# A Study of Green Purchase Intention Comparing with Collectivistic (Chinese) and Individualistic (American) Consumers in Shanghai, China

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Abstract: This study examines the influence of four factors on the green purchase intention of American and Chinese consumers as well as the relationship between these factors. To this end, a conceptual model has been proposed and subjected to empirical verification with the use of a survey. The survey results obtained in one major Chinese city provide reasonable support for the validity of the proposed model. Specifically, the findings from the structural-equation modeling confirm the influence of environmental knowledge, attitudes, environmental concern, and social influence, on the green purchase intention. Although the present findings provide a better understanding of the process and significant antecedents of green purchase intention, the researcher also highlight two areas for more thorough investigation. They are collectivism and individualism. This study also discusses how the present findings may help the Chinese government and green marketers to fine-tune their environmental programs.

**Key Words:** Green Purchase Intention, collectivism, individualism, American and Chinese Consumers, Green Products

#### 1. Introduction

Globally, there is an incremental trend in green consumerism and green marketing. Although this trend might be common in the Western countries, Asian countries have just started to receive its appearance (Asia's Media and Marketing Newspaper, 2008). In recent times, the environmental protection has emerged as a hot issue for societies, governments, in addition to business organizations. An awareness of environmental degradation has taken a long time to emerge in China (Head, 1996). Sharing the industrialization experience of most advanced nations, China has been paying a high ecological price for its rapid economic growth and transition to a market economy in terms of worsening pollution and an accelerating depletion of many critical resources (Chen, 1998). Chinese society becomes more sensitive and responsive towards environmental issues. When compared with other countries, China's lack of environmental concern and sustainability management is clearly evident (McEven et al, 2006).

In China, green products as an eco-friendly concept is welcomed by the green consumers' purchase behavior are influenced by the environmental concerns. However, not all the consumers would like to take the environmental action to purchase eco-friendly products. Moreover, China has been paying a higher ecological price for its rapid economic growth in terms of worsening pollution than many other developed countries (Ruowei, 2009). For this reason, the analysis of consumers' purchase intention of green products has become a subject of the research in attempt to find some differences of consumers who under different culture and which major factors may play the influential role during consumers' purchase intention of green products. The researcher developed the conceptual framework to examine the effect of green purchase intention as the dependent variable. This study conceptualized that by observing the environmental knowledge, attitudes, environmental concern and social influence as independent variables; it may increase the level of understanding on the green purchase intention. The main objectives of this study are: (1) to investigate the relationship between environmental knowledge, attitudes, environmental concern and social influence on green purchase intention; and (2) to investigate whether a difference exists between the collectivistic (Chinese) and the individualistic (American) consumers.

#### 2. Literature Review

Collectivism: A person who thinks collectively is expected to protect the environment so that the whole society, including him or her, can enjoy prosperity (McCarty & Shrum, 1994). The positive association between collectivistic and eco-friendly attitudes (both inward and outward) was repeatedly confirmed in previous empirical studies (Ling-yee, 1997; Chan, 2001). The Chinese culture measures very high on the "collectivism" scale along with Japan and Korea compared to most Western cultures. This means that the Chinese, in general, is a collective society that strives for harmony and group belonging, whether to family, friends, work, or country (Chinese New Year Red Envelope 2: Collectivism,2010). Miller (1984) found that collectivists paid more attention to the situation (context) than did individualists in making judgments of the appropriateness of behaviors in various situations. Given the collectivist nature, the Chinese are expected to exhibit a relatively strong tendency to subordinate their individual interests in pursuit of group interests compared to their Western counterparts (Hofstede, 1983; Triandis, 1989; Benton, 1994).

**Individualism:** Individualism is the moral stance, political philosophy, ideology, or social outlook that stresses "the moral worth of the individual" (Gagnier, 2010). Individualism promote the exercise of one's goals and desires and so value independence and self-reliance while opposing external interference upon one's own interests by society or institutions such as the government (Gagnier, 2010). Individualism is associated with artistic and bohemian interests and lifestyles where there is a tendency towards self-creation and experimentation as opposed to tradition or popular mass opinions and behaviors as also with humanist philosophical positions and ethics (Gagnier, 2010). In Hofstede's (1983) study, the United States scored the highest in individualism. His studies have shown that of all the cultures he analyzed, American culture possesses the highest level of individualism. It is the ultimate individualistic culture. This permeates every aspect of American society and is solidly embedded in the country's constitution.

**Environmental Knowledge:** Kinnear and Taylor (1974) defined environmental knowledge as the sets of ecological knowledge that individuals have of environmental topics. Chan and Lau (2002) defined environmental knowledge as the amount of knowledge a person has regarding environmental issues. According to Gan et al.'s (2008) study, environmental knowledge evolved in two forms; that is, 1) consumers have to be educated to be able to understand the impact of a product on the environment; and 2) consumer knowledge in the product itself is produced in an eco-friendly way.

**Attitudes:** Kassarjian (1971) stated that consumers' attitude was a determining factor to predict whether they can be involved in the protection activities against air pollution. Walsh et al. (2009) pointed out that consumers' attitudes would directly lead to energy conservation and ecologically conscious purchase. Balderjahn (1988) concluded that a positive attitude toward environmental issue would result in an ecological responsibility to execute more pro-environmental behavior. Researchers have investigated the effects of 'attitude' towards the "importance of recycling" and "inconvenience of recycling" on the recycling behavior (McCarty & Shrum, 2004).

**Environmental Concern:** Environmental concern is a strong attitude towards preserving the environment (Chan, 1996). Based on Dunlap and Van's research (1978), environmental concern is also defined as a global attitude with indirect effects on behavior through behavioral intention. Environmental concern is also sometime known as "ecological concern", which refers to the degree of emotionality, the amount of specific factual knowledge, and the level of willingness as well as the extent of actual behavior on pollution-environmental issues (Cosby, 1981)

**Social Influence:** Changing in an individual's thoughts, feelings, attitudes, or behaviors that results from interaction with another individual or a group (Ramayah, et al., 2010). According to Kalafatis et al.'s (1999) study, a social norm is whether an action should or should not be performed by a respondent in a referent's point of view. Referents could be friends, neighbors, not for profit or for profit organizations, teachers, parents, etc. Social influence is a proxy of subjective norm.

**Green Purchase Intention:** The green purchase intention is conceptualized as the probability and willingness of a person to give preference to products having eco-friendly features over other traditional ones

in their purchase considerations (Nik, 2009). According to Beckford et al.'s (2010) and Chan's (2001) research studies, the green purchase intention is a significant predictor of green purchase behavior, which means that the purchase intention is positively affecting the probability of a customer's decision as to whether he will buy green products.

### 3. Methodology

This researcher used three methods; there are probability and non-probability sampling, descriptive analysis and survey. In probability and non-probability sampling, the researcher used sample random, quota and convenience sampling. In descriptive analysis, the researcher used Bivariate (Pearson Correlation) and Independent-Samples T Test. In survey, the researcher used self-administered questionnaire and using SPSS (Statistical Product and Service Solutions) to analysis the demographic factors. The researcher selected 10 branches department stores and shopping malls in Shanghai, China, and then the researcher distributed 400 questionnaires to respondents; 200 for American consumers and 200 for Chinese consumers from 20 December 2012 to 8 January 2013. Moreover, the researcher gave 2 RMB bonuses to each consumer.

#### 4. Results and Discussion

**Profiles of Respondents:** The demographic characteristics of American consumers indicated that the people aged between 31 and 40 years old (25.5%) are the majority. For gender, the majority is male (57%). For educational level, the majority graduated high school or less (37.5%). For occupation, the major group of consumers is self-employed (28%). For monthly income, the highest percentage is consumers who have very high-level income (23.5%). For marital status, the majority is married (50%). For family status, the majority has (a) child/children (60.5%). The demographic characteristics of Chinese consumers indicated that the people aged between 21 to 30 years old (43%) are the majority. For gender, the majority is female (64%). For educational level, the majority hold bachelor's degree (53.5%). For occupation, the major group of consumers is student (47%). For monthly income, the highest percentage is consumers who have low level income (55.5%). For marital status, the majority is single (85%). For family status, the majority does not have any child (87.5%).

**Summary of Findings:** The results of this study provide both a practical and theoretical contribution to the understanding of the green products purchase intention in China. After the data analysis and interpretation, the main findings can be summarized as follows:

The main purpose of this study was to examine the relationships between the dependent and independent variables and find the differences between collectivistic (Chinese) and individualistic (American) consumers during these variables. Through the SPSS analysis, the theoretical model has been tested which illustrates that the seventeen hypotheses of this study are supported. The results indicated that there existed a significance relationship between environmental knowledge, attitudes, environmental concern and social influence and green purchase intention and there is a significant difference between the collectivistic (Chinese) and the individualistic (American) consumers with respect to environmental knowledge, attitudes, social influence and green purchase intention except environmental concern.

Based on the research findings, the researcher found that most of American consumers are more knowledgeable and subjective. They pay more attention on the details of the environmental protection and green products themselves. Due to they belong to the low context, they are more willing to believe that written form of legal. However, most of Chinese consumers are socialization, more objective and very sensitive to price. They pay more attention on the overall effect of the environmental protection and promoting green products. Due to they belong to the high context, they focus more on the word-of-mouth.

## 5. Conclusion

The consumer purchasing intention study has always been a complex issue, because there are many perspectives from which this topic can be analyzed (Fraj & Martinez, 2006). First of all, researchers may focus on different aspects of factors during the process of purchasing behavior, such as consumers' demographic

characteristics, psychological variables, motivations, and techniques of promotion (Michaelidou & Hassan, 2008). Most of the previous researches investigate the factors that have impacts on the green consumption (Chan &Lau, 2002; Byrne, 2001; Fraj& Martinez, 2006; Sutcliffe & Howell, 2008). Obviously, those studies may provide valuable foundation for this research on green products intention. Secondly, it is not easy to account for specific factors precisely for all the consumer population, since people with different demographic characteristics have distinct characteristics on the environmentally relevant intentions while purchasing food products. Therefore, in order to better understand factors that influence consumers' green purchase intention, the researcher determine the target population in Shanghai because of 1) Shanghai is a fashion, economic, financial and international trade center of China, it is the first international modern city. It has attracted many foreigners to come for investment, live, work, and travel. According to the Shanghai almanac in 2011, the accumulative total resident foreigners in Shanghai were 162,481 people, but Americans ranked the top one of Western consumers; 2) America and Chinese are representative countries and meanwhile they also are individualism and collectivism representatives. According many previous study and mathematic formula, the researcher assume and calculate sample size is closed to 400, but in order to convenient to analysis the data, the researcher choose 400 as sample size. Owing to the time and money limitation, the researcher decided to collect data from 10 branches department stores and shopping malls in Shanghai. Due to there be many holidays during 20 December 2012 and 8 January 2013, the researcher considered that this period is the best for collecting data.

Recommendations: The recommendations of this study are based on the research findings, observations and analysis for American and Chinese consumers as following: For American consumers, firstly, the marketers should pay more attention to the consumers who have a child/children when they make the marketing strategies, it would be attract these consumers easily, because parents are often concerned whether the child can grow up healthily. Secondly, due to most respondents are middle aged, they will pay more attention on details of green products such as quality, usage, size, price and package, the marketers should reflect the green products 'characteristics, attributes and performance on the advertisement. The marketers could take advantage of market penetration strategy to make green products more deeply, because of most of American consumers have very high level income; they tend to ignore the price and a greater focus on products' availability. For Chinese consumers, firstly, the marketers should pay more attention to the female consumers when they make the marketing strategies, because it would be easier and effective to advertise the green products to women than men would. Secondly, the most of the respondents are young consumers and students expressed their interests in green products purchasing. This result indicates that the young consumers are more interested in the green products. They like to get more information about environmental issues and put it into action. Thus, it is important for the government to improve the education system and maintain young people's positive attitudes toward the environmental issues and green products. Due to Chinese consumers are more sensitive to price, the marketers could reduce the price of green products so that to increase its competitive strength with other conventional products. The Chinese government should pay more attention to the proper educational programs, and let the consumers to be familiar with the environmental issues and green products in order to cultivate consumers' environmental concern and enhance their green purchasing intention.

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