

THE EFFECT OF INSTAGRAM INFLUENCERS ON GREEN CONSUMPTION
BEHAVIOR AMONGST INSTAGRAM FOLLOWERS IN MALAYSIA

SANAZ SAGHATI JALALI

UNIVERSITI TEKNOLOGI MALAYSIA

THE EFFECT OF INSTAGRAM INFLUENCERS ON GREEN CONSUMPTION
BEHAVIOR AMONGST INSTAGRAM FOLLOWERS IN MALAYSIA

SANAZ SAGHATI JALALI

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

Azman Hashim International Business School
Universiti Teknologi Malaysia

DECEMBER 2021

DEDICATION

This thesis is dedicated to my loving parents and my supportive husband. I also dedicate this thesis to my wonderful sisters.

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and the Most Merciful. All praises to Allah and His blessing for the completion of this thesis. First and foremost, I would like to sincerely thank my supervisor Dr. Haliyana Binti Khalid, for her guidance, understanding, patience, and most importantly, encouragement and a warm spirit to finish this thesis. It has been a great pleasure and honour to have her as my supervisor. My deepest gratitude also goes to all of my family members. It would not be possible to write this thesis without their support. I would like to thank my dearest father, my supportive mother, my beloved husband and my lovely sisters. I offer my special thanks to my dear friend Dr. Parisa Mohammadi for her motivation, push up and prayers, and Dr. Amir Hesam Yaribakht for his sincere help and support during my study. Of course, many others had helped me during my PhD journey but listing all the names would not be possible. I am truly grateful to every single person who supported me in this journey.

ABSTRACT

Nowadays, environmental problems are arising due to individuals' consumption behavior, which necessitates serious attention. Consumers are gradually becoming aware of the effects of their consumption behavior on the environment and making a difference. Social media, particularly Instagram, plays a major role in increasing awareness and promoting environmentally-friendly behavior. However, the impact of social media, particularly Instagram, on green behavior has been less understood. To address the gap in the literature, the current study intends to examine the impact of Instagram influencers on their followers' green consumption behavior. Moreover, this study aims to understand the mediating role of followers' green habits in the relationship between their green consumption intention and green consumption behavior. To achieve this goal, questionnaires were distributed among followers of some environmentally-conscious influencers, asking their opinions about the content of a specific Instagram account. Integrating the Theory of Planned Behavior and Agenda-Setting Theory, six hypotheses were developed and analyzed using Partial Least Squares – Structural Equation Modeling (SEM-PLS). The findings revealed that Instagram influencers' photo or video contents and green concerns positively influence the green attitudes of their followers. Additionally, it was confirmed that the green attitude strongly and positively influences the green consumption intention of Instagram followers. Moreover, green consumption intention and green habit are found to be the main predictors of green consumption behavior. However, the findings showed a non-significant association between the green word of mouth and green consumption intention. The originality of the research is in its investigation of the role of Instagram influencers in promoting green consumption behavior. From a practical perspective, the government of Malaysia may use the findings of this study to invest in social media, particularly Instagram, to formulate efficient policies and an environmental protection framework.

ABSTRAK

Pada masa kini, masalah alam sekitar semakin meningkat disebabkan oleh tingkah laku penggunaan individu, yang memerlukan perhatian serius. Pengguna secara beransur-ansur menyedari kesan tingkah laku penggunaan mereka terhadap alam sekitar dan membuat perubahan. Media sosial khususnya *Instagram* memainkan peranan utama dalam meningkatkan kesedaran dan mempromosikan tingkah laku mesra alam sekitar. Walau bagaimanapun, kesan media sosial, terutamanya *Instagram*, terhadap tingkah laku hijau agak kurang difahami. Untuk menangani jurang dalam literatur, kajian ini berhasrat untuk mengkaji kesan pempengaruh *Instagram* terhadap tingkah laku penggunaan hijau pengikut mereka. Selain itu, kajian ini bertujuan untuk memahami peranan pengantara tabiat hijau pengikut dalam hubungan antara niat penggunaan hijau dan tingkah laku penggunaan hijau mereka. Untuk mencapai matlamat ini, soal selidik telah diedarkan di kalangan pengikut beberapa pempengaruh yang mementingkan alam sekitar, untuk bertanya pendapat mereka tentang kandungan akaun *Instagram* tertentu. Mengintegrasikan *Theory of Planned Behavior* dan *Agenda-Setting Theory*, enam hipotesis dibangunkan dan dianalisis menggunakan pendekatan Kuasa Dua Terkecil Separa – Pemodelan Persamaan Struktur (PLS-SEM). Penemuan kajian ini mendedahkan bahawa kandungan foto atau video dan keprihatinan hijau pempengaruh *Instagram* memberi kesan positif kepada sikap pengikut *Instagram* mereka. Selain itu, telah disahkan bahawa sikap hijau secara kuat dan positif mempengaruhi niat penggunaan hijau pengikut *Instagram*. Selain itu, niat penggunaan hijau dan tabiat hijau didapati menjadi peramal utama tingkah laku penggunaan hijau. Walau bagaimanapun, penemuan tersebut menunjukkan interaksi yang tidak signifikan antara komunikasi percakapan hijau dan niat penggunaan hijau. Keaslian penyelidikan ini adalah dalam kajiannya terhadap peranan pempengaruh *Instagram* dalam mempromosikan tingkah laku penggunaan hijau. Dari perspektif praktikal, kerajaan Malaysia mungkin boleh menggunakan penemuan kajian ini untuk melabur di media sosial, khususnya *Instagram*, untuk menggubal dasar yang cekap dan rangka kerja perlindungan alam sekitar.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	iii
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xiii
	LIST OF FIGURES	xv
	LIST OF ABBREVIATIONS	xvi
	LIST OF APPENDICES	xvii
CHAPTER 1	INTRODUCTION	1
1.1	Introduction	1
1.2	Research Background	1
1.3	Malaysian context	4
1.4	Problem Statement	8
1.5	Research Questions	11
1.6	Research Objectives	12
1.7	Significance of the study	13
	1.7.1 Theoretical significance	13
	1.7.2 Practical Significance	14
1.8	Scope and Limitation	15
1.9	Definitions of Key Terms	16
	1.9.1 Influencers	16
	1.9.2 Followers' Green Concern	16
	1.9.3 Green Word of Mouth	16
	1.9.4 Green attitude	16
	1.9.5 Photo/video content	17

1.9.6	Green habit	17
1.9.7	Green Consumption Intention	17
1.9.8	Green Consumption Behavior	18
1.10	Organization of Research	18
CHAPTER 2	LITERATURE REVIEW	21
2.1	Introduction	21
2.2	Underpinning theories	21
2.2.1	Theory of Planned Behavior	21
2.2.2	Agenda setting theory	25
2.3	Environmentally-friendly behavior	26
2.4	Sustainable development	27
2.5	Approaches to green consumption behavior	29
2.5.1	Green Consumption Behavior	35
2.6	The Concept of Influencers	41
2.7	Social media	44
2.8	Development of hypotheses	47
2.8.1	Photo/video content and green attitude	47
2.8.2	Green Word of Mouth and Green Attitude	49
2.8.3	Green Word of Mouth and Green Consumption Intention	50
2.8.4	Green concern and green consumption intention	52
2.8.5	Green attitude and green consumption intention	53
2.8.6	Green consumption intention and green consumption behavior	55
2.8.7	Green consumption intention and green habit	57
2.8.8	Green habits and green consumption behavior	58
2.8.9	Mediating role of green habit	60
2.9	Research framework	61
2.10	Summary	64

CHAPTER 3	RESEARCH METHODOLOGY	65
3.1	Introduction	65
3.2	Research Philosophy	65
3.3	Research Design and Methodology	67
3.4	Population and Sampling	71
	3.4.1 Population and Sample Characteristics	71
	3.4.2 Unit of analysis	72
	3.4.3 Sampling Technique	73
	3.4.4 Sample Size	73
3.5	Variables and definitions	75
3.6	Construct Measurement	76
	3.6.1 Photo/video content	76
	3.6.2 Green concern	77
	3.6.3 Green word of mouth	78
	3.6.4 Green attitude	78
	3.6.5 Green habits	79
	3.6.6 Green consumption intention	81
	3.6.7 Green consumption behavior	81
3.7	Data collection	82
3.8	Questionnaire Design and Format	83
	3.8.1 Questionnaire Design	83
	3.8.2 Questionnaire Format	84
3.9	Questionnaire Validation and Pilot Testing	87
3.10	Data screening	88
	3.10.1 Missing Data	88
	3.10.2 Suspicious Response Patterns	89
	3.10.3 Outliers	89
	3.10.4 Data Distribution	90
3.11	Structural Equation Modelling (SEM)	90
	3.11.1 Justification to Select CB-SEM or PLS-SEM	91
3.12	Steps in PLS-SEM	92
	3.12.1 Formative and Reflective Indicators	93

3.12.2	Assessment of the Measurement Model	94
3.12.2.1	Reliability	95
3.12.2.2	Convergent Validity	96
3.12.2.3	Discriminant Validity	96
3.12.3	Assessment of Structural Model	97
3.12.3.1	Path Coefficients	97
3.12.3.2	Coefficient of Determination	98
3.12.3.3	Effect Size	98
3.12.3.4	Predictive Relevance	98
3.13	Summary	99
CHAPTER 4	FINDINGS AND ANALYSIS	101
4.1	Introduction	101
4.2	Data Screening	101
4.2.1	Missing values and suspicious data	101
4.2.2	Multivariate Outliers	102
4.2.3	Data Normality Assessment	102
4.2.4	Common Method variance (biases)	103
4.3	Demographic Profile of the Respondents	105
4.4	Descriptive Statistics	106
4.5	Correlation Analysis	106
4.6	Structural Equation Modelling	107
4.6.1	Measurement Model	107
4.6.1.1	Indicator Reliability (Outer Loading)	108
4.6.1.2	Internal consistency reliability	110
4.6.1.3	Convergent Validity	112
4.6.1.4	Discriminant Validity	112
4.6.2	Structural Model	115
4.6.2.1	Path coefficient	115
4.6.2.2	Coefficient of Determination	116
4.6.2.3	Effect size	117
4.6.2.4	Predictive relevance	118

4.7	Hypotheses Testing	119
4.8	Chapter Summary	121
CHAPTER 5	CONCLUSION AND RECOMMENDATIONS	123
5.1	Introduction	123
5.2	Summary of Research Objectives and Questions	123
5.3	Discussion of the Research Findings	125
5.3.1	Photo/video content	125
5.3.2	Green WOM	126
5.3.3	Green concern	128
5.3.4	Green attitude	128
5.3.5	Green consumption intention	130
5.3.6	Green habit	130
5.4	Contributions of the Study	131
5.4.1	Theoretical Contribution	132
5.4.2	Practical and Managerial Implications	134
5.5	Limitations and suggestions for future research	135
5.6	Summary	137
	REFERENCES	138
	LIST OF PUBLICATIONS	180

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 2.1	Studies using the theory of planned behavior	22
Table 2.2	Summary of some of the studies on green consumption behavior	40
Table 2.3	Summary of the studies on influencers	43
Table 3.1	Comparison of paradigms (Creswell, 2014)	66
Table 3.2	Sample size recommendation (Cohen, 1992)	74
Table 3.3	Definition of the variables	75
Table 3.4	Scale for photo/video content	77
Table 3.5	Scale for green concern	77
Table 3.6	Scale for the green word of mouth	78
Table 3.7	Green attitude measurement items	79
Table 3.8	Scale for green habits	80
Table 3.9	Scale for green consumption intention	81
Table 3.10	Scale for green consumption behavior	82
Table 3.11	Questionnaire design and format	85
Table 3.12	Reliability analysis for each construct	88
Table 3.13	Comparison of PLS-SEM and CB-SEM (Hair <i>et al.</i> , 2011; Hair <i>et al.</i> , 2014)	91
Table 4.1	Normality of Data	103
Table 4.2	Total Variance Explained	104
Table 4.3	Demographics	105
Table 4.4	Descriptive statistics	106
Table 4.5	Correlation Matrix	107
Table 4.6	Outer Loadings	108
Table 4.7	Cronbach's alpha	111
Table 4.8	Composite reliability	111

Table 4.9	Convergent Validity	112
Table 4.10	Cross Loadings	113
Table 4.11	Fornell-Larcker validity	114
Table 4.12	Path coefficient	116
Table 4.13	R2 Values for the Structural Model	117
Table 4.14	f^2 Values for each Path	118
Table 4.15	Predictive relevance (Q2)	118
Table 4.16	Summary of the findings	121
Table 5.1	Summary of the research objectives and questions	124

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 2.1	Theory of Planned Behavior	24
Figure 2.2	Agenda setting theory (visualized by the researcher)	26
Figure 2.3	Approaches to green consumption behavior (visualized by the researcher)	33
Figure 2.4	Green consumption behavior steps (Source: visualized from Peattie, 2010)	39
Figure 2.5	Research Model	63
Figure 3.1	Research onion (Saunders <i>et al.</i> , 2009)	68
Figure 3.2	Research Design (Visualization by the researcher)	70
Figure 3.3	Steps in PLS-SEM (Researcher's visualization)	92
Figure 3.4	Reflective and formative indicators (Vinzi <i>et al.</i> , 2010)	94
Figure 3.5	Measurement model (Researcher's visualization)	95
Figure 4.1	Measurement model	110

LIST OF ABBREVIATIONS

GCB	-	Green Consumption Behavior
GCI	-	Green Consumption Intention
GWOM	-	Green Word of Mouth
GA	-	Green Attitude
GC	-	Green Concern
PC	-	Photo/video content
SEM	-	Structural Equation Modelling
PLS	-	Partial Least Square
AVE	-	Average Variance Extracted

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	(Questionnaire)	161
Appendix B	(Outlier)	169
Appendix C	(Normality)	172
Appendix D	(Data Collection- Beach Cleaning)	177

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter introduces the landscape of the thesis. It begins by explaining general trends and research background and continues with the problem statement and research gaps. Next, research questions and objectives are defined, followed by the study's significance, from theoretical and practical perspectives. The chapter then explains the study's scope, limitations, the definition of key terms, and the thesis structure.

1.2 Research Background

Rapid economic growth has often been associated with adverse environmental degradation (Joshi and Rahman, 2016). The considerable and worldwide environmental changes (Sun *et al.*, 2019) endanger human life (Muhammad *et al.*, 2019). Climate change and global warming, air pollution, waste generation, natural disasters (Maichum *et al.*, 2016), ozone layer depletion (Biswas and Roy, 2015a), and energy depletion are some examples of environmental problems (Zhang *et al.*, 2015).

Recently, environmental sustainability has captured different parties' attention, from practitioners to academics and business actors (Bhuiyan *et al.*, 2018; Jan *et al.*, 2019). Practitioners and scholars are concerned about environmental problems that are increasing every single day. Accordingly, they attempt to find a solution to adopt a sustainable environment (Joshi and Rahman, 2016). From a practical perspective, environmental issues have been placed on top of the political agenda with the end goal of preserving the environment and limited natural resources (Gatersleben *et al.*, 2010). From the academic perspective, the importance of environmental concerns is evident

by a sharp increase in ecological behavior research publications over the last two decades (Li *et al.*, 2019).

An examination of the literature revealed that there is an interrelationship between environmental problems and human life. Environmental quality both affects and is affected by humans. For instance, haze pollution affects the lives and work of humans. Conversely, individuals' lives and work are sources of haze pollution (Zhang *et al.*, 2019). In this regard, it has been stated that human behavior and consumption habits significantly contribute to environmental degradation. Regardless of how dramatic or small, people's behavior would impact the environment (J. Li *et al.*, 2019). According to Zhang *et al.* (2019), approximately 40 percent of the environmental issues are caused by unhelpful consumption patterns and unreasonable lifestyles. In other words, private households' hyper-consumption and consumption habits lead to environmental deterioration (Biswas and Roy, 2015a).

With ever-increasing concerns about the environment, people are pushed to make significant changes in their current habits and move toward more environmentally-friendly behavior, which leads to protecting natural resources (Gatersleben *et al.*, 2010). As a result of this pressure, people gradually realize that their behavior and daily habits impact the quality of the environment available for future generations (Smith and Brower, 2012; Perera *et al.*, 2018). They know that their purchasing behavior and consumption activities directly lead to many ecological problems (Laroche *et al.*, 2001; Chekima *et al.*, 2015; Dhandra, 2019; Tan *et al.*, 2019).

Therefore, it can be concluded that promoting green habits has an undeniable impact on dealing with environmental issues (Zhang *et al.*, 2019), and a change towards more environmentally-friendly consumption patterns is vital (Chekima *et al.*, 2015). Consumers can protect the planet (Joshi and Rahman, 2015) by adopting a different consumption approach; a method that leads to changing attitude and behavior (Biswas and Roy, 2015a). According to Peattie (2010), the higher willingness the consumers have to engage in green consumption behavior, the more possibility of developing a sustainable society.

In recent years, the Internet is known as one of the dominant platforms for spreading environmental information (eco-information). Hence, the Internet can be considered as a good source that helps to promote environmentally-friendly behavior and green consumption behavior (Huang, 2016; Amato *et al.*, 2019). Social media plays a more important role than traditional media in influencing pro-environmental behavior (Xu and Han, 2019). In its various manifestations, social media presents a golden opportunity and rich environment to study people's behavior. Much of the information (in text, image, and/or video format) is recorded and stored in publicly-accessible repositories and personal devices (Khoo, 2014). Social media is also widely used by youngsters, as opposed to traditional media. A large portion of the youth population around the world are using social media to communicate. They share thoughts and feelings with their peers by texting or posting different pictures and videos (Rani and Padmalosani, 2019).

As empirical evidence, the findings of a study by Xu and Han (2019) revealed that social media is positively correlated with pro-environmental behavior. Likewise, the results of the study of Young *et al.* (2017) proved that social media plays a significant role in reducing customers' food waste generation. Similarly, Zahid *et al.* (2018) mentioned that social media fuels environmental consciousness among consumers. Bedard and Tolmie (2018) found out that there is a positive influence of social media usage on green purchase intention of users. The authors particularly highlighted that intention to buy green products is even stronger among millennials with more frequent social media usage for consumption-related activities. Likewise, Burnasheva *et al.* (2019) stated that social media usage affects millennials' attitudes toward luxury fashion brands and online purchase intentions.

As a most recent trend, people are getting used to and looking for information from people who have a higher rate of visualization, who are usually referred to as influencers (Wang *et al.*, 2016). Influencers are individuals who have the power to influence or move the opinions of others about specific areas (Istania *et al.*, 2019), which include mostly celebrities from the music and film industry (Global Web Index, 2019). They share a massive volume of images, gifs, memes, etc. about their daily lives, personal life events, thoughts, and opinions (Manikonda and De Choudhury,

2017). Influencers have a huge number of followers and have their networks. Followers of these influencers tend to trust their influencers mostly. Each influencer's role varies, where some do promote brands, and some others do marketing, whereas others share experiences in their daily lives. This phenomenon of influencers affecting others' approaches represents a new form of independent third-party who endorses and nurtures or reshapes individuals' attitudes via blogs, tweets, etc. by using multiple social media channels (Glucksman, 2017).

In line with the above-mentioned statements and knowing that social media plays a critical role in shaping human behavior and improving environmental problems, it is time to develop our knowledge about green consumption behavior from a social media perspective. Stern (2000) groups the causal variables of environmental action into four major types: attitudinal factors, contextual forces (such as media exposure), personal capabilities, and habit. He encouraged scholars to develop new conceptual models for green behavior by incorporating and integrating new variables from different categories instead of focusing on personal or contextual factors.

By reviewing recent trends in the realm of green behavior, we found some less developed areas that need further attention. One of the neglected concepts is social media influencers' impacts on green consumption behavior of their fans and followers (Bedard and Tolmie, 2018). Despite the rapid expansion of Instagram as one of the most popular social media platforms, there is limited academic research about it compared to other social platforms such as Facebook and Twitter (Lay and Ferwerda, 2018). The following sections elaborate on extant research gaps, the context of the study, and consequent objectives.

1.3 Malaysian context

Malaysia is a country with a population of about 32 million, including a mixture of Malays, Chinese, and Indians (Lai *et al.*, 2010). Malays are mostly Muslims, whereas other ethnicities follow Confucianism, Taoism, Buddhism, Christianity, etc. (Ghazali *et al.*, 2019). The diversity of races, cultures, and religions

in the Malaysian society delivers an excellent platform to advance research on consumers' green behavior. On the other side, the rapid recent economic growth in Malaysia has significantly affected Malaysians' consumption patterns. Hence, understanding people's consumer behavior in this country becomes more exciting and challenging (Lai *et al.*, 2010). The rapid growth of the Malaysian economy also leads to a force of "going green," as environmental threats are alarming the government and citizens (Lee, 2008).

Environmental Performance Index (EPI), measuring environmental health and ecosystem vitality across 180 countries, scored Malaysia 59.22 (in the 0–100 scoring system) and ranked 75th in Environmental Performance. To be more specific, Malaysia is ranked 80 in Environmental Health, 102 in Climate and Energy, and 107 in air pollution among 180 countries (EPI, 2018). As it is evident by statistics, the air quality of Malaysia does not show a remarkable position. Air pollution, a leading environmental threat to public health, contributes to two-thirds of environmentally-related deaths and disabilities (EPI, 2018).

In Malaysia, the government has taken numerous initiatives to promote green behavior among the people to encourage them to enhance green products' consumption (Tan *et al.*, 2019). First, the "Ministry of Energy, Science, Technology, Environment, and Climate Change" has taken some steps to promote environmental concern among Malaysian citizens. For instance, people are forced to pay for plastic bags and food containers during shopping, while encouraging them to bring their own bags and containers. Another good example is the "no straw by default" initiative that promotes fewer straws consumption (Mohd Suki, 2019).

Second, the "National eco-labeling scheme" was initiated by the "Standards and Industrial Research Institute of Malaysia" (SIRIM). This plan aims to classify green products as "cleaning agents," "building instruments," "home appliances," "home-care products," "office supplies," "package containers," "personal care products," "food," etc. (Tan *et al.*, 2019). Lastly, "Malaysia Green Tech Corporation" (MGTC), in collaboration with the "Ministry of Energy, Green Technology, and Water," introduced the "MyHIJAU program" to certify products with ecological

standards and encourage the use of environmentally-friendly products among Malaysians (Mohd Suki, 2019).

Knowing the fact that a) the Malaysian government already has perceived the importance of green consumption, b) Malaysia is dealing with environmental issues such as air pollution (EPI, 2018), and c) human behavior and consumption habits are the primary reasons for environmental degradation (L. Zhang *et al.*, 2019), it can be concluded that finding determinants of green consumption behavior in Malaysia is an important topic.

Among studies conducted in Malaysia, Ghazali *et al.* (2018) examined the green purchase behavior of 504 Muslims. The findings highlighted the critical role of habit and its stronger impact on green behavior than intention. Green habit was also found to moderate the relationship between green attitudes and green intentions. In another study by Saleki *et al.* (2019), the drivers of Malaysian consumers' organic food purchase intention were examined. The findings revealed that attitude, subjective norm, perceived behavioral control, moral norm, self-identity, and environmental concern exert significant positive effects on consumers' purchase intention.

Social media has also contributed to the mainstreaming of green issues and has helped people realize that their personal consumption affects the planet (Smith and Brower, 2012). However, choosing social media platforms and social media differs in various individuals, communities, and societies. Malaysians spend about five hours a day using different social media platforms. The statistics also show that 17% of social media users in Malaysia spend above nine hours a day checking their social media accounts (Ho, 2019).

Interestingly, it has been reported that in Malaysia, women spend more time checking their social media accounts than men. More specifically, 21% of females in Malaysia spend around nine hours (a day) on social media, whereas only 11% of males do so. WhatsApp is the most common platform, with almost 88% of usage, followed by Facebook, YouTube, and Instagram (with 81%, 74%, and 64%, respectively) (Global Web Index, 2019). It proves that Malaysia's exposure to social media is

relatively high, and Instagram is the third most popular platform among Malaysians. Apart from the Instagram popularity among Malaysians, our focus on Malaysia is also because Malaysian social media influencers can influence massive followers by reviewing products, services, and social trends on their social media accounts (Jalali and Khalid, 2019).

Malaysian influencers are actively involved in areas such as fashion, beauty, art, entertainment, education, food, health, sport, environmental protection, lifestyle, and travel. According to Helmy (2021), there are around 11 million Instagram users and 16800 influencers in Malaysia as of January 2020. The influencers earn up to 460 million Ringgit per year, which is a relatively high contribution to the economy. The statistics published in *statista.com* revealed that many influencers in Malaysia are considered Nano influencers. Nano influencers are our everyday people that usually do not make a living out of content creation. These influencers may have a smaller number of followers but often have reached into highly-targeted audiences (Zarei *et al.*, 2019). Lilian Tan¹ is an excellent example of a Nano influencer with around 7 K followers in Malaysia. She is a 4-times world champion sportswoman.

One of the most popular Malaysian influencers with 8 million followers is called Neelofa². She is an entrepreneur of her own stunning hijab fashion line and is impacting the fashion industry. Neelofa influences purchase decisions of her followers and that is why companies are willing to pay her to tap into their reach. Regarding entertainment, strong influence and presence of Dato' Sri Siti Nurhaliza³, famously known as Malaysia's Queen of Pop, in the entertainment industry is undeniable. She has more than 8 million followers. Relevant to this study's context, Tengku Datin Paduka Setia Zatashah⁴ is an advocate for environmental protection in Malaysia. As a member of the Selangor royal, she attempts to raise her followers' awareness about environmental issues, particularly pollution caused by plastic usage. For instance, she

¹ [Instagram.com/@liliantanfitness](https://www.instagram.com/liliantanfitness) <https://www.instagram.com/liliantanfitness/?hl=en>

² [Instagram.com/@neelofa](https://www.instagram.com/neelofa/) Verified Account <https://www.instagram.com/neelofa/>

³ [Instagram.com/@ctdkc](https://www.instagram.com/ctdkc/) Verified Account <https://www.instagram.com/ctdkc/?hl=en>

⁴ [Instagram.com/@zatashah](https://www.instagram.com/zatashah/) Verified Account <https://www.instagram.com/zatashah/>

began “#sayno2plastic” campaign to reduce plastic pollution using her social media platform, Instagram.

1.4 Problem Statement

In the last two decades, there have been many drastic changes on the planet such as climate change, global warming, pollution (Tan, 2018), depletion of natural resources, acid rain, etc. One of the most significant problems among all others is the ubiquity and abundance of plastic debris (Barnes *et al.*, 2009), widely used and expected to exceed 500 million metric tons by 2050 (Sardon and Dove, 2018). All these problems gradually increased concerns about environmental protection (Manaktola and Jauhari, 2007). Scholars are of the view that human behavior has an undeniable impact on the environment (Zhang *et al.*, 2019). Citizens of the planet are responsible for preventing worsening environmental quality by practicing green consumption (Tan, 2018) and developing more environmentally-friendly behavior.

Prior studies have extensively discussed factors that predict green consumption behavior. For instance, perceived consumer effectiveness (Kabaday *et al.*, 2015), behavioral efficacy (Lee, 2008), green attitudes (Sreen *et al.*, 2018), religion (Reni and Ahmad, 2016), and perceived value (Yadav and Pathak, 2017) are introduced as individual-level factors that play significant roles in foreseeing green behavior of people. Additionally, the impact of social influence (Lee, 2008; Khare, 2015), perceived behavioral control (Sreen *et al.*, 2018), subjective norm (Sreen *et al.*, 2018), and image branding (Lee, 2008) has been studied in previous research.

Nevertheless, an investigation of the literature revealed some gaps that need to be addressed. First, there is still a necessity to understand factors that impact green behavior (Paço *et al.*, 2019). It is also emphasized by Li *et al.* (2019) that there is a lack of deep analysis on the formation mechanism of green behavior. Second, the vast majority of studies rely on intention as a predictor of behavior, without extending the model to actual behavior. Therefore, it is required to incorporate green behavior along

with the intention (Yadav and Pathak, 2016). Third, there is a scarcity of research on green habit' influence on green behavior (Ariswibowo and Ghazali, 2017).

In this regard, Ghazali *et al.* (2018) tested this factor and found out that green habits positively influence green purchase intention and behavior. Once a habit develops, the brain does not work hard for decision-making. Instead, it focuses on more critical tasks (Kirshner, 2013). Hence, it can be concluded that the power of habit leads to performing green behavior on a daily basis. Fourth, the green concern is another crucial element that is still undeveloped. As suggested by Sreen *et al.* (2018), green concerns need to be added to green behavior models. Becoming environmentally concerned will result in the adoption of an automatic set of environmentally-friendly preferences.

Lastly, to date, social media's impact on green behavior has not been well understood (Dunlop *et al.*, 2016). A recent study by Xu and Han (2019) discovered that social media usage for environmental information acquisition has positive correlations with pro-environmental behavior. In another study, Bedard and Tolmie (2018) found out that social media usage and online interpersonal influence had positive relationships with green purchase intentions.

Narrowing down to a specific social media platform, although Instagram is the most widespread photo-sharing application, scholars paid less attention to it (Lay and Ferwerda, 2018), mostly targeting Twitter and Facebook instead (Tosun, 2012; Ozimek and Bierhoff, 2016; Rahim *et al.*, 2016). A significant study by Bedard and Tolmie (2018) suggests that influencers' role is worthwhile for future studies. This topic is particularly critical to train people and raise their awareness about environmental issues and green product consumption behavior (Tan, 2018). According to Global Social Media Landscape, global web index (2019), the main reason to use Instagram is to stay in touch with what others are doing, share photos and videos, and find products to buy/consume.

Unlike Facebook, Instagram primarily focuses on photo sharing, image enhancement, and nonreciprocal relationships (Jackson and Luchner, 2018). Sharing

images online via social networking services such as Instagram is a pervasive practice. Instagram allows users to take photographs, apply digital photographic filters, and upload the image, together with a short caption, to its social networking website (Zappavigna, 2016). Instagram users prefer this type of social media because they find it easier to upload, edit, and share photographs with other members (Saharuddin *et al.*, 2017).

On popular social media platforms, many users often follow popular social media accounts that are called social media influencers (Nandagiri and Philip, 2018). Social media influencers represent a new type of independent, third-party endorsers who shape the audience's attitudes through blogs, tweets, and the use of other social media channels. Through sites like Instagram, YouTube, Twitter, and Facebook, social media influencers create content promoting certain brands with the goal of obtaining a following and brand recognition (Glucksman, 2017). Hence, it can be concluded that influencers' activities in Instagram may impact followers' attitudes, mindset, opinion, intention, and behavior. This impact mainly can be attributed to the content of photos or videos shared on Instagram. Nonetheless, to date, the role of visual imagery as a mechanism of self-disclosure is undeveloped (Manikonda and De Choudhury, 2017). However, there is still a dearth of studies investigating the impact of influencers on green attitude and behavior. In this regard, Bedard and Tolmie (2018), in a study entitled "*Millennials' green consumption behavior: Exploring the role of social media*", called for further research on social media influencers' impacts on their followers' behavior.

By considering the above discussed environmental problems and gaps, this study investigates the impact of Instagram influencers' green activities on their followers' green consumption behavior. Consequently, we propose green concern, photo/video content, green word of mouth (WOM), green attitude, green habits, green consumption intention as antecedents of green consumption behavior.

Regarding the context, the current study focuses on Malaysia as a developing country with current challenges and environmental issues. In this study, Malaysia's context has been chosen due to fact that only a limited number of studies have been

done in Asian and developing countries (Yadav and Pathak, 2017; Chua *et al.*, 2019), mostly in China, (Chen and Deng, 2016; Gan and Li, 2018; Xu and Han, 2019) and India (Khare, 2015; Uddin and Khan, 2016; Jaiswal, 2018).

1.5 Research Questions

The research questions addressed in this thesis are as follow:

RQ1. Does Instagram influencers' photo/video content affect the green attitudes of Instagram followers in Malaysia?

RQ2. Does Instagram influencers' green word of mouth affect the green attitudes of Instagram followers in Malaysia?

RQ3. Does Instagram influencers' green word of mouth affect the green consumption intention of Instagram followers in Malaysia?

RQ4. Does green concern affect green consumption intention of Instagram followers in Malaysia?

RQ5. Do green attitudes affect the green consumption intention of Instagram followers in Malaysia?

RQ6. Does green consumption intention affect the green consumption behavior of Instagram followers in Malaysia?

RQ7. Does green consumption intention affect green habits of Instagram followers in Malaysia?

RQ8. Do green habits affect the green consumption behavior of Instagram followers in Malaysia?

RQ9. Do green habits mediate the relationship between green consumption intention and green consumption behavior of Instagram followers in Malaysia?

1.6 Research Objectives

Research objectives of the study are as follow:

- RO1. To examine the relationship between Instagram influencers' photo/video content and green attitudes of Instagram followers in Malaysia.
- RO2. To examine the relationship between Instagram influencers' green word of mouth and green attitudes of Instagram followers in Malaysia.
- RO3. To examine the relationship between Instagram influencers' green word of mouth and green consumption intention of Instagram followers in Malaysia.
- RO4. To examine the relationship between the green concern and green consumption intention of Instagram followers in Malaysia.
- RO5. To examine the relationship between green attitudes and green consumption intention of Instagram followers in Malaysia.
- RO6. To examine the relationship between green consumption intention and green consumption behavior of Instagram followers in Malaysia.
- RO7. To examine the relationship between green consumption intention and green habits of Instagram followers in Malaysia.
- RO8. To examine the relationship between the green habits and green consumption behavior of Instagram followers in Malaysia.
- RO9. To examine the mediating impact of green habits on the relationship between green consumption intention and green consumption behavior of Instagram followers in Malaysia.

1.7 Significance of the study

This study has significant theoretical and practical implications in line with creating a sustainable planet for the future generations by promoting green consumption behavior.

1.7.1 Theoretical significance

From a theoretical viewpoint, this study contributes to the body of knowledge in several ways. The first contribution of this study is theory extension. The present research aims to extend the theory of planned behavior by introducing new variables and considering new relationships among variables. According to the theory of planned behavior, background factors allow us to improve our knowledge about intention and action determinants. Exposure to social media is one of the background factors that is suggested to be tested empirically. Exposure to social media and its impact on individuals' attitudes is supported by the agenda-setting theory. Thus, this study contributes to understanding media effects in the context of green consumption behavior by integrating two theories, namely the theory of planned behavior and the agenda-setting theory.

The current study will be one of the pioneer studies that focus on the Instagram platform and investigate the influencers' impact on green consumption behavior of their followers. This study also contributes to the body of knowledge by examining the influence of the content of photos/videos shared by Instagram influencers on their followers' green consumption behavior. The impact of Instagram influencers' photo content on followers' attitudes is supported by the agenda-setting theory.

The next contribution of this study is adding green habits to the theory of planned behavior. Habits are considered as roots of a broad range of actions. Once behavior turns into a habit, performing that particular conduct does not require much effort, and the person can do it spontaneously, without the need for deliberate effort.

The last contribution of this study can be explained from a methodological perspective. The vast majority of studies that have measured green attitudes are only relied on two or three items with remarkably similar content. However, this study measures green attitude from a multidimensional perspective, which adds value to the research finding by capturing a right and comprehensive picture of followers' green attitude.

1.7.2 Practical Significance

Industrialization and aspects of global warming have been significant concerns in the past few decades. Generally, this study contributes to increasing the awareness of green consumption behavior to combat global warming and climate change and change people's behavior.

From a practical perspective, the current research findings will provide new insights to Malaysia's policymakers and the government. The present study's motivation is to determine green consumption behavior's primary antecedents from a social media perspective. Malaysia's government may use this study's findings to initiate new plans and strategies for protecting the environment through more investment on social media platforms. Media is a powerful instrument for the governments to impact public participation in environmental protection and encourage green consumption behavior.

Besides government and policymakers, the findings of the current study may benefit marketers and managers. For marketers, it helps to plan appropriate marketing strategies. The study's findings will also equip sales managers to exploit factors that contribute to the formation of favorable attitudes towards green products and, consequently, green consumption behavior.

This study is also significant for the design of environmental messages. Campaign practitioners, journalists, non-governmental organizations, and all other

entities that advocate environmental protection should consider social media, particularly Instagram, to promote green behavior.

Additionally, this research is significant for influencers. They can incorporate green practices in their daily usage of Instagram posting processes, spread green culture to their followers, and become active and innovative in increasing the knowledge and changing their followers' attitudes. Many green influencers are practicing green activities through posting content on Instagram. The reduced cost, less pollution, and saving energy are benefits of sustainable green practices that could be achieved using social media to target potential followers willing to live a greener lifestyle.

1.8 Scope and Limitation

The current study is limited by the time and scope of the investigation. First, this study is limited to Malaysia's context, and findings cannot be generalized to other contexts. Second, this study is limited by time, from 2018 to 2020. Regarding the scope of investigation, the respondents of this study are Instagram users who follow certain influencers with environmental concern. The reason to choose Instagram followers is that influencers have an undeniable impact on consumers' attitudes and purchase intention (Evans et al., 2019). Therefore, it is worth investigating the influence of Instagram influencers on followers' attitudes and green consumption behavior in Malaysia. Concerning the unit of analysis, this study falls into individual category. This is mainly because the respondents are followers of Instagram influencers and their viewpoints about research variables will be asked.

1.9 Definitions of Key Terms

1.9.1 Influencers

According to Arora *et al.* (2019), Influencers are those individuals who have social media profiles in certain platforms such as Instagram and YouTube. These people are the ones who have huge numbers of followers and have their own network. In this study, Instagram influencers refer to individuals who have an Instagram account with a considerable number of followers.

1.9.2 Followers' Green Concern

Green concern refers to how an individual is involved in environmental issues (Kwong, 2016). In this study, followers' green concern refers to the degree to which a follower has concerns about environmental issues and is actively involved in them.

1.9.3 Green Word of Mouth

Green word of mouth (WOM) is the extent to which a customer would inform friends, relatives, and colleagues about a product or a brand regarding positive environmental feedback (Chen *et al.*, 2014). In this study, Influencers' green WOM refers to online messages, feedback, or comments posted and shared by influencers, which contain environmental messages and encourage green consumption behavior.

1.9.4 Green attitude

Attitude refers to the perception and evaluation of a person from an object or outcome (Zhang *et al.*, 2018). In this study, followers' green attitudes refer to the

degree to which green consumption behavior is positively or negatively valued by the followers.

1.9.5 Photo/video content

It refers to information, experience, and expression of a picture of something or someone (Yarbil and Argaç, 2017). In this study, Influencers' green photo/video content refers to the pictures/videos that are shared by an influencer containing a green concept. A photo/video is green if it is relevant to an environmental problem or encouraging followers to have green consumption behavior.

1.9.6 Green habit

Habit is the “semiautomatic performance of well-learned behaviors.” The behaviors that are performed more frequently become habitual gradually (Ghazali *et al.*, 2018). In this study, green habits refer to how an Instagram follower develops a habit of green consumption.

1.9.7 Green Consumption Intention

Green consumption intention (GCI) refers to an individual's readiness to perform green behavior (Chen and Deng, 2016). In this study, followers' green consumption intention means the extent to which a follower is willing or feels ready to consume green products in the future.

1.9.8 Green Consumption Behavior

Green consumption behavior (GCB) refers to acting with a sense of social responsibility and usage of products that do not harm the environment (Paço *et al.*, 2019). In this study, followers' green consumption behavior refers to consuming environmentally-friendly products and avoiding consumption behavior that damages the environment.

1.10 Organization of Research

This thesis is organized as follows:

Chapter 1: This chapter explains the background of the study, followed by the problem statement, research questions, and research objectives. Next, the significance of the current research and its necessity is briefly discussed. The chapter ends with an explanation of the scope and definition of key terms.

Chapter 2: First, a review of past literature related to green consumption intention and behavior is provided. Second, relevant variables and elements are identified and discussed in detail. To end with, the research models and hypotheses are developed.

Chapter 3: This chapter discusses the research paradigm, research methodology, and sampling procedure. Additionally, an appropriate instrument to measure the constructs is introduced on the basis of previous studies. The chapter ends with an explanation of the data collection and data analysis.

Chapter 4: This chapter discusses the data analysis and interpretation of collected data. Two steps of the structural equation modeling are explained.

Finally, the hypotheses are tested to see whether they are confirmed or rejected.

Chapter 5: The chapter is about the discussion on the findings of the current study. The theoretical and managerial implications of the study are highlighted, and future lines of the research are recommended.

REFERENCES

- Aarts, H., Verplanken, B. and Van Knippenberg, A. (1998) 'Comstock drill plans reined in.', *Journal of Applied Social Psychology*, 28(15), pp. 1255–1274.
- Acuña, E. and Rodriguez, C. (2004) 'The Treatment of Missing Values and its Effect on Classifier Accuracy', In: Banks D., McMorris F.R., Arabie P., Gaul W. (eds) *Classification, Clustering, and Data Mining Applications. Studies in Classification, Data Analysis, and Knowledge Organisation*. Springer, Berlin, Heidelberg, pp. 639–647.
- Ajzen, I. (1989) 'Attitude structure and behavior relations', *Attitude Structure and Function*, (August), pp. 241–274.
- Ajzen, I. (1991) 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, 50, pp. 179–211.
- Ajzen, I. (2002a) 'Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior', *Journal of Applied Social Psychology*, 32(4), pp. 665–683.
- Ajzen, I. (2002b) 'Residual Effects of Past on Later Behavior: Habituation and Reasoned Action Perspectives', *Personality and Social Psychology Review*, 6(2), pp. 107–122.
- Ajzen, I. and Fishbein, M. (1977) 'Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research', *Psychological Bulletin*, 84(5), pp. 888–918.
- Ajzen, I. and Fishbein, M. (2005) 'The Influence of attitudes on behavior', *The Handbook of Attitudes*, pp. 173–221.
- Akyüz, A. (2013) 'Determinant factors influencing eWOM', *Mediterranean Journal of Social Sciences*, 4(11), pp. 159–166.
- Altmann, A. and Ebersberger, B. (2013) *Universities in change: Managing higher education institutions in the age of globalization*, *Universities in Change: Managing Higher Education Institutions in the Age of Globalization*.
- Amato, A. D., Giaccherini, M. and Zoli, M. (2019) 'The Role of Information Sources and Providers in Shaping Green Behaviors . Evidence from Europe', *Ecological Economics*. Elsevier, 164(November 2018), p. 106292.

- Anderson, E. (1998) 'Customer Satisfaction and word of mouth', *Journal of Service Research*, pp. 1–14.
- Ariswibowo, N. and Ghazali, E. (2017) 'Green Purchase Behaviours of Muslim Consumers: An Examination of Religious Value and Environmental Knowledge', *Journal of Organisational Studies and Innovation*, 4(1), pp. 39–56.
- Ari, E. and Yilmaz, V. (2017) 'Effects of environmental illiteracy and environmental awareness among middle school students on environmental behavior', *Environment, Development and Sustainability*, 19(5), pp. 1779–1793.
- Arora, A., Bansal, S., Kandpal, C., Aswani, R. and Dwivedi, Y. (2019) 'Measuring social media influencer index- insights from facebook, Twitter and Instagram', *Journal of Retailing and Consumer Services*, 49, pp. 86–101.
- Bagozzi, R. P. and Yi, Y. (1988) 'On the evaluation of structural equation models', *Journal of the Academy of Marketing Science*, 16(1), pp. 74–94.
- Bandura, A., Adams, N. E., Hardy, A. B. and Howells, G. N. (1980) 'Tests of the generality of self-efficacy theory', *Cognitive therapy and research*. Springer, 4(1), pp. 39–66.
- Barnes, D. K. A., Galgani, F., Thompson, R. C. and Barlaz, M. (2009) 'Accumulation and fragmentation of plastic debris in global environments', *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1526), pp. 1985–1998.
- Bedard, S. A. N. and Tolmie, C. R. (2018) 'Millennials' green consumption behaviour: Exploring the role of social media', *Corporate Social Responsibility and Environmental Management*, 25(6), pp. 1388–1396.
- Bentler, P. M. and Chou, C. P. (1987) 'Practical Issues in Structural Modeling', *Sociological Methods & Research*, 16(1), pp. 78–117.
- Bhuiyan, S. N., Sharma, S. K., Butt, I. and Ahmed, Z. U. (2018) 'Antecedents and pro-environmental consumer behavior (PECB): the moderating role of religiosity', *Journal of Consumer Marketing*, 35(3), pp. 287–299.
- Biswas, A. (2016) 'Impact of Social Media Usage Factors on Green Choice Behavior Based on Technology Acceptance Model', *Journal of Advanced Management Science*, 4(2), pp. 92–97.

- Biswas, A. and Roy, M. (2015a) 'Green products: an exploratory study on the consumer behaviour in emerging economies of the East', *Journal of Cleaner Production*. Elsevier Ltd, 87, pp. 463–468.
- Biswas, A. and Roy, M. (2015b) 'Leveraging factors for sustained green consumption behavior based on consumption value perceptions: Testing the structural model', *Journal of Cleaner Production*. Elsevier Ltd, 95, pp. 332–340.
- Bocken, N. M. P., Mugge, R., Bom, C. A. and Lemstra, H. J. (2018) 'Pay-per-use business models as a driver for sustainable consumption: Evidence from the case of HOMIE', *Journal of Cleaner Production*, 198, pp. 498–510.
- Bryman, A. (2007) 'Barriers to Integrating Quantitative and Qualitative Research', *Journal of Mixed Methods Research*, 1(1), pp. 8–22.
- Burnasheva, R., Gusuh, Y. and Villalobos-moron, K. (2019) 'Factors Affecting Millennials ' Attitudes toward Luxury Fashion Brands : A Cross-Cultural Study', *International Business Research*, 12(6), pp. 69–81.
- Carmela, M. and Fiorillo, D. (2017) 'Water conservation behavior and environmental concerns: Evidence from a representative sample of Italian individuals', *Journal of Cleaner Production*. Elsevier Ltd, 159, pp. 119–129.
- Carrus, G., Passafaro, P. and Bonnes, M. (2008) 'Emotions, habits and rational choices in ecological behaviours: The case of recycling and use of public transportation', *Journal of Environmental Psychology*, 28(1), pp. 51–62.
- Casaló, L. V. and Escario, J. J. (2018) 'Heterogeneity in the association between environmental attitudes and pro-environmental behavior: A multilevel regression approach', *Journal of Cleaner Production*, 175, pp. 155–163.
- Chairy, C. and Syahrivar, J. (2020) 'Cogent Business & Management You reap what you sow : The role of Karma in Green purchase You reap what you sow : The role of Karma in Green purchase', *Cogent Business & Management*. Cogent, 7(1).
- Chan, R. Y. K., Wong, Y. H. and Leung, T. K. P. (2008) 'Applying ethical concepts to the study of "green" consumer behavior: An analysis of chinese consumers' intentions to bring their own shopping bags', *Journal of Business Ethics*, 79(4), pp. 469–481.
- Chekima, B., Khalid Wafa, S. A. W. S., Igau, O. A. and Chekima, S. (2015) 'Determinant factors of consumers' green purchase intention: The moderating role of environmental advertising', *Asian Social Science*, 11(10), pp. 318–329.

- Chen, K. and Deng, T. (2016) 'Research on the green purchase intentions from the perspective of Product knowledge', *Sustainability (Switzerland)*, 8(9).
- Chen, M. F. (2016) 'Extending the theory of planned behavior model to explain people's energy savings and carbon reduction behavioral intentions to mitigate climate change in Taiwan-moral obligation matters', *Journal of Cleaner Production*. Elsevier Ltd, 112, pp. 1746–1753.
- Chen, Y. S., Lin, C. L. and Chang, C. H. (2014) 'The influence of greenwash on green word-of-mouth (green WOM): The mediation effects of green perceived quality and green satisfaction', *Quality and Quantity*, 48(5), pp. 2411–2425.
- Cheung, C. M. K., Lee, M. K. O. and Rabjohn, N. (2008) 'The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities', *Internet Research*, 18(3), pp. 229–247.
- Chin, W. W. (1998) 'The partial least squares approach to structural equation modeling', (January 1998).
- Chin, W. W. (2010) *Handbook of Partial Least Squares*.
- Chua, K. B., Quoquab, F. and Mohammad, J. (2019) 'Factors affecting environmental citizenship behaviour: An empirical investigation in Malaysian paddy industry', *Asia Pacific Journal of Marketing and Logistics*, (January 2020).
- Clark, V. L. P. and Creswell, J. W. (2015) *Understanding Research A Consumer's Guide*.
- Cleveland, M., Robertson, J. L. and Volk, V. (2020) 'Helping or hindering: Environmental locus of control, subjective enablers and constraints, and pro-environmental behaviors', *Journal of Cleaner Production*. Elsevier Ltd, 249, p. 119394.
- Cohen, J. (1992) 'Statistical Power Analysis', *Psychological Science*, pp. 98–101.
- Cohen, J. E. (1989) 'Statistical Power Analysis for the Behavioral Sciences, second ed', *Lawrence Erlbaum Associates, Hillsdale, NJ*.
- Coleman, L. J., Bahnan, N., Kelkar, M. and Curry, N. (2011) 'Walking The Walk : How The Theory', 27(3), pp. 107–116.
- Cousineau, D. and Chartier, S. (2010) 'Outliers detection and treatment: a review. Detección y tratamiento de valores extremos: una revisión', *International Journal of Psychological Research International Journal of Psychological Research International Journal of Psychological Research*, 3(31), pp. 2011–2079.

- Craighead, C. W., Ketchen, D. J., Dunn, K. S. and Hult, G. T. M. (2011) 'Addressing Common Method Variance : Guidelines for Survey Research on Information Technology , Operations , and Supply Chain Management', *58(3)*, pp. 578–588.
- Creswell, J. W. (2009) 'Mapping the field of mixed methods research', *Journal of Mixed Methods*, *3(2)*, pp. 95–108.
- Creswell, J. W. (2014) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, SAGE Publications.
- Dagher, G. K. and Itani, O. (2014) 'Factors influencing green purchasing behaviour: Empirical evidence from the Lebanese consumers', *Journal of Consumer Behaviour*, *13*, pp. 188–195.
- Defranc, A., Van Den Broucke, S., Leroy, R., Hoppenbrouwers, K., Lesaffre, E., Martens, L., Debyser, M. and Declerck, D. (2008) 'Measuring oral health behaviour in Flemish health care workers: An application of the theory of planned behaviour', *Community Dental Health*, *25(2)*, pp. 107–114.
- Devereux, E., Grimmer, L. and Grimmer, M. (2020) 'Consumer engagement on social media: Evidence from small retailers', *Journal of Consumer Behaviour*, *19(2)*, pp. 151–159.
- Dhandra, T. K. (2019) 'Achieving triple dividend through mindfulness: More sustainable consumption, less unsustainable consumption and more life satisfaction', *Ecological Economics*. Elsevier, *161*, pp. 83–90.
- Dhanesh, G. S. and Duthler, G. (2019) 'Relationship management through social media influencers: Effects of followers' awareness of paid endorsement', *Public Relations Review*. Elsevier, *45(3)*, pp. 1–13.
- Djafarova, E. and Rushworth, C. (2017) 'Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users', *Computers in Human Behavior*, *68*, pp. 1–7.
- Dunlop, S., Freeman, B. and Jones, S. C. (2016) 'Marketing to youth in the digital age: The promotion of unhealthy products and health promoting behaviours on social media', *Media and Communication*, *4(3)*, pp. 35–49.
- EPI (2018) 'Global metrics for the environment: Ranking country performance on high-priority environmental issues', *Yale Center for Environmental Law & Policy; Yale University Center for International Earth Science Information Network; Columbia University*, pp. 1–4.

- Evans, N. J., Phua, J., Lim, J. and Jun, H. (2017) 'Disclosing Instagram Influencer Advertising: The Effects of Disclosure Language on Advertising Recognition, Attitudes, and Behavioral Intent', *Journal of Interactive Advertising*, 17(2), pp. 138–149.
- Evans, N. J., Phua, J., Lim, J. and Jun, H. (2019) 'Disclosing Instagram Influencer Advertising : The Effects of Disclosure Language on Advertising Recognition , Attitudes , and Behavioral Intent', 2019(August 2017).
- F.Hair, J., M.Hult, G. toma., Ringle, C. and Sarstedt, M. (2014) 'A primer on partial least squares structural equation modeling (PLS-SEM)', *International Journal of Research & Method in Education*, 38(2), pp. 220–221.
- Field, A. (2017) *DISCOVERING STATISTICS USING SpSS THIRD*, *BMC Public Health*.
- Fornell, C., & Larcker, D. F. (2016) 'Evaluating Structural Equation Models with Unobservable Variables and Measurement Error', *Journal of Marketing Research This*, 18(1), pp. 39–50.
- Fornell, C. and Larcker, D. F. (1981) 'Evaluating Structural Equation Models with Unobservable Variables and Measurement Error', *Journal of Marketing Research*, 18(1), p. 39.
- Frohlich, D. and Fennell, J. (2007) 'Sound, paper and memorabilia: Resources for a simpler digital photography', *Personal and Ubiquitous Computing*, 11(2), pp. 107–116.
- Fu, L., Sun, Z., Zha, L., Liu, F., He, L., Sun, X. and Jing, X. (2020) 'Environmental awareness and pro-environmental behavior within China's road freight transportation industry: Moderating role of perceived policy effectiveness', *Journal of Cleaner Production*. Elsevier Ltd, 252, p. 119796.
- Gan, C. and Li, H. (2018) 'Understanding the effects of gratifications on the continuance intention to use WeChat in China: A perspective on uses and gratifications', *Computers in Human Behavior*, 78, pp. 306–315.
- Gardner, B. (2015) 'A review and analysis of the use of "habit" in understanding, predicting and influencing health-related behaviour', *Health Psychology Review*, 9(3), pp. 277–295.
- Gatersleben, B., White, E., Abrahamse, W., Jackson, T. and Uzzell, D. (2010) 'Values and sustainable lifestyles', *Architectural Science Review*, 53(1), pp. 37–50.

- Ghazali, E. M., Mutum, D. S. and Ariswibowo, N. (2018) 'Impact of religious values and habit on an extended green purchase behaviour model', *International Journal of Consumer Studies*, 42(6), pp. 639–654.
- Ghazali, E. M., Nguyen, B., Mutum, D. S. and Yap, S.-F. (2019) 'Pro-Environmental Behaviours and Value-Belief-Norm Theory: Assessing Unobserved Heterogeneity of Two Ethnic Groups', *Sustainability*, 11(12), p. 3237.
- Ghazali, E., Soon, P. C., Mutum, D. S. and Nguyen, B. (2017) 'Health and cosmetics: Investigating consumers' values for buying organic personal care products', *Journal of Retailing and Consumer Services*. Elsevier Ltd, 39(August), pp. 154–163.
- Gilg, A., Barr, S. and Ford, N. (2005) 'Green consumption or sustainable lifestyles? Identifying the sustainable consumer', *Futures*, 37(6), pp. 481–504.
- Giulio, A. Di and Fuchs, D. (2014) 'Sustainable Consumption Corridors : Concept , Objections , and Responses', 1, pp. 184–192.
- Gleim, M. R., Smith, J. S., Andrews, D. and Cronin, J. J. (2013) 'Against the Green: A Multi-method Examination of the Barriers to Green Consumption', *Journal of Retailing*. New York University, 89(1), pp. 44–61.
- Global Web Index (2019) *Entertainment Content on Social Media, global web index*.
- Glucksman, M. (2017) 'The Rise of Social Media Influencer Marketing on Lifestyle Branding: A Case Study of Lucie Fink', *Elon Journal of Undergraduate Research in Communications*, 8(2), pp. 77–87.
- Goh, S. K. and Balaji, M. S. (2016) 'Linking green skepticism to green purchase behavior', *Journal of Cleaner Production*. Elsevier Ltd, 131, pp. 629–638.
- Gong, X., Zhang, J., Zhang, H., Cheng, M., Wang, F. and Yu, N. (2020) 'Internet use encourages pro-environmental behavior: Evidence from China', *Journal of Cleaner Production*. Elsevier Ltd, 256(June 2019), p. 120725.
- Grafström, J. and Jakobsson, L. (2018) 'The Impact of Influencer Marketing on Consumers ' Attitudes', (May).
- Haferkamp, N. and Krämer, N. C. (2011) 'Social comparison 2.0: Examining the effects of online profiles on social-networking sites', *Cyberpsychology, Behavior, and Social Networking*, 14(5).
- Hagger, M. S., Chatzisarantis, N. and Biddle, S. J. H. (2001) 'The influence of self-efficacy and past behaviour on the physical activity intentions of young people', *Journal of Sports Sciences*, 19(9), pp. 711–725.

- Hair, Joseph F, J., Hult, G. T. M., Ringle, C. M. and Sarstedt, M. (2017) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Hair, J. F., Hult, T. M., Ringe, C. M. and Sarstedt, M. (2016) *A PRIMER IN PARTIAL LEAST SQUARES STRUCTURAL EQUATION MODELING {PLS--SEM} Joseph Hair Book 2014 (PLS)*.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011) 'PLS-SEM: Indeed a Silver Bullet', *The Journal of Marketing Theory and Practice*, 19(2), pp. 139–152.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2013) 'Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance', *Long Range Planning*, 46(1–2), pp. 1–12.
- Hair, J. F., Risher, J. J., Sarstedt, M. and Ringle, C. M. (2019) 'When to use and how to report the results of PLS-SEM', *European Business Review*, 31(1), pp. 2–24.
- Hair, J. F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V. G. (2014) 'Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research', *European Business Review*, 26(2), pp. 106–121.
- Hair, J. F., Sarstedt, M., Pieper, T. M. and Ringle, C. M. (2012) 'The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications', *Long Range Planning*. Elsevier Ltd, 45(5–6), pp. 320–340.
- Hansmann, R., Laurenti, R., Mehdi, T. and Binder, C. R. (2020) 'Determinants of pro-environmental behavior: A comparison of university students and staff from diverse faculties at a Swiss University', *Journal of Cleaner Production*. Elsevier Ltd, 268, p. 121864.
- Harizan, iti H. M. and Rahman, W. A. W. A. (2016) 'Spirituality of Green Purchase Behavior: Does Religious Segmentation Matter?', *Journal of Research in Marketing*, 6(3), pp. 473–484.
- Harvey, J. (2015) 'The roles of attitudes , beliefs and risk perception as determinants of sustainable behaviour : a framework for Government action and further research .', (February).
- Hassan, S. H. (2014) 'The role of Islamic values on green purchase intention', *Journal of Islamic Marketing*, 5(3), pp. 379–395.

- Helm, S., Serido, J., Ahn, S. Y., Ligon, V. and Shim, S. (2019) 'Materialist values, financial and pro-environmental behaviors, and well-being', *Young Consumers*, 20(4), pp. 264–284.
- Helmy, F. (2021) *What local top e-commerce players did for Malaysia's 11.11 Shopping Festival*, www.sushivid.com.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G. and Gremler, D. D. (2004) 'Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?', *Journal of Interactive Marketing*, 18(1), pp. 38–52.
- Henseler, J., Hubona, G. and Ray, P. A. (2016) *Using PLS path modeling in new technology research: updated guidelines*, *Industrial Management & Data Systems*.
- Henseler, J. rg, Ringle, C. M. and Sinkovics, R. R. (2009) 'The Use of Partial Least Squares Path Modeling in International Marketing', *Advances in International Marketing*, 20, pp. 277–319.
- Hertzog, M. A. (2008) 'Considerations in Determining Sample Size for Pilot Studies', *Research in nursing & health*, 31(4), pp. 341–354.
- Ho, K. (2019) *YouGov | Malaysians spend almost a quarter of their day on social media*, *YouGov April 30, 2019, 4:25 p.m.* .
- Hobson, K. (2016) 'Thinking Habits into Action : the role of knowledge and process in questioning household consumption practices', (November).
- Homer, P. and Kahle, L. (1988) 'A structural equation test of the value attitude behavior'.
- Hu, Y., Manikonda, L. and Kambhampati, S. (2014) 'What We Instagram: A First Analysis of Instagram Photo Content and User Types', *Frontiers of Mathematics in China*, 12(1), pp. 247–260.
- Huang, H. (2016) 'Media use, environmental beliefs, self-efficacy, and pro-environmental behavior', *Journal of Business Research*. Elsevier Inc., 69(6), pp. 2206–2212.
- Huang, L., Wen, Y. and Gao, J. (2020) 'Resources , Conservation & Recycling What ultimately prevents the pro-environmental behavior? An in-depth and extensive study of the behavioral costs', *Resources, Conservation & Recycling*. Elsevier, 158(February), p. 104747.

- Iman Khalid, A. Q. and Zainuddin, Y. Bin (2011) 'The Impact of Media Exposure on Intention to Purchase Green Electronic Products amongst Lecturers', *International Journal of Business and Management*, 6(3), pp. 240–248.
- Istania, F., Pratiwi, I. P., Yasmine, M. F. and Ananda, A. S. (2019) 'Celebrities and celebgrams of cosmetics: The mediating effect of opinion leadership on the relationship between instagram profile and consumer behavioral intention', *International Journal of Scientific and Technology Research*, 8(8), pp. 75–86.
- Jackson, C. A. and Luchner, A. F. (2018) 'Self-presentation mediates the relationship between Self-criticism and emotional response to Instagram feedback', *Personality and Individual Differences*. Elsevier Ltd, 133, pp. 1–6.
- Jain, V. K., Gupta, A., Tyagi, V. and Verma, H. (2020) 'Social media and green consumption behavior of millennials', *Journal of Content, Community and Communication*, 10(6), pp. 221–230.
- Jaiswal, D. (2018) 'Toward sustainable consumption : Investigating the determinants of green buying behaviour of Indian consumers', *Business strategy and development*, 1, pp. 64–73.
- Jaiswal, D. and Kant, R. (2018) 'Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers', *Journal of Retailing and Consumer Services*. Elsevier Ltd, 41, pp. 60–69.
- Jalali, S. S. and Khalid, H. (2019) 'Understanding Instagram Influencers Values in Green Consumption Behaviour: A Review Paper Sanaz Saghati Jalali * , Haliyana Khalid', *Open International Journal of Informatics (OIJI)*, 7, pp. 47–58.
- Jan, I. U., Ji, S. and Yeo, C. (2019) 'Values and green product purchase behavior: The moderating effects of the role of government and media exposure', *Sustainability (Switzerland)*, 11(23).
- Joseph F. Hair, Jr., G. Tomas M. Hult, Christian Ringle, M. S. (2016) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Joshi, Y. and Rahman, Z. (2015) *Factors Affecting Green Purchase Behaviour and Future Research Directions*, *International Strategic Management Review*. Holy Spirit University of Kaslik.
- Joshi, Y. and Rahman, Z. (2016) 'Predictors of young consumer's green purchase behaviour', *Management of Environmental Quality: An International Journal*, 27(4), pp. 452–472.

- Joyce, S., Harvey, J. and Norman, P. (2003) 'Public Perceptions of Sustainability, Energy Efficiency and Recycling - How these can inform the Design Process', *In B Hon (ed) Proceedings of the 2nd Int Conf on Design and Manufacture for Sustainable Development: 107-116.*
- Kabadayı, E. T., Dursun, İ., Alan, A. K. and Tuğer, A. T. (2015) 'Green Purchase Intention of Young Turkish Consumers: Effects of Consumer's Guilt, Self-monitoring and Perceived Consumer Effectiveness', *Procedia - Social and Behavioral Sciences*, 207, pp. 165–174.
- Kang, H. (2013) 'The prevention and handling of the missing data', *Korean Journal of Anesthesiology*, 64(5), pp. 402–406.
- Kaplan, A. M. and Haenlein, M. (2010) 'Users of the world, unite! The challenges and opportunities of Social Media', *Business Horizons*, 53(1), pp. 59–68.
- Kautish, P. and Dash, G. (2017) 'Environmentally concerned consumer behavior: evidence from consumers in Rajasthan', *Journal of Modelling in Management*, 12(4), pp. 712–738.
- Kautish, P. and Sharma, R. (2020) 'Determinants of pro-environmental behavior and environmentally conscious consumer behavior: An empirical investigation from emerging market', *Business Strategy and Development*, 3(1), pp. 112–127.
- Khare, A. (2015) 'Antecedents to green buying behaviour: A study on consumers in an emerging economy', *Marketing Intelligence and Planning*, 33(3), pp. 309–329.
- Khoo, C. S. G. (2014) 'Issues in information behaviour on social media', *Libres*, 24(2), pp. 75–96.
- Kirshner, H. S. (2013) *The Power of Habit, Cognitive And Behavioral Neurology.*
- Kline, R. B. (2011) *Principles and Practice of Structural Equation Modeling.*
- Klößner, C. a. (2005) 'Das Zusammenspiel von Gewohnheiten und Normen in der Verkehrsmittelwahl – ein integriertes Norm-Aktivations- Modell und seine Implikationen für Interventionen. Inaugural - Dissertation zur Erlangung des Grades eines Doktors der Philosophie in der Fakultät', (January 2005), pp. 1–162.
- Knussen, C. and Yule, F. (2008) "'I'm not in the habit of recycling": The role of habitual behavior in the disposal of household waste', *Environment and Behavior*, 40(5), pp. 683–702.

- Kothari, C., Kumar, R. and Uusitalo, O. (2014) *Research Methodology, New Age International*.
- Krueger, N. F., Reilly, M. D. and Carsrud, A. L. (2000) 'Competing models of entrepreneurial intentions', *Journal of Business Venturing*, 15(5–6), pp. 411–432.
- Kurusu, K., Kimura, N. and Hanaki, K. (2019) 'Expression effects of public service advertisements on intentions to act for global warming', *Journal of Cleaner Production*. Elsevier Ltd, 218, pp. 1045–1054.
- Kwong, G. S. (2016) 'LINKING GREEN SKEPTICISM TO GREEN PURCHASE BEHAVIOR', pp. 0–7.
- Lai, F., Chong, S., Sia, B. and Ooi, B. (2010) 'Culture and consumer behavior: comparisons between Malays and Chinese in Malaysia', *International Journal of Innovation, ...*, 1(2), pp. 180–185.
- Laroche, M., Bergeron, J. and Barbaro-Forleo, G. (2001) 'Targeting consumers who are willing to pay more for environmentally friendly products.', *Journal of consumer marketing*, 18(6), pp. 503–520.
- Lay, A. and Ferwerda, B. (2018) 'Predicting Users' Personality Based on Their "Liked" Images on Instagram', *CEUR Workshop Proceedings*, 2068(March).
- Lee, J. and Cho, M. (2020a) 'The Effects of Consumers' Media Exposure, Attention, and Credibility on Pro-environmental Behaviors', *Journal of Promotion Management*, 26(3), pp. 434–455.
- Lee, J. and Cho, M. (2020b) 'The Effects of Consumers ' Media Exposure , Attention , and Credibility on Pro-environmental Behaviors'.
- Lee, K. (2008) 'Opportunities for green marketing: Young consumers', *Marketing Intelligence and Planning*, 26(6), pp. 573–586.
- Lee, K. (2009) 'Gender differences in Hong Kong adolescent consumers' green purchasing behavior', *Journal of Consumer Marketing*, 26(2), pp. 87–96.
- Leßmann, O. and Masson, T. (2015) 'Journal of Behavioral and Experimental Economics Sustainable consumption in capability perspective : Operationalization and empirical illustration', 57, pp. 64–72.
- Li, D., Zhao, L., Ma, S., Shao, S. and Zhang, L. (2019) 'What influences an individual ' s pro-environmental behavior ? A literature review Resources , Conservation & Recycling What in fl uences an individual ' s pro-environmental behavior ?

- A literature review', *Resources, Conservation & Recycling*. Elsevier, 146(May), pp. 28–34.
- Li, J., Zhang, D. and Su, B. (2019) 'The Impact of Social Awareness and Lifestyles on Household Carbon Emissions in China', *Ecological Economics*. Elsevier, 160(July 2018), pp. 145–155.
- Lim, X. J. (2017) 'The Impact of Social Media Influencers on Purchase Intention and the Mediation Effect of Customer Attitude', (February), pp. 18–36.
- Lin, C.-J. and Chen, H.-Y. (2016) 'User expectancies for green products', *Social Enterprise Journal*, 12(3), pp. 281–301.
- Liobikienė, G., Liobikas, J., Brizga, J. and Juknys, R. (2020) 'Materialistic values impact on pro-environmental behavior: The case of transition country as Lithuania', *Journal of Cleaner Production*, 244.
- Lockton, D., Harrison, D. and Stanton, N. (2008) 'Making the user more efficient: Design for sustainable behaviour', *International Journal of Sustainable Engineering*, 1(1), pp. 3–8.
- López-Mosquera, N., Lera-López, F. and Sánchez, M. (2015) 'Key factors to explain recycling, car use and environmentally responsible purchase behaviors: A comparative perspective', *Resources, Conservation and Recycling*. Elsevier B.V., 99, pp. 29–39.
- Loureiro, S. M. C., Cavallero, L. and Miranda, F. J. (2018) 'Fashion brands on retail websites: Customer performance expectancy and e-word-of-mouth', *Journal of Retailing and Consumer Services*. Elsevier Ltd, 41, pp. 131–141.
- Lu, L. C., Chang, H. H. and Chang, A. (2015) 'Consumer Personality and Green Buying Intention: The Mediate Role of Consumer Ethical Beliefs', *Journal of Business Ethics*, 127(1), pp. 205–219.
- Luo, C., Luo, X., Schatzberg, L. and Sia, C. L. (2013) 'Impact of informational factors on online recommendation credibility: The moderating role of source credibility', *Decision Support Systems*. Elsevier B.V., 56(1), pp. 92–102.
- Maichum, K., Parichatnon, S. and Peng, K. C. (2016) 'Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers', *Sustainability (Switzerland)*, 8(10), pp. 1–20.

- Manaktola, K. and Jauhari, V. (2007) 'Exploring consumer attitude and behaviour towards green practices in the lodging industry in India', *International Journal of Contemporary Hospitality Management*, 19(5), pp. 364–377.
- Manikonda, L. and De Choudhury, M. (2017) 'Modeling and understanding visual attributes of mental health disclosures in social media', *Conference on Human Factors in Computing Systems - Proceedings*, 2017-May, pp. 170–181.
- McAndrew, F. T. and Jeong, H. S. (2012) 'Who does what on Facebook? Age, sex, and relationship status as predictors', *Computers in Human Behavior*, 28, pp. 2359–2365.
- Mccombs, M. E. and Donald, L. (1992) 'The Evolution of Agenda-Setting Research : Twenty-Five Years in the Marketplace of Ideas', *Journal of Communication*, 3, pp. 58–67.
- Mohd Suki, N. (2019) 'Examination of peer influence as a moderator and predictor in explaining green purchase behaviour in a developing country', *Journal of Cleaner Production*. Elsevier Ltd, 228, pp. 833–844.
- Mont, O. and Plepys, A. (2008) 'Sustainable consumption progress : should we be proud or alarmed ?', (March).
- Morya, K. K. and Yadav, S. (2017) 'EMPLOYEE ENGAGEMENT & INTERNAL EMPLOYER BRANDING : A STUDY OF SERVICE INDUSTRY', 15(4), pp. 7557–7569.
- Moser, A. K. (2015) 'Thinking green, buying green? Drivers of pro - Environmental purchasing behavior', *Journal of Consumer Marketing*, 32(3), pp. 167–175.
- Mostafa, M. M. (2007) 'Gender differences in Egyptian consumers' green purchase behaviour: The effects of environmental knowledge, concern and attitude', *International Journal of Consumer Studies*, 31(3), pp. 220–229.
- Muhammad, S., Raza, M. and Yaseen, M. (2019) 'The influence of consumption values on green purchase intention: A moderated mediation of greenwash perceptions and green trust', *Pakistan Journal of Commerce and Social Sciences*.
- Mustofa, A. (2020) 'Dialectics Between Religion and Culture (Sculptor 'S Reception Towards the Hadith About Carving Statue in Prumpung Magelang)', *Analisa: Journal of Social Science and Religion*, 5(01), pp. 71–85.

- Nandagiri, V. and Philip, L. (2018) 'Impact of Influencers From Instagram and Youtube on Their Followers', *International Journal of Multidisciplinary Research and Modern Education (IJMRME)*, 4(1), pp. 61–65.
- Ohler, A. M. and Billger, S. M. (2014) 'Does environmental concern change the tragedy of the commons? Factors affecting energy saving behaviors and electricity usage', *Ecological Economics*. Elsevier B.V., 107, pp. 1–12.
- Ojo, A. O., Raman, M. and Downe, A. G. (2019) 'Toward green computing practices: A Malaysian study of green belief and attitude among Information Technology professionals', *Journal of Cleaner Production*. Elsevier Ltd, 224, pp. 246–255.
- Ozimek, P. and Bierhoff, H. W. (2016) 'Facebook use depending on age: The influence of social comparisons', *Computers in Human Behavior*, 61, pp. 271–279.
- Paço, A. do, Shiel, C. and Alves, H. (2019) 'A new model for testing green consumer behaviour', *Journal of Cleaner Production*. Elsevier Ltd, 207, pp. 998–1006.
- Pallant, J. (2011) *A step by step guide to data analysis using SPSS*.
- Paul, J., Modi, A. and Patel, J. (2016) 'Predicting green product consumption using theory of planned behavior and reasoned action', *Journal of Retailing and Consumer Services*. Elsevier, 29, pp. 123–134.
- Peattie, K. (2010) 'Green consumption: Behavior and norms', *Annual Review of Environment and Resources*, 35, pp. 195–228.
- Peng, D. X. and Lai, F. (2012) 'Using partial least squares in operations management research: A practical guideline and summary of past research', *Journal of Operations Management*. Elsevier B.V., 30(6), pp. 467–480.
- Perera, C., Auger, P. and Klein, J. (2018) 'Green Consumption Practices Among Young Environmentalists: A Practice Theory Perspective', *Journal of Business Ethics*. Springer Netherlands, 152(3), pp. 843–864.
- Perugini, M. and Bagozzi, R. P. (2001) 'The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour', *British Journal of Social Psychology*, 40(1), pp. 79–98.
- Pittman, M. and Reich, B. (2016) 'Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words', *Computers in Human Behavior*. Elsevier Ltd, 62, pp. 155–167.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. and Podsakoff, N. P. (2003) 'Common method biases in behavioral research: A critical review of the literature and recommended remedies.', *Journal of Applied Psychology*, 88(5), pp. 879–903.

- Rademaker, C. A. and Royne, M. B. (2018) 'Thinking green: How marketing managers select media for consumer acceptance', *Journal of Business Strategy*, 39(2), pp. 30–38.
- Rafiki, A. (2020) 'Determinants of SME growth: an empirical study in Saudi Arabia', *International Journal of Organizational Analysis*, 28(1), pp. 205–225.
- Rahardjo, F. A. (2015) 'The roles of green perceived value, green perceived risk, and green trust towards green purchase intention of inverter air conditioner in Surabaya', *iBuss Management*, 3(2), pp. 252–260.
- Rahim, R. A., Sulaiman, Z., Chin, T. A., Baharun, R. and Muharam, F. M. (2016) 'Measuring electronic word of mouth review adoption on green purchase intention using source credibility theory', *Advanced Science Letters*, 22(12), pp. 4283–4287.
- Rahnama, H. and Rajabpour, S. (2017) 'Identifying effective factors on consumers' choice behavior toward green products: the case of Tehran, the capital of Iran', *Environmental Science and Pollution Research*. *Environmental Science and Pollution Research*, 24(1), pp. 911–925.
- Rajaei, M., Hoseini, S. M. and Malekmohammadi, I. (2019) 'Proposing a socio-psychological model for adopting green building technologies: A case study from Iran', *Sustainable Cities and Society*. Elsevier, 45(December 2018), pp. 657–668.
- Rajapaksa, D., Gi, R., Torgler, B., Garcia-valiñas, M., Athukorala, W., Managi, S. and Wilson, C. (2019) 'Resources , Conservation & Recycling Do monetary and non-monetary incentives influence environmental attitudes and behavior? Evidence from an experimental analysis', 149(February), pp. 168–176.
- Rani, P. U. and Padmalosani (2019) 'Impact of social media on youth', *International Journal of Innovative Technology and Exploring Engineering*, 8(11 Special Issue), pp. 786–787.
- Reinartz, W., Haenlein, M. and Henseler, J. (2009) 'An empirical comparison of the efficacy of covariance-based and variance-based SEM', *International Journal of Research in Marketing*. Elsevier B.V., 26(4), pp. 332–344.
- Reni, A. and Ahmad, N. H. (2016) 'Application of Theory Reasoned Action in Intention To Use Islamic Banking in Indonesia', *Al-Iqtishad: Journal of Islamic Economics*, 8(1), pp. 137–148.

- Riggle, M. (2019) 'The Impact of Social Media Influencers in Sustainable Fashion on Millennial Consumers'.
- Roth, K. P. and Diamantopoulos, A. (2009) 'Advancing the country image construct', *Journal of Business Research*. Elsevier Inc., 62(7), pp. 726–740.
- Ruiz-Gomez, A. (2019) 'Digital Fame and Fortune in the age of Social Media: A Classification of social media influencers', *aDResearch ESIC International Journal of Communication Research*, 19(19), pp. 08–29.
- Saharuddin, S., Abu Bakar, A. and Shamsudin, Z. (2017) 'Celebrity Couple 's Posted Image on Instagram : A Negative Malaysian Perspective Siti Shareena Mohd Saharuddin , Aziyah Abu Bakar Ph . D , Zarihan', (April).
- Sale, J., Lohfeld, L. and Brazil, K. (2002) 'Revisiting the quantitative-qualitative debate: implications for mixed-methods research', *Quality and Quantity*, 36(1), pp. 43–53.
- Saleki, R., Quoquab, F. and Mohammad, J. (2019) 'What drives Malaysian consumers' organic food purchase intention? The role of moral norm, self-identity, environmental concern and price consciousness', *Journal of Agribusiness in Developing and Emerging Economies*, 9(5), pp. 584–603.
- Sarabia-Andreu, F., Sarabia-Sánchez, F. J. and Moreno-Albaladejo, P. (2019) 'A new attitudinal integral-model to explain green purchase intention', *Sustainability (Switzerland)*, 11(22), pp. 1–17.
- Sardon, H. and Dove, A. P. (2018) 'Plastics recycling with a difference', *Science*, 360(6387), pp. 380–381.
- Sarstedt, M., Ringle, C. M. and Hair, J. F. (2017) *Handbook of Market Research, Handbook of Market Research*.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R. and Hair, J. F. (2014) 'Journal of Family Business Strategy Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers', *Journal of Family Business Strategy*. Elsevier Ltd.
- Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research Methods for Business Students, Pearson Education, Fifth edition*.
- Saw, G., Abbott, W., Donaghey, J. and McDonald, C. (2013) 'Social media for international students – it's not all about Facebook', *Library Management*, 34(3), pp. 156–174.
- Sekaran, U. (2013) *Research methods for business, Research methods for business*.

- Sekaran, U. and Bougie, R. (2012) 'Research Methods For Business: A Skill-Building Approach'.
- Setiawan, E. B. (2018) 'The Role of Word of Mouth in Increasing Purchase Intention of Low Cost Green Car', pp. 88–96.
- Shen, Y. C. and Chen, H. S. (2020) 'Exploring consumers' purchase intention of an innovation of the agri-food industry: A case of artificial meat', *Foods*, 9(6).
- Shiau, W. L., Dwivedi, Y. K. and Yang, H. S. (2017) 'Co-citation and cluster analyses of extant literature on social networks', *International Journal of Information Management*, 37(5), pp. 390–399.
- Smith, K. T. and Brower, T. R. (2012) 'Longitudinal study of green marketing strategies that influence Millennials', *Journal of Strategic Marketing*, 20(6), pp. 535–551.
- Souza, F., De Las Casas, D., Flores, V., Youn, S. B., Cha, M., Quercia, D. and Almeida, V. (2015) 'Dawn of the selfie era: The whos, wheres, and hows of selfies on Instagram', *COSN 2015 - Proceedings of the 2015 ACM Conference on Online Social Networks*, pp. 221–231.
- Spence, A. and Pidgeon, N. (2013) 'Psychology, Climate Change and Sustainable Behaviour', *Journal of Chemical Information and Modeling*, 53(9), pp. 1689–1699.
- Sreen, N., Purbey, S. and Sadarangani, P. (2018) 'Impact of culture, behavior and gender on green purchase intention', *Journal of Retailing and Consumer Services*. Elsevier Ltd, 41(December 2017), pp. 177–189.
- Statista (2020) *Share of Instagram users by gender 2020* | Statista.
- Stern, P. C. (2000) 'Toward a Coherent Theory of Environmentally Significant Behavior', *Journal of Social Issues*, 56(3), pp. 407–424.
- Straub, D. W. (1989) 'Validating Instruments in MIS research', *MIS Quarterly*, 13(2), pp. 147–169.
- Suganthi, L. (2019) 'Examining the relationship between corporate social responsibility, performance, employees' pro-environmental behavior at work with green practices as mediator', *Journal of Cleaner Production*. Elsevier Ltd, 232, pp. 739–750.
- Sun, Y., Liu, N. and Zhao, M. (2019) 'Factors and mechanisms affecting green consumption in China: A multilevel analysis', *Journal of Cleaner Production*. Elsevier Ltd, 209, pp. 481–493.

- Sundar, S. S. (2008) 'The MAIN model: A heuristic approach to understanding technology effects on credibility', in *Digital Media, Youth, and Credibility*, pp. 73–100.
- Tan, B.-C. (2011) 'The Roles of Knowledge, Threat, and PCE on Green Purchase Behaviour', *International Journal of Business and Management*, 6(12), pp. 14–27.
- Tan, C. N. L., Ojo, A. O. and Thurasamy, R. (2019) 'Determinants of green product buying decision among young consumers in Malaysia', *Young Consumers*, 20(2), pp. 121–137.
- Tan, H. (2018) 'Green products consumption behaviour among industrial engineering undergraduate students based on the theory of planned behaviour Green products consumption behaviour among industrial engineering undergraduate students based on the theory of planned behav', *The 2nd International Conference on Eco Engineering Development 2018 (ICEED 2018)*.
- Tan, L. P., Johnstone, M. L. and Yang, L. (2016) 'Barriers to green consumption behaviours: The roles of consumers' green perceptions', *Australasian Marketing Journal*. Elsevier Ltd, 24(4), pp. 288–299.
- Tapia-Fonllem, C., Corral-Verdugo, V., Fraijo-Sing, B. and Durón-Ramos, M. F. (2013) 'Assessing sustainable behavior and its correlates: A measure of pro-ecological, frugal, altruistic and equitable actions', *Sustainability (Switzerland)*, 5(2), pp. 711–723.
- Teng, S., Khong, K. W., Chong, A. Y. L. and Lin, B. (2017) 'Persuasive electronic word-of-mouth messages in social media', *Journal of Computer Information Systems*, 57(1), pp. 76–88.
- Teng, S., Khong, K. W., Goh, W. W. and Chong, A. Y. L. (2014) 'Examining the antecedents of persuasive eWOM messages in social media', *Online Information Review*, 38(6), pp. 746–768.
- Tosun, L. P. (2012) 'Motives for Facebook use and expressing "true self" on the Internet', *Computers in Human Behavior*, 28(4), pp. 1510–1517.
- Trivedi, R. H., Patel, J. D. and Acharya, N. (2018) 'Causality analysis of media influence on environmental attitude, intention and behaviors leading to green purchasing', *Journal of Cleaner Production*. Elsevier Ltd, 196, pp. 11–22.
- Tsang, K. K. (2012) 'The use of midpoint on Likert Scale: The implications for educational research.', *Hong kong Teachers' Centre Journal*, 11, pp. 121–130.

- Turner, P. G. and Lefevre, C. E. (2017) 'Instagram use is linked to increased symptoms of orthorexia nervosa', *Eating and Weight Disorders*. Springer International Publishing, 22(2), pp. 277–284.
- Uddin, S. M. F. and Khan, M. N. (2016) 'Green Purchasing Behaviour of Young Indian Consumers: An Exploratory Study', *Global Business Review*, 17(6), pp. 1469–1479.
- UNEP, U. E. P. (2001) *Consumption Opportunities*, Paris: UNEP.
- Urbach, N. and Ahlemann, F. (2010) 'Structural equation modeling in information systems research using partial least squares', *Journal of Information Technology Theory and Application*, 11(2), pp. 5–40.
- Varshneya, G., Pandey, S. K. and Das, G. (2017) 'Impact of Social Influence and Green Consumption Values on Purchase Intention of Organic Clothing: A Study on Collectivist Developing Economy', *Global Business Review*, 18(2), pp. 478–492.
- Vasseur, V., Marique, A. F. and Udalov, V. (2019) 'A conceptual framework to understand households' energy consumption', *Energies*, 12(22), pp. 1–22.
- Vaus, D. de (2002) *Surveys in socila research*.
- Vazifehdoust, H., Taleghani, M., Esmailpour, F., Nazari, K. and Khadang, M. (2013) 'Purchasing green to become greener: Factors influence consumers' green purchasing behavior', *Management Science Letters*, 3, pp. 2489–2500.
- Vazquez-brust, D. A., Darnall, N., Pointing, C. and Vazquez-brust, D. (2012) 'Why consumers buy green Why Consumers Buy Green', (May).
- Vermeir, I. and Verbeke, W. I. M. (2006) 'Sustainable food consumption: exploring the consumer "attitude – behavioral intention" gap', pp. 169–194.
- Verplanken, B. (2003) 'Reflections on Past Behavior: A Self-Report Index of Habit Strength', *Journal of Applied Social Psychology*, 33, pp. 1313–1330.
- Verplanken, B., Aarts, H. and Van Knippenberg, A. (1997) 'Habit, information acquisition, and the process of making travel mode choices', *European Journal of Social Psychology*, 27(5), pp. 539–560.
- Vinzi, V. E., Trinchera, L. and Amato, S. (2010a) *Handbook of Partial Least Squares*.
- Vinzi, V. E., Trinchera, L. and Amato, S. (2010b) *PLS Path Modeling: From Foundations to Recent Developments and Open Issues for Model Assessment and Improvement*.

- Wang, P., Liu, Q. and Qi, Y. (2014a) 'Factors in influencing sustainable consumption behaviors : a survey of the rural residents in China', 63, pp. 152–165.
- Wang, P., Liu, Q. and Qi, Y. (2014b) 'Factors influencing sustainable consumption behaviors: A survey of the rural residents in China', *Journal of Cleaner Production*, 63, pp. 152–165.
- Wang, Y. and Li, B. (2016) 'Sentiment Analysis for Social Media Images', *Proceedings - 15th IEEE International Conference on Data Mining Workshop, ICDMW 2015, (Ijcai)*, pp. 1584–1591.
- Wang, Y., Lin, S., Yeh, C., Li, C. and Li, H. (2016) 'What drives students ' cyber entrepreneurial intention : The moderating role of disciplinary difference', *Thinking Skills and Creativity*. Elsevier Ltd, 22, pp. 22–35.
- Wang, Y., Xiang, D., Yang, Z. and Sara, S. (2019) 'Unraveling customer sustainable consumption behaviors in sharing economy : A socio-economic approach based on social exchange theory Unraveling customer sustainable consumption behaviors in sharing economy : A socio-economic approach based on social excha', *Journal of Cleaner Production*. Elsevier Ltd, 208(October 2018), pp. 869–879.
- Wright, M. and Klÿn, B. (1998) 'Environmental attitude - Behaviour correlations in 21 countries', *Journal of Empirical Generalisations in Marketing Science*, 3, pp. 42–60.
- Xu, J. and Han, R. (2019) 'The Influence of Place Attachment on Pro-Environmental Behaviors: The Moderating Effect of Social Media', *International journal of environmental research and public health*, 16(24).
- Yadav, R. (2016) 'Altruistic or egoistic: Which value promotes organic food consumption among young consumers? A study in the context of a developing nation', *Journal of Retailing and Consumer Services*. Elsevier, 33, pp. 92–97.
- Yadav, R. and Pathak, G. S. (2016) 'Intention to purchase organic food among young consumers: Evidences from a developing nation', *Appetite*. Elsevier, 96, pp. 122–128.
- Yadav, R. and Pathak, G. S. (2017) 'Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior', *Ecological Economics*. Elsevier B.V., 134, pp. 114–122.
- Yarbil, N. B. and Argaç, N. (2017) 'A note on generalized Lie derivations of prime rings', *Frontiers of Mathematics in China*, 12(1), pp. 247–260.

- Young, W., Russell, S. V., Robinson, C. A. and Barkemeyer, R. (2017) 'Can social media be a tool for reducing consumers' food waste? A behaviour change experiment by a UK retailer', *Resources, Conservation and Recycling*. Elsevier B.V., 117, pp. 195–203.
- Zahid, M. M., Ali, B., Ahmad, M. S., Thurasamy, R. and Amin, N. (2018) 'Factors Affecting Purchase Intention and Social Media Publicity of Green Products: The Mediating Role of Concern for Consequences', *Corporate Social Responsibility and Environmental Management*, 25(3), pp. 225–236.
- Zainal, N. T. A., Harun, A. and Lily, J. (2017) 'Examining the mediating effect of attitude towards electronic words-of mouth (eWOM) on the relation between the trust in eWOM source and intention to follow eWOM among Malaysian travellers', *Asia Pacific Management Review*, 22(1), pp. 35–44.
- Zappavigna, M. (2016) 'Social media photography: construing subjectivity in Instagram images', *Visual Communication*, 15(3), pp. 271–292.
- Zarei, G., Nuri, B. A. and Noroozi, N. (2019) 'The effect of Internet service quality on consumers' purchase behavior: The role of satisfaction, attitude, and purchase intention', *Journal of Internet Commerce*. Routledge, 0(0), pp. 1–24.
- Zhang, B., Wang, Z. and Lai, K. hung (2015) 'Mediating effect of managers' environmental concern: Bridge between external pressures and firms' practices of energy conservation in China', *Journal of Environmental Psychology*. Elsevier Ltd, 43, pp. 203–215.
- Zhang, L., Fan, Y., Zhang, W. and Zhang, S. (2019) 'Extending the theory of planned behavior to explain the effects of cognitive factors across different kinds of green products', *Sustainability (Switzerland)*, 11(15), pp. 1–17.
- Zhang, L., Li, D., Cao, C. and Huang, S. (2018) 'The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern', *Journal of Cleaner Production*. Elsevier Ltd, 187, pp. 740–750.
- Zhang, M., Guo, S., Bai, C. and Wang, W. (2019) 'Study on the impact of haze pollution on residents' green consumption behavior: the case of Shandong Province', *Journal of Cleaner Production*. Elsevier Ltd, 219, pp. 11–19.
- Zhang, X., Bai, X. and Shang, J. (2018) 'Is subsidized electric vehicles adoption sustainable: Consumers' perceptions and motivation toward incentive policies,

- environmental benefits, and risks', *Journal of Cleaner Production*. Elsevier Ltd, 192, pp. 71–79.
- Zhang, X., Geng, G. and Sun, P. (2017) 'Determinants and implications of citizens' environmental complaint in China: Integrating theory of planned behavior and norm activation model', *Journal of Cleaner Production*. Elsevier Ltd, 166, pp. 148–156.
- Zhang, Y., Zhang, H. L., Zhang, J. and Cheng, S. (2014) 'Predicting residents' pro-environmental behaviors at tourist sites: The role of awareness of disaster's consequences, values, and place attachment', *Journal of Environmental Psychology*. Elsevier Ltd, 40(December), pp. 131–146.
- Zhou, H., Yin, H., Yuan, F. and Wang, F. (2019) 'Social relationships, public media, and pro-environmental behaviors', *Empirical Economics*. Springer Berlin Heidelberg, 57(2), pp. 569–588.
- Zulli, D. (2018) 'Capitalizing on the look: insights into the glance, attention economy, and Instagram', *Critical Studies in Media Communication*. Taylor & Francis, 35(2), pp. 137–150.

Appendix A (Questionnaire)

Survey on green consumption behavior

We are conducting a research on “The effect of Instagram influencers on green consumption behavior amongst Instagram followers in Malaysia”. The following questionnaire looks at your personal view about factors that impact consuming green products in your daily life. Please fill in the questionnaire if you follow an Instagram account that promote green and environmentally friendly concepts. Your participation is voluntary and your answers will be kept confidential. It will only take about 5 minutes of your valuable time to complete this survey. Your assistance in this matter is greatly appreciated.

Regards

Sanaz Saghati Jalali

Ph.D. Candidate at Universiti Teknologi Malaysia

Section A:

Demographic questions

This part concerns some general information. Please tick (✓) in provided box bellow that best describes your answer

1. Gender: Male Female

2. Age: 17 or less 18-34 35-46 47 or above

3. Education level: Diploma and lower degree Master PhD

4. Ethnicity: Malay Chinese Indian Other

5. Income level: less than RM3000 RM3001 to 6000 RM6001 or more

Section B:

Please tick (✓) in provided box bellow that best describes your answer. Strongly disagree= 1, disagree=2, natural=3, agree=4 and strongly agree=5.

Photo/video content	Strongly Disagree \longleftrightarrow Strongly Agree				
1. This Instagram account often posts photographs/videos about environmental issues	1	2	3	4	5
2. This Instagram account tags photographs relevant to green behavior	1	2	3	4	5
3. The visual content of this Instagram account is relevant to my needs	1	2	3	4	5
4. This Instagram account posts photos/videos that are valuable for me	1	2	3	4	5
5. The photos/video content of this Instagram account is useful for me	1	2	3	4	5
6. Photos/videos of this Instagram account are timely	1	2	3	4	5
Green concern					
1. I am worried about the worsening of the quality of the environment	1	2	3	4	5

2. Environmental issues are my major concern	1	2	3	4	5
3. I am passionate about environmental protection issues	1	2	3	4	5
4. I often think about how the environmental quality can be improved	1	2	3	4	5
Green word of mouth					
1. This Instagram account highly recommends certain product to others because of their environmental image	1	2	3	4	5
2. This Instagram account positively recommends consuming certain products because of their environmental functionality	1	2	3	4	5
3. This Instagram account encourages others to consume environmentally-friendly products	1	2	3	4	5
4. This Instagram account presents useful content about consumption of certain products because of its environmental performance	1	2	3	4	5
Green habit					

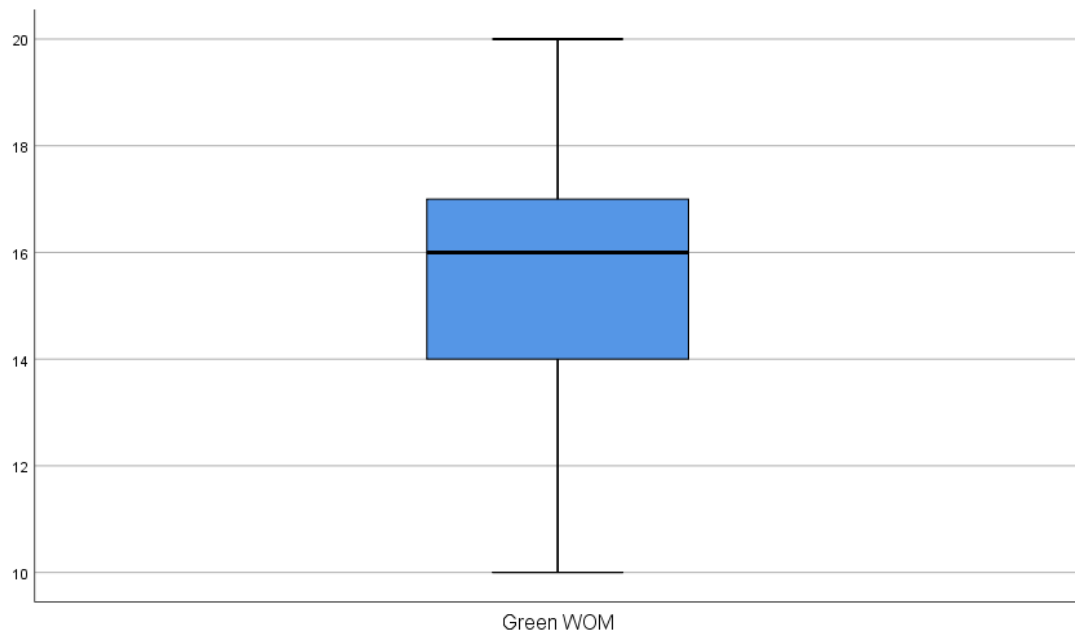
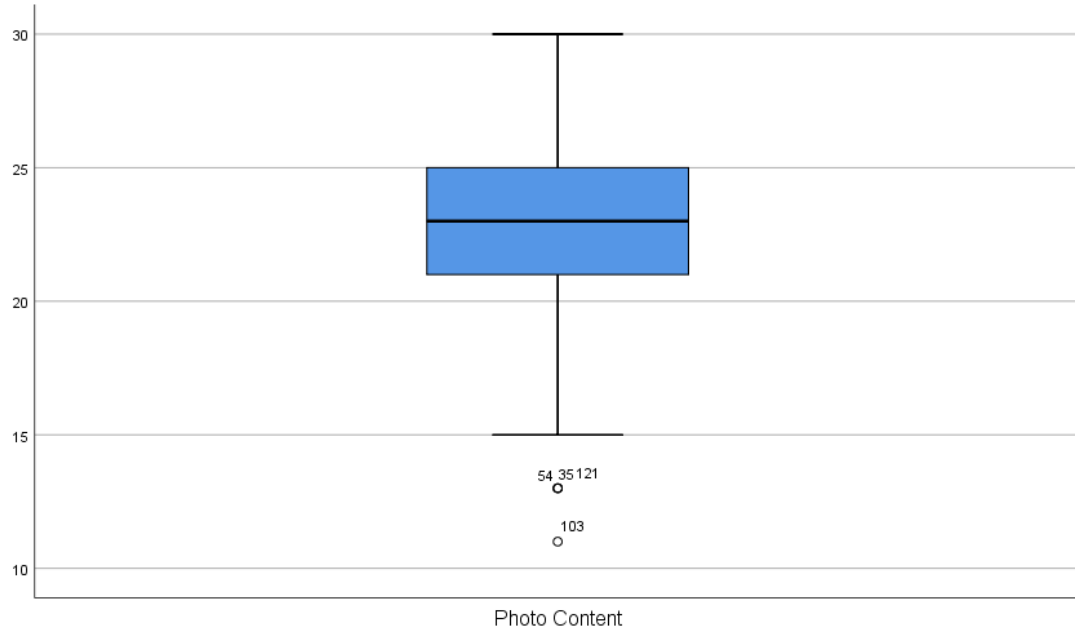
1. Consuming green product is something “I do frequently”	1	2	3	4	5
2. Consuming green product is something “I do automatically”	1	2	3	4	5
3. Consuming green product is something “I do without having to consciously remember”	1	2	3	4	5
4. Consuming green product is something “that makes me feel weird if I do not do it”	1	2	3	4	5
5. Consuming green product is something “I do subconsciously”	1	2	3	4	5
6. Consuming green product is something “that would require effort NOT to do it”	1	2	3	4	5
7. Consuming green product is something “that belongs to my (daily, weekly, monthly) routine”	1	2	3	4	5
8. Consuming green product is something “I start doing before I realize I am doing it”	1	2	3	4	5
9. Consuming green product is something “I would find hard NOT to do”	1	2	3	4	5
10. Consuming green product is something “I have no need to think about doing”	1	2	3	4	5

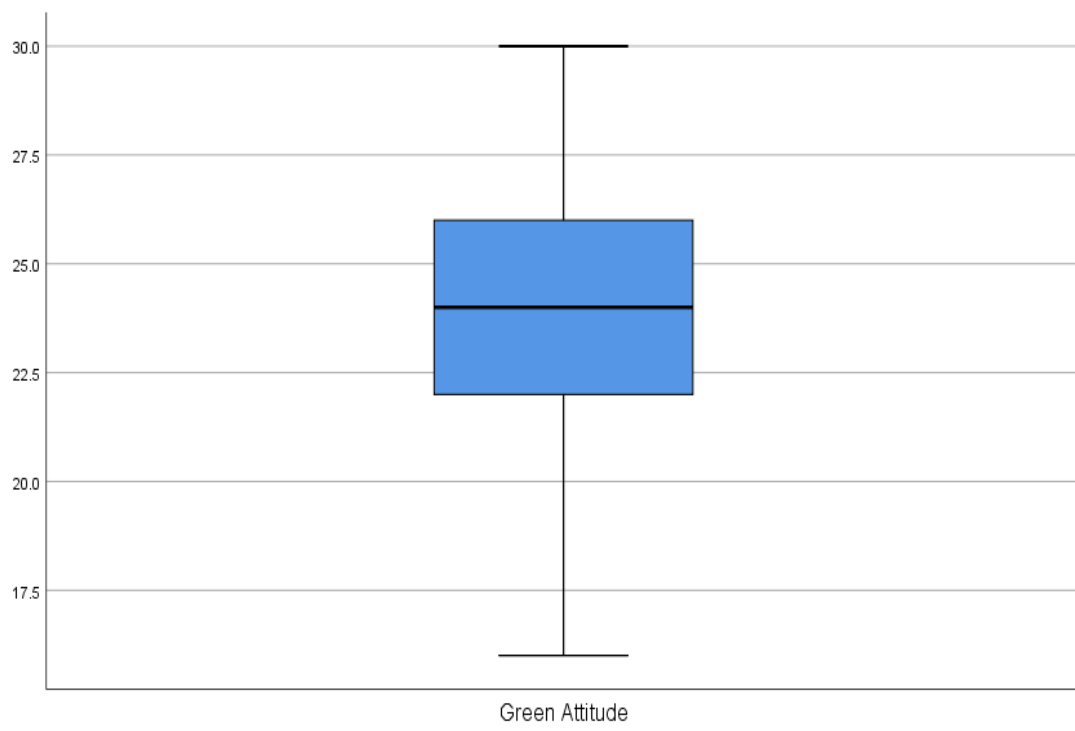
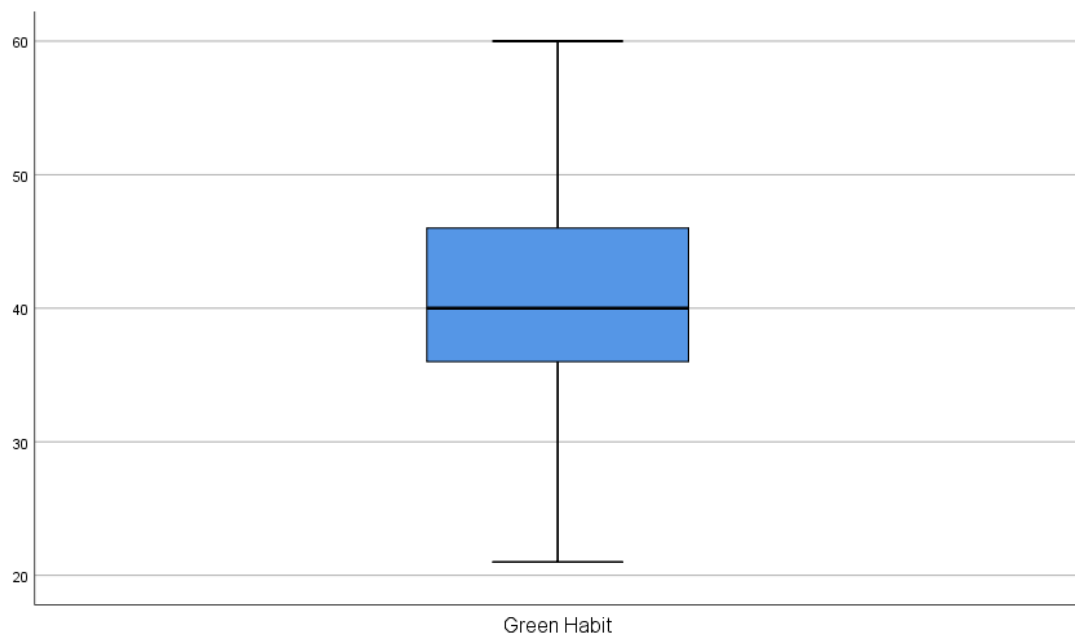
11. Consuming green product is something “Consuming green product is the typical me”	1	2	3	4	5
12. Consuming green product is something “I have been doing for a long time”	1	2	3	4	5
Green attitude					
1. I feel good about myself when I behave in an environmentally friendly way	1	2	3	4	5
2. I feel positive when I behave in an environmentally friendly way	1	2	3	4	5
3. I would be willing to pay higher prices for goods and services if it helped protect the environment	1	2	3	4	5
4. I would be willing to lower my standards of living if it helped protect the environment	1	2	3	4	5
5. I would be willing to support higher taxes if it helped to protect the environment	1	2	3	4	5
6. My personal behavior can bring about positive environmental change	1	2	3	4	5
Green consumption intention					

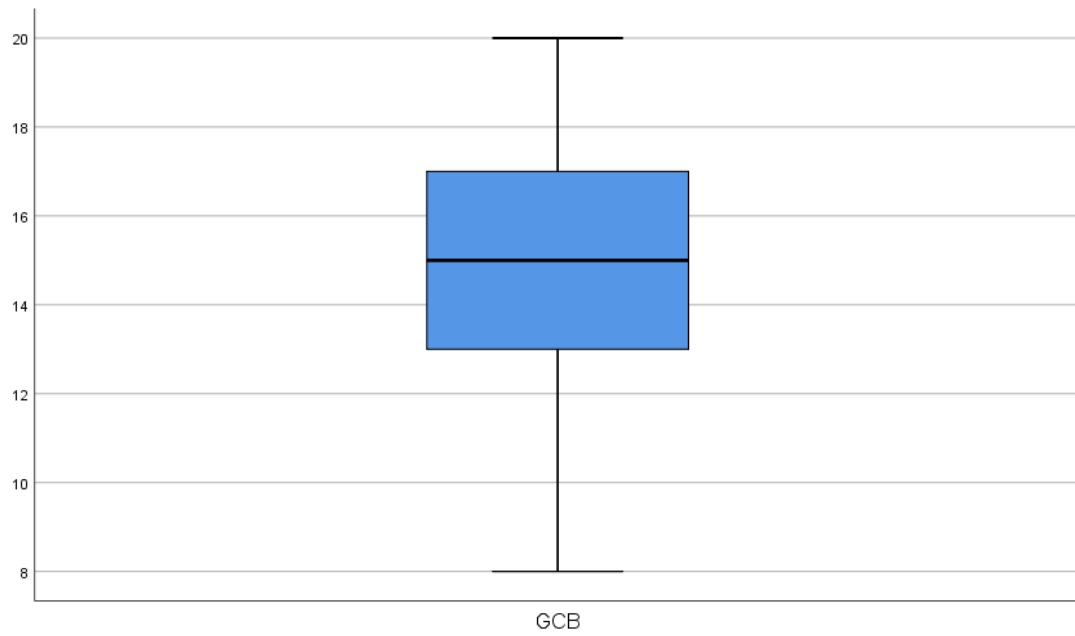
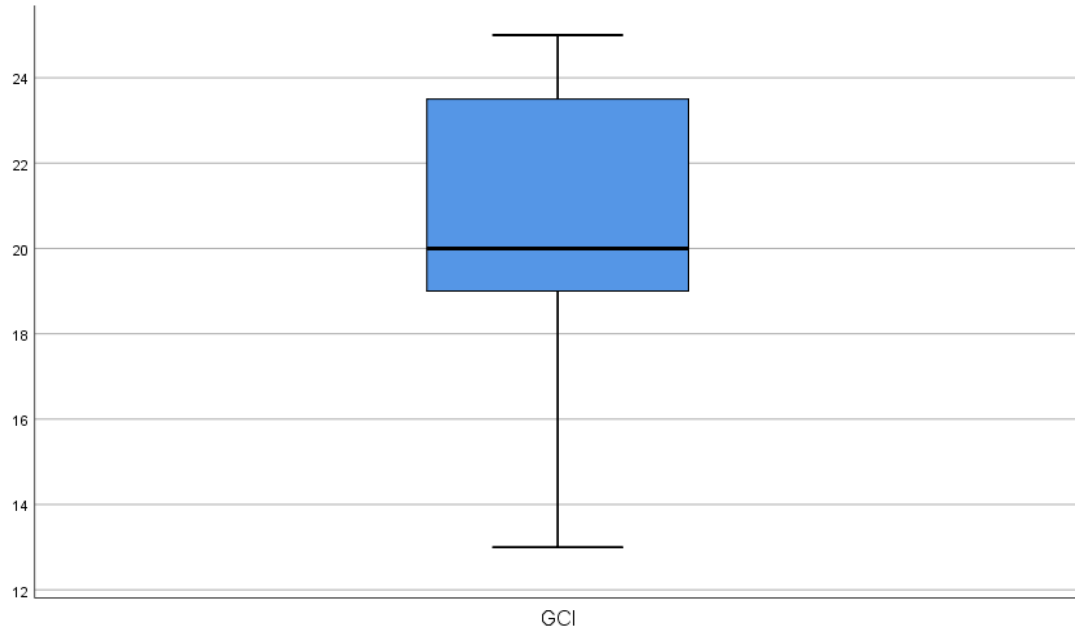
1. In the near future, I will consider consuming products that are less polluting	1	2	3	4	5
2. Very soon, I will consider switching to environmentally friendly brands for ecological reasons.	1	2	3	4	5
3. I plan to consume environmentally friendly products rather than conventional products in coming times	1	2	3	4	5
4. I intent to consume products with positive environmental contribution	1	2	3	4	5
5. I absolutely want to consume green products in the near future	1	2	3	4	5
Green consumption behavior					
1. Before choosing a product for consumption, I look at ingredients label to see if it contains things that are environmentally damaging	1	2	3	4	5
2. I choose to consume products that are environmentally-friendly	1	2	3	4	5
3. I attempt to use water efficiently in my daily life	1	2	3	4	5

4. I often consume the less packaging products	1	2	3	4	5
--	---	---	---	---	---

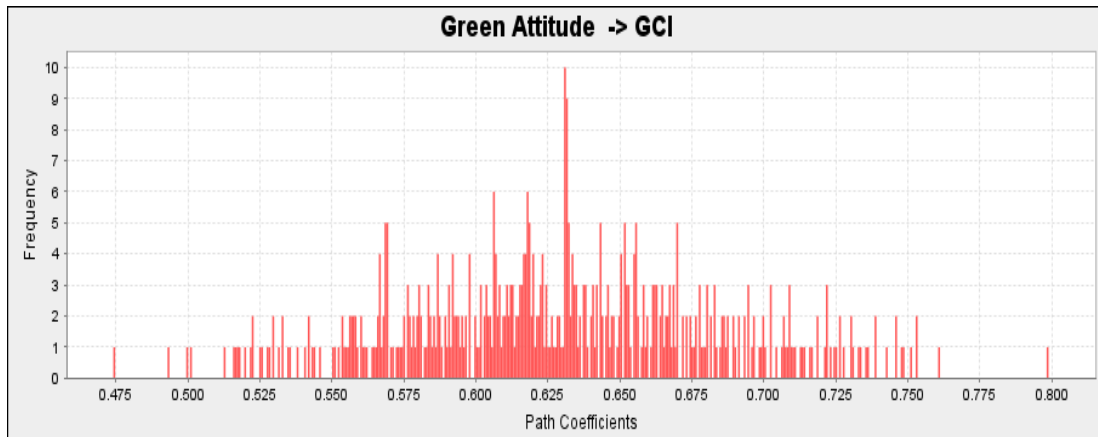
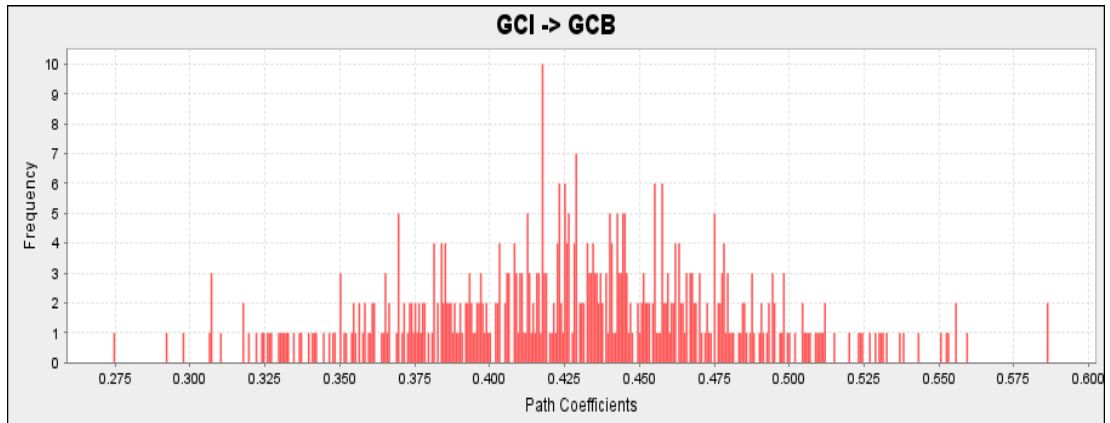
Appendix B (Outlier)

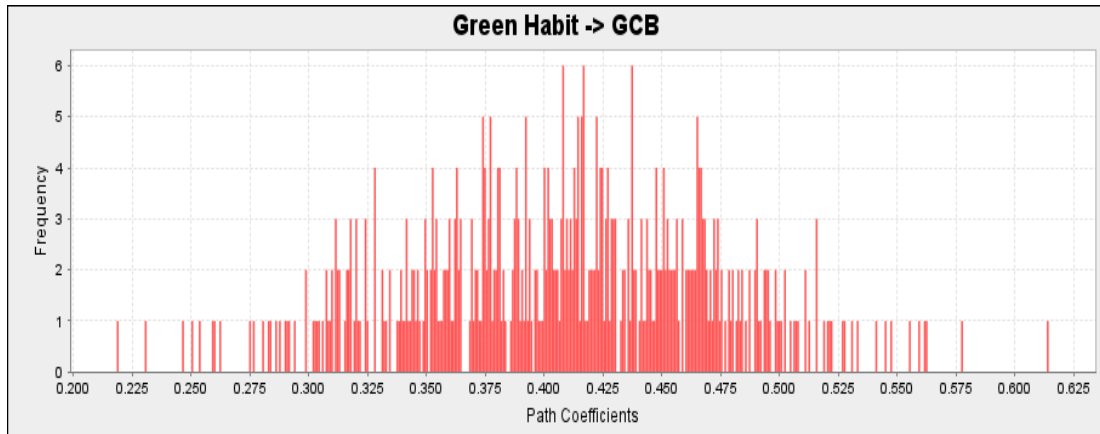
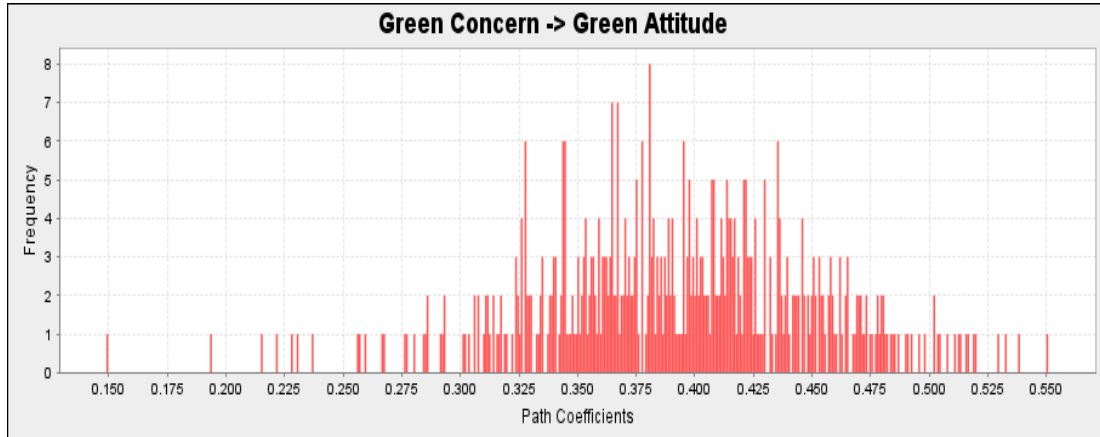


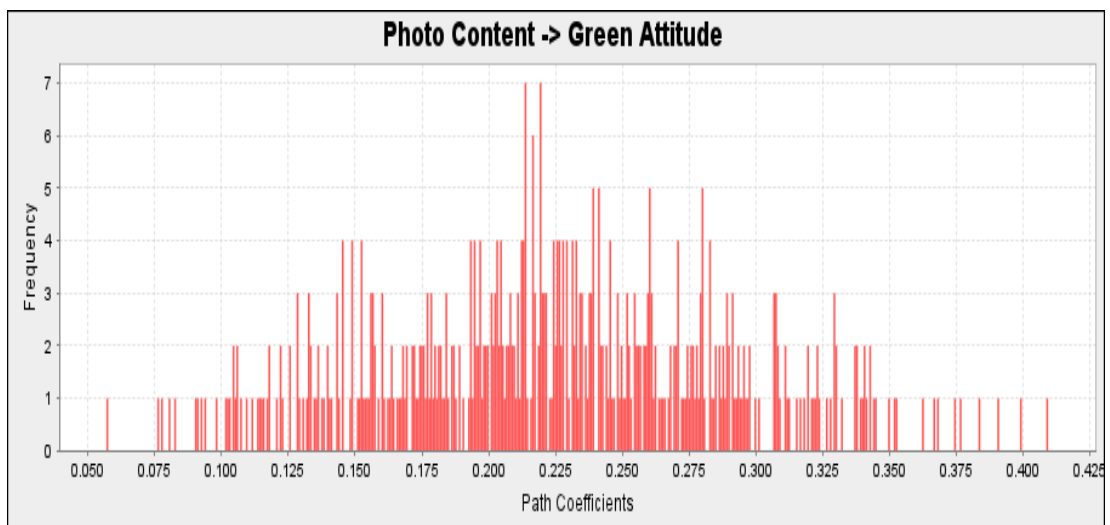
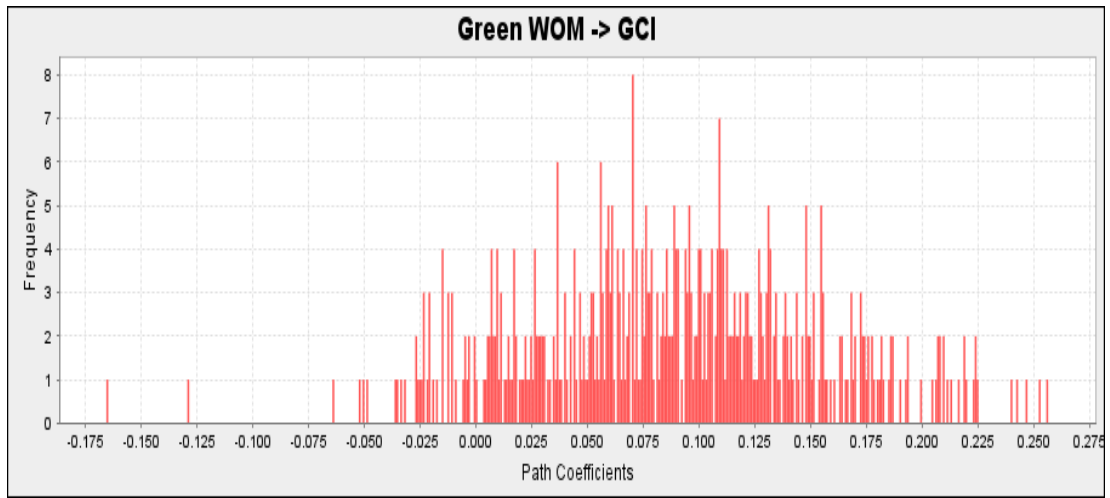




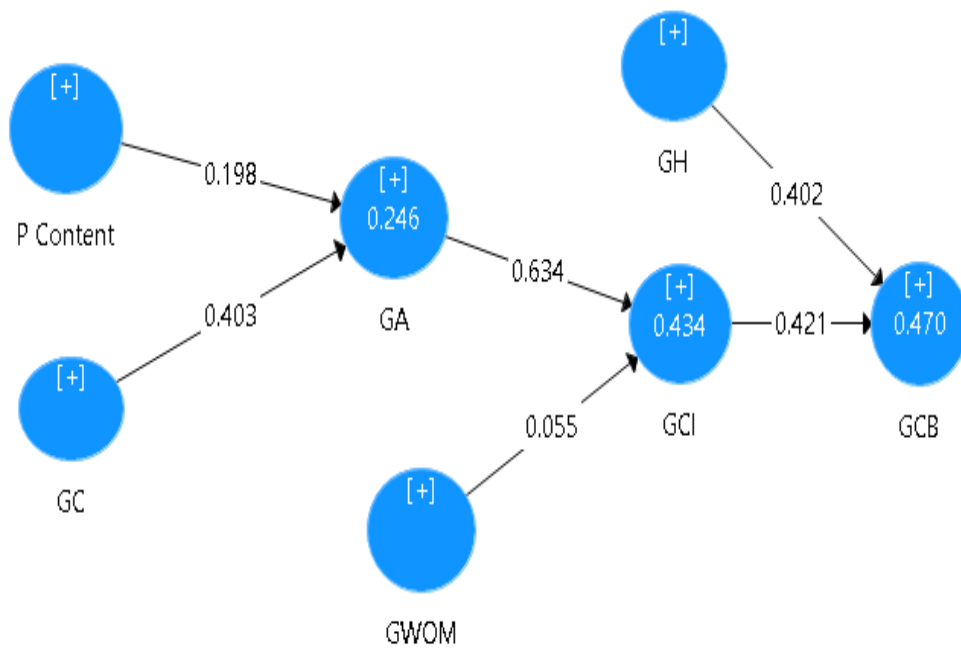
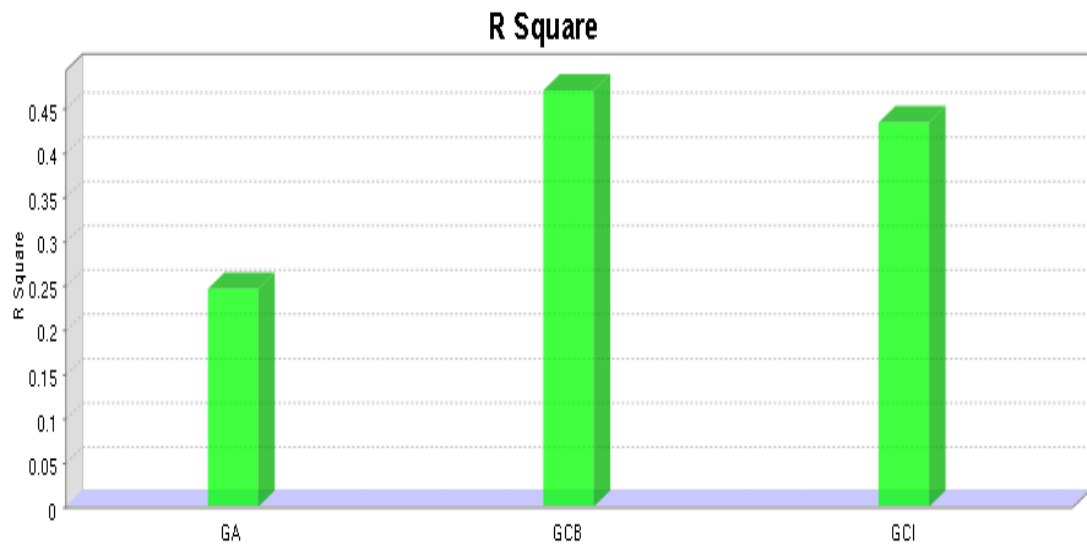
Appendix C (Normality)

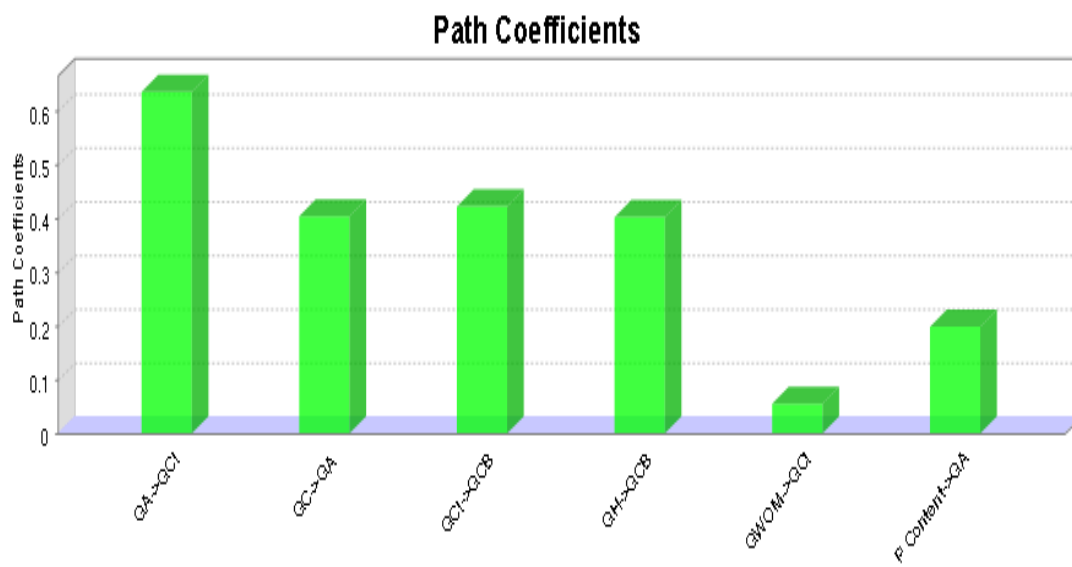
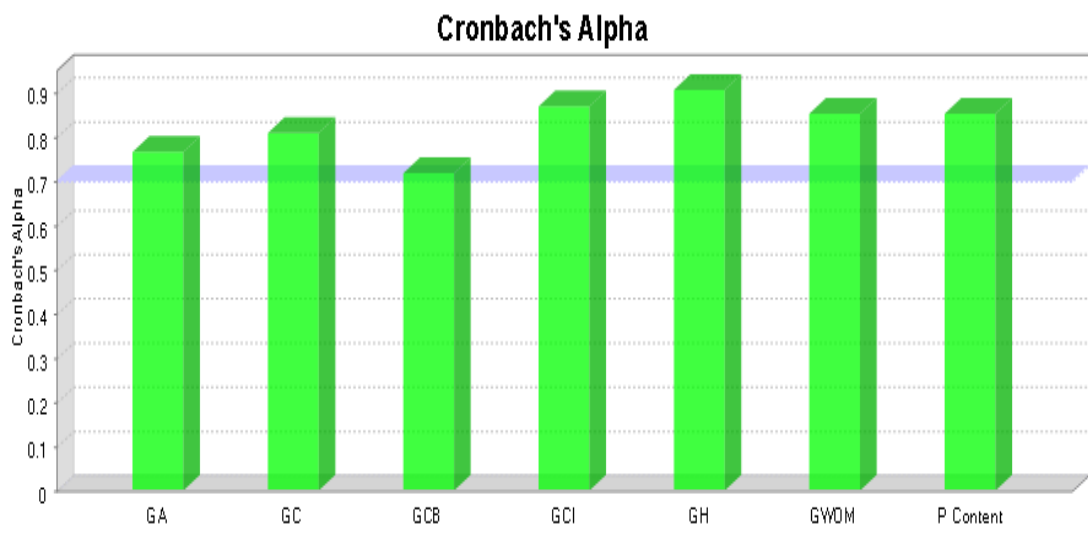






Appendix D (Structural Equation Modelling)





Appendix D (Data Collection- Beach Cleaning)







LIST OF PUBLICATIONS

Saghati Jalali, Sanaz and Khalid, Haliana (2020), A conceptual framework for describing the influence of Instagram influencers' activity on green consumption behavior, *Business Management and Strategy*.

Saghati Jalali, Sanaz and Khalid, Haliana (2019), Understanding Instagram influencers values in green marketing industry, 1st International Professional Doctoral Symposium 2019 (IPDocS 2019).