shopping behavior

Shopping behavior \ Interest in weight control	Reasons for trying to lose weight				Mean	F Value
	difficulty when shopping for clothes	health complications that can come from obesity	to look more stylish	being perceived to be fat by others		
Tele-Shopping	3.16 A	2.37 B	2.80 B	2.76 AB	2.77	4.97**
Trendy merchandise & brand name value	3.24	3.01	3.09	3.11	3.11	0.66
Economical shopping	2.94	2.88	3.09	2.99	2.98	0.47
Planned shopping	4.30	4.26	4.29	4.35	4.29	0.08

**p<.01

5. Difference of shopping behavior based on demographic characteristics

To verify the shopping behavior differences according to demographical characteristics, ANOVA method was used, and to verify ex post facto affairs between the groups, Duncan's Multiple Range test was performed. As a result, significant difference between age gaps existed and showed different study results in tele-shopping, desire for famed brands, brand value, desire for economical shopping and preference for planned shopping<Table 7, 8>.

Particularly, tele-shopping was most desired by heavy computer users in the age group of 18 to 22. The key differences between the married and unmarried groups were in the context of their preference in the tele-shopping, economical purchasing and planned-purchasing. In particular, unmarried persons mail order purchasing propensity is higher than that of married person. This has supported the study result of Lee(1999) on the theme of mail order sales satisfaction according to demographical character.

<Table 7> Difference of shopping behavior based on demographic characteristics : Ages, Marital Status, Education

variables \ Shopping behavior	Ages					Mean	F	Marital Status		Mean	F	Education			Mean	F
	18 ~ 22	23 ~ 27	28 ~ 37	38 ~ 49	50+			un-married	married			high school	college student	over college student		
Tele-shopping	3.50 A	2.76 B	2.27 B	2.65 B	2.14 C	2.77	7.58**	3.24 A	2.55 B	2.77	9.79**	2.66 A	3.49 B	2.59 A	2.79	10.8***
Preference for trendy garments and inclination to brand value	3.05 AB	3.44 A	3.32 AB	2.97 B	2.89 B	3.11	2.60**	3.26 A	3.04 A	3.11	2.74*	2.94 B	3.18 AB	3.30 A	3.11	4.14*
Economical Shopping	2.44 C	2.68 BC	3.41 A	2.98 AB	2.81 BC	2.95	6.58**	2.70 AB	3.08 A	2.96	4.25**	2.98 A	2.45 AB	3.19 A	2.95	7.72***
Planned Shopping	4.11 AB	3.88 B	4.25 AB	4.45 A	4.37 A	4.28	2.23**	4.00 AB	4.40 A	4.28	5.14**	4.25	4.17	4.42	4.29	1.33

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

<Table 8> Difference of shopping behavior based on demographic characteristics : Occupation, Household Income

variables	Occupation			Mean	F	Household Income (million won)					Mean	F
	student	housewife	company staff			10l	101-200	201-300	301-400	over 401-500		
Tele-shopping	3.44	2.62	2.70	2.81	8.99**	2.99	2.92	2.78	2.47	2.39	2.75	2.04
	A	B	B			A	AB	AB	AB	B		
Preference for trendy garments and inclination to brand value	3.24	2.97	3.27	3.13	2.93	3.05	3.02	3.05	3.21	3.42	3.11	1.24*
Economical Shopping	2.35	3.13	3.07	2.96	10.23*	2.54	2.99	2.86	3.23	3.18	2.96	2.38**
	B	A	A			B	AB	AB	A	A		
Planned Shopping	4.10	4.46	4.20	4.30	3.40*	4.02	4.28	4.27	4.43	4.46	4.29	1.20**
	B	A	AB			B	AB	AB	AB	A		

*p<.05. **p<.01 ***p<.001

V. Conclusion and Implications

The factors in different shopping behavior are categorized into 4 groups:

tele-shopping, trendy merchandise preference and inclination to brand name value, economical shopping and planned shopping.

Analyzing the correlation between shopping behavior and the level of interest in weight control, significant differences was partly present in past diet experience, self-perception of his/her own body shape, level of interest in weight control, reason for having interest in weight control, and reasons for trying to lose weight.

The study showed, first, consumers with more diet experience prefer trendy goods and brand name clothing. Second, consumers who considers themselves to be fat prefer tele-shopping. Third, stronger the interest in weight control, more obese consumers prefer tele-shopping and trendy goods and brand name clothing. Finally, the study shows that consumers try to lose weight for reasons such as having difficulty shopping for clothes, looking less stylish when dressed, and being perceived to be obese by others.

This study also showed that there are significant differences among people of different ages, marital status, degree of education, occupation and the level of household income.

Concerning the age factor, those heavy computer users of ages between 18 to 22 showed the highest preference for tele-shopping. Concerning the marital status factor, the unmarried showed higher preference for tele-shopping than the married. However, the married showed higher preference for economical comparative and planned shopping. Education wise, college graduates definitely preferred tele-shopping and those with more than college education preferred brand name products and appreciated brand value and had higher desire for products with fame. Concerning household income level, people of lower income showed preference for tele-shopping. People of high income level preferred economic comparative shopping and planned shopping.

This results seem to be caused by the fact that people of lower income are not used to seeing the fancy merchandise shown through the shopping channels and therefore, they are interested in getting them spontaneously.

Based on this study, it is proven that people of different demographics behave differently concerning their shopping and therefore these kinds of data can be used effectively for the purpose of developing marketing strategy.

This study implies that lady fashion business can be effectively optimized by carefully studying different demographics of female population and adjust marketing strategies accordingly. And also, different kinds of goods can be applied to target a different market segments based on the overall business objective.

Also, the study shows how important it is to understand the natural biological changes taking place in female body and apply different marketing tactics to communicate with different segments to optimize sales.

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