

GREEN TRUST, ENVIRONMENTAL QUALITY AWARENESS, GREEN SELF-EFFICACY,
ENVIRONMENTAL ATTITUDE IN INFLUENCING GREEN PURCHASING BEHAVIOR

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A thesis submitted in fulfilment of the
requirement for the award of the degree of
Doctor of Philosophy

Azman Hashim International Business School
Universiti Teknologi Malaysia

JUNE 2019

DEDICATION

To my beloved mother and father.

I sincerely appreciate my beloved mother who always nurtures me to be a sincere and humble person. My father who always give me encouragement, motivation, and spectacular direction in doing my study. My sister who always push my limit to go further. My brothers who always inspire me in doing my study. Without them, I would not be able to do it alone. Furthermore, I am grateful to all my close friends who have helped me on many occasions throughout these years.

ACKNOWLEDGEMENT

Foremost, I would like to extend my sincere gratitude to the people who always help me in preparing this thesis. Especially Assoc. Prof Dr Fauziah bt. Sh. Ahmad who has given me her patience, motivation and immense knowledge in the process of doing my thesis. She incited me to widen my research from various perspectives and supports me in various. Not forgotten, my second supervisor, Assoc. Dr Farzana Quoquab, who has guided me in insightful comments and encouragement by leading diverse exciting projects.

My fellow postgraduates who supported and provided assistance to me in the preparation of the proposal defense and viva. Their opinion, advise and tips are useful in supplying relevant examples.

My sincere thanks also go to Kementerian Pendidikan Tinggi Malaysia (MyBrain15), I have the opportunity to expand my knowledge with financial sponsorship by them to carry out my study until this stage.

ABSTRACT

The living resources ecosystem is consistently threatened by numerous environmental degradations whereas concerted salvaging efforts of the resources by organizations and marketers have not developed better customers' green purchasing behaviour significantly. Although the Environmental Performance Index proved to be of enormous importance, it is neither taking account of affecting people's sensitivity level nor does it guarantee to make them act on it. Furthermore, there is apparent comprehensive evidence on available antecedents to measure the customers' awareness of environmental quality. With this in mind, this study attempts to address the attitude-behaviour gap by conceptualizing the possible constructs of Environmental Quality Awareness (EQA). Two major theories were adapted; namely the Theory of Planned Behaviour and the Stimulus Organism Response Theory to explain green trust, environmental quality awareness, green self-efficacy and the mediating role of environmental attitude in order to understand the customers' green purchasing behaviour. The research collected 321 usable data through questionnaire from Malaysian respondents who are aware of and use household technology products. The data was analyzed using Partial Least Square - Structural Equation Modeling (PLS-SEM) method. The result indicated that 70% of the EQA integrated constructs framework is supported; namely the relationship of EQA and green self-efficacy towards environmental attitude and the relationship of green trust, green self-efficacy and environmental attitude towards green purchasing. Additionally, the mediator role of environmental attitude also supported the relationship between EQA and green self-efficacy towards green purchasing behaviour. The remainder 30% of the framework showed non-supportive hypotheses; the relationship of green trust towards environmental attitude, the relationship of EQA towards green purchasing and the mediator role of environmental attitude between green trust and green purchasing behaviour. In conclusion, this empirical research has contributed to the EQA novelty that essentially gives the body of knowledge and marketers a better understanding of broad and complex customers' behaviour spectrum in purchasing green products that will then provide resolutions for better environment sustenance.

ABSTRAK

Ekosistem sumber kehidupan setiap masa terancam dengan berlakunya banyak kemusnahan alam sekitar sedangkan usaha penyelamatan sumber daya yang dilakukan oleh organisasi dan pemasar belum dapat membina tingkah laku pembelian hijau pelanggan dengan signifikan. Walaupun Indeks Prestasi Alam Sekitar terbukti sangat penting, namun tidak mengambil kira sama ada mempengaruhi tahap kepekaan masyarakat mahupun menjamin mereka untuk bertindak. Selain itu, terdapat bukti komprehensif sebelumnya yang jelas untuk mengukur kesedaran pelanggan tentang kualiti alam sekitar. Dengan yang demikian, kajian ini cuba untuk menangani jurang sikap dan tingkah laku dengan mengkonsepsualisasikan kemungkinan pembinaan Kesedaran Kualiti Alam Sekitar (EQA). Dua teori utama diguna pakai dalam kajian ini, iaitu Teori Tingkah laku Terancang dan Teori Rangsangan Respon Organisme untuk menjelaskan kepercayaan hijau, kesedaran kualiti alam sekitar, efikasi sendiri hijau dan peranan perantaraan sikap terhadap alam sekitar bagi memahami tingkah laku pembelian hijau pelanggan. 321 data yang boleh digunakan dalam kajian ini dikumpul melalui soal selidik daripada responden Malaysia yang sedar terhadap produk teknologi isi rumah dan menggunakannya. Data dianalisis dengan menggunakan kaedah Pemodelan Persamaan Struktur dengan Kuasa Dua Terkecil Separa (PLS-SEM). Dapatan kajian menunjukkan bahawa 70% daripada rangka kerja bersepadu EQA disokong, iaitu hubungan EQA dengan efikasi sendiri hijau ke atas sikap terhadap alam sekitar dan hubungan kepercayaan hijau, efikasi sendiri hijau dan sikap terhadap alam sekitar ke atas pembelian hijau. Di samping itu, peranan perantaraan sikap terhadap alam sekitar juga menyokong hubungan antara EQA dengan efikasi sendiri hijau ke atas tingkah laku pembelian hijau. Baki 30% daripada rangka kerja menunjukkan hipotesis yang tidak disokong, iaitu hubungan kepercayaan hijau ke atas sikap terhadap alam sekitar, hubungan EQA terhadap pembelian hijau dan peranan perantaraan sikap terhadap alam sekitar dengan kepercayaan hijau dan tingkah laku pembelian hijau. Sebagai kesimpulannya, penyelidikan empirik ini telah menyumbang kepada kebaharuan EQA yang pada dasarnya memberikan pengetahuan utama dan pemahaman yang lebih baik kepada pemasar tentang spektrum tingkah laku pelanggan yang luas dan kompleks dalam pembelian produk hijau yang kemudiannya akan memberikan resolusi yang lebih baik bagi kelangsungan alam sekitar.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xii
	LIST OF FIGURES	xiv
	LIST OF ABBREVIATIONS	xvi
	LIST OF APPENDICES	xvii
CHAPTER 1	INTRODUCTION	1
	1.1. Background of the research	1
	1.2. Research Context	5
	1.3. Problem Statement	7
	1.4. Purpose of the Research	11
	1.5. Research Questions, Research Objectives and Hypotheses	12
	1.6. Operational Definitions	14
	1.7. Organization of the Research	16
CHAPTER 2	LITERATURE REVIEW	19
	2.1. Introduction	19
	2.2. Green Shades of Pro-Environmental People	20
	2.2.1. Green Movements	23
	2.2.2. Green Product Challenges	25
	2.3. The fundamental of Behavioural Theories	28
	2.3.1. Attitude and Green Purchasing Behaviour Inconsistency	31

2.3.2.	The Underpin Theories and Models	36
2.3.3.	Theory of Planned Behaviour	36
2.3.4.	Limitation of the theory	44
2.3.5.	Customer Black Box Model and Stimulus-Organism-Response Model	46
2.4.	Literature Discussion Related to Research Constructs	49
2.4.1.	Dependent Variable: Green Purchasing Behaviour (GPB)	49
2.4.2.	Mediator: Environmental Attitude (EA)	56
2.4.3.	Independent Variables: Green Trust (GT)	57
2.4.4.	Independent Variable: Environmental Quality Awareness (EQA)	64
2.4.5.	Independent Variable: Green Self-efficacy (GSE)	73
2.5.	Hypothesis Development	75
2.5.1.	The relationship between Green Trust and Environmental Attitude	75
2.5.2.	The relationship between Environmental Quality Awareness and Environmental Attitude	77
2.5.3.	The relationship between Green Self Efficacy and Environmental Attitude	79
2.5.4.	The relationship between Green Trust and Green Purchasing Behaviour	80
2.5.5.	The relationship between Environmental Quality Awareness and Green Purchasing Behaviour	81
2.5.6.	The relationship between Green Self Efficacy and Green Purchasing Behaviour	83
2.5.7.	Relationship Environmental Attitude and Green Purchasing Behaviour	84
2.5.8.	Relationship of Environmental Attitude as a mediator between Green Trust, Environmental Quality Awareness and Green Purchasing Behaviour	85
2.6.	Proposed Conceptual Framework and Underlying Theories	87
2.7.	Summary	89

CHAPTER 3	METHODOLOGY	91
3.1.	Introduction	91
3.2.	Research Paradigm	92
3.3.	Research Approach, Method and Design	95
3.3.1.	Research Approach	96
3.3.2.	Research Methods	96
3.3.3.	Research Design	97
3.4.	Variables and Measures	102
3.4.1.	Measurement Development of Environmental Quality Awareness	102
3.4.2.	Interview Protocol	108
3.4.3.	Exploratory Factor Analysis	116
3.4.4.	Independent Variables	121
3.4.5.	Mediator	124
3.4.6.	Dependent Variable	125
3.5.	Sampling Design	127
3.5.1.	Study of Population	127
3.5.2.	Sample Size	127
3.5.3.	Sampling Techniques	128
3.6.	Structural Equation Modelling (SEM)	128
3.6.1.	Partial Least Squares SEM (PLS-SEM)	129
3.7.	Chapter Summary	132
CHAPTER 4	ANALYSIS	135
4.1.	Introduction	135
4.2.	Measurement Development Findings	135
4.2.1.	Conceptualizing Environmental Quality Awareness Measurement	137
4.2.1.1.	Formulating Item to Measure Environmental Quality Awareness	139

4.2.2. Exploratory Factor Analysis (EFA) Findings	141
4.3. Data Analysis and Findings	144
4.3.1. Data Screening	146
4.3.2. Examination of Data Entry and Missing Value	146
4.3.3. Respondents' Profile	149
4.3.4. Descriptive Study	150
4.4. Measurement Model Evaluation	152
4.4.1. Internal Consistency Reliability	153
4.4.2. Convergent Validity (Average Variance Extracted)	156
4.5. Structural Model Evaluation	161
4.5.1. Collinearity Assessment	162
4.5.2. Structural Model Path Coefficient	163
4.5.3. The coefficient of Determination (R^2)	164
4.5.4. Effect Size (f^2)	165
4.5.5. Blindfolding and Predictive Relevance (Q^2)	166
4.6. Mediation Effect Analysis	169
4.7. Chapter Summary	171
CHAPTER 5 DISCUSSION AND CONCLUSION	173
5.1. Discussion of the Findings	173
5.1.1. Research Question 1 (RQ1): Does Green Trust positively affect Environmental Attitude?	176
5.1.2. Research Question 2 (RQ2): Is Environmental Quality Awareness positively affect Environmental Attitude?	177
5.1.3. Research Question 3 (RQ3): Does Green Self-efficacy positively affect Environmental Attitude?	178
5.1.4. Research Question 4 (RQ4): Does Green Trust positively affect Green Purchasing Behaviour?	179
5.1.5. Research Question 5 (RQ5): Is Environmental Quality Awareness positively affects Green Purchasing Behaviour?	180

5.1.6. Research Question 6 (RQ6): Does Green Self-efficacy positively affect Green Purchasing Behaviour?	182
5.1.7. Research Question 7 (RQ7): Is Environmental Attitude positively affect Green Purchasing Behaviour?	183
5.1.8. Research Question 8 (RQ8): Does Environmental Attitude positively mediate the relationship between Green Trust and Green Purchasing Behaviour?	184
5.1.9. Research Question 9 (RQ9): Does Environmental Attitude positively mediate the relationship between Environmental Quality Awareness and Green Purchasing Behaviour?	186
5.1.10. Research Question 10 (RQ10): Is Environmental Attitude positively mediates the relationship between Green Self-efficacy and Green Purchasing Behaviour?	187
5.2. Summary of Research Questions	188
5.3. Importance-Performance Map Analysis	190
5.4. The significance of the Research	194
5.4.1. Theoretical Implication	194
5.4.2. Methodological Implication	198
5.4.3. Practical Implication	201
5.5. Recommendation for Future Research	206
5.6. Limitation and Challenge	222
5.7. Chapter Summary	224
REFERENCES	227
LIST OF PUBLICATIONS	247

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 1.1	Customers Spending Summary in 2015	6
Table 1.2	Research Questions and Research Objectives Summary Table	13
Table 2.1	Reinforcement versus Punishment	29
Table 2.2	Theory of Reasoned Action	37
Table 2.3	Achieving the Desired Outcome Summary Table	41
Table 2.4	Customer's Black Box Model	47
Table 2.5	Studies on Green Purchasing Behaviour Determinants in Malaysia	53
Table 2.7	Environmental Performance Index Rating (2014)	70
Table 2.8	Environmental Performance Index Challenges	71
Table 3.1	Environmental Quality Awareness, Dimensions and Themes Summary Table	106
Table 3.2	Content Adequacy Assessment	107
Table 3.3	Focus group interview questions	110
Table 3.4	Dimensions of the EPA Construct	112
Table 3.5	Generated Items to Measure Environmental Quality Awareness Construct	113
Table 3.6	Adapted Independent Variable Items	122
Table 3.7	Adapted Mediator Variable Items	124
Table 3.8	Adapted Dependent Variable Items	125
Table 3.9	Summary of Questionnaire Items	126
Table 3.10	Organization of Multivariate Methods	130
Table 3.11	PLS-SEM Algorithm Stages and Steps	132
Table 4.1	Environmental Quality Awareness Conceptual Development	137

Table 4.2	Definition of Environmental Quality Awareness	139
Table 4.3	EFA Loadings and Cronbach Alpha (α)	143
Table 4.4	Results of EFA on Environmental Quality Awareness	144
Table 4.5	Systematic Evaluation of PLS-SEM Results	145
Table 4.6	Rate of Response	148
Table 4.7	Profile of The Respondents	149
Table 4.8	Descriptive Statistic	151
Table 4.9	Pearson Correlations	151
Table 4.10	Cross-loading Table	153
Table 4.11	Summary of Internal Consistency Reliability	154
Table 4.12	Composite Reliability	155
Table 4.13	Fornell and Larker (1981)	157
Table 4.14	Heterotrait-monotrait (HTMT)	159
Table 4.15	The Reflective Measurement Models (Discriminant Validity) Results	160
Table 4.16	VIF Table	163
Table 4.17	Path Coefficient and Hypotheses Testing	167
Table 4.18	Hypothesis Testing for Mediation Effect (Indirect Effect)	169
Table 4.19	Summary of Hypotheses Testing Results	171
Table 5.1	Research Questions Summary for the Antecedents and Outcomes of Green Purchasing Behaviour	188
Table 5.2	IPMA for Environmental Attitude	190
Table 5.3	IPMA for Green Purchasing Behaviour	192

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 1.1	Overview of the Empirical Research Process	16
Figure 2.1	Segmenting by Green Interest	20
Figure 2.2	Who should be doing more?	22
Figure 2.3	Skinner's Reinforcement	28
Figure 2.4	Skinner's Operant Conditioning	30
Figure 2.5	Green consumer motives and purchasing strategies	35
Figure 2.6	The Theory of Planned Behaviour	38
Figure 2.7	The Theory of Planned Behaviour Framework	40
Figure 2.8	Stimulus-Organism-Responses (SOR)	48
Figure 2.10	Why people do not buy green products?	52
Figure 2.11	Categorization of measures	67
Figure 2.12	Indicator Pie Chart of the Environmental Performance Index	68
Figure 2.13	Malaysia Environmental Performance Index (MYEPI)	69
Figure 2.14	MYEPI (Environmental Quality Index) by the Ministry of Natural Resources and the Environment (NRE) (2014)	71
Figure 2.9	Environmental Quality Awareness Integrated Framework	88
Figure 3.1	Scale development process. Ten steps and three phases in scale development	103
Figure 3.2	Exploratory Factor Analysis Stage 1 to 3	118
Figure 3.3	Exploratory Factor Analysis Stage 4 to 7	119
Figure 3.4	Stages and Steps in Calculating the Basic PLS-SEM Algorithm	131
Figure 4.1	Structural Model Assessment Procedure	162
Figure 4.2	Hypotheses Testing	168

Figure 5.1	IPMA for Environmental Attitude	190
Figure 5.2	IPMA for Green Purchasing Behaviour	192

LIST OF ABBREVIATIONS

ATT	-	Attitude
EA	-	Environmental Attitude
EPI	-	Environmental Performance Index
EQA	-	Environmental Quality Awareness
F2	-	Effect sizes.
GPB	-	Green Purchasing Behaviour
GSE	-	Green Self-efficacy
GT	-	Green Trust
HTMT	-	Heterotrait-Monotrait ratio.
IPMA	-	Importance Performance Map Analysis
PLS	-	Partial Least Square
Q2	-	Measure of a model's predictive power
R2	-	Amount of explained variance of endogenous latent available in the structural model
SEM	-	Structural Equation Modelling
TPB	-	Theory of Planned Behaviour
TRA	-	Theory of Reasoned Action
VIF	-	Variance Inflation Factor

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Focus Group Interview Questions	226
Appendix B	Research Questions and Objectives Summary Table	246
Appendix C	Content Analysis for Pilot Test of Environmental Quality Awareness (EQA)	250
Appendix D	PLS-SEM Descriptive Analysis	254
Appendix E	Research Questionnaire	273

CHAPTER 1

INTRODUCTION

1.1. Background of the research

In recent years, there were numerous environmental issues need to be addressed, for examples the “global warming, depletion of the stratospheric ozone layer, pollution of sea and rivers, noise and light pollution and acid rain” (C. Kim & Marina, 2005, p.55). Furthermore, climate change has led to the risk of thermal stress, extreme weather and infectious disease (McMichael et al., 2006). Hence, today people are facing many issues on how to scale up the dissemination of environmental practices within the continuous growth of the global economy and fast pace technology change (K. Lee, 2009).

A decade ago, the emergence of the green idea and green movements have become widely discussed in the academia and industry. Prior research by John Elkington (1994) had coined the term of Three Bottom-Line discusses the social, environmental and financial parts. Similarly, with Three Environmental Pillar which consists of the environmental pillar, social pillar, and economic pillar. These two models Three Bottom-Line and Three Environmental Pillar compromise these three parts which referred to people, environment, and profit that must be harmonised with each other to find its sustainability balance.

The multidisciplinary background researchers have recognised the importance to study the environmental aspect of increasing the effort to find solutions to protect, develop as well as to sustain the environment. Additionally, sustainable practices have been gradually adapting in many industries (Gupta & Ogden, 2009). Moreover, the topics on ecological behaviour and green marketing have discussed in the multi-industries. In the western country, for instance, the European Commission has a

division on international environment policy that discusses ecological concern within different industries ranging from power energy, water system, agriculture to transportation. Moreover, there is the presence of environmental awareness improvements by local councils to voluntarily adopt sustainable practices and initiatives by university students to enhance sustainability practices.

For example, companies are essentially focusing on reducing their carbon footprints (packaging waste, energy, and water usage) in order to find its positive financial impact in the future. However, on the social side, business is demanded to give more responsive benefits to gain government support, community engagement, loyalty and maintaining employees' support in the long run.

The term 'green people' and 'pro-environmentalist' have become popular terms in the green era. These terms are known as the people who are environmentally conscious and interested in ecological issues (Soonthonsmai, 2007). Hence, in general, green consumers will consider before they consume or purchase the products that have an environmental impact. These people practice eco-friendly activities in their daily life by conserving water and energy as well as recycling. Furthermore, they support the sustainable management and stewardship through green movements such as conservation activities, green politics as well as human rights.

Like many Asian countries than people who live in the West (K. Lee, 2009), Malaysia perceived severe environmental problems. In 1974, Malaysia took the initiative towards addressing the problem by enacting on the Environment Quality Act and became one of the earliest developing countries to overcome degradation issues. Many initiatives have been continuously undertaken to educate and undertake the responsibility to enhance the nation's capacity in dealing with environmental issues.

Additionally, the Malaysia government struggles in financing environmental resources preservation and pollution mitigation. For instance, in September 2006, Bursa Malaysia rolled out a CSR framework for Public Listed Companies, and in April 2009 Ministry of Energy, Green Technology and Water (KeTTHA) was introduced to sustain the healthy environment. By 2012, the introduction of MYEPI was undertaken

by Minister Ministry of Natural Resources and The Environment (NRE) is based on the global EPI methodology. The approach consists of three principal objectives which focus on Environmental Health (EH), Ecosystem Vitality (EV) and Socioeconomic Sustainability (SS) (Ahamad et al., 2014). Hence, the involvement of among agencies, departments, and government ministries in gathering complex data has been one of the serious efforts to protect future generations.

Subsequently, in Malaysia, some of the leading organisations have responded towards the propaganda or agenda by developing and introducing eco-friendly products in the market. Furthermore, there are top ten companies who are practising green in their supply chain that strive for producing green products. For instance, First Solar Malaysia, Maribumi Starchtech Sdn Bhd, Titi Eco Farm Resort Sdn Bhd, SP Multitech Sdn Bhd, Builders Biomass Sdn Bhd, Green Age Solar Technology Sdn Bhd, MTS Fibroma (M) Sdn Bhd, Magri Group of Companies, Zenxin Agri-Organic Food Sdn Bhd and Lam Chong Group.

Therefore, there is continuous commitment also showed by the institution of higher education, supported by specific government entities, non-government organisations and private sectors to participate in the movement. In addition, the issues of natural resources consumption such as water, energy as well as the protection of natural habitats and endangered species are making it more important for the marketers to illustrate the numerous examples of green product benefits. These parties have collaboratively provided the development and creating the initiatives for a better environmentally friendly undertaking. For instance, the Suria 1000 project promotes and educates the public on the use of solar power, energy star rating for some electrical goods, and the implementation on Green Building Index (GBI) for industrial development, reducing emissions from deforestation and forest degradation in developing countries (REDD) (Shafie et al., 2011).

Furthermore, the involvement of NGO in enhancing environmental awareness range from outreach activities through seminars, project, campaign, and program. For instances, mobilising Malaysians on Climate Change project, organising Green Hunts using public transportation and Organic Day (Hari Organik) campaigns to promote

organic produce and farming practices. Beside, VCOS or the Voluntary Carbon Offset Scheme is an example of a partnership between public and private sectors to enhance environmental awareness to promote green purchasing and green consumption on a daily basis (Shafie et al., 2011).

In general, the green activities such as recycling, carpooling, green movements and green policies could protect us from the environmental threat. Despite environmental awareness exists within the layers of Malaysia's population, there are still numerous environmental issues arises. However, these are relatively general of green activities or initiatives, whereas the green product purchasing (activity) is a big chunk of ecological issues that people have to face in the future. The green purchasing has become a common trend in the West which is not yet strongly appreciated and practised in Malaysia (Chen & Chai, 2010). The customers' acceptance (demand) in Malaysia towards green products was reported that environmentally friendly products consumption compared to non-green products were still low due to non-significant number (Goh & Wahid, 2014; Mei et al., 2012; Ong et al., 2011; Papargyropoulou et al., 2012; Rahbar & Wahid, 2010; Ramli, 2009; Sinnappan et al., 2011).

Thus, no matter how great concern of environmental issue perceived, little do people know that most of the environmental burden comes from the things that people consume or use every day. People are accountable for global emissions of greenhouse gasses (GHG), climate change and water pollution that have grown in complex degree (Jerneck et al., 2011). Therefore, in this chapter, the researcher will briefly discuss the research context. Then, the researcher will discuss problems statement on the gaps and will enlighten the purpose of the research. Next, the research questions, objectives and hypotheses will be outlined. Lastly, the research will point out the research significant for future academic and industry stance.

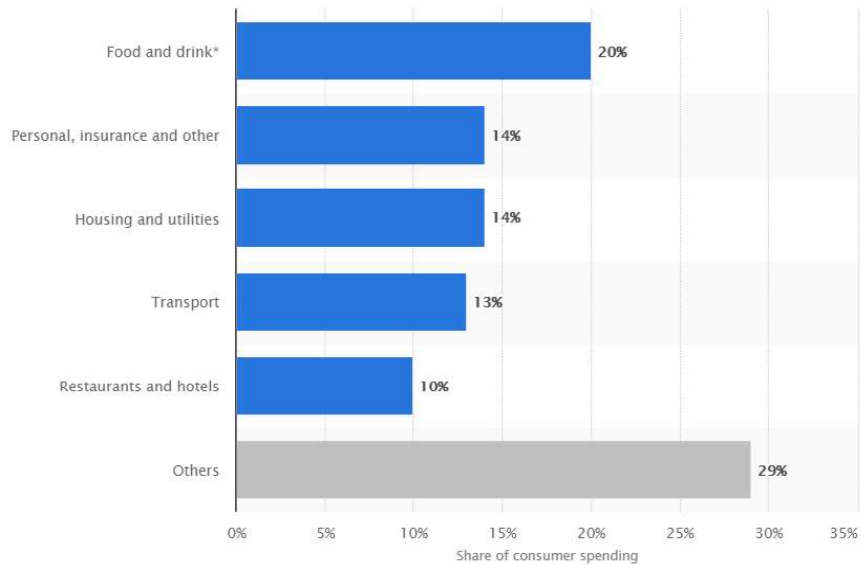
1.2. Research Context

Customers are large contributors to environmental degradation, thus, it is essential to define the consumer types in the green context. Sustainable behaviour may be multifaceted as it reflected in the customer's daily habit and activities, for example, recycling, carpooling, purchasing biodegradable food products and saving electricity consumption. Whereas, purchasing green behaviour is cumulated in the big chunk of pro-environmental categories and vary from general purchase-related customer behaviour (C. Kim et al., 2005).

Based on Bertoli (2014), there are two-type of consumers, the first type is prevention-type consumers, which these "people are feeling more duty towards greener lifestyle". Whereas, the second one is promotional-type of the individual which they are likely focusing on "their aspiration and dreams which do not strongly feel the pressure to quickly adjust their behaviour in the direction of becoming more environmental-friendly" (G. Bertoli et al., 2014).

Moreover, there is a two-fold customers' sphere that focuses on what kind of outcome by purchasing the products known as private-sphere and public-sphere behaviour. Private-sphere behaviour "refers to the purchase, use, and disposal of personal and household products that have an environmental impact" (P.C. Stern, 2000; M. Ertz et al., 2016). Meanwhile, 'public-sphere behaviour' refers to "behaviour that affects the environment directly through committed environmental activism or indirectly by influencing public policies, such as active involvement in environmental organisations and demonstrations (direct impact) or petitioning on environmental issues (indirect impact)" (Ertz et al., 2016). Hence, in this research context will assess both types of prevention and promotional type, as well as public-sphere behaviour and private-sphere behaviour types to achieve the overall green product purchasing behaviour perspective.

Table 1.1: Customers Spending Summary in 2015



Source: Statista (2016)

In Table 1.1 above shows the statistic of customers spending summary which it complements the Maslow Hierarchy of Needs (1943) which shows that physiological needs (food and drinks) are the highest with 20% of spending, whereas insurance (personal security and safety) and housing (safety) with 14% are the second highest. Meanwhile the third is transportation (esteem needs) with 13% of the weight of customers' spending in 2015 (Statista, 2016).

The researcher determines to assess the purchasing of household technology products and transportation as they are consisting of a large contributor to environmental degradation. For instance, people are fixing their daily chores by using the best products that they could have. Like famous motto 'it all starts from home', where the individual is motivated by his or her personal needs that reflect in the respect to environmental preservation. Therefore, purchasing behaviour of household products and transportation will be an interesting subject of this research context.

1.3. Problem Statement

In the complex customers' behavioural context, there is a contradiction between attitude and behaviour to cope up between lifestyle and environmental issues. To date, academia, marketers and government are still harvesting various potential antecedents to investigate a relevant degree of pressure to 'move' the customers to switch their daily behaviour to be more organic or environmentally friendly.

There are numerous arguments on the circumstantial relationship limitations of customers' attitude does not lead to behaviour, including the pro-environmentalist attitude. A prior study showed that most of the people are expecting others to solve environment issues (Carrington et al., 2010). Young et al., (2009) study suggested that based on the consumers' 'attitude/behaviour gap' or 'values/action gap' showed that 30% of self-proclaimed as an environmentalist is struggling in purchasing bio-gradable products. Subsequently, the Eurobarometer (2013) reported that consumers' behaviour seemed not fully conscious of sustainable products importance. Additionally, Bertolli et al. (2014) research show that people tend to focus on the personal values influenced by a personal dimension that pin-pointed on individuals' needs and wants rather than environmental issues.

Furthermore, attitude/behaviour in purchasing green products is ambiguous. Generally, people are expected to monitoring their lifestyle, but in the individual perspective, most of the people rather leave for others to solve environmental issues. Therefore, most of the positive attitude people and even customers who claimed they are pro-environmentalist; their attitude does not reflect in their purchasing behaviour (Bamberg, 2003; Chen et al.,2010; Markkula & Moisander, 2011; Sinnappan et al., (2011). Hence, it is best to investigate the customers' environmental attitude and understand green purchasing behaviour gap.

Moreover, a famous writer of the New Rules of Green Marketing book, Jacquelyn A. Ottman (2011) stated that customers are seldom want to sacrifice for the environment and instead, they are focusing on the 'benefit-to-self' factors. The term of "what is it for me" become a common motive where they are likely to deliver or

offer in order to gain their self-fulfilment and satisfaction rather than for future outcome orientation (Oliver, 2014). As a result, the attitude-behaviour gap has a major impact on both environment protections as well as industry sustainability.

Meanwhile, in the industry context; organisations are encouraged to embrace the concept of green marketing for creating a green economy for the country. The government has stressed out the green prospect in the 10th Malaysia Plan that assessed through policies, strategies, and institutions. However, the initiatives by government and industry parties still have not significantly reflected in the demand and supply (Chen & Chai, 2010). Consequently, sustainable products are readily available in the conventional market (supply), but the people involved in green purchasing is still slow (demand). Thus, there is an indication of poor green demand reflected by people who are still in profound confusion or rather not interested in all of the green idea (Chen & Chai, 2010).

Meanwhile, in the green marketing perspective, the establishment of green products' label, promotion, and advertising have claimed that green attributes could influence the customers purchasing. However, the probability of the unethical organisations could take advantage of portraying 'being green' and may potentially lead to backfire which contributes to customers' scepticism and confusion. Thus, the problem arises when customers feel that they could rely on or not confident enough with the green products, hence, the demand is not growing.

As a result, marketers are struggling to offer and convince customers about the eco-products in the industry along with the conventional products. Thus, with ambiguous green demand direction, it will contribute a continuous challenge for marketers to create solid marketing strategies to manoeuvre customers' needs and wants towards purchasing green (Sinnappan et al., 2011). Based on TB Chen (2010) study, it has expanded green trust novel in the Theory of Planned Behaviour (TPB) to provide an understanding of customers' influence in purchasing green products, but the stance is yet to be determined, because the green trust may not lead to green purchasing and marketers probably still facing enormous challenges in convincing the

customers about green products. Hence, the researcher intends to investigate green trust in the context of purchasing green behaviour.

Subsequently, in the theory context, the popular TPB by Ajzen (1991) has highlighted self-efficacy as antecedent that could justify certain conditions to attain the desired behaviour. However, the theory remains vague to expel the purchasing of green products behaviour issues. Ajzen (1991) suggested that belief translated to given behaviour performance might be biased by self-serving motives like anger, fear or other emotions. This also represents the intrinsic value which states how much effort customers are able to give or lose to gain environmental benefits.

According to Bandura (1982), the customer's self-efficacy determines whether an individual will be able to persist or how much effort is they willing to be given to the face of obstacles to achieve the desired outcome. For example, some of the green products are not placed in convenience stores or in the usual shelf together with the conventional products, hence, the marketer needs to determine how much effort of time and energy of customers would spend to travel or to find such green products (J.Ottman, 2010). Moreover, the efforts become more time-consuming as the customers need to spend to understand the green products' characteristic, ingredient and authenticity. Nevertheless, most customers are already aware that the green product price is slightly expensive than conventional products in the market.

Hence, the customer's self-efficacy; the customers' time and energy effort are remained vague to extend the attitude towards purchasing green products. Therefore, it is best to investigate the customers' self-efficacy that they are willing to give or lose in the exchange of environmental protection. Thus, the researcher will examine the customers' self-efficacy by adapting Bandura (1982) in TPB theory to explain the customers' personal judgement of how well one can execute courses of action required to deal with prospective environmental situations.

Whereas in social stance, Malaysia Environmental Performance Index (MYEPI) has introduced by Minister Ministry of Natural Resources and Environment (NRE) in 2012. MYEPI aims to provide the general public data-driven information

system that is useful towards achieving Sustainable Development Goals (SDGs). There are significant efforts by agencies, department, government ministries, non-government organisations (NGO) and the private sector that collaboratively addressed the environmental issues and sustainable living to educate Malaysians (Ahamad et al., 2014).

EPI aims to achieve the sustainable goal by monitoring the progress of environmental performance, however, MYEPI has been gradually dropping, in 2010 Malaysia was in 50th place and in 2018 it significantly dropped again at a 75th place in the world. The constructive criticism of environmental impact goes beyond the index method as it has few drawbacks on data deficiencies and it is inadequately reflecting the environmental issues of trade flow (Alex de Shernin et al., 2013).

Unfortunately, the Environmental Performance Index is only the benchmark of the overall country environment performance, yet it could not measure the people sensitivity and reaction about the environmental issues to make social behaviour adjustment or improvement. Hence, there were big queries about people behaviour; what is the people perception towards environmental quality or development and to what extent people will do about the environmental quality stance. Therefore, it is crucial to promote a new novel that will help the research to investigate the customers' awareness towards environmental quality.

On those ground of research problems that have been briefly discussed, this research aims to fill the gaps in the green purchasing behaviour in Malaysia. Nevertheless, by construing prior literature reviews, the researcher will investigate the relationship between green trust, environmental quality awareness and environmental attitude towards green purchasing behaviour. Furthermore, the researcher will extend the environmental attitude as a mediator to examine the relationship between green trust, environmental quality awareness, environmental attitude and green purchasing behaviour. Subsequently, this research intends to analyse the relationship between the conceptual framework constructs based on the psychological behaviour theories; Theory of Planned Behaviour and Stimuli-Organism-Response Theory

1.4. Purpose of the Research

In regards of Chen & Chai (2010) study, stated that Malaysian customers are still in an idle state of mind to expand the green idea, whereby it is relatively different from other Western countries; where they have been actively involved in green movements. In addition, there were reported that few ecological purchasing behaviour studies were conducted in Malaysia (K. N. Adham & Siwar, 2012; Goh & Wahid, 2014; Mat Said et al., 2003; McMurray et al., 2014; Mei et al., 2012; Ong, Mahlia, & Masjuki, 2011; Papargyropoulou et al., 2012; Rahbar & Wahid, 2010; Ramayah et al., 2010; Ramli, 2009; Sinnappan et al., 2011). Hence, it is necessary to test the potential determinants that complement the three sustainability pillars and three bottom lines that consists of the economic, social and environment in the Malaysia context (Sinnappan et al., 2011; Goh & Wahid, 2014).

In the academic setting, many studies pertaining green purchase intention conducted by western scholars such as Kalafatis et al., 1999; Chan and Lau (2000); Laroche, Bergeron and Barbara-Forleo (2001); Follows and Jobber (1999); Stone et al., (2008); Schlegelmich et al., 1996; Conraud-Koellner and Rivas-Tovar (2009); Pickett-Backer and Ozaki (2008). Despite prior study has shown that the threatened environment has an impact on environmental concern, the result only limits to the intention of conserving where it does not translate to customers' purchasing behaviour (Leonidou et al., 2010).

Furthermore, there are undoubtedly many discussions on purchasing behaviour indicators that originate from internal and external factors which adapted different theoretical frameworks. Even so, many environmental results have constructed by the general disposition which in the end, they tend to be poor indicators towards the specific situation (outcome) or behaviour (Boldero, 1995; Sinnappan et al., 2011). Theory of Planned Behaviour suggests that no matter how people arrive at their behavioural, normative and control beliefs; their attitudes towards the behaviour, subjective norms and perceptions of behavioural control will automatically and consistently follow by their beliefs (Ajzen, 2011).

Thereby, many studies recommended that if the researcher wants to predict a specific behaviour, such as purchasing behaviour, the attitude measure must be appointed at a specific environmental issue (Heberlein et al., 1976; Weigel et al., 1976). Thus, the researcher will investigate four specific environmental determinants which will carry-out in the research framework. The first one is consumer trust, secondly is to examine the customers' awareness of environmental quality. Thirdly, is to analyse the customers' green self-efficacy and lastly, to investigate customers' environmental attitude.

Subsequently, it brings into this research attention to investigate Malaysian customers' behaviour towards purchasing green products. The main objective of this study to examine these proposed variables relationships that are postulated to explain the attitude-behaviour gap in green purchasing behaviour. The research will test the relationship construct by adapting the Theory of Planned Behaviour (TPB) by Ajzen (1991) and Stimulus-Organism-Response (SOR) by Woodworth (1954).

1.5. Research Questions, Research Objectives and Hypotheses

Given insights from research problems in section 1.3, there are ten research questions arise that the researcher aims to address (Table 1.2). There are three independent variables are proposed for the research framework, namely; green trust, environmental quality awareness and green self-efficacy. Moreover, environmental attitude is integrated into the framework as a potential mediator between the relationship of green trust, environmental quality awareness, green self-efficacy and environmental variables to investigate the green purchasing behaviour.

Subsequently, the researcher proposed four research objectives and ten hypotheses to be tested out which it is a bounded rational to 'move' customer's conventional to purchase bio-degradable products. The researcher will be further discussed these research questions, research objectives and hypotheses development in chapter 2.

Table 1.2: Research Questions and Research Objectives Summary Table

RESEARCH QUESTIONS (RQ)	RESEARCH OBJECTIVES (RO)	RESEARCH HYPOTHESES
<p>RQ1: Does Green Trust positively affect Environmental Attitude?</p> <p>RQ2: Is Environmental Quality Awareness positively affecting Environmental Attitude?</p> <p>RQ3: Does Green Self-efficacy positively affects Environmental Attitude?</p>	<p>RO1:</p> <p>To investigate green trust, environmental quality awareness and green self-efficacy influence towards the environmental attitude</p>	<p>H1: Green Trust positively affects Environmental Attitude</p> <p>H2: Environmental Quality Awareness positively affects Environmental Attitude</p> <p>H3: Green Self-efficacy positively affects Environmental Attitude</p>
<p>RQ4: Does Green Trust positively affect Green Purchasing Behaviour?</p> <p>RQ5: Is Environmental Quality Awareness positively affecting Green Purchasing Behaviour?</p> <p>RQ6: Does Green Self-efficacy positively affect Green Purchasing Behaviour?</p> <p>RQ7: Is Environmental Quality Awareness positively affecting Green Purchasing Behaviour?</p>	<p>RO2:</p> <p>To investigate green trust, environmental quality awareness and green self-efficacy influence towards green purchasing behaviour</p> <hr/> <p>RO3:</p> <p>To measure environmental attitude affects green purchasing behaviour</p>	<p>H4: Green Trust positively affects Green Purchasing Behaviour</p> <p>H5: Environmental Quality Awareness positively affects Green Purchasing Behaviour</p> <p>H6: Green Self-efficacy positively affects Green Purchasing Behaviour</p> <p>H7: Environmental Attitude positively affect Green Purchasing Behaviour</p>
<p>RQ8: Does Environmental Attitude positively mediate the relationship between Green Trust and Green Purchasing Behaviour?</p> <p>RQ9: Does Environmental Attitude positively mediate the relationship between Environmental Quality Awareness and Green Purchasing Behaviour?</p> <p>RQ10: Is Environmental Attitude positively mediating the relationship between Green Self-efficacy and Green Purchasing Behaviour?</p>	<p>RO4:</p> <p>To examine the environmental attitude mediation effect between green trust, environmental quality awareness and green self-efficacy and green purchasing behaviour</p>	<p>H8: Environmental Attitude positively mediates the relationship between Green Trust and Green Purchasing Behaviour</p> <p>H9: Environmental Attitude positively mediates the relationship between Environmental Quality Awareness and Green Purchasing Behaviour</p> <p>H10: Environmental Attitude positively mediates the relationship between Green Self-efficacy and Green Purchasing Behaviour</p>

1.6. Operational Definitions

Green People or pro-environmentalist is a person who belongs to environment-society. This person is a supporter of green or environmental movement whether it is a political and ethical movement. They belong to the group that seeks to improve and protects the quality of the natural environment through changes in environmental activities.

Green Consumerism defines as the customers' purchasing habits towards environmentally friendly products and services. GC was known as a form of consumption that is not harmful towards the three pillars of sustainability namely, economy, environment, and society. Green people or environmentalist particularly form green consumerism.

Green Products are environmentally safe products that carry safe, energy efficient and often have low maintenance requirements. The characteristics of green products are mostly free from toxic compounds and often made of recycled materials or renewable energy. Some of the products are certified and possess eco-labels to help customers to differentiate between commercial products and green products.

Eco-label is a certification that provides the understanding of ecological benefits to the customers in the long run. Eco-label is certified by particular bodies that emphasise the product's characteristic to avoid eco-conscious consumers being deceived into buying fake green products.

Green Trust defines as “a willingness to depend on a product or service based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental performance” (Chen et al., 2010, p.492).

Environmental Quality Awareness is a novel that explains customers' awareness of environmental quality. EQA concerns about three sustainable pillars which are environmental health, ecosystem vitality, and socioeconomic sustainability.

EQA define as an acknowledgement the impact of environmental burden towards Human Health, Ecosystem Vitality and Socioeconomic Sustainability of the country.

Green Self-efficacy discusses the people's degree of involvement, effort and how long they will persist in facing the obstacles as well as aversive experiences. GSE is effective in predicting a person to behave that influenced by thoughts patterns, actions, and emotional arousal.

Environmental Attitude is an expression of the psychological tendency between favour and un-favour towards things, situations, and people. EA is believed to be the crucial antecedent in environmental behaviour research to determine the behaviour outcome.

Green Purchasing Behaviour is spending on products that are beneficial to the environment.

Environmental Performance Index is global metrics for the environment that rank the countries' environmental performance of the human health protection and the protection of ecosystems.

1.7. Organization of the Research

Based on Figure 1.1 below shows an overview of the empirical research process follows the structure of the doctoral thesis as suggested by Chad Perry (1998).

CHAPTER 1: INTRODUCTION

- Background of the Research
- Research Context
- Problem Statement
- Purpose of the Research
- Research Questions, Research Objectives and Hypotheses
- Operational Definitions
- Organization of the Research

CHAPTER 2: LITERATURE REVIEW

- Introduction
- Green Shades of Pro-Environmental People
- The Fundamental of Behavioral Theories
- Literature Discussion Related to Research Constructs
- Hypothesis Development
- Proposed Conceptual Framework and Underlying Theories

CHAPTER 3: METHODOLOGY

- Introduction
- Research Paradigm
- Research Approach, Methods and Design
- Variables and Measures
- Sampling Design
- Structural Equation Modelling (SEM)

CHAPTER 4: ANALYSIS

- Introduction
- Measurement Development Findings
- Data Analysis and Findings
- Measurement Model Evaluation
- Structural Model Evaluation
- Mediation Effect Analysis

CHAPTER 5: DISCUSSION AND CONCLUSION

- Discussion of the Findings
- Importance-Performance Map Analysis (IPMA)
- The Significance of the Research
- Recommendation for Future Research
- Limitation and Challenge

Figure 1.1 Overview of the Empirical Research Process

Chapter one is the introduction of the background of the research and research context. Later, problems statement and purpose of the research. Subsequently, based on the research problems, the researcher explains the research question, research objectives, research hypotheses, operational definition followed by an organization of the research.

Chapter two will present a review of the literature that discusses a broad investigation of the current issues and in-depth study on environmental stance. Firstly, the literature review discusses the green shades of pro-environmental people, green movements and green product challenges. Next, the researcher will synthesise and critique the literature reviewed, discuss the foundation elements for the dissertation and the opposing viewpoints, as well as interpret relevant findings to the research. Then, each antecedent will be discussed in related literature from many various perspectives follows by fundamental of behavioural theories, underpinning theories and proposed conceptual framework, underlying theories and hypotheses developments. Later, the researcher will explain the hypotheses development that discusses the relationship between the construct. Finally, the chapter will propose the research conceptual framework.

Chapter three will describe the methods and detailed procedures to answer the research questions developed in chapter one. This chapter will discuss the problem-solving methods as well as how to test the adapted model theories. Chapter three emphasises methodology of the research that discusses the approaches and procedures. Moreover, this section will describe how research questions in chapter one are going to be answered. A significant discussion on research approach and strategy, research design and data collection method, sampling techniques, scale development, data collection and data analyses procedure, as well as expected findings, are presented here. Overall, this chapter stresses problem-solving followed by methods to test the models as well as theories adapted the framework.

Whereas chapter four will provides the analysis, presentation of the research hypothesis and findings. First, a discussion on scale development results by using the exploratory method. Then, the analysis results in data collection as well as presenting

the assessment of the measurement model and structural model. Lastly, hypotheses testing and the results will be discussed in detail.

Chapter Five delivers a summary of the research findings and the importance-performance map analysis. This chapter synthesises the overall conclusions follow from detailed discussions of significant of the research towards, theoretical, methodological and practical implications. Later, the researcher will provide a recommendation for future research. Then, the researcher will explain the limitation and challenge during the research progress. Lastly, the researcher will summarize chapter 5 in the research overall conclusion

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LIST OF PUBLICATIONS

Indexed Journal

Rosli, N. T., Ahmad, F. S., Quoquab, F., & Salam, Z. A. (2017). Measuring Environmental Performance Awareness: A Qualitative Approach. *Advanced Science Letters*, 23(4), 3198-3201. <https://doi.org/10.1166/asl.2017.7709>. Q3.IF

Book Chapter

Rosli, T., & Ahmad, F. S. (2018). A Review on Green Trust and Environmental Quality Awareness Affect Towards Environmental Attitude. In *Driving Green Consumerism Through Strategic Sustainability Marketing* (p. 37-49). IGI Global. DOI: 10.4018/978-1-5225-2912-5.ch003

Rosli, Trianna & Sh, Fauziah. (2019). A Review on Green Trust and Environmental Quality Awareness Affect Towards Environmental Attitude: Concepts, Methodologies, Tools, and Applications. In *Green Business*, p.1510-1522 DOI:10.4018/978-1-5225-7915-1.ch073.

APPENDIX A

FOCUS GROUP INTERVIEW QUESTIONS

1. Do you understand the concept of environmental performance awareness?
2. Have you ever heard about it before?
3. Do you think that the questions are difficult to understand?
(If Yes, reason, and opinion to improve)
4. Do you find any of the questions are offensive or insulting to certain people?
5. Do you agree all the issues items of environmental burden are affecting:
 - human health
 - ecosystem vitality
 - socio-economic sustainability*(if disagree, why?)*
6. As a customer, is there any other environmental burden could affecting:
 - human health
 - ecosystem vitality
 - socioeconomic sustainability*(if disagree, why?)"*
7. Do you think that the questions are suitable to understand the awareness of environmental quality towards
 - human health
 - ecosystem vitality
 - socioeconomic sustainability*(if disagree, why?)*
8. "Overall, do you agree with the definition of the core items?
 - human health
 - ecosystem vitality
 - socioeconomic sustainability

(if disagree, why?)

9. After you answered the survey, do you agree environmental quality runs into these three aspects? (HH, EV, SS)
10. Do you agree on the definition of environmental quality awareness (EQA)?
11. Do you agree all of these environmental issues are affecting our country environmental quality?
12. Overall, tell me your opinion regarding the question items, advice, ideas to add.

APPENDIX B

RESEARCH QUESTIONS AND RESEARCH OBJECTIVES

RESEARCH QUESTIONS (RQ)	RESEARCH OBJECTIVES (RO)
<p>RQ1: Does Green Trust positively affect Environmental Attitude?</p> <p>RQ2: Is Environmental Quality Awareness positively affecting Environmental Attitude?</p> <p>RQ3: Does Green Self-efficacy positively affects Environmental Attitude?</p>	<p>RO1: To investigate independent variables namely green trust, environmental quality awareness and green self-efficacy influence towards the environmental attitude</p>
<p>RQ4: Does Green Trust positively affect Green Purchasing Behaviour?</p> <p>RQ5: Is Environmental Quality Awareness positively affecting Green Purchasing Behaviour?</p> <p>RQ6: Does Green Self-efficacy positively affect Green Purchasing Intention?</p>	<p>RO2: To investigate independent variables namely; green trust, environmental quality awareness and green self-efficacy influence towards green purchasing behaviour</p>
<p>RQ7: Is Environmental Quality Awareness positively affecting Green Purchasing Behaviour?</p>	<p>RO3: To measure environmental attitude affects green purchasing behaviour</p>
<p>RQ8: Does Environmental Attitude positively mediate the relationship between Green Trust and Green Purchasing Behaviour?</p> <p>RQ9: Does Environmental Attitude positively mediate the relationship between Environmental Quality Awareness and Green Purchasing Behaviour?</p> <p>RQ10: Is Environmental Attitude positively mediating the relationship between Green Self-efficacy and Green Purchasing Behaviour?</p>	<p>RO4: To examine environmental attitude mediation effect between green trust, environmental quality awareness and green self-efficacy and green purchasing behaviour</p>

APPENDIX C

CONTENT ANALYSIS FOR PILOT TEST ENVIRONMENTAL QUALITY AWARENESS (EQA)

RELIABILITY

```

/VARIABLES=EPA_HH1 EPA_HH2 EPA_HH3 EPA_HH4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE COV
/SUMMARY=MEANS VARIANCE COV CORR.
    
```

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	141	100.0
	Excluded ^a	0	.0
	Total	141	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.902	4

Item Statistics

	Mean	Std. Deviation	N
EPA_HH1	4.6312	.61425	141
EPA_HH2	4.6241	.62723	141
EPA_HH3	4.6241	.62723	141
EPA_HH4	4.6738	.56690	141

Inter-Item Covariance Matrix

	EPA_HH1	EPA_HH2	EPA_HH3	EPA_HH4
EPA_HH1	.377	.296	.260	.250
EPA_HH2	.296	.393	.279	.241
EPA_HH3	.260	.279	.393	.226
EPA_HH4	.250	.241	.226	.321

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.638	4.624	4.674	.050	1.011	.001	4
Item Variances	.371	.321	.393	.072	1.224	.001	4
Inter-Item Covariances	.259	.226	.296	.070	1.307	.001	4
Inter-Item Correlations	.698	.637	.769	.132	1.207	.002	4

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.5532	4.592	2.14285	4

FACTOR

```

/VARIABLES EPA_HH1 EPA_HH2 EPA_HH3 EPA_HH4
/MISSING LISTWISE
/ANALYSIS EPA_HH1 EPA_HH2 EPA_HH3 EPA_HH4
/PRINT INITIAL CORRELATION SIG DET KMO AIC EXTRACTION ROTATION
/FORMAT BLANK(.5)
/PLOT EIGEN
/CRITERIA MINEIGEN(1) ITERATE(100)
/EXTRACTION PC
/CRITERIA ITERATE(100)
/ROTATION VARIMAX
/METHOD=CORRELATION.

```

Factor Analysis

Correlation Matrix^a

		EPA_HH1	EPA_HH2	EPA_HH3	EPA_HH4
Correlation	EPA_HH1	1.000	.769	.676	.719
	EPA_HH2	.769	1.000	.710	.677
	EPA_HH3	.676	.710	1.000	.637
	EPA_HH4	.719	.677	.637	1.000
Sig. (1-tailed)	EPA_HH1		.000	.000	.000
	EPA_HH2	.000		.000	.000
	EPA_HH3	.000	.000		.000
	EPA_HH4	.000	.000	.000	

a. Determinant = .079

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.839
Bartlett's Test of Sphericity	Approx. Chi-Square
	349.173
	df
	6
	Sig.
	.000

Anti-image Matrices

		EPA_HH1	EPA_HH2	EPA_HH3	EPA_HH4
Anti-image Covariance	EPA_HH1	.325	-.145	-.071	-.136
	EPA_HH2	-.145	.331	-.133	-.069
	EPA_HH3	-.071	-.133	.435	-.089
	EPA_HH4	-.136	-.069	-.089	.426
Anti-image Correlation	EPA_HH1	.811 ^a	-.441	-.188	-.366
	EPA_HH2	-.441	.816 ^a	-.349	-.185
	EPA_HH3	-.188	-.349	.872 ^a	-.207
	EPA_HH4	-.366	-.185	-.207	.868 ^a

a. Measures of Sampling Adequacy(MSA)

Communalities

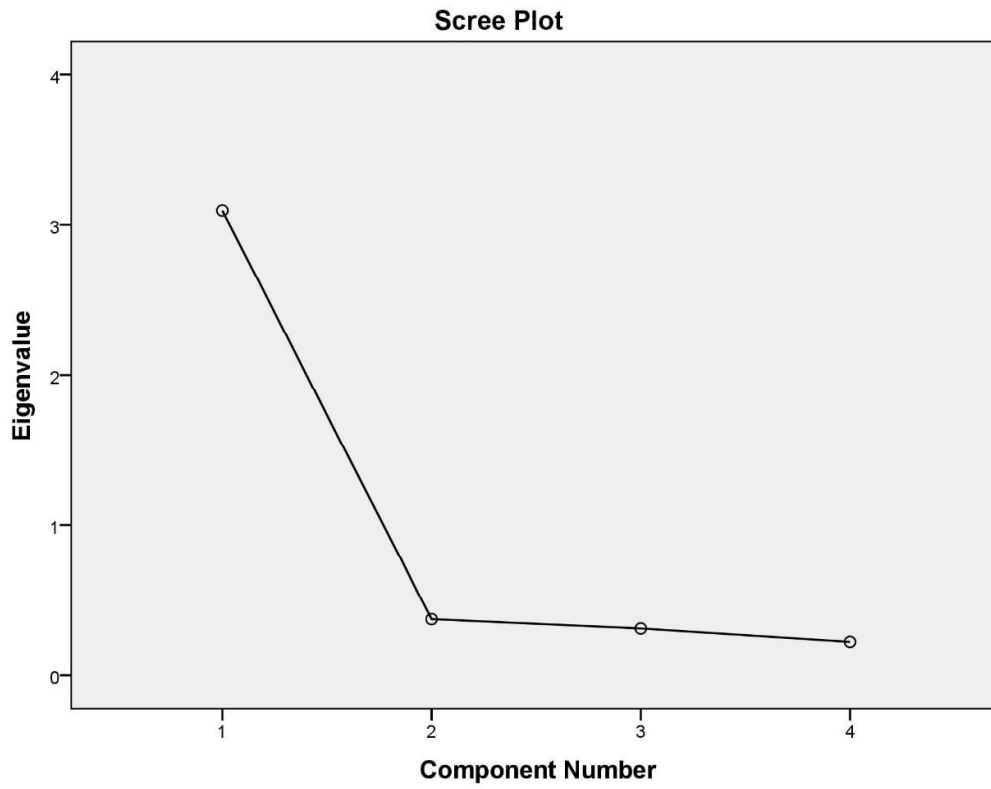
	Initial	Extraction
EPA_HH1	1.000	.812
EPA_HH2	1.000	.808
EPA_HH3	1.000	.734
EPA_HH4	1.000	.740

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.095	77.373	77.373	3.095	77.373	77.373
2	.373	9.328	86.701			
3	.311	7.766	94.467			
4	.221	5.533	100.000			

Extraction Method: Principal Component Analysis.



Component Matrix^a

	Component
	1
EPA_HH1	.901
EPA_HH2	.899
EPA_HH3	.857
EPA_HH4	.860

Extraction Method:
Principal Component
Analysis.

a. 1 components extracted.

APPENDIX D

PLS-SEM: DESCRIPTIVE ANALYSIS

Notes		
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Comments		
Input	Data	D:\EQA.august.sav
	Active Dataset	DataSet1
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	321
	File	
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=EQA1 EQA2 EQA3 EQA4 GT5 GT6 GT7 GT8 GSE9 GSE10 GSE11 EA12 EA13 EA14 EA15 GPB16 GPB17 GPB18 /SAVE /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.11
Variables Created or Modified	ZEQA1	Zscore(EQA1)
	ZEQA2	Zscore(EQA2)
	ZEQA3	Zscore(EQA3)
	ZEQA4	Zscore(EQA4)
	ZGT5	Zscore(GT5)
	ZGT6	Zscore(GT6)
	ZGT7	Zscore(GT7)
	ZGT8	Zscore(GT8)
	ZGSE9	Zscore(GSE9)
	ZGSE10	Zscore(GSE10)
	ZGSE11	Zscore(GSE11)

ZEA12	Zscore(EA12)
ZEA13	Zscore(EA13)
ZEA14	Zscore(EA14)
ZEA15	Zscore(EA15)
ZGPB16	Zscore(GPB16)
ZGPB17	Zscore(GPB17)
ZGPB18	Zscore(GPB18)

[DataSet1] D:\EQA.august.sav

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EQA1	321	1	5	4.60	.639
EQA2	321	3	5	4.74	.497
EQA3	321	2	5	4.74	.530
EQA4	321	2	5	4.81	.452
GT5	321	1	5	3.97	.834
GT6	321	1	5	3.85	.766
GT7	321	1	5	3.93	.856
GT8	321	2	5	3.76	.771
GSE9	321	1	5	3.66	.884
GSE10	321	1	5	3.65	.875
GSE11	321	2	5	3.85	.821
EA12	321	2	5	4.46	.693
EA13	321	2	5	4.72	.538
EA14	321	3	5	4.80	.474
EA15	321	1	5	4.05	.812
GPB16	321	1	5	3.96	.869
GPB17	321	1	5	3.73	.938
GPB18	321	1	5	4.08	.925
Valid N (listwise)	321				

Frequencies

Notes

Output Created		26-AUG-2016 23:04:00
Comments		
Input	Data	D:\EQA.august.sav
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	Weight	<none>
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	N of Rows in Working Data	321
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=EQA1 EQA2 EQA3 EQA4 GT5 GT6 GT7 GT8 GSE9 GSE10 GSE11 EA12 EA13 EA14 EA15 GPB16 GPB17 GPB18 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT /HISTOGRAM NORMAL /ORDER=ANALYSIS.
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	Elapsed Time	00:00:06.50

Statistics

		EQA	EQA	EQA	EQA			
		1	2	3	4	GT5	GT6	GT7
N	Valid	321	321	321	321	321	321	321
	Missing	0	0	0	0	0	0	0
	Skewness	-	-	-	-	-	-	-
		1.877	1.794	2.057	2.569	-.488	-.196	.459
	Std. Error of Skewness	.136	.136	.136	.136	.136	.136	.136
	Kurtosis	4.668	2.402	4.028	7.414	-.153	-.177	.265
	Std. Error of Kurtosis	.271	.271	.271	.271	.271	.271	.271

Statistics

		GT8	GSE9	GSE10	GSE11	EA12	EA13	EA14
N	Valid	321	321	321	321	321	321	321
	Missing	0	0	0	0	0	0	0
	Skewness	-.184	-.090	-.272	-.325	-1.145	-1.912	-2.327
	Std. Error of Skewness	.136	.136	.136	.136	.136	.136	.136
	Kurtosis	-.339	-.613	-.053	-.404	.864	3.407	4.746
	Std. Error of Kurtosis	.271	.271	.271	.271	.271	.271	.271

Statistics

		EA15	GPB16	GPB17	GPB18
N	Valid	321	321	321	321
	Missing	0	0	0	0
Skewness		-.619	-.532	-.579	-.996
Std. Error of Skewness		.136	.136	.136	.136
Kurtosis		.143	-.238	.194	.929
Std. Error of Kurtosis		.271	.271	.271	.271

Frequency Table

EQA1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	3	.9	.9	1.2
	3	12	3.7	3.7	5.0
	4	90	28.0	28.0	33.0
	5	215	67.0	67.0	100.0
Total		321	100.0	100.0	

EQA2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	9	2.8	2.8	2.8
	4	64	19.9	19.9	22.7
	5	248	77.3	77.3	100.0
Total		321	100.0	100.0	

EQA3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	.3	.3	.3
	3	11	3.4	3.4	3.7
	4	59	18.4	18.4	22.1
	5	250	77.9	77.9	100.0
Total		321	100.0	100.0	

EQA4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	.3	.3	.3
	3	5	1.6	1.6	1.9
	4	48	15.0	15.0	16.8
	5	267	83.2	83.2	100.0
	Total	321	100.0	100.0	

GT5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	13	4.0	4.0	4.4
	3	72	22.4	22.4	26.8
	4	145	45.2	45.2	72.0
	5	90	28.0	28.0	100.0
	Total	321	100.0	100.0	

GT6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	7	2.2	2.2	2.5
	3	95	29.6	29.6	32.1
	4	155	48.3	48.3	80.4
	5	63	19.6	19.6	100.0
	Total	321	100.0	100.0	

GT7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	16	5.0	5.0	5.3
	3	76	23.7	23.7	29.0
	4	141	43.9	43.9	72.9
	5	87	27.1	27.1	100.0
	Total	321	100.0	100.0	

GT8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	15	4.7	4.7	4.7
	3	97	30.2	30.2	34.9
	4	158	49.2	49.2	84.1
	5	51	15.9	15.9	100.0
	Total	321	100.0	100.0	

GSE9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	26	8.1	8.1	8.4
	3	115	35.8	35.8	44.2
	4	119	37.1	37.1	81.3
	5	60	18.7	18.7	100.0
	Total	321	100.0	100.0	

GSE10

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	1	4	1.2	1.2	1.2
	2	20	6.2	6.2	7.5
	3	114	35.5	35.5	43.0
	4	129	40.2	40.2	83.2
	5	54	16.8	16.8	100.0
Total		321	100.0	100.0	

GSE11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	18	5.6	5.6	5.6
	3	82	25.5	25.5	31.2
	4	152	47.4	47.4	78.5
	5	69	21.5	21.5	100.0
Total		321	100.0	100.0	

EA12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	1.2	1.2	1.2
	3	25	7.8	7.8	9.0
	4	110	34.3	34.3	43.3
	5	182	56.7	56.7	100.0
Total		321	100.0	100.0	

EA13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	.3	.3	.3
	3	11	3.4	3.4	3.7
	4	65	20.2	20.2	24.0
	5	244	76.0	76.0	100.0
Total		321	100.0	100.0	

EA14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	10	3.1	3.1	3.1
	4	45	14.0	14.0	17.1
	5	266	82.9	82.9	100.0
	Total	321	100.0	100.0	

EA15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	11	3.4	3.4	3.7
	3	59	18.4	18.4	22.1
	4	150	46.7	46.7	68.8
	5	100	31.2	31.2	100.0
	Total	321	100.0	100.0	

GPB16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.3	.3	.3
	2	17	5.3	5.3	5.6
	3	70	21.8	21.8	27.4
	4	138	43.0	43.0	70.4
	5	95	29.6	29.6	100.0
	Total	321	100.0	100.0	

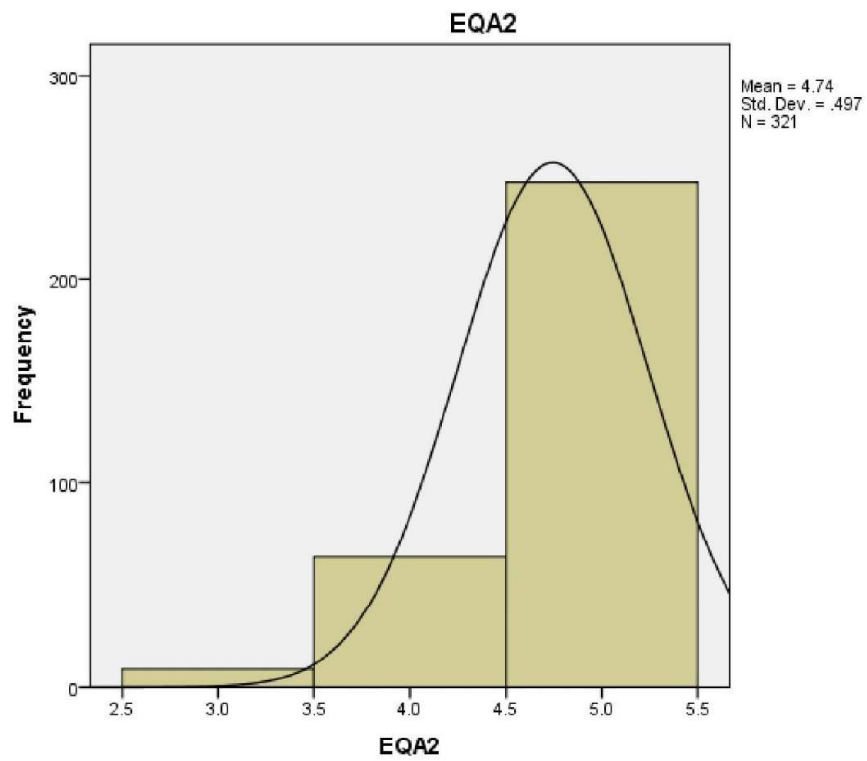
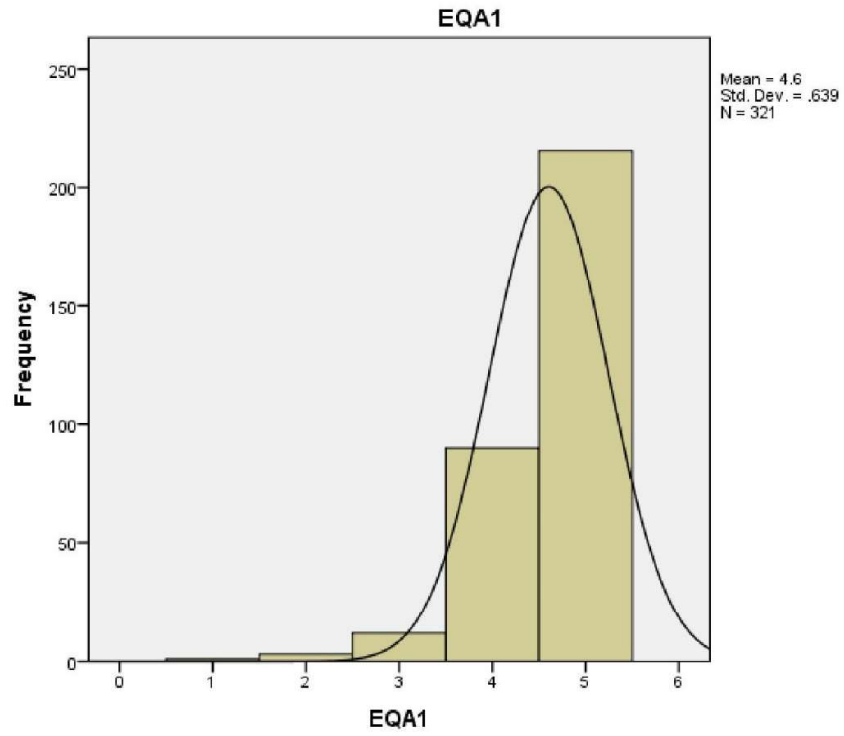
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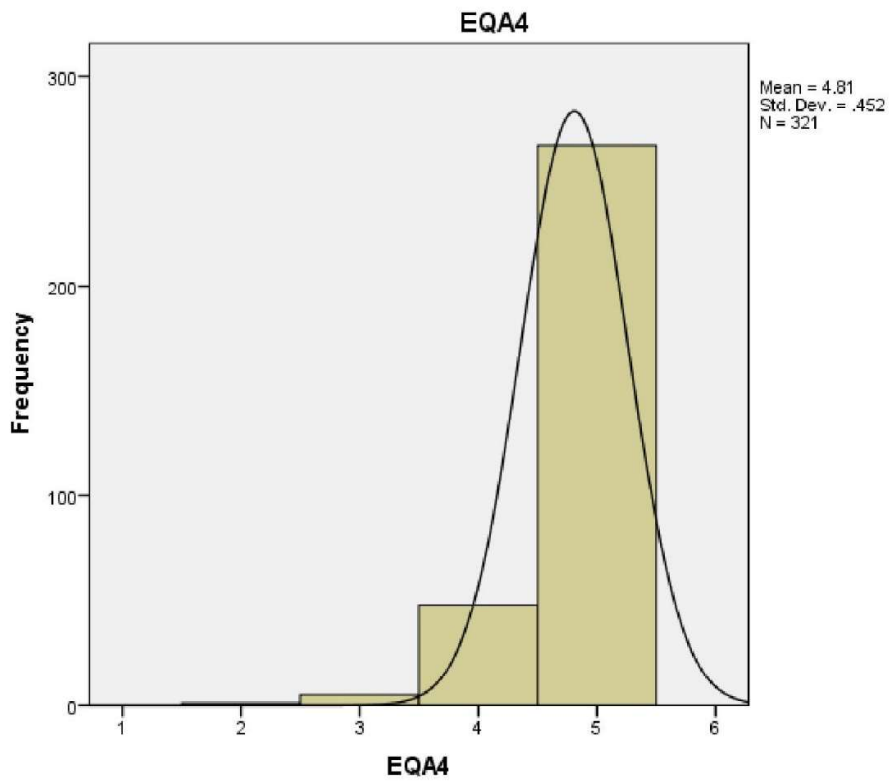
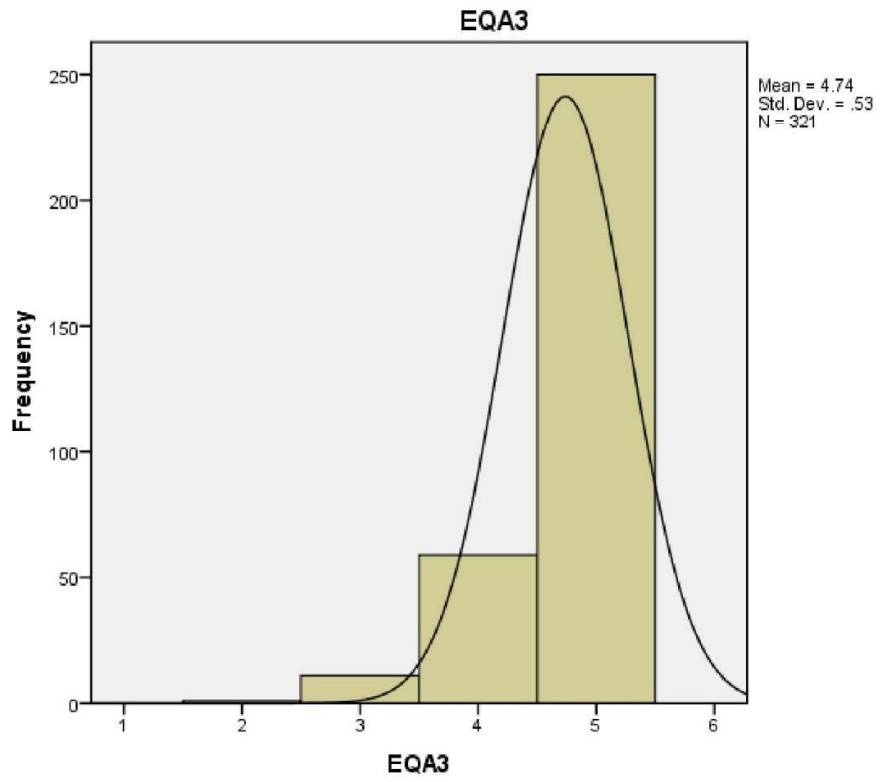
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2.2	2.2	2.2
	2	22	6.9	6.9	9.0
	3	88	27.4	27.4	36.4
	4	138	43.0	43.0	79.4
	5	66	20.6	20.6	100.0
Total		321	100.0	100.0	

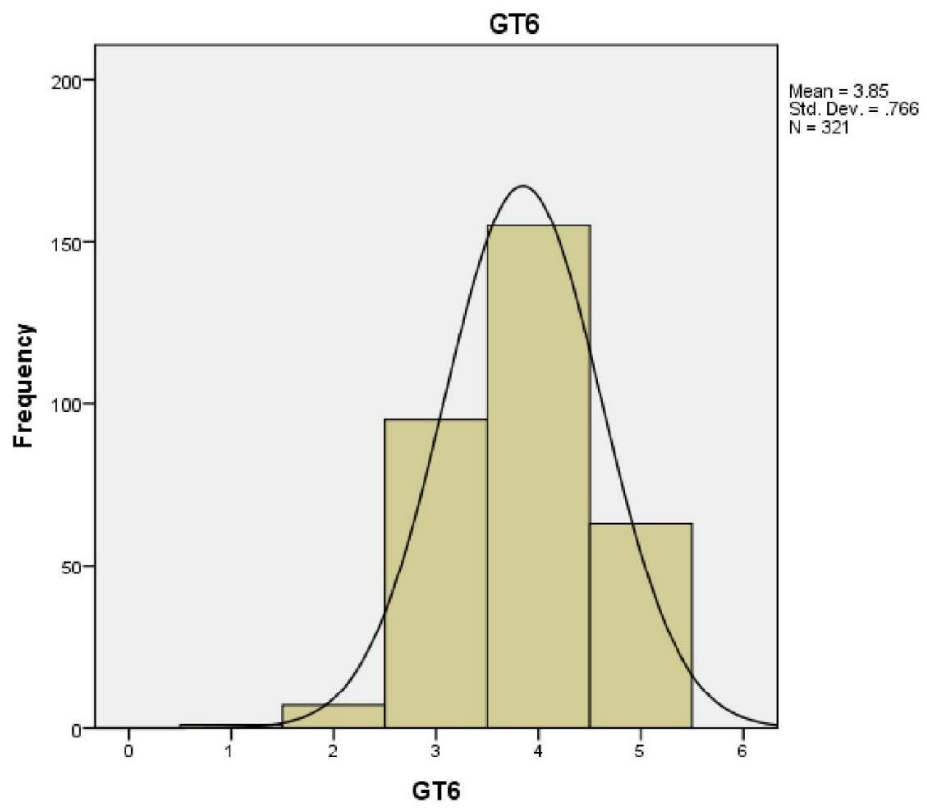
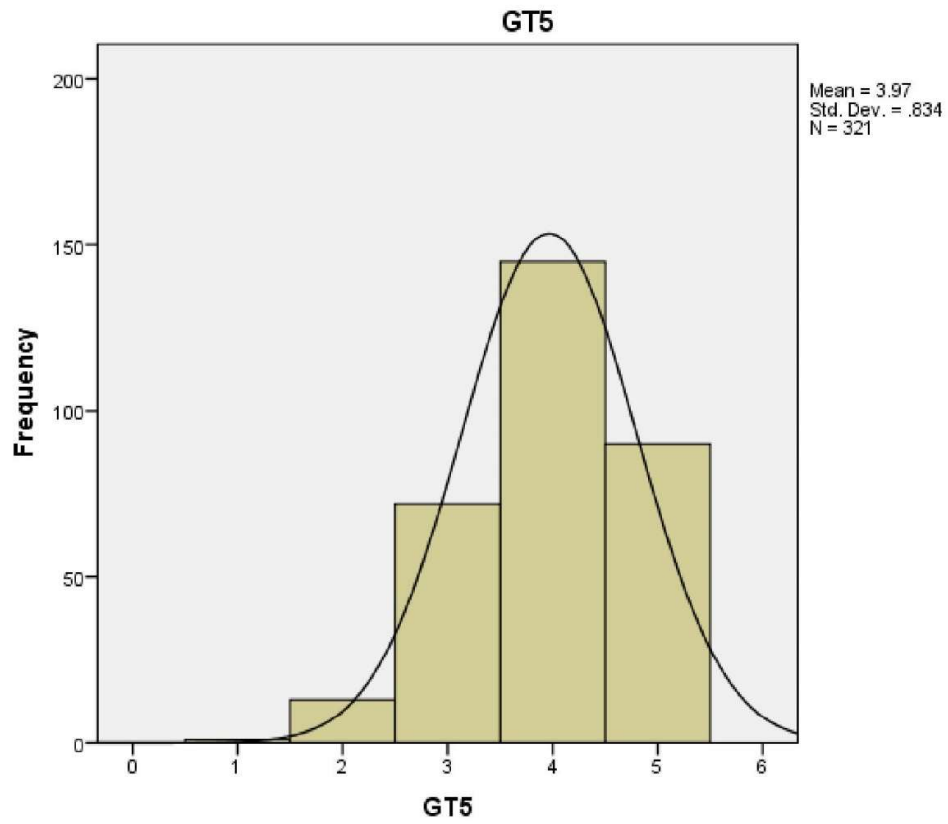
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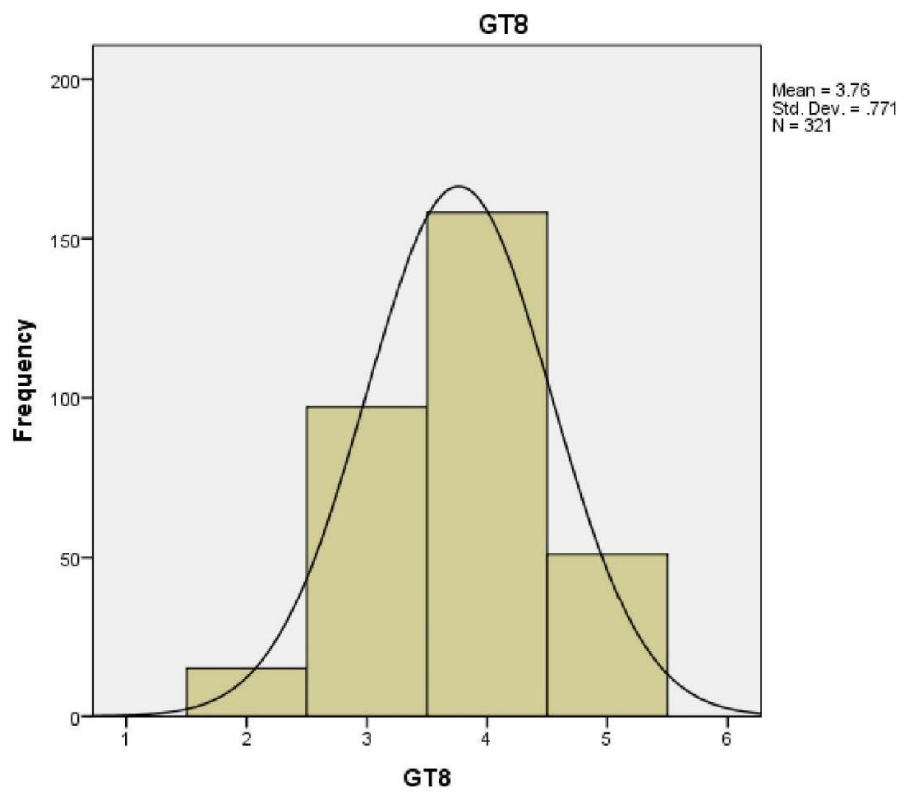
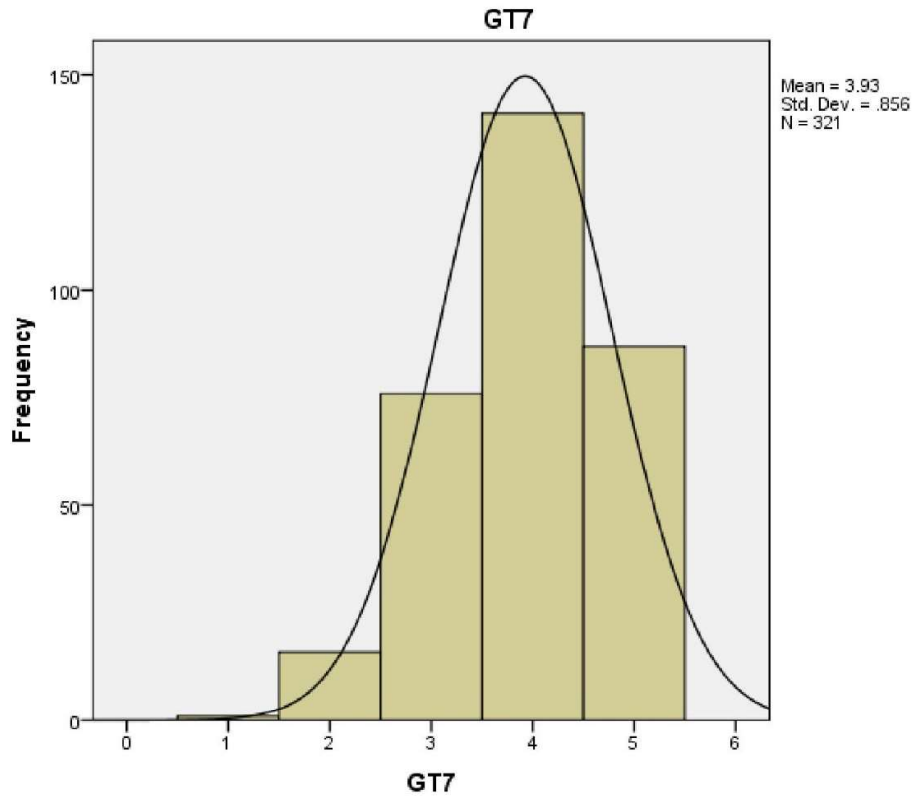
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.9	1.9	1.9
	2	11	3.4	3.4	5.3
	3	56	17.4	17.4	22.7
	4	126	39.3	39.3	62.0
	5	122	38.0	38.0	100.0
Total		321	100.0	100.0	

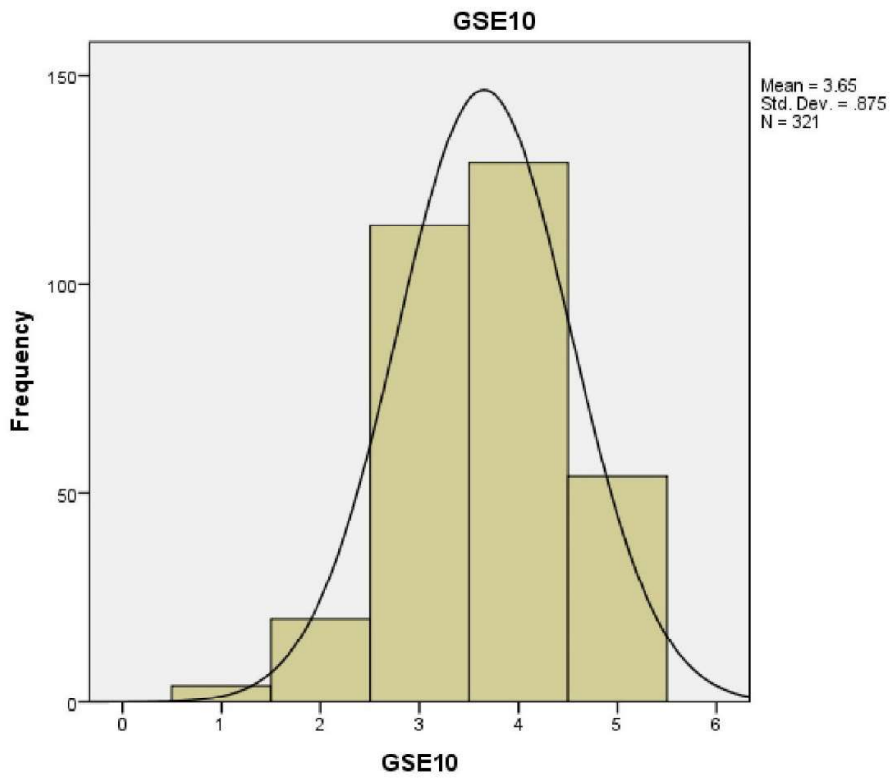
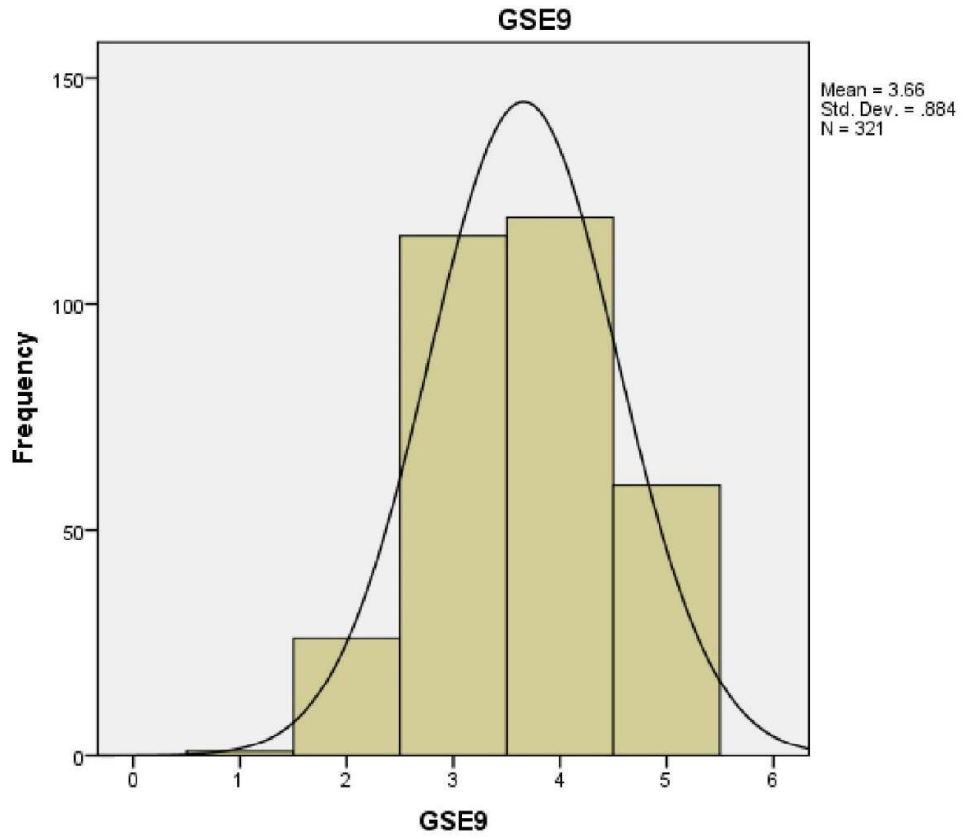
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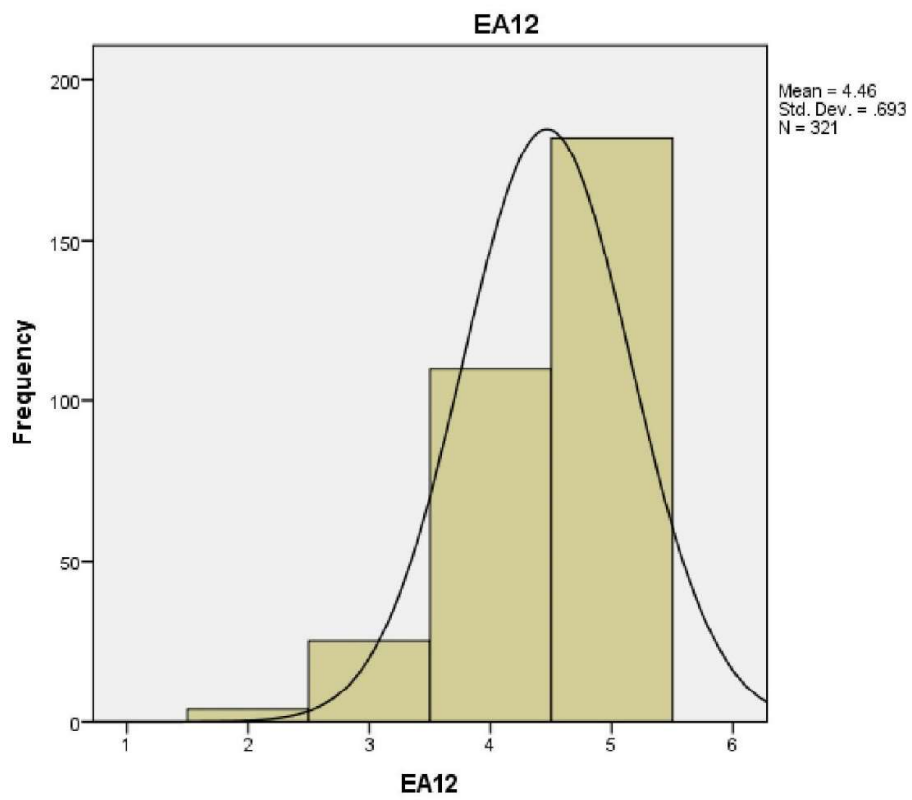
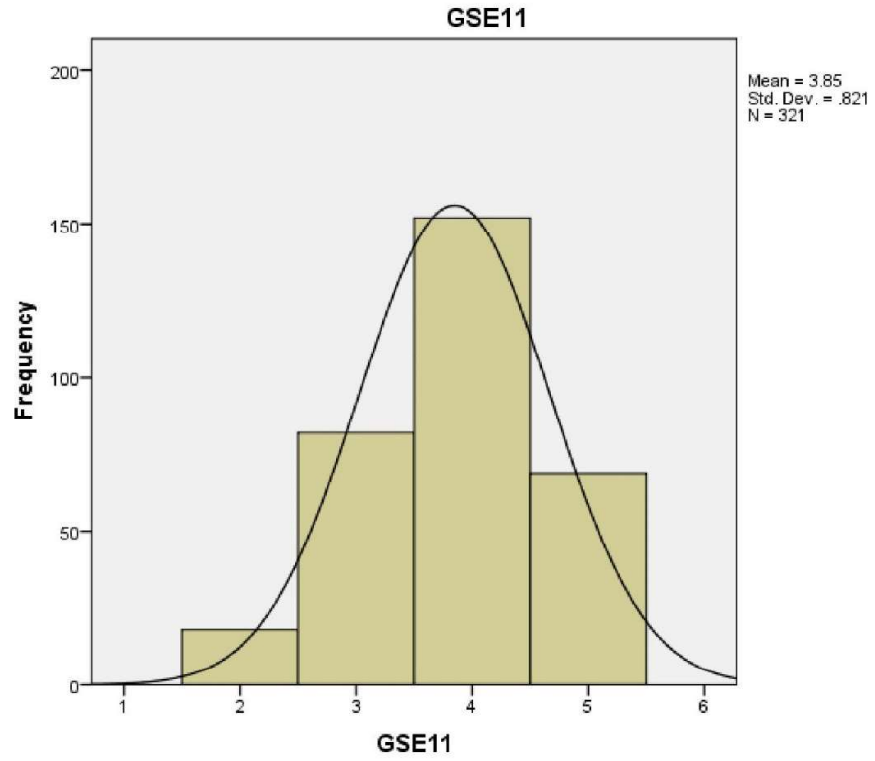


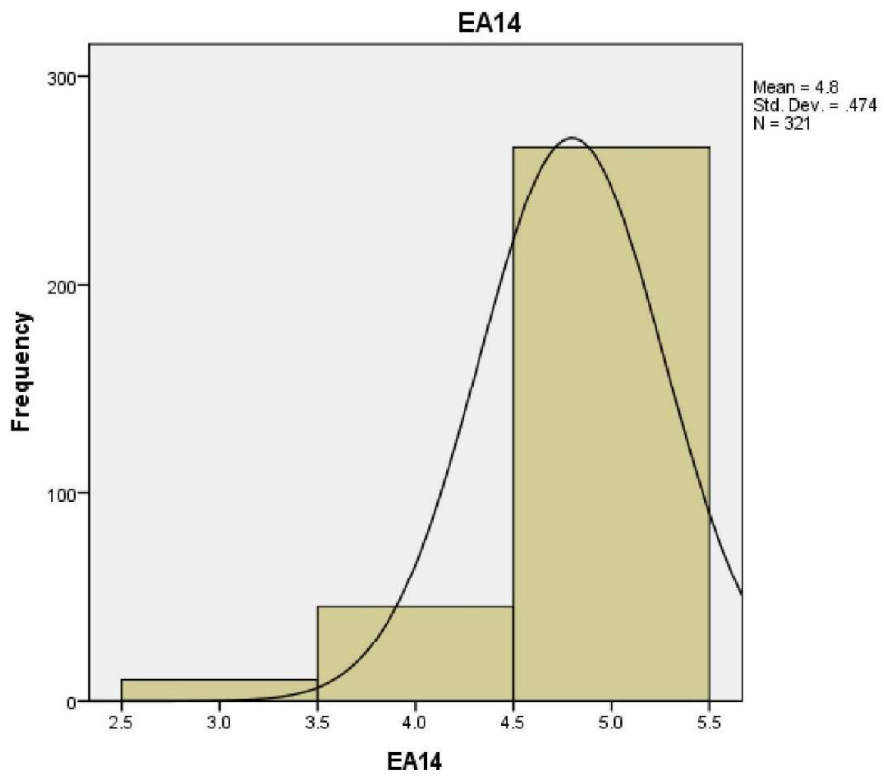
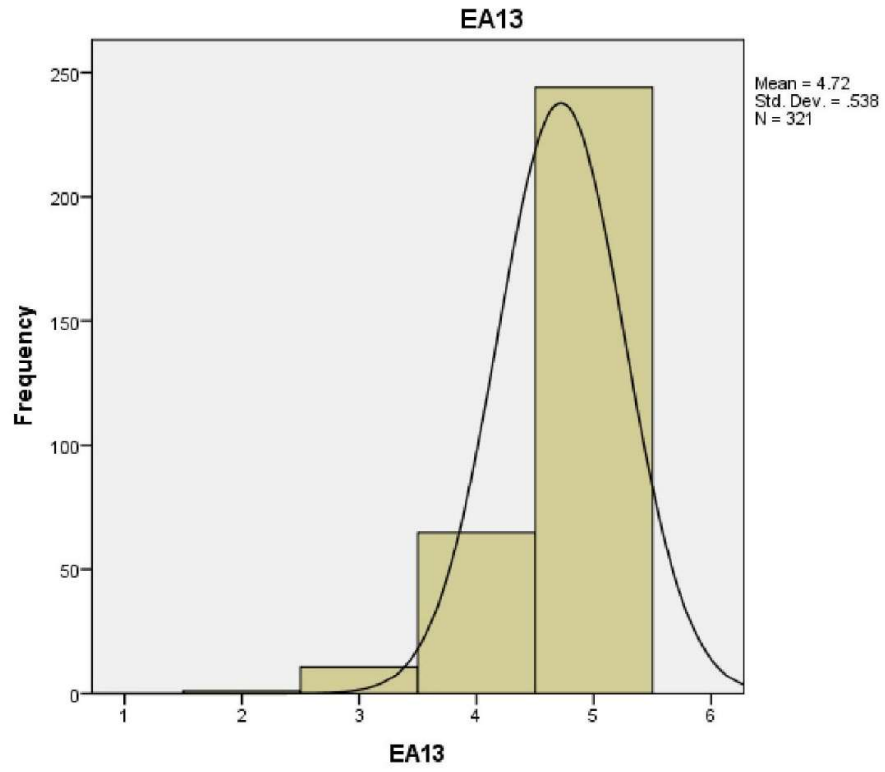


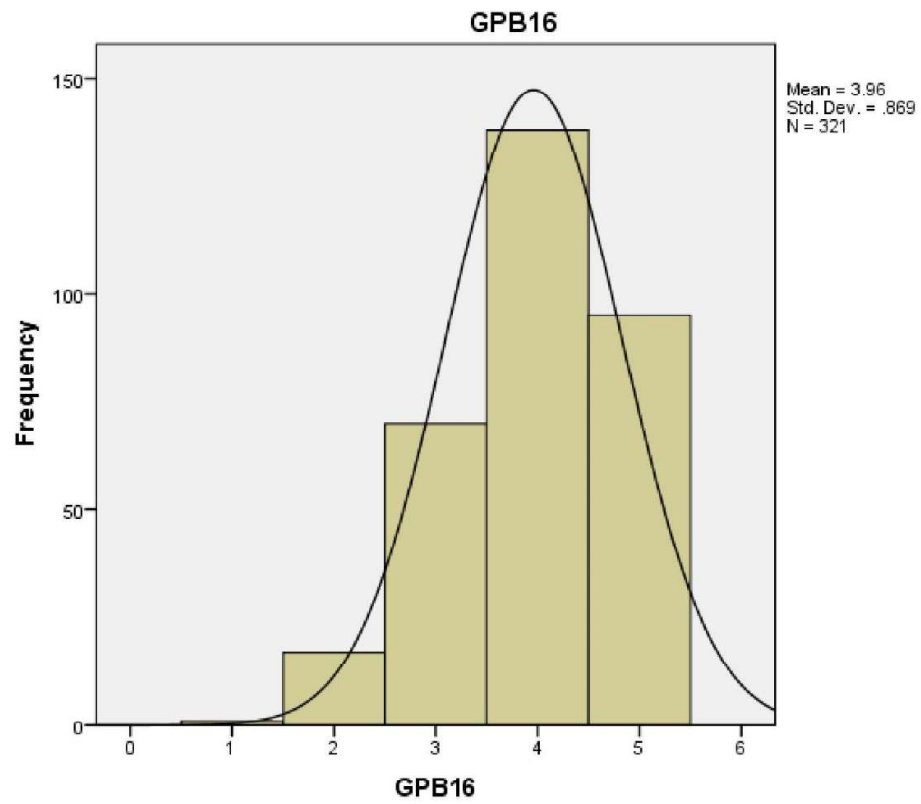
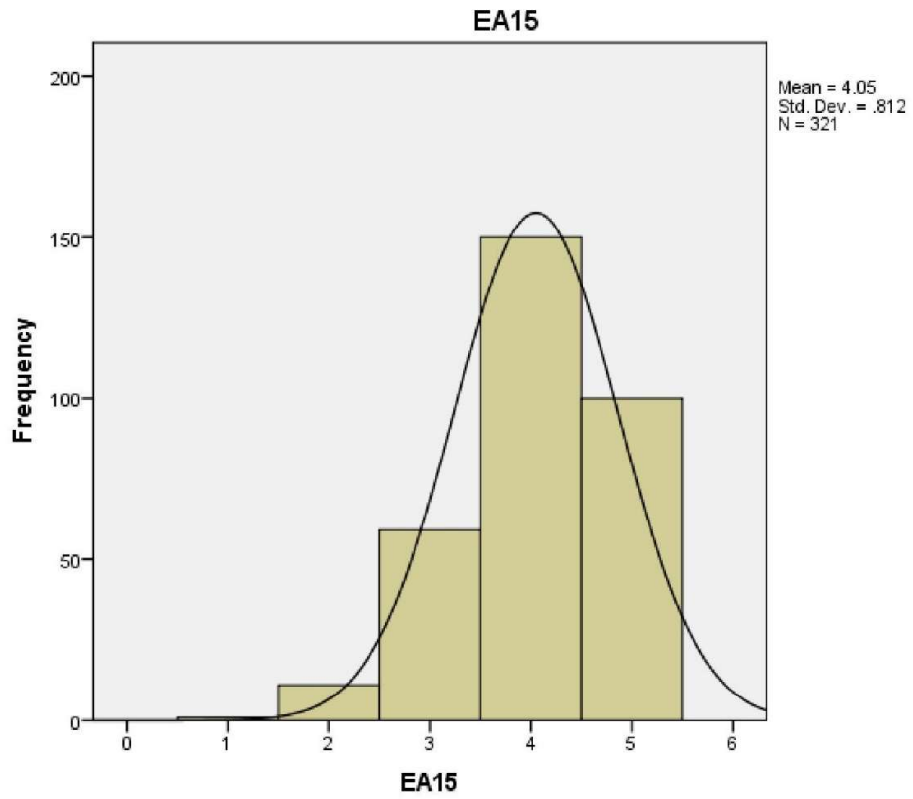


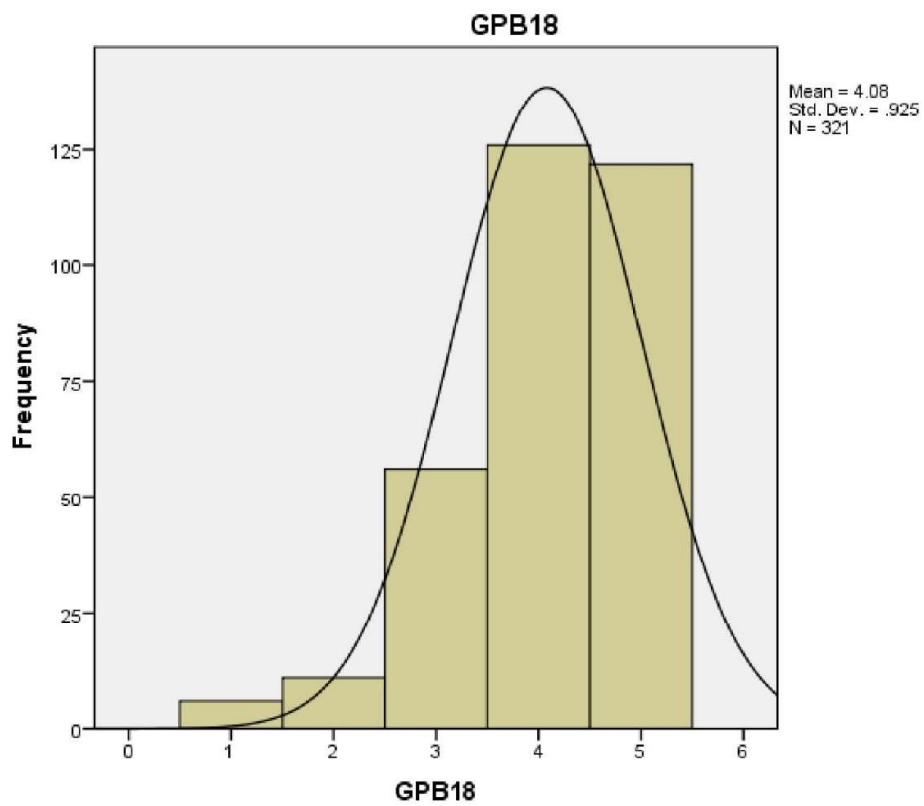
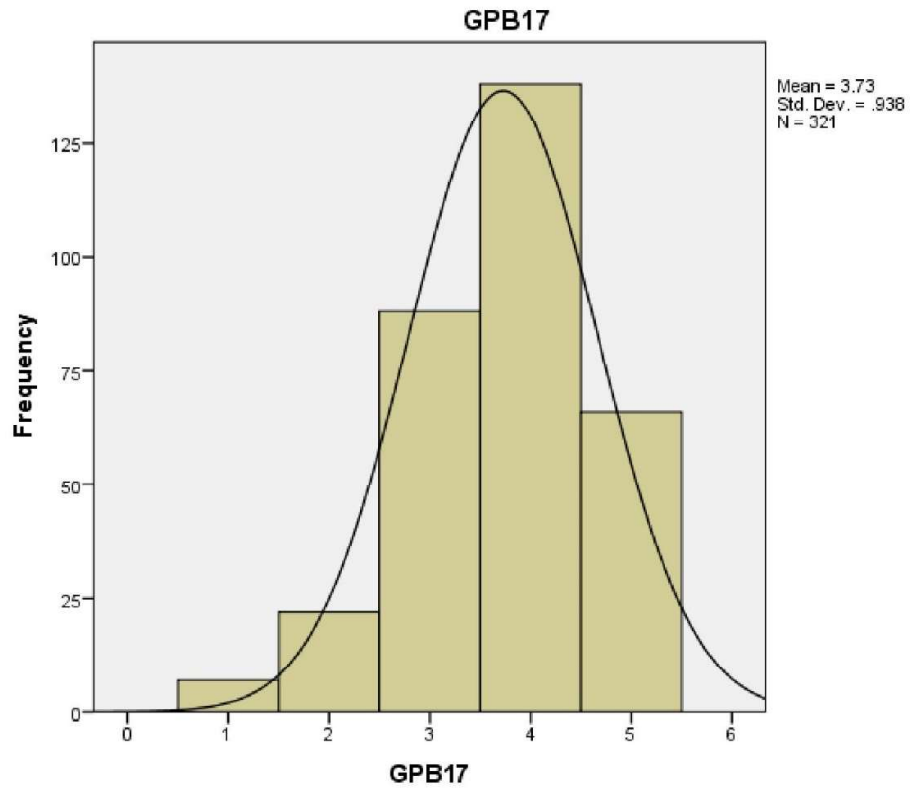












APPENDIX E

RESEARCH QUESTIONNAIRE

CUSTOMER'S PURCHASING BEHAVIOR

Dear Respondent,

My name is Nennie Trianna bt Rosli and I am a doctoral student of International Business School in Universiti Teknologi Malaysia (UTM), Kuala Lumpur. I am conducting a research on "Customers' Purchasing Behavior" research in Malaysia to fulfill my Doctor of Philosophy (Marketing).

I understand that your time is valuable but this survey consists 18 QUESTIONS and it will only takes 5 minutes of your time. Your contribution will provide substantive insights on ecological behavior knowledge for future guidance and references.

The survey focuses on HOUSEHOLD TECHNOLOGY APPLIANCES and HOUSEHOLD VEHICLE only.

A) HOUSEHOLD TECHNOLOGY APPLIANCES

(e.g., fridge, washing machine, electric kettle, water filter, bread maker, computer, television and CD player)

B) HOUSEHOLD VEHICLE

(e.g., car and motorcycle)

The information provided will be kept confidential and would only be used for statistical analysis purpose.

If you need any further information, please contact me at ntrianna@ymail.com.

Your help is very much appreciated.

Thank you.

Best Regards,
Trianna Rosli

6012-6909071

* Required

18 Questions on Purchasing Behavior

THE PURCHASING BEHAVIOR FOCUSES ONLY ON ENVIRONMENTAL PRODUCTS :

A) HOUSEHOLD TECHNOLOGY APPLIANCES

(e.g., fridge, washing machine, electric kettle, water filter, bread maker, computer, television and CD player)

B) HOUSEHOLD VEHICLE

(e.g., car and motorcycle)

1. **1. I am aware that the environmental burden can affect my health and the well being of ecosystems ***

1. Saya sedar bahawa beban alam sekitar boleh memberi kesan kepada kesihatan saya dan kesejahteraan ekosistem
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

<https://docs.google.com/forms/d/1oGi8zRjZWPnyTEmbedbJ9PKd-KTgskbHclUqGD8JO9w/edit>

2. I know that the quality of air and water can affect my health and the well being of ecosystems *

2. Saya tahu bahawa kualiti udara dan air boleh menjejaskan kesihatan saya dan juga kesejahteraan ekosistem

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

3. I believe that the water treatment system is important for maintaining my health and the well being of ecosystems *

3. Saya percaya bahawa sistem rawatan air adalah penting bagi mengekalkan kesihatan dan juga menjaga kesejahteraan ekosistem

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

4. I am aware that open burning , pollution, public transport and industrial waste can affect my health and well-being of ecosystems *

4. Saya sedar bahawa pembakaran terbuka, pencemaran pengangkutan awam dan sisa industri boleh memberi kesan kepada kesihatan saya dan kesejahteraan ekosistem

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

5. Green products are reliable *

5. Produk alam sekitar boleh dipercayai

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

6. Green products' performance is dependable *

6. Prestasi produk mesra alam boleh dipercayai

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

7. Green products have assurance towards environmental protection *

7. Produk mesra alam mempunyai jaminan terhadap perlindungan alam sekitar

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

8. Green products' environmental claims (eg., green attributes and characteristic) are trustworthy *

8. Pernyataan (cth: sifat dan ciri) mengenai produk mesra alam boleh dipercayai
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

9. I have the ability to practice green purchase in my daily life *

9. Saya berkemampuan untuk mengamalkan pembelian produk mesra alam dalam kehidupan harian saya
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

10. I am confident that I can solve environmental problems by buying green products *

10. Saya yakin saya boleh menyelesaikan masalah alam sekitar dengan membeli produk mesra alam
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

11. I am capable of contributing to the environmental performance by purchasing green products *

11. Saya mampu mempertingkatkan prestasi alam sekitar dengan membeli produk mesra alam
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

12. It is essential to promote green living in Malaysia *

12. Ianya adalah perlu untuk mempromosikan gaya hidup mesra alam di Malaysia
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

13. I agree that more environmental protection activities are required in Malaysia *

13. Saya bersetuju bahawa Malaysia memerlukan lebih banyak aktiviti perlindungan alam sekitar
Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

14. 14. It is important to raise environmental awareness among Malaysian people *

14. Ia adalah penting untuk meningkatkan kesedaran alam sekitar di kalangan rakyat Malaysia
Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

15. 15. I choose the sellers who are committed to the environment *

15. Saya memilih penjual yang komited terhadap alam sekitar
Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

16. 16. I choose the sellers who are active in corporate social responsibility *

16. Saya memilih penjual yang aktif dalam menjalankan tanggungjawab terhadap sosial korporat
Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

17. 17. I have switched my purchasing habit on certain products for environmental protection *

17. Saya telah menukar tabiat pembelian saya pada produk tertentu bagi melindungi alam sekitar
Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

18. 18. When I am comparing products, I choose the one that is less harmful to other people and environment *

18. Apabila saya membandingkan produk, saya memilih produk yang kurang membahayakan orang lain dan alam sekitar
Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

Respondent's background

This section inquires a few questions about you. Please tick the most appropriate box (ONLY ONE) or fill in the blanks for each of the following items.

19. Nationality *

20. Where do you live? *

Check all that apply.

- Kuala Lumpur
- Selangor
- Johor
- Melaka
- Negeri Sembilan
- Pahang
- Perak
- Perlis
- Terengganu
- Kelantan
- Sabah
- Sarawak
- Kedah
- Pulau Pinang

21. Gender *

Check all that apply.

- Male
- Female

22. Age *

Check all that apply.

- Below 25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56 years old and older

23. Age *

Check all that apply.

- Below 25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56 years old and older

24. Marital Status *

Check all that apply.

- Single
- Married
- Divorced
- Widow / widower

<https://docs.google.com/forms/d/1oGi8zRjZWPnyTEmbedbJ9PKd-KTgskbHclUqGD8JO9w/edit>

25. Ethnicity *

Check all that apply.

- Malay
- Chinese
- Indian
- Other: _____

26. Education Background *

Check all that apply.

- Primary School
- Secondary School
- Diploma / Vocational
- Bachelor Degree
- Master Degree
- Doctoral Degree
- Other: _____

27. Monthly Salary Income *

Check all that apply.

- Below RM 2000
- RM 2001- RM 3000
- RM 3001- RM 4000
- RM 4001- RM 5000
- RM 5001- RM 6000
- above RM 6001

28. Career *

Check all that apply.

- Administrative and Managerial
- Architect
- Banking and Finance
- Doctor
- Entrepreneur
- Engineer
- Teacher / Lecturer
- Technical
- Sales and Marketing
- Student
- Other: _____

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