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Analyzing the Sustainable Behavioral Intentions:
Role of Norms, Beliefs and Values on Behavioral Intentions

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Abstract

The purpose of the study is to examine the contributing factors (norms, beliefs and values) as a proxy of sustainable behavior. To achieve the research objective a survey method was adopted by using convenience sampling. From the results of the study it is evident that normative influence is a key predictor of behavioral intention. This study provides valuable insight and sound ground for academicians who are interested in studying sustainable consumer behavior in concerned emerging markets. It also presents valuable insights for practitioners and policy makers and it has revealed important findings and implications for aforementioned context.

Key words: sustainable behavior, normative influences, norms, beliefs, values.

1. Introduction

In marketing literature, consumption of the products in a sustainable manner is not novel phenomenon (Fisk, 1973). Numerous stakeholders such as policy makers, investors and consumers, hold sustainability as critically important business goal (Schrader & Thogersen 2011). Achrol and Kotler, (2012) stated the phenomenon of sustainable behavioral intentions to be a super phenomenon for marketing and society due to its significance.

Sustainable consumer behavior research initiated 30-35 years ago and declared the topic to be important for further in-depth exploration and imitated the starting of ecological compassion in general public. The concept was further redefined in 1980s and 1990s, entailing increased concerned perspective in academic inquiries and practices respectively. According to some researcher (Verbeke *et al.* 2007), sustainable behavior intentions have increased in many food production and agricultural levels but still have not increased as much at consumer levels. Sustainable behavior is conceptualized by a lot of researchers in different ways. Some researchers call environmentalism (van Doorn & Verhoef, 2011) and corporate social responsibility (Mysen, 2012) to be sustainable behavior whereas some

considered ethical behavior (Carrington *et al.* 2010) to be sustainable. Some suggested ecofriendly (Han *et al.* 2011) behaviors to be sustainable and others argued green consumption (Olson, 2013) as a sustainable behavior.

Regardless of the immense interest shown by different segments in this area of study, the concept of sustainable behavioral intentions are barely understood in a broader perspective (Crittenden *et al.* 2011). Operationalization, measurement, conceptualization and the definition of sustainable behavior intensions is controversial issue among researchers both academics and practitioners. There is no unanimous understanding of the phenomenon that has resulted in disagreement of understanding and overlapping of this concept with some others. This discrepancy of thoughts and understanding clearly signals the confusion about a very important yet scattered domain of literature (Luzio & Lemke, 2013).

This study aimed at conceptualizing sustainable behavior intentions in broader perspective by incorporating green consumption (Shaw & Riach, 2011), energy conservation intentions (Ha & Janda, 2012) and recycling intentions (Luchs & Swan 2011). The primary objective of the research is to operationalize the concept of sustainable consumer behavioral intentions through normative influences i-e: personal and social norms (Whitmarsh & O'Neill, 2010) and individual's belief and values i-e: knowledge (Mostafa, 2007), awareness, environmental concerns (Peattie, 2010), eagerness (Fitzmaurice, 2005) and anticipated guilt in context of Pakistan.

2. Literature Review

Existing literature on sustainable behavior have shown a few distinct realms and explored under different theories. First, psychological factors are explored as a precursor of sustainable behavior (e.g. Ramayah, 2013; Zhao et al. 2014), and next focuses on the development of scales to measure underline ides related to sustainable consumptions. The research on sustainability has also adopted established theories and models, mostly theory of reasoned action (Ajzen & Fishbein, 1980) and related theory of planned behavior (Ajzen, 1991) is used (e.g., Papista & Krystallis, 2013). Some other theories like Norms Activation Theory, Role theory and an emerging theory value-belief norm theory (VBN) have also gained acceptance in the realm of sustainable marketing literature (e.g., Park & Ha, 2012). Some researchers intend to developed campaign to foster sustainable behavior and developments like community-based social marketing (CBSM) model (e.g., Cole & Fieselman, 2013), while other explored the consumer reaction to green strategies.

Despite such extensive research, it is recommended that future research explores and examine, normative and psychological factors related to behavioral intentions as there is inconsistency among the relationship (He & Kua, 2013; Ramayah, 2013). Some research recommended that the combination of these two viewpoints is better way because behavior related to sustainability is not only influenced by beliefs, values, attitude but also norms in the form of norms and social identity (Bamberg *et al.* 2007).

2.1 Sustainable Behavioral Intentions

According to Bonnes and Bonaiuto (2002) sustainable behavior is defined as the set of effective and deliberate actions which are intended for the conservation of the physical-socio environment for future generations and surroundings. Taking this definition in the context of this study, sustainable behavior of consumers should include those actions which are aimed for the conservation of electricity and also behavior which shows concerns for

other individuals and groups. Individuals who tend to show more sustainable behavior their consumption of energy resources is moderate (Iwata, 2002).

2.2 Normative Influences

According to the researches of consumer behavior, it is argued that the combination of personal and social norms enhances and magnifies the exploratory supremacy of consumers' sustainable behavioral intensions (Aertsens *et al*. 2009). Previous empirical studies provide evidence that consumer's sustainable behavioral intentions are dependent on social and personal norms. In this research our focus is on both social and personal norms that jointly would predict a consumer's sustainable behavior.

2.3 Beliefs and Values

Theory of reasoned action summarizes the elements of beliefs, value, purchase intentions, attitude and behavior. Ramayah (2013) suggested that is still important to investigate the beliefs and values affecting behavior intentions and attitude. Ramayah et al. (2010) recommend using more than one measure of behavioral intentions to understand the reason behind the consumer actions. It is important for academicians and marketer to identify the beliefs and values that manifest attitude towards special behavior (Ramayah et al., 2003). Thus this research attempts to investigate the impact of values and beliefs such as awareness, knowledge, environmental concerns, anticipated guilt, and eagerness towards sustainable behavioral intentions in a developing country Pakistan. Researchers have argued that the knowledge about the environment has influenced the consumer's behaviors (Mostafa, 2007). Different researchers argued that the quality of the environment heavily relies upon the extent of knowledge of people, their attitude, values and practices all of these are considered essential (Salequzzaman & Stocker 2001).

The phenomenon of environmental concern symbolizes the attitude of an individual toward the environment and the extent of apprehension to issues related to environment (Choi & Kim, 2005). Consumers who showed greater concerns about the environment were more likely to exhibit sustainable behavioral intentions but these relationships are not believed to be always very influential (Peattie, 2010). Parkinson and Illingworth, (2009) narrated that it is usually believed that every guilt has a social dimension associated with it and a person sometimes performs philanthropic behaviors to diminish this feeling of guilt. However the concept of anticipated guilt has not yet been defined in terms of sustainable behavior and should be considered worthwhile. Eagerness is expected to prompt a strong urge to indulge into a sustainable behavior as it boosts the consumer to achieve the desired end state they are striving for (Fitzmaurice, 2005).

3. Theoretical Framework and Hypotheses Development

- **H_1:** There is significant and positive relationship between normative influence and sustainable behavior intentions.
- **H_1a:** Significant relationship exists between normative influence (NIF) and recycling intentions (RIN).
- **H_1b:** Significant relationship exists between normative influence (NIF) and green consumption intention (GCI).
- **H_1c:** Significant relationship exists between normative influence (NIF) and Energy conservation intention (ECI).

- **H_2:** There is significant and positive relationship between believes & Values (BNV) and sustainable behavior intention.
- **H_2a:** Significant relationship exists between believes & Values (BNV) and recycling intentions (RIN).
- **H_2b:** Significant relationship exists between believes & Values (BNV) and green consumption intention (GCI).
- **H_2c:** Significant relationship exists between believes & Values (BNV) and Energy conservation intention (ECI).

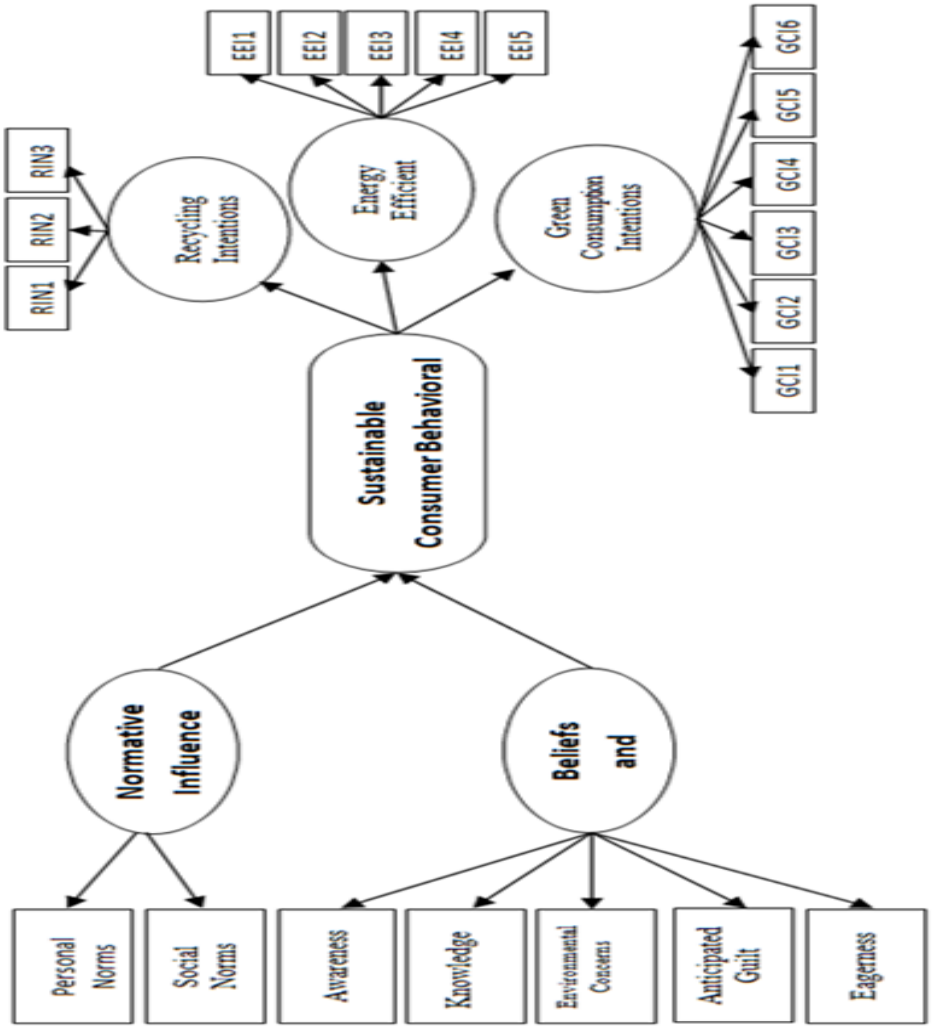

Figure 1: Theoretical Framework

4. Methodology

4.1 Sample

The sample size for this study consisted of 238 university students as they are the future consumer of the country (Ramayah, 2013). Convenient sampling was used for data collection. The target sample size would be better 5 times (Davis 2005) the items and therefore the target sample size in this research is considerably enough. Among the respondents 59% were males and 42% were females; for age groups 20-25 year sample stood 80.5%, for 25-30 years it was 19.5%; 38.2%, were graduates, 41.5% were masters, M-Phil were 16.3% and 4.03% were PhD; for monthly income below 20,000, 14.6%, 20,000-30,000 56.9%, 30,000-40,000 21.1% and above 40,000 7.3%); Most of the data was collected from male (58.5 %) lies between 20-25 year of age (80.5%) and monthly income range 20000-30000 (56.9%).

4.2 Measures

All items were measured on the basis of five point Likert scale. Normative influence (α=.701) was measured the basis of personal norms and social norms. Personal norms were measured on three items and social norms were measured on two items, based on measurement of Ajzen (2001) and Follows & Jobber (2000). Believes and values were operationalized as knowledge, awareness, environmental consciousness, anticipated guilt, eagerness. Knowledge (α=.69), awareness (α=.76) and eagerness (α=.74) were measured on three items each adapted from measurement scale of Ha & Janda (2012**)**. Environmental consciousness (α=.74) and green consumption intentions (α=.67) were measured on five and six items respectively adapted from Zhao et al. (2013). Anticipated guilt (α=.70) was measured on three items adapted from Bamberg and Moser (2006). Recycling intentions (α=.72) were measured on three item scale adapted from Park and Ha (2012). Energy conversional intentions (α=.90) were measured on five items adapted from Ryu at el. (2008). Respondent's profile was measured with the help of four items e. g Gender, Age, Income and Educational background.

4.3 Data Collection Procedure

Data was collected from different universities of five cities of Pakistan. Data was collected from management sciences graduates during their scheduled classes. Permission was obtained from university authorities and respective teachers. Students were informed verbally about the scope of the research and then asked to fill out questionnaires. Respondents were asked to record their responses on a 5 point Likert scale ranging from 1=strongly disagree to 5=strongly disagree.

4.4 Data Analysis

Stu dy used descriptive statistics for calculating mean, standard deviation, Skewness and kurtosis were employed to analyse the assumptions of normality. Reliability was measured by calculating Cronbach's Alpha coefficient. Linear regression was used to analyse the impact of variables. Study employed SPSS 20 for analysis.

5. Results

5.1 Descriptive Statistics

The mean or average is probably the most commonly used method of describing central tendency whereas standard deviation is a more accurate estimate of dispersion because an

outlier can greatly exaggerate the range (McDowall & Saunders, 2010). To analyse the assumption of normality, the current study have followed two suggested measures i.e. Kurtosis and Skewness. According to the assumption of normal distribution (Muthén & Kaplan, 1985), the current study showed that observed variables were within recommended range i.e. ±1 for skewness and ± for kurtosis. Mean standard deviation skewness and kurtosis are presented in the following table.

Table 1: Descriptive Statistics

	Mean	**SD**	**Skewness**	**Kurtosis**
NIF	3.54	.50	-.91	.04
BNV	3.32	.41	-.17	.02
SBI	3.30	.35	-.01	-.28
Notes: N= 238				

5.2 Regression Analysis

First, normative influence (NIF) was regressed on sustainable behavioral intention (SBI) result depicted in table shows that a significant model emerged. The value of R Square (.330) shows that approximately 33% variation in SBI was due to NIF. The F-value shows that model is significant and F (1,122) value = 59.725** and the value of β= .575** shows the

Table 2: Regression Analysis

Dependent variable	**Predictors**	**R^2**	**AdjR^2**	**R^2 Δ**	**B**	**F**
Sustainable Behavioral Intentions	NIF	.33	.325		.575**	59.725**
	BNV	.049	.041		.221*	6.189*
	NIF BNV	.359	.348	.280	.559** .169*	33.562**
** $p \leq 0.01$ * $p \leq 0.05$						

Significant relationship of NIF and SBI. Secondly, beliefs and values (BNV) was regressed on sustainable behavioral intention (SBI) result depicted in table shows that a significant model emerged. The value of R Square (.041) shows that approximately 4% variation in SBI was due to BNV. The F-value shows that model is significant and F (1,122) value = 6.189* and the value of β= .221* shows the significant relationship of BNV and SBI. In the third step, NIF and BNV were regressed on SBI, the result shows that R Square = .359 and R Square change = .028 which shows about 3% more variation in model after the inclusion on BNV. The value of NIF (β)= .559** and BNV (β)= .169* show the significant relationships of NIF, BNV and SBI.

Table 3: Regression Analysis

Dependent Variable	Predictors	R^2	AdjR^2	R^2 Δ	β	F
RIN	NIF	.16	.15		.40**	23.01**
	BNV	.09	.08		.30**	12.57**
	NIF	.23	.22	.073	.37**	18.25**
	BNV				.27**	
GCI	NIF	.24	.24		.49**	39.47**
	BNV	.01	-.01		-.02	.07
	NIF	.25	.23	.251	.50**	20.11**
	BNV				-.07	
ECI	NIF	.21	.21		.46**	33.40**
	BNV	.12	.12		.35**	17.84**
	NIF	.31	.30	.100	.43**	27.81**
	BNV				.31**	

5.3 Hypotheses Testing

H_1: The results of this study established significant relationships between normative influence and sustainable behavior intention. H_1a: The value of St. Regression Co-efficient 0.490** is showing the significant and positive relationship between NIF and RIN that indicated 49 % of variations caused in RIN were due to NIF. H_1b: The value of St. Regression Co-efficient 0.503** is showing the significant and positive relationship between NIF and GCI that indicated 50 % of variations caused in GCI were due to NIF. H_1c: The value of St. Regression Co-efficient 0.436** is showing the significant and positive relationship between NIF and ECI that indicated 43 % of variations caused in ECI were due to NIF. H_2: Significant relationships between normative influence and sustainable behavior intention were established. H_2a: The value of St. Regression Co-efficient 0.307** is showing the significant and positive relationship between BNV and RIN that indicated 30 % of variations caused in RIN were due to BNV. H_2b: The value of St. Regression Co-efficient -.025 is showing the insignificant relationship between BNV and GCI that indicated a negative and insignificant relationship between BNV and GCI. H_3c: The value of St. Regression Co-efficient .318** is showing the significant and positive relationship between BNV and ECI that indicated 31 % of variations caused in ECI were due to BNV.

Table 4: Results of Hypothesis

Hypothesis	Structural Path	St. Regression Co-Efficient	P-Value	Results
H_1	NIF→SBI	.575**	P<0.05; Significant	Accepted
H_{1a}	NIF→RIN	.496**	P<0.05; Significant	Accepted
H_{1b}	NIF→GCI	.503**	P<0.05; Significant	Accepted
H_{1c}	NIF→ECI	.436**	P<0.05; Significant	Accepted
H_2	BNV→SBI	.221*	P<0.05; Significant	Accepted
H_{2a}	BNV→RIN	.307**	P<0.05; Significant	Accepted
H_{2b}	BNV→GCI	-.025	P>0.05; Insignificant	Rejected
H_{2c}	BNV→ECI	.318**	P<0.05; Significant	Accepted

6. Discussion

Study developed an integrated model of sustainable behavioral intension, explaining the role normative influences (social and personal norms) and belief & values play in shaping up energy efficient, green consumption and recycling intensions of consumers in Pakistan. Majority of the consumers were youngsters between the ages of 20 to 25 years.

It is evident from the results of the study that normative influences that included personal and social influences were strong influencers as compared to belief and values. It showed that consumer as a member of a social group may receive an inclination of community, so product and marketing campaigns should be inclined with the social contingencies and respect the humanistic, environmental and cultural values of that community (Park & Ha, 2012). Normative influences hugely influence a consumer's recycling intension and then energy conservation intensions. Green consumption intension of a consumer were least impacted by normative influences (Aertsens et al., 2009). Consumers with high social and personal norms would be more inclined to exhibit sustainable behavior particularly recycling.

Findings of research suggested that consumer's beliefs and values were less influential than normative influences when it comes to exhibiting sustainable behaviors. These results were consistent with the findings of Ramayah, (2013). Further, results indicated that consumers held beliefs and values play their part in formation of recycling and energy conservation behavior but when it comes to green consumption, consumers held beliefs and values did not play any role. Ha & Janda (2012) reported similar results. Oveall in Pakistani context, social and personal motives proved to be better stimulators of sustainable behavioral intensions as compared to a consumer's held beliefs and values.

7. Practical Implications

The research question of the study has a profound potential to be replicated in other markets, cultures, communities or countries as is the requirement for the researcher. The result of the study revealed that sustainability conscious consumers are very much influenced by personal and social norms as compared to beliefs and values. So that marketer should consider the element of normative influence while making their promotional activities. From the policy maker prospective, this study showed that while developing the strategies and polices, they should better target the normative influence (social and personal norms) in product development and promotional campaign than the beliefs and values.

8. Conclusion

A model of sustainable behavior intensions was developed using theory of planned behavior and norms action theory where sustainable behavior was measured using three major constructs i-e: green consumption, energy conservation and recycling intention of a consumer on the basis of normative influences and beliefs and values of the consumers. The model proved to be a good fit and all assumptions were held true in analysis. Overall normative influences impacted sustainable behavior intentions more than individual beliefs and values. Findings of the study revealed that while developing the strategies and polices, marketers and policy makers should target the normative influence (social and personal norms) in product development and promotional campaign than the beliefs and values.

9. Future Research

This study is conducted in Pakistan which has collectivistic cultural settings. Thus, this model may also be tested in individualistic cultural settings and a cross cultural comparison may also be under taken. University graduates were the respondents of this research study. Students being a part of young generation are more vulnerable to be influenced by others. So, this model may also be test for different samples like working professionals and household. Literature review may help for the selection of different variables and dimensions and offer a more integrated research e.g. attitude, perceived customer value, government policies and actual gain etc. To get more insight regarding consumer intention and behavior a longitudinal study may be helpful.

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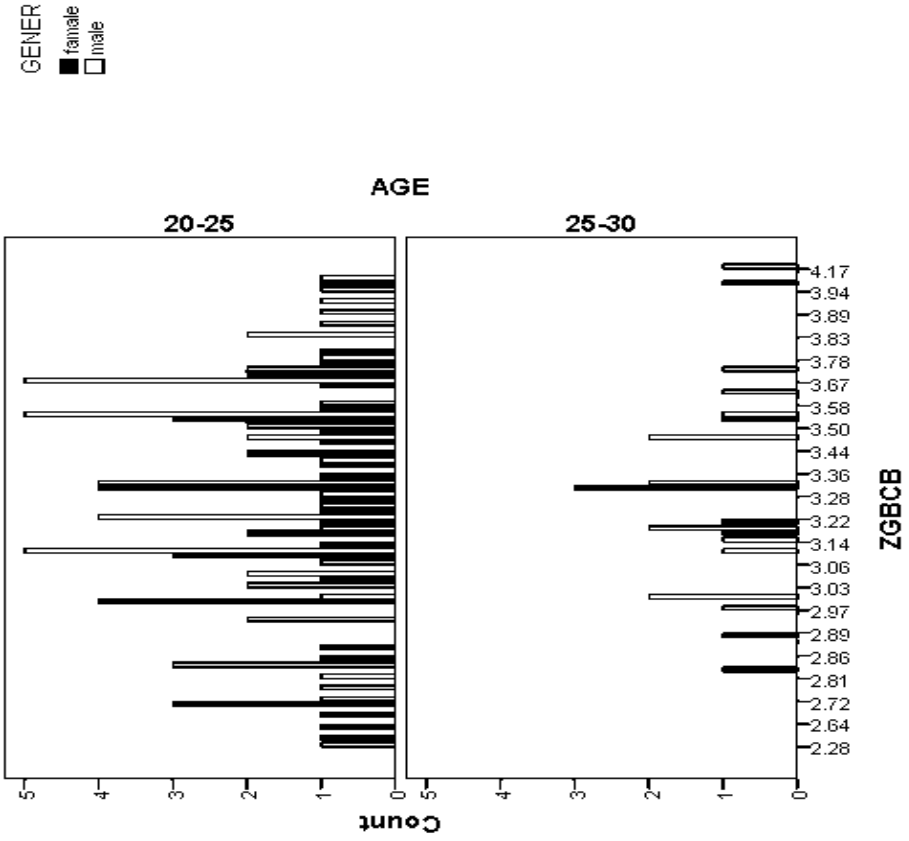
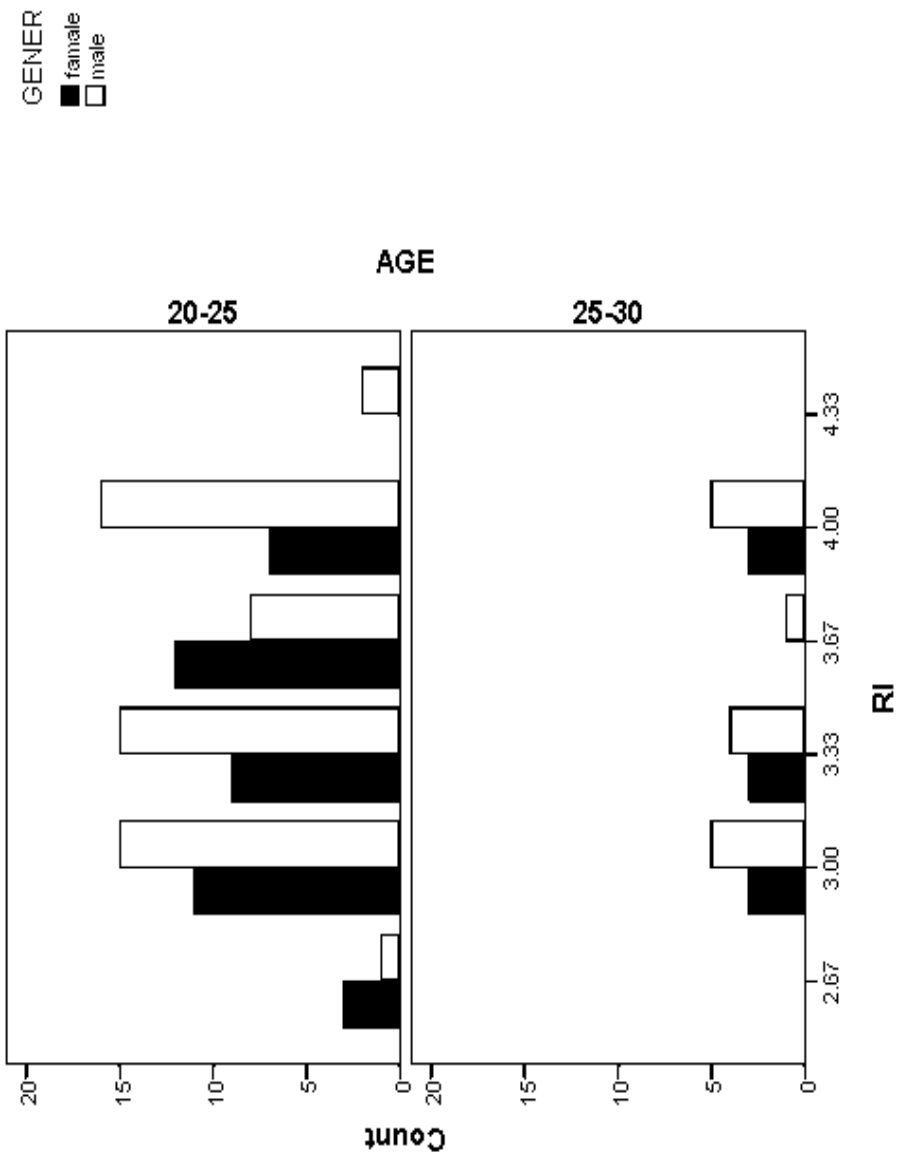
APPENDIXES

Graphical Representations

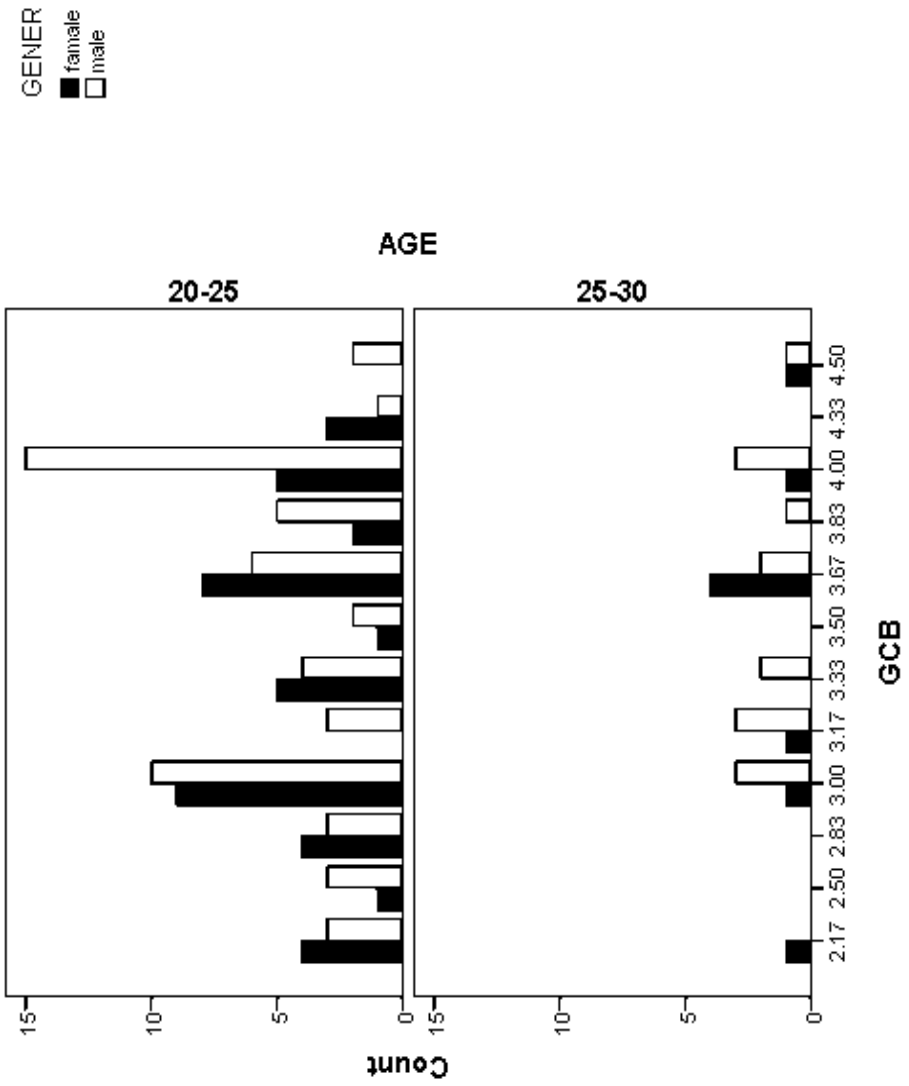
Gender, Age and Sustainable Behavioral Intentions



Gender, Age and Reclining Intentions



Gender, Age and Green Consumption Intentions



Gender, Age and Energy Conservation Intentions