Internet Marketing Involvement and Consumer Behavior

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Brief biography

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Abstract

This paper proposes a framework for connecting the involvement construct's antecedents of Internet marketing, measured involvement degree, related constructs and consequences of consumer behavior. The research first determined the factors that influence the degree of Internet marketing involvement then established the different involvement degree clusters by measured involvement. Finally, the relationship among influence factors, Internet marketing involvement degree, and consequences of consumer behavior was analyzed. Based on the research findings, this paper discusses the possible Internet marketing strategies for a variety involvement degree clusters.

Keywords: Internet marketing involvement, consumer behavior.

Introduction

One of the most stunning aspects of the past few years has been the speed at which the Internet market has expanded and matured. This rapid rate of Internet adoption has resulted in an extraordinary pace of change in the marketing landscape- and opened up a variety of opportunities for marketers (Pollack 1999). All across Taiwan and around the world, shopping centers are closing their doors as consumers turn to the Internet for all of their shopping needs. The Internet as the primary on-line marketing channel is now overtaking the commercial on-line services. In fact, all of the on-line service firms now offer Internet access as a primary service. Users can send e-mails, exchange views, shop for products, and access news, food recipes, art, and business information (Armstrong and Kotler 2000).

As the Internet establishes its position as a mainstream marketing channel, consumer criticism regarding Internet marketing strategies have increased as well. Critics worry about information privacy, including issues related to the acquisition and dissemination of consumer data (Rohm and Milne 1998). Thus, though over half of all American adults use the Internet, approximately only half of the current Internet users have purchased products or services online (Sefton 2000). This poses a serious obstacle for Internet marketers, as 75% of American adults do not spend money in web stores. The percentage of online money-spenders is generally less in countries outside the United States.

A key factor that decides the success of Internet marketing is user involvement. The level of consumer involvement in a product category or service is a major determinant of online purchase or usage behavior. Different involvement clusters produce different responses. Thus the degree of user involvement in an Internet marketing effort will determine consumer behavior. The response dimension is a function of the type of involvement generated and the situations confronted. The response dimension characterizes how a consumer will behave under different involvement conditions. There are three response factors: (1) search, (2) information processing, and (3) decision/persuasion. However, a variety of variables are thought to precede and influence the user involvement. These so-called antecedents interact with each other to determine the degree of involvement a consumer will experience at any particular time. These variables can be grouped into (1) person, (2) stimulus/object, and (3) situation categories (Loudon and Della Bitta 1993).

The purpose of this paper is to propose a framework that can determine the relationship among involvement antecedents of Internet marketing, measured involvement degree, related constructs, and consequences of consumer behavior. The framework first establishes the factors that affect the degree of Internet marketing involvement and then presents the different involvement degree clusters according to the measured involvement degrees. Finally, consumer behavior consequences of Internet marketing are established. With the findings, this paper then discusses the implications for Internet marketers and recommends Internet strategies for a variety of involvement degree clusters.

Consumer Involvement

Involvement identification

Involvement result is the customer's ultimate concern with a purchase/consumption experience (Bolfing 1988). Holbrook and Hirschman (1982) proposed that involvement included experiencing a number of positive results such as the rewards inherent in the product and the product's expressive values. Rothschild (1984) defined involvement as "an unobservable state of motivation, arousal or interest." Involvement is evoked by a particular stimulus

or situation and has drive properties. Its consequences are searching, information processing and decision-making (Kapferer and Laurent 1986). Hansen (1985) suggested that involvement is nothing more than a consumer's interest for a product category. Moreover, some researchers proposed frameworks for conceptualizing the involvement construct. Zaichkowsky (1986) outlined prior studies that have shown involvement antecedents to be due to personal characteristics, object characteristics and/or situation characteristics. Earlier researchers posited that one or more of these factors influenced the consumer's level of involvement in advertising, products, and purchase decision. Andrews, Durvasula and Akhter (1990) designed a framework that closely scrutinizes the involvement construct's antecedents, state properties, measures, related constructs, and consequences. The framework provided a nomological network of relationships among involvement antecedents, state properties, related constructs, and consequences. The antecedents to involvement were grouped into personal and situational/decision factors. The related construct factors, such as one's opportunity to process and ability to process, can limit the impact of these antecedents on the level of involvement. Numerous consequences of manipulated involvement levels have also been determined, including search behavior, information processing and persuasion.

Involvement measuring methodology

Andrews, Durvasula and Akhter (1990) distinguished involvement measurement scales into two types. One scale measures enduring/product involvement. For example, Buchanan (1964), Zinkhan and Fornells' (1989) method for measuring product interest was developed based on their research respondents' relative preferences for watching short films regarding the products in question. Each product was presented four times, for a possible range of 0 to 8, a higher result indicating. Bowen and Chaffee (1974) and Tyebjee (1979) used seven product-involvement measures to differentiate product class. Vaughn (1980) distinguished product class by product categorization and think/feel dimensions. Else, Block (1981) used a 17-item product involvement scale for car enthusiasts. Laurent and Kapferer (1985) used a 19-item consumer involvement scale. Zaichkowsky (1985, 1987) used a 20-item bipolar adjective scale while Wells (1986) used a 10-item relevance scale.

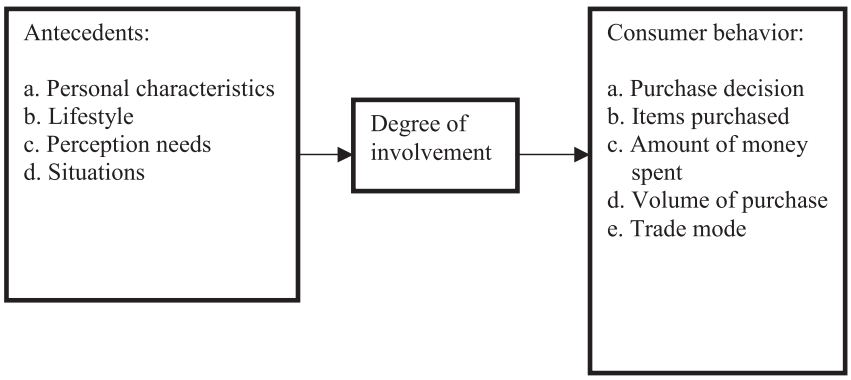
The second scale measures information manipulation with a focus on advertising messages. This second method studies three topics: (1) attention/processing strategies (e.g. Gardner, Mitchell and Russo 1978, 1985; Gardner 1985; Laczniak, Muehling and Grossbart 1989), (2) personal/situational involvement (e.g. Wright 1973, 1974; Belk 1982; Clarke and Belk 1978; Celsi and Olson 1988; Andrews and Shimp 1990), and (3) audience/process involvement (e.g. Krugman 1966-1967; Leigh and Menon 1987).

In marketing, involvement has often been equated with perceived product importance (Traylor 1981; Lastovicka and Bonfield 1982). Zaichkowsky (1985) proposed a bipolar adjective scale, the Personal Involvement Inventory (PII), to capture the concept of involvement in products. The scale successfully complied with standards for internal reliability, reliability over time, content validity, criterion - related validity and construct validity. The PII offers researchers an easily administered tool that can be applied across product categories used as a covariate to other research questions. By using twenty items, the scale allowed an adequate sampling of possible items that represented product involvement was long enough to ensure a high level of reliability. This scale used semantic differential that consists of a series of bipolar items, each measured on a seven-point rating scale. It is easy to administer and score, takes only a few minutes to complete, and is applicable to a wide array of objects (Zaichkowsky 1985). Thus, this study used PII as the measuring scale for Internet marketing involvement and to segment the market clusters.

The Framework

According to Andrews, Durvasula and Akhter (1990), this study's conceptualization of the relationship construct is shown in Figure 1. This framework for identifying consumer involvement is influenced by four antecedents that included (a) personal characteristics, (b) lifestyle, (c) perception needs, and (d) situations that directly affect the shopping decision. The consumer behaviors affected were (a) purchase decision, (b) items purchased, (c) amount of money spent, (d) volume of purchase, and (e) trade mode.

Figure 1. Framework



Based on this framework, the four antecedents influenced the consumer's involvement in Internet marketing and consumption behaviors. These involvement antecedents are significantly related with the degree of Internet marketing involvement, which in turn has a significant relationship

with consumer behaviors. The following hypotheses are offered regarding the relationship among the degree of Internet marketing involvement, influence variables, and consumer behavior.

H_1: The degree of Internet marketing involvement is significantly related with consumer's personal characteristics.

H_2: The degree of Internet marketing involvement changes significantly with different consumers' lifestyles.

H_3: The degree of Internet marketing involvement changes significantly with different consumers' perception needs.

H_4: The degree of Internet marketing involvement is significantly related with situations.

H_5: Consumer behavior is significantly related with the degree of Internet marketing involvement.

The study

Focus groups

This study interviewed a focus group of ten potential customers to collect original consumer perception needs associated with Internet marketing. In total, 122 descriptions of perception needs were collected. All non-redundant needs obtained from the first focus group were recorded as primary needs. The study then interviewed a second focus group of ten different customers to consolidate and reduce the number of primary needs. This process generated 20 representative items regarding the respondents' perception needs and attitudes toward Internet marketing. A third focus group, composed of ten Internet users, was formed to verify the descriptions about perception needs so a questionnaire on perception needs and attitudes for Internet marketing could be designed. Finally, 17 items concerning perception needs and attitudes were obtained and incorporated into a questionnaire for a random sampling survey. Concurrently, the SRI Value and Lifestyles (VALS) Program (Piirto 1991) was used to design and acquire 18 lifestyle questions. Lifestyle was defined as a person's living patterns. Lifestyle questions measured consumers' major AIO dimensions: Activities, Interests, and Opinions. In this study, consumer perception needs and lifestyles were measured using a five-point Likert scale. Consumer purchase behavior, personal characteristics data, and the situations were assessed using a nominal scale.

Data collection

The primary data from this research were collected through personal interviews with 620 Internet users selected by quota sampling throughout Taiwan. After rejecting 20 unusable responses, this research collected a sample of 600 respondents for an effective response yield of 96.77 percent. Respondent ages ranged from sixteen to fifty years old. Gender was almost equally

balanced (43.5% male, 56.5% female). Respondent occupations included engineers, students, business professionals, laborers and service workers. Educational levels ranged from junior high school to post-graduate degrees. Monthly individual gross income ranged from under US$550 to US$2850. Of the 600 respondents, 13.8% were married and the others were either never married or divorced. These demographic characteristics were similar to those of Taiwan Internet users.

The first purpose of this study is to measure a person's involvement in Internet marketing. Using the PII measure to total the 20 items gives a range from a low of 20 to a high of 140. This study divided consumers into three involvement degree clusters by quartiles. An involvement score within the first quartile/25th percentile was considered the low involvement cluster. An involvement score between the first quartile/25th percentile and the third quartile/75th percentile was considered the intermediate involvement cluster. An involvement score on the third quartile/75th percentile or above was considered the high involvement cluster. To decide the cut off points for low, intermediate and high involvements on the scale, an overall distribution was tabulated and presented in Table 1. The resulting distribution was used to classify scores into low, intermediate, or high involvement clusters when the study needed a comparison among individuals. A low score were defined as one ranging from 20 to 69. Intermediate scores were defined as those ranging from 70 to 86. High score were defined as those in the top quartile of the distribution, ranging from 87 to 140. Because some involvement scores were similar, the respondent sample could not be divided perfectly into three groups by quartiles. The resulting three clusters were 151 (25.2%), 285 (47.5%) and 164 (27.3%) for low, intermediate, and high scores, respectively.

Result analysis

This study first sought to determine the influence of antecedents on Internet marketing involvement. By the Chi-square test, this research found that the degree of Internet marketing involvement was significantly related with three items of consumer personal characteristics ($p<0.00$): Education, occupation, and income. This result supports H_1. Most members of the low involvement degree cluster had low levels of education, were laborers or service workers, and were in the middle-income level. Most in the intermediate involvement degree cluster were college students with low incomes. Members in the high involvement degree cluster had the highest education level, most of whom with graduate or college degrees. Those in the high involvement cluster were mostly students or business professionals and exhibited the highest average income among the three clusters (See Table 2).

Second, AIO data was submitted for a principal component factor analysis with varimax rotation. Using an eigenvalue greater than one selection criterion, the analysis identified five lifestyle factors, which accounted

for 51.21 percent of the variance. Because the Cronbach's alpha of the fifth factor was too low, it was deleted. This study identified the four lifestyle factors as the (1) fashion and ego factor, (2) independence and freedom factor, (3) family life factor, and (4) information inquiry and arbitrary factor (Shown in Table 3). Using a variance analysis, this study found that the degree of Internet marketing involvement differed significantly in relation to three different lifestyle factors - fashion and ego factor, independent and freedom factor, and family life factor. This finding provides partial support for H_2. The high involvement degree cluster considered these three lifestyle-factors more important than did the other two clusters (Shown in Table 4).

Third, this research identified four perception need factors by using factor analysis. The factors were: (1) safe and trust factor, (2) knowledge and understanding factor, (3) convenience and speed factor, and (4) effective factor. These four factors accounted for 51.64 percent of the variance. The Cronbach's alpha for all four factors were greater than 0.52 (See Table 5). Through variance analysis, this study found that the degree of Internet marketing involvement differed significantly in relation to three perception-need factors. The three factors were safe and trust factor, knowledge and understanding factor, and effective factor. This finding provides partial support for H_3. The high involvement degree cluster considered these three perception-need factors more important than did the other two clusters (Shown in Table 6).

Fourth, by using the Chi-square test, this study found that the degree of Internet marketing involvement was significantly related with the situation. The different involvement degree clusters displayed significantly different reactions to the three items defined as online location, online frequency per week, and Wed site ($p<0.00$). This finding supports H_4. The high involvement degree cluster exhibited more online locations and online frequency and higher usage of Kimo or Yahoo Web site (See Table 7).

According to the above results, this study was able to identify the influence factors of Internet marketing involvement. This included three items of personal characteristics, three lifestyle factors, three perception-needs factors, and three situation items. These factors are the antecedents that influence consumers' degree of Internet marketing involvement.

Finally, this study used the Chi-square test to identify the consequences of Internet marketing involvement correlating to consumer behavior. The study found seven items of consumer behavior that differed significantly among the different Internet marketing involvement clusters. This finding indicated that consumer behavior was significantly related with the degree of Internet marketing involvement and supports H_5 (See Table 8).

The seven items were grouped into five categories (See Figure 2). The first category, purchase decision, included two items: (1) online purchase rate, and (2) reasons for not shopping online. The high involvement degree

cluster recorded the highest rate of online purchases and the low involvement degree cluster had the lowest online purchase rate. The top reasons for not shopping online were high freight charges followed by unsafe delivery methods and long delivery periods.

The second category was product categories purchased through Internet marketing. The high involvement degree cluster often purchased books via the Internet; the low involvement degree cluster's purchase rate for grocery was the highest among the three clusters.

The third category was the amount of money spent on online purchases per month. The high involvement degree cluster spent money via Internet marketing than the intermediate and low involvement degree clusters.

The fourth category, purchase volume of online shopping, was measured by purchase frequency per month. The results revealed that over half of the members in the high involvement degree cluster conducted 2 to 7 online purchases per month. Among those in the intermediate involvement degree cluster, 41.91% made 2 to 7 online purchases per month. On the other hand, half of those in the low involvement degree cluster made on average one or less online purchase per month.

The fifth category, trade mode, included two items: (1) service acquisition and (2) pay mode. In the high involvement degree cluster, 35.37% of consumers sought product information through Internet marketing, 17.07% considered a company's image based on Internet marketing, and 16.46% sought customer services. In the intermediate involvement degree cluster, 31.19% of consumers sought product information, and nearly 20% considered a company's image and paid attention to online promotions. Only 24.5% of the consumers in the low involvement degree cluster sought product information through Internet marketing, but over 20% percent paid attention to online promotions and customer services. Most members in the high involvement degree cluster paid by both credit card and mail. The intermediate involvement degree cluster preferred mail, and the low involvement degree cluster preferred credit card.

Marketing Implications

Many factors influence consumers' degree of Internet marketing involvement. This study has identified four categories of influence antecedents (Shown in Figure 2). The first category, personal characteristics, includes (1) education, (2) occupation, and (3) income. The second category, lifestyle, includes (1) fashion and ego factor, (2) independence and freedom factor, and (3) family life factor. The third category, perception needs, includes (1) safe and trust factor, (2) knowledge and understanding factor, and (3) effective factor. The fourth category, situations, includes (1) online location, (2) online frequency and (3) Web site. This relationship items figure revealed the influence factors of Internet marketing involvement degree, and the rela-

tionship among antecedents, Internet marketing involvement degree, and the consequence on consumer behavior. The consequences were presented by purchase decision, items purchased, amount of money spent, purchase volume, and trade mode.

An Internet marketing manager can make strategies based on the study results. Online strategies should first focus on the market segment with a high degree of Internet marketing involvement, such as students or business professionals with high education and income levels, and emphasize the characteristics of fashion and ego, independence and freedom, and family life to best match their lifestyles. Second, Internet marketing should strengthen consumer trust, knowledge, and understanding through effective Web sites such as Yahoo or Kimo. By satisfying consumer needs, Internet marketing can raise the online purchase rate. By offering more product information, customer service, and convenient payment methods, Internet marketing can help increase online purchase frequency and money spent.

The online purchase rate of those in the intermediate Internet marketing involvement degree cluster is limited by low income. To best reach these consumers, the online marketing manager should emphasize company image and product promotions via advertising. Because increased perception builds trust and eventually usage, the implementation of more information and promotion can boost online usage and purchase rates.

Consumers in the low Internet marketing involvement degree cluster are mostly laborers and service workers with low educational levels and low Internet usage. To develop these consumers into frequent Internet users and prime them for online purchases, the marketing manager should emphasize Internet marketing perception and awareness and improve their knowledge and understanding.

Conclusion

Though several articles have studied consumer involvement in advertising or product and purchase decision, few researches involved Internet marketing. This paper proposed a framework for connecting the involvement construct's antecedents of Internet marketing, measures involvement degree, related constructs and consequences of consumer behavior. After identifying the factors influencing Internet marketing involvement degree, this study differentiated the three involvement degree clusters by involvement measurements. Finally, the relationship among influence factors, Internet marketing involvement degree, and consequences of consumer behaviors was presented. Implications for Internet marketing retailers were then discussed with strategy considerations about Internet marketing for consumers in the three involvement degree clusters.

Antecedents of personal characteristics, lifestyle, perception needs, and situations affected the degrees of consumer involvement. These influ-

ence factors directly affects consumers' Internet marketing involvement degree and consumers' behavior such as purchase decision, items purchased, amount of money spent, purchase volume, and trade mode.

This study attempted to identify all influence factors and respondent behavior to Internet marketing. Such research efforts will contribute to enrich our understanding of Internet marketing related factors, and will advance the study of involvement driven frameworks in Internet marketing research. Future research should apply the framework developed in this paper to other products and introduce additional variables to identify more relationships and reach more effective results.

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Table 1. Cluster of involvement degree			
Involvement score	*Number*	*Percentage*	Involvement degree cluster
20-69	151	25.2%	Low
70-86	285	47.5%	Intermediate
87-140	164	27.3%	High

Table 2. Personal characteristics analysis				
		Involvement degree cluster		
Characteristics item	*Chi-square (p)*	*Low*	*Intermediate*	*High*
Education	1.887 (0.000)**	High school	College	Graduate, College
Occupation	58.462 (0.000)**	Laborers, Service workers	Student	Student, Business professional
Income (US$ /per month)	29.469 (0.000)**	Middle (58.9% $550 below/per month, 31.8% $551-1150/per month)	Low (71.6% $550 below/per month)	High (48.8% $550 below/per month, 38.4% $551-1150/per month)
**: p<0.01				

Table 3. Factor analysis and reliability for lifestyle			
Factor name	*Eigenvalue*	*Cumulative percent of variance*	*Cronbach's alpha*
1. Fashion and ego	2.591	14.395	0.7060
2. Independence and freedom	2.214	26.696	0.6523
3. Family life	1.583	35.488	0.3777
4. Information inquiry and arbitrary	1.556	44.131	0.2096
5. Effect and excitement	1.274	51.210	0.0892

Table 4. Analysis of variance for lifestyle

	Involvement degree cluster					
Factor name	*Low (1)*	*Intermediate (2)*	*High (3)*	*F*	*p*	*Scheffe test*
1.Fashion and ego	-1.6388	-0.0703	0.2730	9.083	0.000**	(1,3) (2,3)
2.Independence and freedom	0.01702	-0.2060	0.3422	16.480	0.000**	(1,3) (2,3)
3. Family life	-0.1536	-0.0177	0.1722	4.303	0.014*	(1,3)
4. Information inquiry and arbitrary	0.1001	-0.0149	-0.0664	1.150	0.317	

**: p<0.01, *:P<0.05

Table 5. Factor analysis and reliability for perception needs

Factor name	*Eigenvalue*	*Cumulative percent of variance*	*Cronbach's alpha*
1. Safe and trust	2.595	15.263	0.7318
2. Knowledge and understanding	2.374	29.231	0.6951
3. Convenience and speed	2.051	41.296	0.6715
4. Effective	1.760	51.647	0.5199

Table 6. Analysis of variance for perception needs

	Involvement degree cluster					
Factor name	*Low (1)*	*Intermediate (2)*	*High (3)*	*F*	*p*	*Scheffe test*
1.Safe and trust	-0.4551	0.1453	0.1673	22.432	0.000**	(1,3) (1,2)
2.Knowledge and understanding	0.0180	-0.1920	0.3158	14.023	0.000	(1,3) (2,3)
3. Convenience and speed	-0.0496	-0.00275	0.0837	1.273	0.281	
4. Effective	-0.1552	-0.1627	0.4246	21.776	0.000	(1,3) (2,3)

**: p<0.01

Table 7. Situations analysis

		Involvement degree cluster		
Situations item	*Chi-square (p)*	*Low*	*Intermediate*	*High*
Online location	24.417 (0.002)**	Home (55.6%) School (27.8%)	Home (50.9%) School (33.3%)	Home (49.4%) School (25.6%) Office (17.7%)
Online frequency (per week)	30.589 (0.000)**	15 hours below (71.5%)	15 hours below (71.5%)	15 hours below (49.4%) 16-30 hours (29.9%)
Web site	24.487 (0.004)**	Kimo, Yahoo (69.5%)	Kimo, Yahoo (60.4%)	Kimo, Yahoo (68.3%)

Table 8. Consumer behavior analysis

		Involvement degree cluster		
Consumer behavior item	*Chi-square (p)*	*Low*	*Intermediate*	*High*
Online purchase rate	26.913 (0.000)**	9.7%	14.8%	22.1%
Reasons for not shopping online	102.171 (0.000)**	High freight charge (48.3%)	High freight charge (34.0%), Long delivery time (18.2%)	High freight charge (34.0%), Unsafe (31.1%)
Amount of money/per month	62.845 (0.000)**	US$28 below (57.1%)	US$29-86 (48.39%)	US$29-86 (54.72%)
Purchase frequency/per month	59.304 (0.000)**	Once and below (50%)	2-7 times (41.94%), 8-10 times (38.71%)	2-7 times (59.62%)
Pay mode	14.677 (0.023)**	Credit card (33.77%)	Mail (33.68%)	Credit card (35.98%), Mail (35.37%)
Purchase product categories	31.813 (0.001)**	Book (41.06%), Grocery (31.13%)	Book (37.2%), Grocery (23.51%)	Book (48.17%), Grocery (17.68%)
Service acquisition	26.258 (0.003)**	Product information (24.5%) Promotion (23.84%) Customer service(21.19%)	Product information (31.93%) Company image (19.65%) Promotion (19.3%)	Product information (35.37%) Company image (17.07%) Customer service(16.46%)
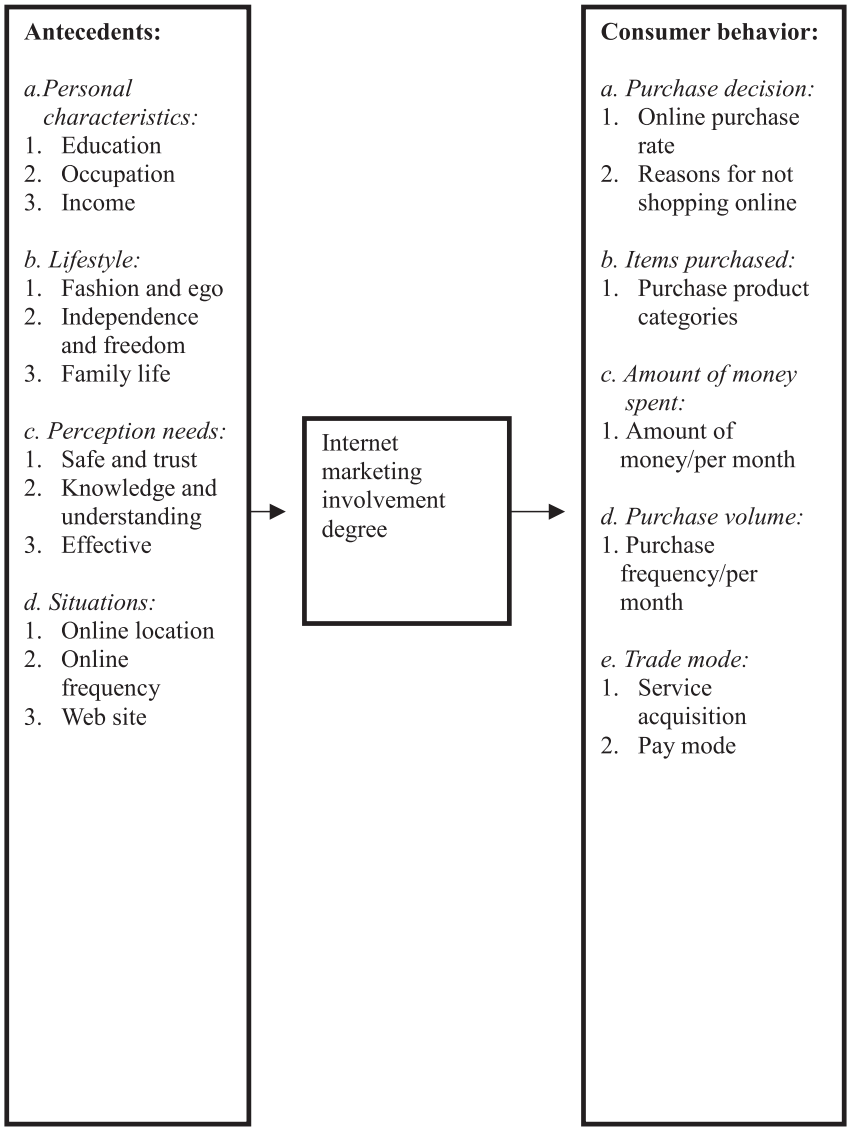
Figure 2. Relationship items