

The Relationship between Price Perception and Participant Roles in On-line Group-Buying: A Sample Study of Travelers from Mainland China

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Abstract. In the recent years, along with the emergence of world-wide-web and internet, many studies investigated in particular factors influencing on the repurchase intentions in the on-line group buying environment such as degree of satisfaction, risk evaluation, and personal characteristics. However our study focuses on the relationships between Price perception and Participant roles on group buying behavior through internet. With the findings found in the paper, there is a significant correlation between the roles of group buying and factors as gender, profession, monthly revenue, and if the family members live together. In the price perception, there is a significant discrepancy between price manevism, sales proneness, as well as price-quality schema and alterations on the roles of group buying.

Keywords: On-Line Group Buying, Price Perception, Participant Roles.

1 Introduction

Although on-line group buying is not yet the consumption model of the mainstream at the moment, the effects possessed by it have been gradually in display. Becoming a kind of newly emerging electronic commerce model, on-line group buying, attracts the attention of consumers or the companies. A good example was “Yahoo nabs Aussie-NZ group buying site” reported by the National Business Review [10]. For the comprehensive investigations done to on-line group buying markets by units, such as China Consumer Newspaper Agency in collaboration with both Sina.com and China.com, with two surveys as “2012 Group buying Consumption Behaviors Status Survey” and “2012 Group buying Consumption Human Right Status Survey”, the findings are shown that 67.9% of the consumers have at least one time of group buying consumption behavior each month, and 17.9% of the consumers even with participation of group buying experience above 4 times each month, that is to say, the consumers in this part will have at least one time of group buying consumption behavior each week in average. [11].

Several approaches have been applied to study online buying behavior. While most researches focus on the factors influencing on the repurchase intentions in the on-line group buying environment such as degree of satisfaction, risk evaluation, this study

combines the concept of price perception with on-line group buying behavior as a theoretical framework to portray the price perception among consumers with different roles in the buying process. By comparing the differences in price perception among the group buying leaders (initiating and completing group buying), followers (following and participating in group buying), and others, we may learn what kind of price perception consumers have different behavior. Such an approach leads us to find different segments of group buying consumers then designing and implementing strategies to target their need.

2 Literature Review

Up to the present time, there are still a lot of ways to call “group buying, for example, “United Purchasing” or “Collective Purchasing”. The earliest concept on group buying comes from marketing study of Etzel, et al [4] on the concept of slim profits earned to drive volume high; the companies will set their pricing below competition, to offer their clients with pricing below market value for large amount of quantity, to enhance sales quantity, allowing both seller and buyer to gain in such a transaction. Under the alluring factor of economic benefits, McHugh [9] believes that there are two reasons why the consumers are attracted by group buying model: (1) The consumers are able to purchase products with pricing lower than market values; (2) The group buying can allow the consumers to get discount on quantity, as well as to make price bargaining in unison with the suppliers by the consumer groups.

Besides this, the scholars also indicate that group buying will involve three parts: firstly, Demand Aggregation by Goldfarb and Stevenson [8], as a process, by which the consumers will gather together to reach a certain amount of purchasing quantity for their mutual products and service needs; secondly, Volume Discounting by Li et al. [5]. Anand & Aron [1] suggests that group buying often occurs in places, such as offices and households. Chen et al. [2] suggests that the historical factors on the origins of group buying activities are: along with the development of electronic commerce, the emergence of on-line auction activities plays an important role, in which there is appearance of group buying auction, for example, the websites on AOL (America-on-line) as LetsBuyIt.com and Ewinwin.com, both offer platform to allow the consumers for the participations of group buying activities.

Price perception is a complicated as well as to contain the feelings created by the stimulation of pricing on people. Generally speaking, pricing is thought to have two different perceptions- positive and negative (Erickson & Johansson [3]; Lichtenstein et al [6]; and Lichtenstein et al. [7]). By taking a look from economic viewpoints, due pricing represents a certain amount of money must be given up, there is creation of negative perception on consumers when purchasing products. In the research of Erickson [3], there are also demonstrations on four thinking constructs, in all of which pricing plays a negative role. Lichtenstein [7] further defines that value consciousness is in relation to the quality obtained by the relative pricing, while price perception is meant that the degree of concentration paid to low pricing by the consumers. It is defined the inclination on the degree of expertise to different pricings on many products, to know where one is able to obtain the lowest pricing. Discount inclination is

with illustration that when the consumers make purchasing, they tend to buy products with discounts. The inclination on the degree of expertise to pricing is defined that for any entity with such an inclination, there is a considerable amount of knowledge on various kinds of products, as well as pricing source data. In regard to the construct research of price perception by Lichtenstein, it is shown as below Fig. 1.

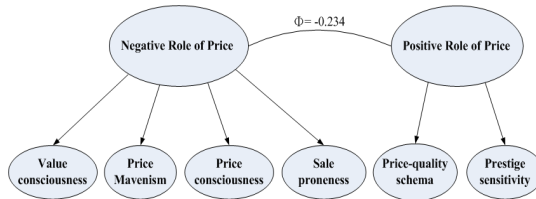


Fig. 1. Two roles of price (Data Source: Lichtenstein, D. R., Ridgway, N. M., Netemeyer, R. G., 1993)

However, not all of the consumers will produce negative implications on high pricings, and for some, they believe that high pricing is associated with high quality. Maybe the reason for them to take such a logical thinking, it is possibly due the products obtained with higher pricings are likely to have better chances for higher quality. As a result, they are more likely to purchase products with higher pricings. In this way, for the type of consumers, they tend to perceive high pricing as a positive connotation. In the study of 1993 by Lichtenstein et al. [7], there is definition that the standard of price-quality schema can be implied with a positive correlation on the standard of product quality. The prestige sensitivity is to illustrate that higher pricing represents the signal with better prestige and standing. For the two type of positive status on price perception, they represent that the consumers have their own uniqueness on product pricings, thus, they will purchase products within their perceived pricings and make decisions suitable to themselves.

According to different situations, the roles played by the consumers in the group buying can be divided into three types in this study, respectively as the leaders who initiate group buying, the followers of group buying, the other consumers who never take part of group buying, and moreover, to make further investigations whether or not there is a significant discrepancy on their personal characteristics and price perception. Based on the discussion above, the hypotheses of this study are as follows:

Hypothesis 1: On the “Roles of Group buying”, “Price Perception” is with significant discrepancy.

Hypothesis 2: On the “Roles of Group buying”, “Personal Characteristics” is with significant discrepancy.

3 Research Method

A survey was conducted in February May of 2011. 2007. A total of 260 passengers who come from Mainland of China were approached at the Taiwan Taoyuan

International Airport in Taiwan formed the sample of this study. Valid questionnaires were obtained from 247 people. The questionnaire consisted of three parts. The first part of the questionnaire focused on price perception. Respondents were asked to indicate their opinion towards group buying on 24 items regarding their level of value consciousness, price consciousness, sale proneness, price mavenism, price-quality schema, and prestige sensitivity on a 1-5 Likert scale, where 1 represented "Strongly disagree," and 5 stood for "Strongly agree." The second part is about group buying experience. The last part asked the respondents about their basic profile.

3.1 Profile of the Respondents

According to the different conditions of roles in group buying, the consumers can be divided into three types, for the consumers who never take part of group buying, there are 70 persons, accounted 30.3%; for the followers of group buying, there are 134 persons, accounted 33.7%; for the leaders who initiate group buying, there are 43 persons, accounted 36%. Moreover, the descriptive statistic table of personal characteristics on the interviewees is as organized in Table 1. For gender, the females are accounted 58.4%, and the males are accounted 41.6%.

Table 1. Profile of the respondents

Personal Characteristics		%	Personal Characteristics		%
Gender	Female	58.4	Education	Below Junior High School	4.6
	Male	41.6		Senior High School	37.9
Age	15~25	40.8		University and College	50.6
	26-35	25.2		Above Master Degree	6.9
	36-45	19.1	Monthly revenue (NTD)	Under15,000	30.0
	46-55	12.2		15,001-25,000	27.2
	Above 55 years old	2.7		25,001-35,000	18.6
Profession	Military and police	3.4		35,001-45,000	12.6
	Public/Educational	18.0		45,001-55,000	3.5
	Industrial	10.3	Over 55,001-65,000	8.1	
	Commercial	19.1	If family members who live together	live alone	19.1
	Services	18.2		live with their children	24.8
	Freelancer	4.4		live with their parents	40.0
	Student	22.2		live with their grandparents	1.1
	Others	4.4		Live with both parents and children	15.0

3.2 The Reliability of Measures among Price-Related Constructs

Data for the price-related constructs were examined for reliability using Cronbach's alpha, which indicated acceptable reliability for the price-related constructs as follows: value consciousness ($\alpha = 0.78$), price consciousness ($\alpha = 0.72$), sale proneness ($\alpha = 0.83$), price mavenism ($\alpha = 0.86$), price-quality schema ($\alpha = 0.70$), and prestige sensitivity ($\alpha = 0.88$).

3.3 Price Perception among Respondents

In regard to research Hypothesis 1: Different “Price Perception” is with significant discrepancy on the “Roles of Group buying”. In Table 2, it is shown the results by analysis. In the construct of price mavenism, there is a significant difference, especially for the means of people who initiate group buying as the highest around 2.843; in the construct of sale proneness, there is a significant difference, especially the means for the followers of group buying as the highest around 3.524; in the construct of price consciousness, there is also a significant difference, especially for the means of people who never take part of group buying as the lowest around 2.821. On the other hand, there is no significant discrepancy on prestige sensitivity, price-quality schema.

Table 2. Six Constructs of Price Perception on the Different Roles of Group buying

	Never take part of group buying	The followers of group buying	The leaders who initiate group buying	F	Sig.
Price Perception	N=70	N=134	N=43		
prestige sensitivity	2.817	2.664	2.843	0.957	0.379
price mavenism	2.657	2.901	3.127	4.223	0.016*
value consciousness	3.489	3.727	3.732	3.243	0.041*
sale proneness	3.200	3.524	3.470	5.091	0.007**
price consciousness	2.821	3.169	3.151	6.531	0.002**
price-quality schema	3.300	3.263	3.273	0.07	0.932

*P<.05. **P<.01. ***P<.001.

3.4 Personal Characteristics on Roles of Group Buying

In regard to research Hypothesis 2: Different “Personal Characteristics” is with significant difference on the “Roles of Group buying”, and in the research results of our paper, to indicate that amongst personal characteristics, gender (Sig. = 0.003) is with significant discrepancy on the roles of group buying, while others not with significant discrepancy. The cross comparison was shown in Table 3. The females have more intention to participate in group buying.

Table 3. Cross Comparison Between Personal Characteristics And Roles of Group buying

		Roles of Group buying						Total	
		Never take part of group buying		Followers		Leaders		N	%
		N	%	N	%	N	%		
gender	Female	36	21.6	99	59.3	22	19.2	167	64
	Male	37	40.2	40	43.9	15	16.3	92	36
Total		73	30.3	139	53.7	37	33.7	259	100

4 Conclusions

For the correlation between different roles of group buying (people who never take part of group buying, the followers of group buying, and the leaders who initiate group buying) and price perception, there is a significant discrepancy on the roles of group buying from price mavenism, sale proneness, and price consciousness. It suggests that the leaders who initiate group buying have the inclination on the degree of expertise to pricing is defined and searching a considerable amount of knowledge on various kinds of products, as well as pricing source data. For the correlation between different roles of group buying and personal characteristics, there is a significant discrepancy only on gender. The result shows that there are more females to take part of group buying, accounted 78.5%, while the males are accounted less at 60.2%, and the females are with 18.3% higher than the males. The percentage on the roles of group buying for female is: the followers of group buying (59.3%) > people who never take part of group buying (21.6%) > the leaders who initiate group buying (19.2%). The same order exists in males: the followers of group buying (43.9%) > people who never take part of group buying (40.2%) > the leaders who initiate group buying (16.3%).

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