

Conceptual Model Predicting Apparel Buying Intention through the Internet

Eun-Ah Yoh

General Manager of Marketing, Wems C&IT Inc.

1 . Introduction

Since the Internet was introduced in 1969, consumer adoption of the Internet computer network has been consistently increasing. Today, the Internet is a global on-line network of approximately 35 million users world-wide (Hoffman & Novak, 1996), with an estimated user base of between 200 million and 500 million in the next five years (VanTassel & Weitz, 1997). The Internet benefits people in their everyday lives in many ways from searching information to shopping at home. Virtual stores and computerized shopping malls are growing due to their low-cost systems accessing consumers worldwide.

As Internet shopping method becomes an essential medium for shopping, a few researchers attempted to investigate factors affecting adoption of Internet shopping (Gattiker, Perlusz, & Bohmann, 2000; Han & Park, 2000; Kim & Park, 1999). Benefits such as convenience and perceived risks such as privacy concern were important factors affecting Internet adoption for shopping (Han & Park, 2000; Kim & Park, 1999). In addition, prior experience with the Internet was another factor influencing purchase intention through the Internet (Han & Park, 2000; Park, 2000). Gattiker et al. (2000) indicated socio-demographics, attitude toward the Internet, and product attributes are important factors affecting decision to use e-commerce.

Although some of previous research tried to conceptualize these factors in models (Gattiker et al., 2000; Han & Park, 2000; Kim & Park, 1999), there is little research developing a model based on theoretical frameworks. In addition, little research focusing on Internet shopping for apparel products was found though research dealing with general commodities has limitation to fully apply to fashion products (Geissler & Zinkhan, 1998). In this study, a model conceptualizing factors affecting intention formation for Internet apparel shopping is developed based on two socio-psychological theories including the theory of reasoned action (Fishbein & Ajzen, 1975) and diffusion of innovations (Rogers, 1995).

The overall objectives of the study are:

- a) to determine factors affecting intention formation for Internet apparel shopping, and
- b) to develop and test a theoretical model indicating relationships among factors affecting intention formation for Internet apparel shopping.

II. Literature Review

1. Theoretical Framework

To conceptualize models explaining Internet apparel shopping, two social psychological theories were adopted as theoretical frameworks. The theory of reasoned action (Fishbein & Ajzen, 1975) explains decision making process related to product purchase. In the theory of reasoned action, purchase intention is assessed by: a) psychological judgment such as beliefs and attitude, and b) social influence by significant others. When this theory is applied to Internet apparel shopping, apparel buying intention through the Internet can be explained by: a) beliefs about and attitude toward Internet apparel shopping, and b) social influence on Internet apparel shopping.

In addition, theoretical notions of diffusion of innovations (Rogers, 1995) were adopted to figure out important variables affecting intention formation for Internet apparel shopping. In this theory, prior experience with an innovation and socio-demographics of users were considered as factors affecting innovation adoption. These concepts were applied to the present study, generating important factors that may affect Internet adoption for apparel shopping such as: a) prior experience with the Internet and in-home shopping, and b) socio-economic characteristics - age, education, and income.

2. Research Hypotheses

Research hypotheses indicating relationships between explanatory variables and response variables are described with supporting literature.

1) Social influence on Internet apparel shopping

In the proposed model, social influences are defined as a level of influence of reference groups (e.g., family, friends) on the decision to adopt Internet apparel shopping. The social influence variable is assessed through social norm component from the theory of reasoned action (Ajzen & Fishbein, 1980) which has been used to

predict consumers' apparel purchase intentions through mail-orders (Shim & Drake, 1990_a).

The social susceptibility construct identifies consumer's willingness to conform to the expectations of others related to the product adoption or product purchase decisions (Bearden, Netemeyer, & Teel, 1989). The normative scales of social susceptibility are significantly correlated with a measure of social influence on Internet apparel shopping. The following hypothesis summarizes relationships between social susceptibility and social influence variables.

H1: Consumers who are more socially susceptible are more influenced by social factors related to Internet apparel shopping than are consumers who are less socially susceptible.

2) Prior experience with in-home apparel shopping

Previous studies presented inconsistent results on relationship between income and use of in-home apparel shopping. Some researchers (Shim & Drake, 1990_a; Smallwood & Wiener, 1987) found a positive relationship between income and use of in-home apparel shopping. However, there was a study finding no relationship between family income and apparel catalog shopping frequency (Jasper & Lan, 1992). To further study the relationship between the two variables, a hypothesis was generated.

H2: Level of household income is positively related to prior experience with in-home apparel shopping.

In previous research, consumers' beliefs about local shopping have been considered as one of the most crucial variables influencing consumer involvement with in-home shopping (Bolfing, Hills, & Barnaby, 1981, Lumpkin & Hawes, 1985; Reynolds, 1974; Shim & Drake, 1990_a). These studies suggest that people who are less satisfied with local shopping tend to more actively engage in in-home shopping as the following hypothesis.

H3: Consumers who have more positive beliefs about local apparel shopping have less prior experience with in-home apparel shopping than do consumers who have less positive beliefs about local shopping.

3) Prior experience with the Internet

Previous studies (Fram & Grady, 1995, 1997; "Internet shopping", 1988; Kunz, 1997) indicate that people tend to have more prior experience as they are younger and have a higher level of education and income. The findings support characteristics of innovation adopters suggested by Rogers (1995). These notions were summarized in the following.

H4: Level of education is positively related to prior experience with the Internet.

H5: Level of household income is positively related to prior experience with the Internet.

H6: Age is negatively related to prior experience with the Internet.

Social influence on innovation adoption encourages people to use the innovation (Rogers, 1995), therefore, social influence on Internet apparel shopping will positively relate to prior experience with the Internet. The relationship between social influence and prior experience with the Internet is presented in hypothesis 7.

H7: Consumers who are more influenced by social factors related to Internet apparel shopping have more prior experience with the Internet than do consumers who are less influenced by social factors related to Internet apparel shopping.

4) Beliefs about in-home apparel shopping

Reflecting strong relationships between prior experience with a certain behavior and beliefs about the behavior, Petty and Cacioppo (1986) recognized that a person's high level of involvement with an issue or activity is likely to generate his or her positive beliefs about the issue or activity. Therefore, prior experience with in-home shopping may generate positive beliefs about in-home shopping as the following.

H8: Consumers who have more prior experience with in-home apparel shopping have more positive beliefs about in-home apparel shopping than do consumers who have less prior experience with in-home apparel shopping.

5) Beliefs about Internet apparel shopping

Previous research (Braun, 1993; Grant, 1996) indicated that consumers using a kind of in-home shopping channel are likely to use another in-home shopping channel since attributes of shopping media are similar across in-home shopping channels. Again, people who recognize more benefits of a kind of in-home shopping method will recognize more benefits of another in-home shopping method. This notion is applied to Internet apparel shopping as follows.

H9: Consumers who have more positive beliefs about in-home apparel shopping have more positive beliefs about Internet apparel shopping than do consumers who have less positive beliefs about in-home apparel shopping.

Rogers (1995) indicated that prior experience with an innovation helps building knowledge of and beliefs about the innovation. Other researchers also found that prior experience with a behavior affects beliefs about the behavior (Doll & Mallu, 1990, in Doll & Ajzen, 1992). Based on this notion, a positive relationship between prior

experience with the Internet and beliefs about Internet apparel shopping was assumed as hypothesis 10.

H10: Consumers who have more prior experience with the Internet have more positive beliefs about Internet apparel shopping than do consumers who have less prior experience with the Internet.

Diffusion of innovation theory (Rogers, 1995) also suggests that social influence on an innovation affects people's beliefs about the innovation. Therefore, social influence on Internet apparel shopping will also affect beliefs about Internet apparel shopping. This notion is summarized in the following hypothesis.

H11: Consumers who are more influenced by social factors related to Internet apparel shopping have more positive beliefs about Internet apparel shopping than do consumers who are less influenced by social factors related to Internet apparel shopping.

6) Attitude toward Internet apparel shopping

The theory of reasoned action (Fishbein & Ajzen, 1975) indicates that beliefs about a behavior directly affect attitude toward the behavior. Following this notion, it is assumed that beliefs about Internet apparel shopping have a positive effect on attitude toward Internet apparel shopping, as indicated in hypothesis 12.

H12: Consumers who have more positive beliefs about Internet apparel shopping have more positive attitude toward Internet apparel shopping than do consumers who have less positive beliefs about Internet apparel shopping.

7) Apparel buying intention through the Internet

In the proposed model, consumers' apparel purchase through the Internet is accessed by attitudes toward Internet apparel shopping as well as the level of social influence, following the concepts in the theory of reasoned action (Fishbein & Ajzen, 1975). There has been previous research supporting positive effects of social norm and attitude components on intention to use electronic shopping for diverse products including apparel (Shim & Drake, 1990_b). Based on these theoretical backgrounds, two hypotheses were generated.

H13: Consumers who have more positive attitude toward Internet apparel shopping have a higher level of apparel buying intention through the Internet than do consumers who have less positive attitude toward Internet apparel shopping.

H14: Consumers who are more influenced by social factors related to Internet apparel shopping have a higher level of apparel buying intention through

the Internet than do consumers who are less influenced by social factors related to Internet apparel shopping.

In addition, Rogers (1995) also highlighted the importance of prior experience in formulating intention to adopt an innovation. Accordingly, other researchers (Han & Park, 2000; Park, 2000) found that prior experience with the Internet positively affect adoption of Internet shopping. This notion is presented in the following hypothesis.

H15: Consumers who have more prior experience with the Internet have a higher level of apparel buying intention through the Internet than do consumers who have less prior experience with the Internet.

III. Method

Data collected from 355 general consumers residing in the US were submitted for path analysis to test the proposed model. A random sample of 1,600 households was purchased from a nationally recognized sampling company. The sample was contacted three times, following Salant and Dillman's (1994) Total Design Method.

The survey questionnaire was developed based on the background literature and objectives of the study. The questionnaire contains items that measure independent and dependent variables in the proposed model. Questionnaire was pretested with 44 college students with diverse majors. Variables measured by multiple items were factor analyzed. Collected data were analyzed using path analysis to test the proposed hypotheses.

1. Research Variables

1) Social factors

Social susceptibility was measured with social normative items asking about interpersonal influence on apparel shopping. Three items asking about the importance of salient others' approvals in selecting apparel were included. These items were adopted from previous literature (Bearden et al., 1989) and modified for this study.

Social influence on Internet apparel shopping was measured by three 7-point scales that were developed based on examples in the literature (O'Keefe, 1990, p. 82). Also, one item asking about the degree of willingness to comply with salient others was used.

2) Prior experience with in-home apparel shopping and the Internet

To measure consumers' prior experience with in-home apparel shopping, three items were used including: a) number of apparel items bought through in-home shopping during the past 12 months, b) number of apparel product orders through in-home apparel shopping during the past 12 months, and c) amount of money spent for apparel in-home shopping during the past 12 months.

Prior experience with the Internet was accessed by three items: a) access of the Internet at home or at work, b) length of time spent on using the Internet for any reason other than work each week, and c) frequency of visiting any Internet retail sites for any kind of merchandise.

3) Beliefs about local, in-home and Internet apparel shopping

Beliefs about local apparel shopping were measured by six items asking about: a) whether it is attractive and successful place to shop for apparel, b) whether it is a safe option to shop for apparel, c) whether it offers consumers good service, d) whether styles of apparel are satisfactory to consumers, e) whether it offers consumers good value, and f) whether consumers can find apparel they want most of time.

Five semantic differential item pairs (risky/safe for credit card use, inconvenient/convenient, not expensive/expensive, difficult/easy, not enjoyable/enjoyable) were used to measure beliefs about in-home and Internet apparel shopping. These items were adopted from a previous study (Settle, Alreck, & McCorkle, 1994).

4) Attitude and buying intention for Internet apparel shopping

For attitude measure, four semantic differential item pairs (good/bad, desirable/undesirable, beneficial/useless, positive/negative) were used. One likely-/unlikely bipolar scale was used to ask about apparel buying intention through the Internet within the next six months.

IV. Results

1. Sample Demographics

A total of 355 usable questionnaires were submitted to data analysis. Male and female respondents were almost equal. Though the ages of respondents ranged from 18 to 88, a half of the respondents were between the age of 35 and 54. Married people were two thirds of the respondents. About 90% of respondents were White or

European American. About 68% of respondents had high school and/or undergraduate education. Household income of the respondents indicated a normal distribution with median category as \$50,000-\$74,999.

2. Factor Analysis

To determine whether multiple indicators for each variable comprised one factor dimension, factor analysis was conducted. Only one factor was generated for eight variables each: 1) social susceptibility, 2) social influence on Internet apparel shopping, 3) prior experience with in-home apparel shopping, 4) prior experience with the Internet, 5) beliefs about local apparel shopping, 6) beliefs about in-home apparel shopping, 7) beliefs about Internet apparel shopping, and 8) attitude toward Internet apparel shopping, indicating uni-dimensionality of multiple measurement constructs.

Factor loadings for each variable ranged from .65 to .95, indicating good construct validity. Cronbach's standardized *alpha* ranged from .77 to .95, presenting high reliability among multiple items measuring factors. Based on the results, each variable was accessed by sum of multiple measures indicating a factor. Results of factor analyses were summarized in <Tab. 1>.

<Tab. 1>. Results of Factor Analysis

Variables	Sample Statement (Number of items)	Factor Loading	Eigen- value	Percent of variance	Cronbach's Alpha
Social susceptibility	When shopping, I generally purchase apparel I think others will approve of (3)	.93	2.49	83.1	.90
Social influence on Internet apparel shopping	My friends or family think I should shop via the Internet (3)	.90	2.30	76.6	.83
Prior experience with in-home apparel shopping	Number of orders for apparel made through in-home shopping during the past 12 months (3)	.96	2.76	92.1	.85
Prior experience with the Internet	Time length spent on using the Internet for any reason other than work (3)	.91	2.25	74.8	.77
Beliefs about local apparel shopping	Styles of apparel in local stores are satisfactory to me (6)	.80	3.30	55.1	.84
Beliefs about in-home apparel shopping	Not enjoyable/Enjoyable (for in-home apparel shopping) (5)	.81	2.94	58.8	.82
Beliefs about Internet apparel shopping	Not enjoyable/Enjoyable (for Internet apparel shopping) (5)	.84	3.01	60.1	.82
Attitude toward Internet apparel shopping	Bad/Good (4)	.93	3.52	88.1	.95

3. Path Analysis

1) Multicollinearity check

To examine a possibility to use Fishbein measures of attitude and buying intention instead of a general measure, multicollinearity (a high degree of correlation among independent variables) was checked. According to Fishbein measures (Fishbein & Ajzen, 1975), attitude is assessed by sum of the values multiplying each belief by weight of the belief. Also, buying intention is a composite of attitude and social influence values.

Multicollinearity was checked for each multiple regression equation using Variance Inflation Factor (VIF). For each independent variable including attitude and buying intention accessed by a general measure, VIF ranged between 1.01 and 2.07, far below Freund and Wilson's (1997, p. 375) acceptable criterion of 10. However, attitude and buying intention accessed by Fishbein measures indicated slightly high VIF of 4.5 and 4.6 respectively. Therefore, in the path analysis, only general attitude and buying intention measures were used to minimize possible multicollinearity problems.

2) Test of hypotheses

Multiple regression was run for each dependent variable in the research model to test proposed hypotheses. In evaluating the hypothesized model, significance of path coefficients, generalized variance, and total variance were compared between the full and reduced (research) model. Results of hypothesis testing were summarized in terms of dependent variables for the paths. <Fig. 1> provides beta coefficients and t-values for each path in the research model. Results of path analyses for the full model and reduced model (research model) were summarized in <Tab. 2>.

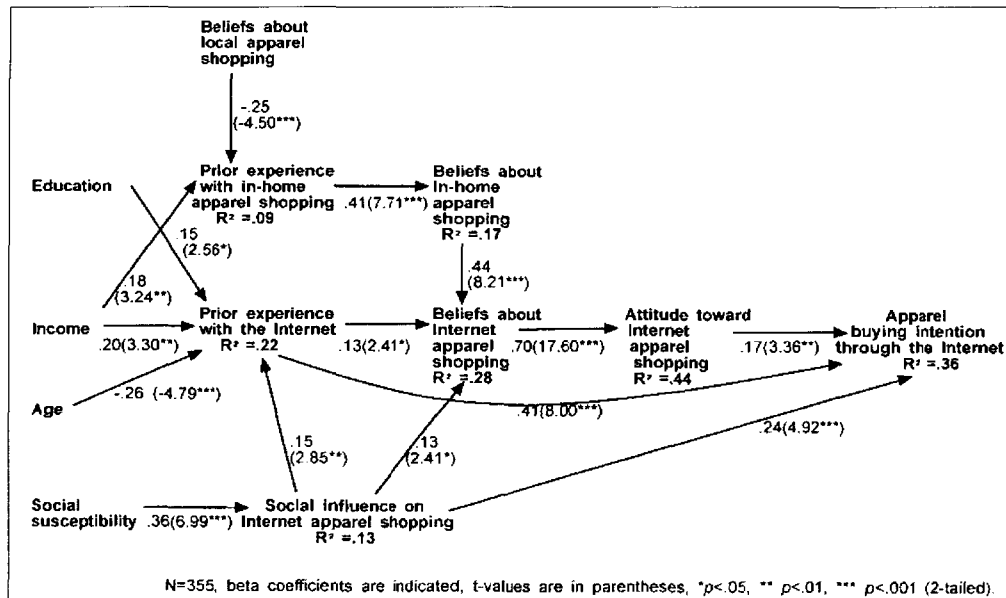
(1) Social influence on Internet apparel shopping

Hypothesis 1 was supported at the significant level of $p < .001$ ($\beta = .36$, $t = 6.99$), showing a significant causal relationship between consumers' social susceptibility and social influence on Internet apparel shopping. R square for social influence on Internet apparel shopping was .13.

(2) Prior experience with in-home apparel shopping

The level of household Income positively affected prior experience with in-home apparel shopping, supporting hypothesis 2 ($\beta = .18$, $t = 3.24$, $p < .01$). Beliefs in local apparel shopping had a direct negative effect on prior experience with in-home apparel shopping, supporting hypothesis 3 ($\beta = -.25$, $t = -4.50$, $p < .001$). R square for

prior experience with in-home apparel shopping variable was .09.



<Fig. 1> Proposed Model with Path Coefficients

(3) Prior experience with the Internet

All hypotheses for prior experience with the Internet (H4, H5, H6, H7) were confirmed ($R^2 = .22$). The level of education and income were positively related to consumers' prior experience with the Internet ($\beta = .15$, $t = 2.56$, $p < .05$; $\beta = .20$, $t = 3.30$, $p < .01$, respectively). Age was negatively related to prior experience with the Internet at the significant level of $p < .001$ ($\beta = -.26$, $t = -4.79$). Social influence on Internet apparel shopping also had a direct effect on consumers' prior experience with the Internet ($\beta = .15$, $t = 2.85$, $p < .01$).

(4) Beliefs about in-home apparel shopping

Consumers' beliefs about in-home apparel shopping were significantly affected by consumers' prior experience with in-home apparel shopping, supporting hypothesis 8 ($\beta = .41$, $t = 7.71$, $p < .001$, $R^2 = .17$).

(5) Beliefs about Internet apparel shopping

Beliefs about Internet apparel shopping were directly influenced by beliefs about in-home apparel shopping ($\beta = .44$, $t = 8.21$, $p < .001$), prior experience with the Internet ($\beta = .13$, $t = 2.41$, $p < .05$), and social influence on Internet apparel shopping ($\beta = .13$, $t = 2.41$, $p < .05$), supporting hypotheses 9, 10, and 11 ($R^2 = .28$).

<Tab. 2> Results of Path Analysis: Comparison of Full Model and Theoretical Model

Response Variable Explanatory Variable	Full Model			Theoretical Model		
	β	t	R ²	β	t	R ²
<u>Social influence on Internet apparel shopping</u>			.13			.13
Social susceptibility	.36	6.99***		.36	6.99***	
<u>Prior experience with in-home apparel shopping</u>			.10			.09
Education	.08	1.27		----	----	
Income	.15	2.33*		.18	3.24**	
Age	-.01	-.18		----	----	
Beliefs about local apparel shopping	-.26	-4.58***		-.25	-4.50***	
<u>Prior experience with the Internet</u>			.22			.22
Education	.16	2.59*		.15	2.56*	
Income	.20	3.25**		.20	3.30**	
Age	-.26	-4.78***		-.26	-4.79***	
Social susceptibility	.03	.54		----	----	
Social influence on Internet apparel shopping	.14	2.47*		.15	2.85**	
<u>Beliefs about in-home apparel shopping</u>			.19			.17
Education	.12	1.77		----	----	
Income	.07	1.02		----	----	
Age	-.03	-.48		----	----	
Beliefs about local apparel shopping	-.14	-2.39*		----	----	
Prior experience with in-home apparel shopping	.32	5.26***		.41	7.71***	
<u>Beliefs about Internet apparel shopping</u>			.29			.28
Education	.05	.79		----	----	
Income	.02	.35		----	----	
Age	-.05	-.92		----	----	
Social susceptibility	-.08	-1.38		----	----	
Social influence on Internet apparel shopping	.18	2.84**		.13	2.41*	
Beliefs about local apparel shopping	-.04	-.60		----	----	
Prior experience with in-home apparel shopping	-.63	-.97		----	----	
Beliefs about in-home apparel shopping	.43	6.71***		.44	8.21***	
Prior experience with the Internet	.13	1.97		.13	2.41*	
<u>Attitude toward Internet apparel shopping</u>			.49			.44
Education	.05	.94		----	----	
Income	-.04	-.64		----	----	
Age	-.04	-.78		----	----	
Social susceptibility	.10	1.77		----	----	
Social influence on Internet apparel shopping	.07	1.26		----	----	
Beliefs about local apparel shopping	-.06	-1.07		----	----	
Prior experience with in-home apparel shopping	-.00	-.04		----	----	
Beliefs about in-home apparel shopping	.05	.76		----	----	
Prior experience with the Internet	-.04	-.61		----	----	
Beliefs about Internet apparel shopping	.59	9.95***		.70	17.60***	
<u>Apparel buying intention through the Internet</u>			.46			.36
Education	.03	.47		----	----	
Income	.01	.23		----	----	
Age	.00	-.00		----	----	
Social susceptibility	-.08	-1.47		----	----	
Social influence on Internet apparel shopping	.24	4.08***		.24	4.92***	
Beliefs about local apparel shopping	-.11	-1.94		----	----	
Prior experience with in-home apparel shopping	-.15	-2.57*		----	----	
Beliefs about in-home apparel shopping	-.05	-.71		----	----	
Prior experience with the Internet	.45	7.35***		.41	8.00***	
Beliefs about Internet apparel shopping	.10	1.33		----	----	
Attitude toward Internet apparel shopping	.09	1.27		.17	3.36**	

Note * $p < .05$, ** $p < .01$, *** $p < .001$ (2-tailed).

(6) Attitude toward Internet apparel shopping

Consumers' beliefs about Internet apparel shopping significantly affected consumers' attitude toward Internet apparel shopping, supporting hypothesis 12 ($\beta = .70$, $t = 17.60$, $p < .001$, $R^2 = .44$).

(7) Apparel buying intention through the Internet

Apparel buying intention through the Internet was directly affected by attitude toward Internet apparel shopping ($\beta = .17$, $t = 3.36$, $p < .01$), social influence on Internet apparel shopping ($\beta = .24$, $t = 4.92$, $p < .001$), and prior experience with the Internet ($\beta = .41$, $t = 8.00$, $p < .001$), supporting hypotheses 13, 14, and 15.

V. Discussion and Conclusions

All 15 hypothesized paths were significant in the proposed model. The results indicate that theoretical notions integrated to generate the proposed model successfully explain some of intention formation process for Internet apparel shopping. Findings suggest that Internet adoption for apparel shopping is mainly explained by psychological judgment and social influence, supporting the theory of reasoned action (Ajzen & Fishbein, 1980).

Specifically, psychological judgment variables such as beliefs about in-home and Internet apparel shopping and attitude toward Internet apparel shopping together are important factors affecting apparel buying intention through the Internet. In findings, belief about diverse aspects of Internet apparel shopping was a key factor developing attitude toward Internet apparel shopping. The results indicate that perceptions of diverse aspects of Internet apparel shopping such as benefits or risks affect evaluation of the Internet as a shopping tool for apparel, consistently with the previous studies (Han & Park, 2000; Kim & Park, 1999).

In addition, social influence on Internet apparel shopping was a significant variable in predicting apparel buying intention through the Internet. This finding was consistent with the theory of reasoned action (Ajzen & Fishbein, 1980).

Rogers' (1995) diffusion of innovations was embedded in the theoretical model proposed in the study. According to the diffusion of innovations theory, prior experience with an innovation and socio-demographic characteristics influence the early stages of the decision making process for innovation adoption. Supporting Rogers' theory, the study findings indicate that prior experience with the Internet and in-home apparel shopping are also important factors predicting adoption of Internet apparel shopping. This results were consistent with the previous studies (Han & Park 2000; Park, 2000).

In addition, socio-demographics of respondents such as education, income and age are also important indicators predicting Internet adoption for apparel shopping. Specifically, study results suggested that who are younger, have a higher level of income, and have a higher level of education had more experience with the Internet than people who are not. The study results supported Rogers' (1995) description of early adopters who tend to be younger and more educated people with higher income.

1. Implications

Results will provide valuable implications for industry practitioners. First, since beliefs about Internet apparel shopping is essential in forming consumers' attitude toward Internet apparel shopping, practitioners should concentrate on promotional efforts emphasizing benefits and reducing risks related to Internet apparel shopping. Second, prior experience is another important factor affecting intention formation process. To increase experiential knowledge of Internet apparel shopping, various kinds of events allowing consumers to visit shopping mall sites or to try innovative functions helping product choice (e.g., a my sized-model option available in www.Landsend.com or an item-coordinating option available in www.Eddiebauer.com) should be provided. Third, target market for Internet shopping can be further defined based on results regarding socio-demographic effects on Internet adoption process for apparel shopping. Specifically, primary targets for Internet apparel shopping will be consumers who are younger and have a high level of income and education.

The study results will contribute to limited literature on conceptual models presenting relationships among factors related to Internet apparel shopping. This model will help to generate important variables in predicting intention formation for Internet apparel shopping. The model developed based on two socio-psychological theories will provide a basis for future research in Internet shopping.

References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15, 473-481.
- Bolfing, C. P., Hills, G. E., & Barnaby, D. J. (1981). Differentiation of urban and rural shoppers using selected in home shopping dimensions. In R. D. Taylor, & J. H. Summey, B. J. Bergiel (Eds.), *Progress in marketing theory and practice* (pp. 87-92), Carbondale, IL: Southern Marketing Association.
- Braun, H. D. (1993). Catalog shoppers and what sets them apart. *Retail Market Analysis*, 2, 1.
- Doll, J., & Ajzen, I. (1992). Accessibility and stability of predictors in the theory of planned behavior. *Journal of Personality and Social Psychology*, 63 (5), 754-765.
- Doll, J., & Mallu, R. (1990). Individualized attitude formation, attitude structure, and attitude-behavior consistency. *Zeitschrift fur Sozialpsychologie*, 21, 2-14.
- Fishbein, M., & Ajzen, I. (1975). *Beliefs, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fram, E. H., & Grady, D. B. (1995). Internet buyers: Will the surfers become buyers? *Direct Marketing*, 57(10), 63-65.
- Fram, E. H., & Grady, D. B. (1997). Internet shoppers: Is there a surfer gender gap? *Direct Marketing*, 59(1), 46-50.

- Freund, R. J., & Wilson, W. J. (1997). *Statistical methods* (Revised ed.). San Diego, CA: Academic Press, Inc.
- Gattiker, U. E., Perlusz, S., & Bohmann, K. (2000). Using the internet for B2B activities: A review and future directions for research. *Internet Research: Electronic Networking and Policy*, 10(2), 126-140.
- Geissler, G. L., & Zinkhan, G. M. (1998). Consumer perceptions of the World Wide Web: An exploratory study using focus group interviews. *Advances in Consumer Research*, 25, 386-392.
- Grant, A. E. (1996). Television IS the store: Direct response television. In R. A. Peterson (Ed.), *Electronic marketing and the consumer* (pp. 39-60). Thousand Oaks, CA: Sage Publications, Inc.
- Han, S. L., & Park, C. K. (2000). Determinants of consumer buying intention in online environment: Analysis of flow concept. *Korean Journal of Marketing Research*, 15(1), 187-204.
- Hoffman, D. L., & Novak, T. P. (1996). Marketing in Hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60, 50-68.
- Internet shopping: An Ernst & Young special report (1998, January). *Stores* (Section 2), 1-28.
- Jasper, C. R., & Lan, P. R. (1992). Apparel catalog patronage: Demographic, lifestyle and motivational factors. *Psychology and Marketing*, 9(4), 275-296.
- Kim, S. Y., & Park, S. Y. (1999). Decision making factors on purchase intention in e-commerce. *Korean Journal of Consumer Research*, 10(3), 45-66.
- Kunz, M. B. (1997). *On-line customers: Identifying store, product and consumer attributes which influence shopping on the Internet*. Unpublished doctoral dissertation, The University of Tennessee, Knoxville.
- Lumpkin, J. R., & Hawes, J. M. (1985). Retailing without stores: An examination of catalog shoppers. *Journal of Business Research*, 13, 139-151.
- O'Keefe, D. J. (1990). *Persuasion: Theory and research*. Newbury Park, CA: Sage Publications, Inc.
- Park, C. (2000). The Internet navigation value and Internet shopping behavior. *Korean Journal of Marketing Research*, 15(1), 143-162.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advanced in experimental social psychology: Vol. 19*. (pp. 123-205). New York: Academic Press.
- Reynolds, F. D. (1974). An analysis of catalog buying behavior. *Journal of Marketing*, 38, 47-51.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: Wiley.
- Settle, R. B., Alreck, P. L., & McCorkle, D. E. (1994). Consumer perceptions of mail/phone order shopping media. *Journal of Direct Marketing*, 8(3), 30-45.
- Shim, S., & Drake, M. F. (1990_a). Consumer intention to purchase apparel by mail order: beliefs, attitude, and decision process variables. *Clothing and Textiles Research Journal*, 9(1), 18-26.
- Shim, S., & Drake, M. F. (1990_b). Consumer intention to utilize electronic shopping. *Journal of Direct Marketing*, 4, 22-33.
- Smallwood, V., & Wiener, J. (1987). Light and heavy catalog shoppers for clothing. *Clothing and Textiles Research Journal*, 5, 25-30.
- VanTassel, S., & Weitz, B. A. (1997, February). *Direct Marketing*, 59(2), 40-41.