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Young Chinese Consumer Decision Making in Buying Green Products: An Application of Theory of Planned Behavior with Gender and Price Transparency

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Abstract

As environmental awareness increases, consumers tend to focus more on environmental friendly products. The literature on green consumption has recently focused on the Asian markets, in particular, the populous country of the world 'china'. Despite many efforts by the marketers to promote the environmental awareness among Chinese consumers and their buying behavior towards the green products are not yet completely understood. This paper examines the green purchase behavior of Chinese consumers using theory of planned behavior. In this attempt, a conceptual model is developed to study the effects of the standard 'theory of planned behavior' predictors; attitudes, subjective norms and perceived behavioral control (PBC) on green buying behavior. In addition, the role of gender and price transparency in the relationship between green purchase intention and behavior are also examined. Surveys were collected from 370 young full-time students; structural equation modeling (SEM) has been used to analyze the data. The result showed a significant correlation among between the attitudes, subjective norms, perceived behavioral control (PBC), green purchase intention (GPI), and green purchase behavior (GPB). This empirical study contributed to the current state of knowledge by showing that gender also plays a role in the purchase intention, and price transparency also has a moderate influence. The study concluded with a discussion of the results and provided theoretical, administrative, and research implications for giving awareness of the green products in China.

Keywords: buying green products, theory of planned behavior, young consumers, price transparency, green purchase intention, green purchase behavior, subject norms, pro-environmental behavior.

1. Introduction

Global warming has triggered the need and awareness about the demolition of the natural resources resulting in human activities such as mass production and consumption. This situation has raised issues related to environmental sustainability in the consumer markets, and consumers change their consumption patterns and buying behaviors to achieve a sustainable environment. Consequently, the need for green products in the global markets has increased, and the consumers prefer green products that are safer and the environmental friendly(Gurau & Ranchhod, 2005). Knowledge related to the consumers' markets and variables that motivate the green purchase behavior is found to have more significant implications whereas the previous researchers examined the intention and purchasing behavior of green consumers in various trading markets, but most of the studies are related to green purchase behavior from developed economies (the USA and Europe) (George Hansen & Hansen, 2009) whereas, in Asian emerging economies like China and India, there is scarcity of research related to green purchase behavior (Chan, 2001; Chan, 2001; Lee, 2008; Mostafa, 2006a; Yadav & Pathak, 2016). The idea of green consumerism is progressively moving and creating a buzz between the business practitioners and the consumers in Asia that the environmental quality of Asian region lags far behind than Western counterparts (Kumar & Ghodeswar, 2015a; Yam-Tang & Chan, 1998). Likewise many Asian countries, China is also suffering from the high intensity of air pollution, poor quality of water, increase in traffic noise, and high level of solid waste (Khan & Chang, 2018). According to (Nielsen, 2011), the concern for climate change/global warming in China is higher than U.S with 64% to 48% respectively. Likewise, the international polling firm named as Globescan published a report mentioning(Greendex, 2010)that top-scoring the consumers belong to the emerging Asian economies namely China and India; on the other hand, the developed countries ranked at the bottom. Chinese society and Chinese consumers are very serious about environmental threats and show prominence to respond to green issues (R. Chan, 2001; Lee, 2008). Biswas and Roy (2015) suggested that there is a need to conduct the research to analyze the environmental proactive behavior of consumers in Asian settings.

The principle of planned behavior (TPB) set by Ajzen and Fishbein (1980) examined green consumption in the perspective of the developing and emerging economies (R. Chan, 2001; Hsu, Chang, & Yansritakul, 2017; Yadav & Pathak, 2016; Zhao, Gao, Wu, Wang, & Zhu, 2014). Though, most of the studies were unsuccessful to reveal the green purchase intention and behavior by using TPB (Joshi & Rahman, 2015; Tan, 2011). Such behavioral relationships have been less emphasizing and rarely investigated in the Chinese context (Chan, 2001; Lee, 2008) similar to the other Asian market settings (Mostafa, 2006a). The conclusion so far established that the significance and importance of TPB measures are still not clear in the Asian emerging economies such as China.

Earlier researches acknowledged that socio-economic factors, including age, gender, location, and income, were used as the main parameters to explain the preferences of green consumers (Roberts & Straughan, 1999). However, most of the demographics related studies demonstrated different results in green the consumers profiling

(Diamantopoulos et al., 2003). Later on, it was supported by the argument that socio-demographic factor cannot act as the determinants but can act as the moderator (Peattie, 2010). Among different socio-demographic factors, issues associated with gender have little attention by researchers and practitioners in the context of the environmental researches (Sreen et al., 2018; Zelezny et al., 2000).

In addition, green products are considered more expensive than typical or common products. Usually, the consumers feel uncertain in choosing the green the product against the typical product in terms of the price variability. It means the price is also an essential aspect that affect the purchase decision of the consumer (Liang, 2015). Price transparency is comprehensive information about the price (Li & Mattila, 2007). The product information (such as price & quality) was considered a determinant of the consumers' green purchase behavior (Cheung & To, 2019).To control the price, proper legislation needs to enhance price transparency (Rossi & Chintagunta, 2015). Usually, green products are 20% to 30% more expensive than typical products; therefore, this study suggests that green products prices may influence the green buying behavior of Chinese consumers. According to Carlson & Weathers (2008), the price transparency of products increases the sense of fairness in the minds of the consumers. As a result, it increases the willingness to buy. Due to the high price of the green products, price transparency is debatable in the relationship between the consumers' intention and purchase behavior.

In light of the previous research gaps, the current empirical research is an effort to apply theory of planned behavior on gender and price transparency while understanding the green purchase behavior of the Chinese the consumers. This study has three major contributions; first, the authors study the influence of TPB determinants on the green purchase intentions and purchase behaviors from the perspective of China. In the literature review, a very few substantial studies have considered this behavioral relationship in the Chinese context (Chan, 2001; Lee, 2008), similar to the study of other Asian market perspectives (Mostafa, 2006a). Second, the study also takes the differential effect of gender perceptions on green purchase intentions, and previous studies have shown that gender issues are less investigated in emerging market scenarios (Jaiswal & Kant, 2018; Lee, 2009). Third, this study considers the role of price transparency as a moderator in the relationship between the green purchase intentions and behaviors. Price transparency is broad information about product prices and is considered an important factor of price (Matzler, Würtele, & Renzl, 2006), especially in green products. Moreover, the study provides insights into emerging markets such as China. Therefore, Theoretical and practical implications of this research can be useful for marketers and help them reorganize strategies related to pro-environmental behavior.

2. Literature Review

2.1. Theory of Planned Behavior

TPB is the most important social psychological theory for predicting human behavior (Dean et al., 2011). The TPB suggested that attitudes, subjective norms, and perceived behavioral controls are decisive factors that influence the consumers' intentions and, in turn, affect consumer purchasing behavior (Cheung et al., 2012; Ramayah et al., 2012). TPB stated that the chances of exercising a certain behavior increase when a person has a

positive attitude about any specific behavior, social endorsement, and support associated with that specific behavior, and the greater control needed to execute that behavior (Ajzen, 1991).TPB has recognized in different research areas of consumerism, including ethical consumption, sustainable and green consumption (Auger & Devinney, 2007; Carrington et al., 2010; Wei et al., 2017; Yadav & Pathak, 2016).In this paper, the authors proposed theoretical model to study the effects of attitude, subjective norms, and perceived behavioral control. Furthermore, role of gender is also highlighted and significant contribution will be investigated taking price transparency as a moderator on a relationship between green purchase intention and green purchase behavior.

2.2. Attitude and Purchase Intention

Attitude is defined as the individual's likes or dislikes towards a particular behavior, idea, object, or the product (Eagly & Chaiken, 2007). According to TPB, when a person has a positive attitude regarding any particular behavior, it means that there are more chances to conduct this behavior (Ajzen, 1991). Previous research has argued that the consumers with more the environmental concerns are expected to be more eco-friendly in their consumption and behavior patterns (Rex & Baumann, 2007; Wang et al., 2014). Previous studies also claimed that attitude is an independent variable to forecast behavior. Green consumption studies have shown that consumers are enthusiastic about eco-friendly products when they are positive and have greater concerns about environmental issues (Paul et al., 2016; Sharma & Dayal, 2017). As such, due to environmental alerts, consumers are more expected to accept green consumption behavior. According to various empirical studies, a positive attitude increases the intention to buy green products (Chen, 2007; Michaelidou & Hassan, 2010). Joshi and Rahman (2015) The consumers with a favorable or positive attitude are possible to have a higher degree of attachment in buying decision. Past studies related to environment and the green products have also mentioned that attitude and green intention both positively related with each other (Aksoy et al., 2013; Diamantopoulos et al., 2003; Flamm, 2009; Roberts & Straughan, 1999; Yadav & Pathak, 2016). Also, such fundamental relationships were validated and supported in emerging Asian economies context (Jaiswal & Kant, 2018; Kumar et al. 2017; Kumar & Ghodeswar, 2015b; Lai & Cheng, 2016; Lee, 2008). For that reasons, the current study formulated the following hypotheses postulates;

- **H_1:** Attitude has a positive effect on green purchase intention.

2.3. Subjective Norms and Purchase Intention

Subjective norms are defined as social pressures or influences that empower individuals to perform the behavior (Sreen et al., 2018). In other words, individual behavior is judged by the approval and disapproval of other people (Choi et al., 2015; Han et al., 2010). The consumers, when are unsure about the specific behavior, might look for support from other people (Bratt, 1999). These "other people" are the friends, relatives, family members, peer groups, and other reference groups. Generally, action or reaction from other peoples have supreme significance in making their own decisions (Davies et al., 2002). Recent research mentioned that social norms are very useful in pro-ecological consumer behavior (Biswas & Roy, 2015; Yadav & Pathak, 2016). Past

studies have revealed that subjective norms are fundamental predictors of the green purchase intention (Kaiser & Gutscher, 2006; Sparks & Shepherd, 1992). Some current studies found that positive relationship exists between subjective norms and green intention (Bamberg, 2003; Jaiswal & Kant, 2018; Yadav & Pathak, 2017) while some studies claimed there exists insignificant relationship between subjective norm and green intention (Paul et al., 2016; Varshneya et al., 2017). Therefore it indicates that more research is needed to understand this relationship. For this reasons, the hypothesis formulated as:

- **H_2:** Subjective norm has a positive effect on green purchase intention.

2.4. Perceived Behavioral Control and Intention

Perceived behavioral control is defined as the individual's evaluation of how difficult or easy the behavior is to perform and can be accessed through the individual confidence related to his or her potential to carry out the behavior (Ajzen, 1991; Martin Fishbein 2010). Previous researches suggested that there is of two kinds of PBC; internal and external PBC. Internal PBC includes internal human resources (skill, planning, confidence, and ability) to act particular behavior (Armitage & Conner, 1999) while external PBC includes external limitation (time, money) needed to carry out a particular behavior (Kidwell & Jewell, 2003). The main barrier that prevents consumers who want to buy green products with higher prices and less availability (Barbarossa & Pastore, 2015). Likewise, some new studies also found the time, cost, availability, lack of knowledge affecting the consumer purchase intention (Barbarossa & Pelsmacker, 2016; Sreen et al., 2018). So, consumers of green products are required to overcome such inconveniences and barriers (Barbarossa & Pastore, 2015; Gleim et al., 2013). For the green products, this study investigates the influence of PBC on green purchase intention in China setting. Therefore, the researchers test this relationship by formulating below hypothesis:

- **H_3:** Perceived behavioral control has a positive effect on green purchase intention.

2.5. Green purchase Intention Green Purchase Behavior

Awareness related to environmental issues and concerns encourages people to modify their traditional lifestyles. Practitioners and the marketers believe that green lifestyle and green purchasing is a solution to the environmental concerns (Liobikienė et al., 2017; Magnusson et al., 2003). Green purchase behavior refers to the buying of sustainable and environment-friendly products that can become easily recyclable and safe for the environment as well as for society (Mostafa, 2006b). Also, green purchasing behavior is the utilization of products that react correctly to environmental concerns(Lai & Cheng, 2016). Consumer green purchase behavior evaluated through the green purchase intention means consumer's willingness to buy green products(Afonso et al., 2012). In other words, the consumer is concerned not only about the quality of the environmental products but also about the environmental impact on purchase decisions. Some recent studies found that a significant relationship exist between green purchase intention and green purchase behavior (Jaiswal & Kant, 2018; Kanchanapibul et al., 2014; Kim et al., 2013), on the other hand, such relationships are not clearly understood in the perspective

of China (Chan, 2001; Wei et al., 2017). Green purchase intention also increases because of health and environmental reasons, so green purchase intention is key indicator of green purchase behavior (Morteza, 2017). Therefore, this study hypothesized as follows:

- **H_4:** Green purchase intention has positive effects on green purchase behavior.

2.6. Moderating Role of Price Transparency

Price transparency enables buyers to forecast and evaluate the relative attractiveness of the company's existing offer (i.e., the customer's consideration of the price paid) as compared to the other competitive offers in the market (Hanna et al., 2019). Since the green products are more expensive than the typical products, prior researches refer to that price as the main obstacle to green consumption. Though, some contradicting outcome demonstrates that moderators can influence consumer's purchasing behavior (Jessica Aschemann-Witzel, 2017). Consumer power is increasing because of their access to information; it encourages the consumer to search for more information related to the product attributes and products price (Matzler et al., 2006). The concept of information transparency has been firstly used in the literature of finance. In a marketing perspective, price transparency indicates accessibility, availability, and truthfulness of information (Li & Mattila, 2007). The firms can increase their sales and establish brand loyalty by practicing price transparency (Mohan et al., 2014). Moreover, studies indicate price transparency have also an impact on fairness judgment, because it listed the costs that affected existing prices (Ferguson, 2014), it also enhances the quality relationship between the interacting parties (Li & Mattila, 2007). However, price transparency also positively affect the consumer's satisfaction (Matzler et al., 2006; Rothenberger, 2015), because it encourages fairness judgment that enhances consumer liking and their dependability, loyalty towards the product (Rothenberger, 2015). Therefore, price transparency affects consumer perception of fairness. In result, it increases the consumer's purchase intention (Carlson & Weathers, 2008). The green products are more costly (high price) than the typical products, being aware of production and other expenditure can help the consumer to acknowledge the high price. As a result, the consumer may be agreeable to pay high prices. It means, price transparency can influence the connection between green purchase intention and green purchase behavior, the study posits the following hypothesis;

- **H_5:** Price transparency has a significant moderating effect on the relationship between intention and purchase.

2.7. Moderating Role of Gender

The interaction among TPB predictors and socio-demographic variables has gained a rare focus on the environmental literature (Botetzagias et al., 2015). Previous authors suggested that gender is the influential forecaster of consumer behavior, followed by age, income, and education (Olli et al., 2001; Wolters, 2014). Men and Women both have different interests, needs, and different perception related to the environment (Asteria et al., 2014). These differences occurred due to the various social development experiences among men and women (Davidson & Freudenburg, 1996). According to the socialization theory that men and women experience different socialization process during their childhood, and both gender has developed diverse social values and expectation (Chodorow, 1979; Gilligan, 1982). Prior researches indicated women have more

understanding about environmental ethics, issues, and values than men (Gracia et al., 2012; Zelezny et al., 2000). As a result, women have an optimistic attitude towards those products that benefit both the environment and society (Lee, 2009; Schahn & Holzer, 1990).

Regarding subjective norms, less literature to look at the social pressure and gender regarding green purchase intention is available. Women have considered more conscious than men about the environment and more responsive to social and communal cues (Croson & Gneezy, 2009; Tikka et al., 2000) Preceding studies found that women were influenced and motivated through social interactions, and it encourages women to make their purchase decision (Lee, 2009; Noble et al., 2006). Relating to PBC, environmental awareness is a comprehensive construct that shows that people are alarmed about the environmental damage and endeavor to pay the best for eco-friendly products (Dunlap, 2015). Women consider more concerned about the environment than men; they will do their best to demonstrate pro-environment behavior, even if it is difficult for them (time, money, and self-efficacy) (Lee, 2009). This study seeks to determine the moderating role of gender exist within the TPB constructs in the context of China, therefore following hypotheses postulate;

- **H_6(a):** The effect of attitude on green purchase intention has more significance in women as compared to men.
- **H_6(b):** The effect of subjective norms on green purchase intention has more significance in women as compared to men.
- **H_6(c):** The effect of PBC on green purchase intention has more significance in women as compared to men.

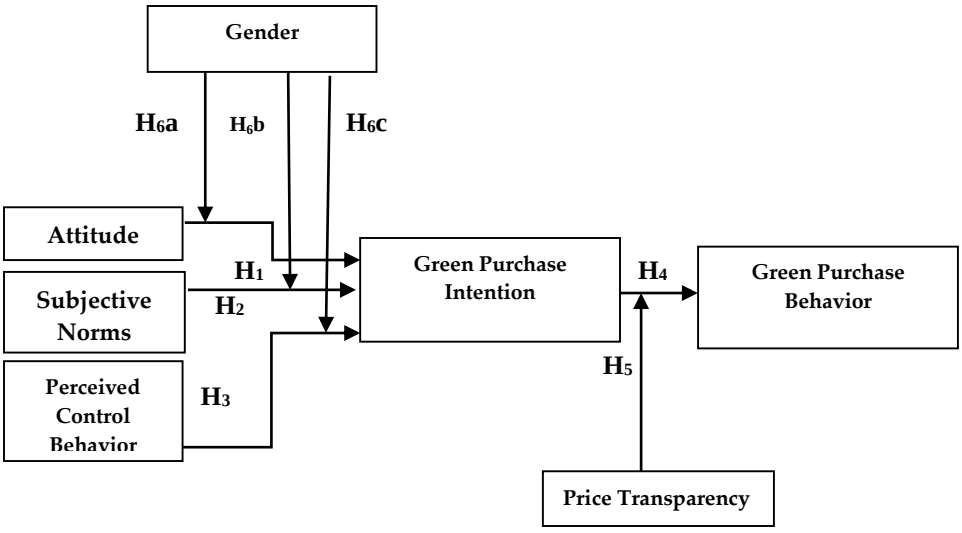

Figure 1: Theoretical/Conceptual Model

To address the research objectives, a conceptual model (see figure 1) is developed by using the Ajzen (1991) "theory of planned behavior" predictors such as attitude, subjective norms, and perceived behavioral control (PBC) on intention and buying behavior of the green products. In addition, the role of gender (Botetzagias et al., 2015) as a moderator in the relationship among three predictors and green purchase intention. Moreover, the role of price transparency (Aschemann-Witzel & Zielke, 2017) in the relationship between green purchase intention and behavior is also examined.

3. Research Methodology

3.1. Sample and The Data Collection

To analyze this empirical study, a planned questionnaire has been used to collect the data. The researchers first designed a survey in English language and then translated it into the Chinese language. To make a sure conceptual equivalence, two independent-expert translators changed the Chinese version into English. The questionnaire comprised of the two parts; the first part mentioned the demographic details of respondents' age group, income, gender, and education. The second part consists of items to measure attitude, subjective norms, perceived behavioral control, green purchase intention, price transparency, and last but not the least green purchase behavior. The data collected from the young educated consumers through self-administered questionnaires. Previous literature reported that young educated individuals have more knowledge about green products (Han & Kim, 2010; Hedlund, 2011). Moreover, surveys were distributed among full-time young students in a public university in Wuhan. The researchers chose university to collect the data because it has students from different cities and different

areas of China. Furthermore, respondents were guaranteed that information provided by them would be used only for the academic purpose, and it will be kept confidential.

The 450 surveys were completed by, only 370 were suitable for current research. The sample size of 370 with a response rate of 93% was considered to be ideal for applying structural equation modeling. Demographic of the respondents are as follows, there were 194 (52%) male and 176 (48%) female, while (74%) of the respondent belongs to the age-group of (24–29) and 48 (13%) in that order followed by age-group of (30-35) and remaining (10%) belong to upper age of 35. Education-wise 161 (44%) were reported as bachelors student, 176 (48%) currently enrolled in master program studies, 33 (9%) were a Doctoral scholar. Household income of respondents, 19 (5%) respondents belong to such income group above RMB 150000 per annum, 118 (32%) of respondents included in the income group less than equal to RMB 100,000 per year; 233 (63%) respondents belong to the income group of less than equivalent to RMB 60000 per annum. Our sample profiles showed that all the respondents are young and educated consumers who have an understanding and knowledge of the topic under investigation.

3.2. Instrument and Questionnaire Design

Research scales were operationalized from past work. All constructs measured through the 5-point Likert scale. "5" denoted as 'STRONGLY AGREE' and '1' as 'STRONGLY DISAGREE'. To measure attitude towards green products (AT) is adopted by using scales developed by (McCarty & Shrum, 2001). For subjective norms (SN), the researchers have chosen items from (Haroon et al., 2001) and (Choi et al., 2015). Items for Perceived control behavior (PCB) adopted from (Haroon et al., 2001) and (Armitage & Conner, 1999).For green purchase intention (GI) items adopted from (Haroon et al., 2001) and (Armitage & Conner, 1999).For Price transparency (PT) items adopted from (Rothenberger, 2015) and (Faullant, Renzl, & Matzler, 2007). Finally, to measure green purchase behavior (GB) items adopted from (Lee, 2008). A proper modification made in items to fit the current research perspective.

Table 1: Profile of Respondents

Variables	Category	Frequency	Percentage (%)
Gender	Male	182	49.19
	Female	163	50.81
Age of Respondent	18-23	47	12.70
	24-29	275	74.32
	30-35	48	12.97
Education	Bachelors	161	43.51
	Master	176	47.57
	PhD	33	8.92
Household Incom (yearly)	Above RMB 150000	18	4.90
	Less than or equal to RMB 100000	117	31.88
	Less than or equal to RMB 60000	232	63.22

4. Data Analysis

Table 2: Constructs and Factor Loadings

Items	Factor Loadings
AT1	0.652
AT2	0.811
AT3	0.788
AT4	0.653
SN1	0.777
SN2	0.761
SN3	0.819
PBC1	0.764
PBC2	0.839
PBC3	0.790
GI1	0.777
GI2	0.820
GI3	0.784
GI4	0.749
PT1	0.793
PT2	0.808
PT3	0.715
GB1	0.692
GB2	0.733
GB3	0.857
GB4	0.660

As depicted in Table 2 all the items loadings were greater than 0.65, Factor loading of every item of the model should be more than 0.55 recommended by (Hair, 2013)

4.1. Reliability and Validity

Table 3.Composite Reliability and Average Variance Extracted

Constructs	**Composite Reliability**	**Average Variance Extracted (AVE)**
Attitude	0.819	0.556
Green purchase behavior	0.827	0.612
Green purchase Intention	0.864	0.613
PBC (perceived behavioral control)	0.831	0.709
Price transparency	0.816	0.598
Subjective Norms	0.829	0.618

Table 4.Correlation of Constructs

		1	2	3	4	5	6
1	Attitude	**0.730**					
2	Green Purchase Behavior	0.446	**0.739**				
3	Green Purchase Intention	0.451	0.599	**0.783**			
4	Perceived Control Behavior	0.281	0.41	0.294	**0.842**		
5	Subjective Norms	0.36	0.446	0.315	0.363	**0.786**	
6	Price Transparency	0.348	0.537	0.424	0.408	0.405	**0.773**

To verify the discriminant validity (Fornell & Larcker, 1981), the purposed model has been used in this study. According to this model, an investigator first make the comparison of the square root of the (AVE) of every construct with the shared variance between constructs, and if the square root of Average Variance Extracted (AVE) is higher than the shared variance between constructs, then the investigator can state the discriminant validity that exists. Table 4 represents the details that discriminant validity is confirmed.

Table 3 shown that measurement model had good convergent validity. Evaluating convergent validity through examining (AVE) each latent construct. Composite reliability (CR) of constructs of the model range from 0.756 to 0.886, whereas (AVE) range from 0.556 to 0.709 that meet up the accepted standard recommended by (Hair et al., 2015). Hence in the entire model, only 21 items were retained as they have loadings greater than 0.55 (see Table 2), it indicates that the measurement model reliable and meaningful.

4.2. Assessment of the Significance of the Structural Model

Table 5: Structural Relationship

Hypothesis	Beta	T-Value	P-Value	Results
H_1: AT - GPI	0.35	8.596	0.000	Accepted
H_2: SN - GPI	0.129	2.696	0.007	Accepted
H_3: PBC - GPI	0.208	3.682	0.004	Accepted
H_4: GPI - GPB	0.536	18.270	0.000	Accepted
H_5: GPI*PT - GPB	0.238	2.000	0.006	Accepted

Note: AT=attitude, SN = subjective norm, PBC= perceived behavioral control, GPI=green purchase intention, GPB = green purchase behavior.

Hypothesis 1 predicted that attitude has positive effect on green purchase intention. The findings in Table 5 revealed a significant positive bond between attitude and green purchase intention ($\beta = 0.35$, $t = 8.596$, $p < 0.00$), supporting the hypothesis 1. As illustrated in Table 5, significant positive effect of subjective norms on green purchase intention was found ($\beta = 0.129$, $t = 2.969$, $p > 0.007$). Therefore, hypothesis 2 was supported. Also, positve effect of PBC was found on green purchase intention ($\beta = 0.208$, $t = 3.682$, $p > 0.004$) was found. Thus, hypothesis 3 was suported. For Hypothesis 4, the results indicated a significant positive effect of green purchase intention on green purchase behavior ($\beta = 0.536$, $t = 18.270$, $p < 0.000$). Thus, the hypothesis was supported. Hypothesis 5 also received empirical support. The results indicated a price transparency has modreating effect in relationship between green purchase intention and green purchase behavior ($\beta = 0.238$, $t = 2.00$, $p < 0.006$).

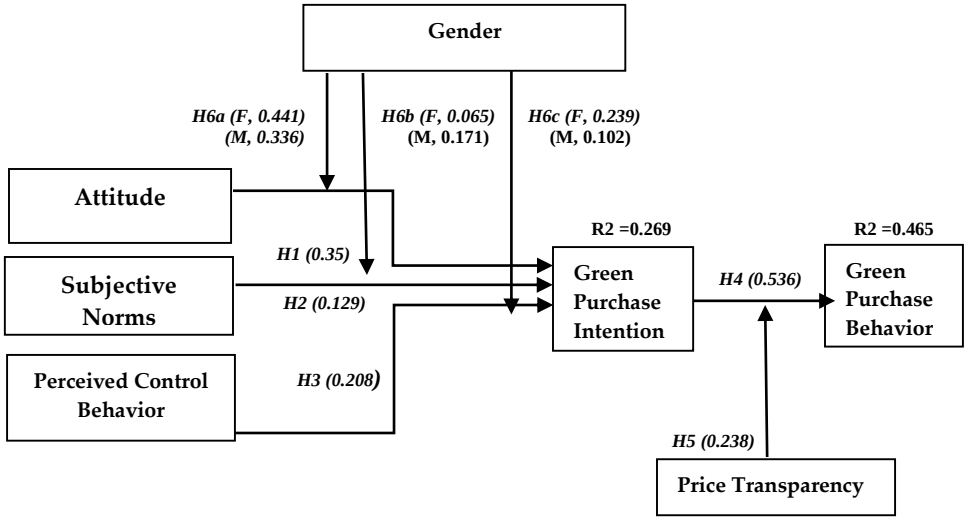

Figure 2: Final Structural Model

4.3 Moderating Role of Gender

Table 6: (Gender Role)

Relationship	Path-Coefficient (Female)	Path-Coefficient (Male)	Difference	P-value (Female vs Male)
H_6(a): AT→GPI	0.441	0.336	0.105	0.000
H_6(b) : SB→GPI	0.065	0.171	0.106	0.380
H_6(c) : PBC→GPI	0.239	0.102	0.137	0.001

To test the moderating effect of gender, multi-group analysis technique has been used. There are two groups, one belongs to female gender (N=194), and another one belongs to male (N=176). However, path coefficients are unlike, but the variation is considerable (as revealed in Table 6). Hypothesis 6(a) and 6 (c) both accepted at 90% confidence interval and H_6 (b) rejected. The empirical result suggested that effect of attitude and subjective norms on green purchase intention has higher in women as compared to men gender, the reason is that the role of gender is based upon culture socialization process. China is rich in culture and a collectivist society; female children in China are socialized to be caregivers. Female used to take care of the children and also manage household activities and are more close to family than men. Women in China make most of the buying decisions regarding household, it makes them the environmentally conscious, so they have a more positive attitude and try their best to control external and internal barriers such as time, cost, planning for the green products purchases, our finding also supports the results of previous studies conducted by (Lee, 2009; Wang et al., 2019) in the context of China and India that women seek more information about the green products and act more frequently in a pro-the environmental manner than males.

5. Discussion and Implications

The result of this research supports the past findings of TPB theory, the attitude has higher impact because young consumers in China are extremely concerned about the environment and are positive about the environment that lead their intention to buy green products that are considered more environmentally friendly and safe, result supports past study conduct in India (Yadav & Pathak, 2017), the result also supports the past study on green products based on the Malaysian context (Chen & Chai, 2010). Subjective norms have positive effect on green purchase intention but it has less impact as compared to attitude and PBC because it indicates that friends/family members' impact resulted to a less driving force concerning the reasons to buy green products, result similar to past studies in the contrary to past study in the context of India (Paul et al., 2016; Varshneya et al., 2017), result similar to past studies on green purchase in the context of Iran (Minbashrazgah, 2017). PBC has positive effect on green purchase intention; the finding seems to suggest that Chinese consumers have high level of control over themselves while taking decision regarding green products purchase, result similar to past studies in

the context of India (Sreen et al., 2018). Besides this, the effect of green purchase intention on green purchase behavior is also significant; it means green purchase intention is significant predicator of green purchase behavior in the context of China, result similar to past studies conduct in Hong Kong and Iran (Lai & Cheng, 2016; Minbashrazgah, 2017).

This study found that price transparency fails to strengthen the relationship between green purchase intention and green purchase behavior; rather, it decreases the T-value (refer table 5). It can be understood that Chinese consumers are patronizing the green consumption but actually in practice, consumer economic situation moderates green purchase behavior. Moreover, this is conclusive that consumers show greater intent to buy and prefer green products, but the price factor affects it. If the price is higher and out of reach of consumer affordability, a significant amount of the consumers will settle for lesser priced the product that may or may not be environment-friendly. Though consumer intention affects consumer purchase behavior, it could be influenced by other variables, previous studies mentioned price does not affect consumer purchase behavior in developed economies (Liobikienė et al., 2017) but it affects consumer purchase decision in the developing economies (Liobikienė et al., 2017). Furthermore, in the developing and emerging economies, economic issues and lack of affordability is given higher priority than the health and environment issues. In the context of China and rapid economic ascendance, despite that China's poverty rate decreased from 88 percent in 1981 to 0.7 percent in 2015 as reported by World Bank (Overview, 2017), the price factor is still considered a major factor in buying behavior and will likely remain important in the near future. The finding of this study indicated that Chinese women have more perceived control and positive attitude towards green products as compared to men. So the managers and marketers should target women through their advertising campaigns, educational activities such as special workshops related to mother/child and offers special discount & free services. Green marketing is progressing day by day in China, so marketers need to create convincing advertisements campaign for the green products and manufacturer firms also need to manufacture a trustworthy green product so that a strong positive attitude can be built. Furthermore, the marketers and government both are required to create awareness regarding the benefits of using green products, knowledge about green labels so that consumers can easily recognize and consume green products. Besides this, government try to facilitate the green manufacturer firms in terms of taxes and legislation. Moreover, the Government should formulate policies that could encourage the manufacturer to produce green products because these products creates sustainable environment for the state.

5.1 Limitation and Future Limitations

This study also has some limitations. First, the current study considered the green products in general; future studies can make this concept rich by conducting research on a variety of sub-categories of the green products such as green skincare products, green electric appliances, and organic food, etc. The second limitation is, the sample size and data used in this research, which was only collected from the single city of China named as Wuhan. It is imperative for upcoming studies to collect the data from different cities of China, and upcoming studies can increase the sample size for generalization-ability of research findings. Third, more variables can be used in this research, such as health,

belief, cultural dimensions, and consumption values, and it will help marketers in a comprehensive analysis of green products. In addition, gender has been tested as a moderator in this empirical research; future research can be conducted by including other moderators such as education, income, age. Lastly, this current research may be utilized for cross-cultural research such as China and the USA, China, and Malaysia. The differences between various cultures will give comprehensive understanding in the context of cultural differences between markets and hence, it can provide a diverse approach to the practitioners and marketer to succeed in global and regional business settings.

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