

The impact of Eco-labels on Driving Consumer Behaviour in the Food Industry. A Study of Millennial Consumers in Ireland.



National
College *of*
Ireland

Masters thesis MSc Marketing

Submitted by
Selin Ozer
19150687

Supervisor
David Hurley

National College of Ireland

Dublin, 19th August 2020

**Submission of Thesis to Norma Smurfit Library,
National College of Ireland**

Student name: Selin Ozer

Student number: 19150687

School: National College of Ireland

Course: MSc in Marketing

Degree to be awarded: Master of Science in Marketing

Title of Thesis: The impact of Eco-labels on Driving Consumer Behaviour in the Food Industry. A Study of Millennial Consumers in Ireland.

One hard bound copy of your thesis will be lodged in the Norma Smurfit Library and will be available for consultation. The electronic copy will be accessible in TRAP (<http://trap.ncirl.ie/>), the National College of Ireland's Institutional Repository. In accordance with normal academic library practice, all theses lodged in the National College of Ireland Institutional Repository (TRAP) are made available on open access. I agree to a hard bound copy of my thesis being available for consultation in the library. I also agree to an electronic copy of my thesis being made publicly available on the National College of Ireland's Institutional Repository TRAP.

Signature of Candidate:



For completion by the School:

The aforementioned thesis was received by _____

Date: 19/08/2020

Abstract

Eco-labels have gained increasing attention from scholars in the green marketing field. Eco-labels as an indicator of sustainable products are believed to be an effective strategy to change consumer behaviour towards purchasing green products as well as raising awareness towards the concept of sustainability. However, it has not been discovered deeply in Ireland yet. While worldwide theoretical knowledge can be put into use to modern society on a global scale, there is still very little known about the consumers in Ireland especially from the population of millennials.

This study aims to investigate the impact of Eco-labels on driving millennial consumers green purchasing behaviour in the food industry in Ireland. It has intended to understand consumer understanding of eco-labels and main behavioural drivers to purchase green products.

In this explanatory research to understand the relationship of eco-labels and green consumer behaviour, quantitative research design was used with a deductive approach. The questionnaire was used to find out whether millennial consumers understand variety of eco-labels on packages in food products, and thus if it helps to drive actual behaviour to buy green products.

According to findings, the positive impact of eco-labels on purchasing behaviour amongst millennial consumers have been suggested as initiatives which increase the chance of creating a sustainable production chain and preserve the natural environment.

Declaration

Submission of Thesis and Dissertation

National College of Ireland
Research Students Declaration Form
(*Thesis/Author Declaration Form*)

Name: Selin Ozer

Student Number: 19150687

Degree for which thesis is submitted: MSc Marketing

Title of Thesis: The Impact of Eco-labels on Driving Consumer Behaviour in the Food Industry. A Study of Millennial Consumers in Ireland.

Date: 19 August 2020

Material submitted for award

- A. I declare that this work submitted has been composed by myself. X
- B. I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged. X
- C. I agree to my thesis being deposited in the NCI Library online open access repository NORMA. X
- D. *Either* *I declare that no material contained in the thesis has been used in any other submission for an academic award.
Or *I declare that the following material contained in the thesis formed part of a submission for the award of

(*State the award and the awarding body and list the material below*) X

Acknowledgements

I would like to articulate my deepest appreciation to a number of people who inspired and support me throughout this journey. I would like to thank Jonathan Lambert, and Dr Nicole Gross, who clarified and contributed with their profound knowledge which helps to improve this research.

I would like to deeply thank my supervisor David Hurley for guiding me with his extensive knowledge, supporting and inspiring me in every stage of my dissertation. I am sincerely grateful for his contribution.

I am also grateful to my friends, especially Berfu Şahin and Jonathan McConkey, who supported me in pursuit of my dreams and helped to develop my ideas.

Finally, a huge thank you to my family for their deepest love and support.

Abstract	2
Declaration	3
Acknowledgements	4
List of Tables.....	8
List of Figures.....	9
Chapter 1: Introduction	10
1.1 Background of The Study.....	11
1.2 Importance of The Study.....	12
1.3 Rationale of The Study	13
1.4 Research Aim and Objectives	14
1.4.1 Research Objectives.....	15
1.4.1.1 Consumer motivation.....	15
1.4.1.2 Ability	15
1.4.1.3 Opportunity	16
1.5 Methods and Scope of The Research	17
1.5.1 Primary Research Sample: Millennials	17
1.5.2 Scope of The Study.....	18
1.6 Dissertation Structure	18
Chapter 2: Literature Review	20
2.0 Introduction.....	20
2.1 Green marketing.....	20
2.2 Green Marketing Influence on Consumer Action Towards Green Products	21
2.3 Green Products and Green Consumer.....	22
2.4 Green Conscious Consumption Behaviour	22
2.4.1 Environmental Concerns As a Main Motivation in Green Purchasing.....	23
2.5 Understanding of Eco-labels	24
2.5.1 Classification of Eco-labels.....	24
2.5.2 Eco-labels As a Key Driver for Green Consumption.....	25
2.5.3 Usage of Eco-Labels in Food & Beverages Industry	26
2.6 Eco-labelling As an Acknowledgement Strategy	27
2.6.1 Consumer Attitudes towards Eco-labels	28
2.6.2 Gen Y As a Growth Driver in Green Products	29
2.6.3 Ability-Motivation-Opportunity Theory to Explain Consumer Behaviour	29
2.7 Conclusion	30
Chapter 3: Research Methodology	32
3.0 Introduction.....	32
3.1 Research Methodology and Structure	32

3.1.1 Research philosophy	33
3.1.1.1 Positivism	34
3.1.1.2 Interpretivism	34
3.1.1.3 Critical Realism	35
3.1.1.4 Pragmatism	35
3.1.2 Research Approach.....	36
3.1.3 Research Strategy	37
3.1.4 Methodological Choice.....	38
3.1.5 Time horizon	39
3.1.6 Quantitative Primary Data Collection.....	40
3.1.6.1 Data collection technique	40
3.1.6.2 Choice of Sampling	41
3.1.7 Quantitative Data Analysis.....	42
3.1.8 Ethical Considerations	43
Chapter 4: Data Analysis & Findings	45
4.1 Data Presentation	45
4.1.1 Table of Respondents.....	46
4.1.2 Table of Respondence According to Residence	46
4.1.3 Demographic Representation of Respondents Data.....	47
4.1.4 Reliability Statistics	48
4.1.5 Perception of Eco-labels	48
4.1.5.1 Opinion of Respondent on Understanding of Eco-Labels	49
4.1.5.2 Opinion of Respondent on Environmental Concerns	50
4.1.5.3 Opinion of Respondent on Self-identification	52
4.1.5.4 Opinion of Respondent on Financial Abilities	53
4.1.5.5 Opinion of Respondent on Awareness	55
4.1.5.6 Opinion of Respondent on Ecolabel products	56
4.2 HYPOTHESES TESTING.....	57
4.2.1 Regression Analysis.....	58
4.2.2 Pearson Correlation Analysis	60
Chapter 5. Discussion & Limitations 5.0 Introduction.....	61
5.1 Eco-label’s Impact on Millennials Consumer Purchasing Behaviour Concerning with Demographics.....	61
5.2 Investigating Millennial Consumer’s Understanding of Sustainability Schemes in The Context of Food Labels	62
5.3 Investigate The Role of Environmental Concerns in The Purchasing of Eco-labelled Products.....	63
5.4 Investigate The Role of Self-identification in Purchasing Eco-labelled Products.....	64
5.5 Consumer’s Willingness to Pay For Green Products	64
5.6 Role of Ecolabels in The Purchasing Green Products As An Acknowledgement Strategy	65
Chapter 6. Conclusion, Limitations and Recommendations	67
6.1 Conclusion	67
6.1.1 Consumer Motivation As a Driver of Purchasing Intention	68

6.1.2 Economic, Emotional Capability Towards the Understanding of Eco-labels.....	68
6.1.3 The Role of Ecolabels in The Purchasing Green Products	69
6.2 Limitations.....	70
6.3 Recommendations For Further Research.....	70
6.3.1 Academic Research	71
6.3.2 Green marketing business	71
<i>Appendices</i>	<i>72</i>
Appendix 1 – Questionnaire.....	72
Appendix 2 – Results Representation in Bar Charts.....	79
Appendix 3 – Correlation Results.....	87
Appendix 4 Regression Analysis of Hypotheses	92
<i>Bibliography.....</i>	<i>94</i>

List of Tables

TABLE 1 RESPONDENTS RATE.....	46
TABLE 2 RESPONDENCE ACCORDING TO RESIDENCE	46
TABLE 3 DEMOGRAPHIC REPRESENTATION OF RESPONDENTS DATA.....	47
TABLE 4 PERCEPTION OF ECO-LABELS	48
TABLE 5 UNDERSTANDING OF ECO-LABELS	49
TABLE 6 OPINION OF RESPONDENT ON ENVIRONMENTAL CONCERNS	50
TABLE 7 OPINION OF RESPONDENT ON SELF-IDENTIFICATION.....	52
TABLE 8 OPINION OF RESPONDENT ON FINANCIAL ABILITIES	53
TABLE 9 OPINION OF RESPONDENT ON AWARENESS	55
TABLE 10 OPINION OF RESPONDENTS ON ECO-LABEL PRODUCTS	56
TABLE 11 REGRESSION ANALYSIS	58
TABLE 12 PEARSON CORRELATION ANALYSIS.....	60

List of Figures

FIGURE 0-1 HYPHOTHESES FRAMEWORK.....	16
FIGURE 0-2 DISSERTATION STRUCTURE.....	18
FIGURE 0-1 RESEARCH ONION (SAUNDERS ET AL., 2012).....	33
FIGURE 0-2 METHODOLOGICAL CHOICES: ADAPTED FROM SAUNDERS ET AL. (2012)	39
FIGURE 0-3 OPINION OF RESPONDENT ON ENVIRONMENTAL CONCERNS	51
FIGURE 0-4 OPINION OF RESPONDENT ON SELF-IDENTIFICATION.....	53
FIGURE 0-5 OPINION OF RESPONDENT ON FINANCIAL ABILITIES	54
FIGURE 0-6 OPINION OF RESPONDENT ON AWARENESS	55
FIGURE 0-7 OPINION OF RESPONDENTS ON ECO-LABEL PRODUCTS	57

Chapter 1: Introduction

The feeling of personal satisfaction in life and its fundamental financial, cultural and social qualities and our ability to sustainably harvest our planet, eventually rely upon the structures of our production chain and our consumption habits therein. Besides, all the more explicitly, it depends on how the combined business sectors can ensure the accomplishment of such alluring destinations. The system of production and consumption has been accepted as major components of the threatening elements of sustainable human life on earth which creates an ethos of destroying natural sources, high carbon emissions, deforestation, climate change and wastelands (*United Nations*, 1992).

Due to unsustainable production systems and conspicuous-consumption behavioural patterns of human beings have resulted in the contamination of clean water sources, the creation of avoidable wastelands, the extinction of animal species, changing climate patterns and the depletion of natural resources all of which are fundamentals of our survival on earth. Conferences are being held worldwide to propose strategies for recycling, water and soil contamination and the effluent treatment of such. Also, international summits are working on increasing awareness for a bright future. Thus, consumers' role gains more importance in leading the production patterns according to their consumption and purchasing behaviour (Sony & Ferguson, 2017). As a result of gaining significance, these conscious human interactions has become a power of leading sustainable life and creating demand towards greener consumption strategies. Since validating the direct effect of human behaviours on the environmental influence of production stages and leading towards a sustainable lifestyle, organisations have begun feeling pressured in taking consideration for environmental measures into their offerings from production phases to design phases towards environmentally friendly products.

Over the decades, environmental concerns have become a huge topic which influences business and government as well as consumers (Gifford & Nilsson, 2014). Accordingly, sustainable economy in Ireland has expanded over the years with the government activities that have been acquainted with offering monetary help to associations that offer merchandise and enterprises in an environmentally-supportable way through initiatives, for example, organic food, the

travel industry, green economy-related administrations, sustainability and vitality productivity have all seen a significant upturn in their number of available initiatives. The pursuit of these initiatives is to accomplish a system of supportable monetary development for the active companies, as indicated by the Irish Government report (Department of Jobs, 2013). The growing number of initiatives has resulted in an enormous ascent to the subject of green marketing particularly because of ecological concerns, such as rapidly changing climate patterns, prompting a rise the earth temperature, flooding, and many natural catastrophes.

1.1 Background of The Study

Green marketing is the promotion of products and services of a firm which rely upon positive environmental practices. Organisations began contemplating how Green marketing could be an amazing asset when used for communicating ecological knowledge of its supplier base and how their offerings are a more advantageous option for nature. These products and services can be differentiated in the actual product packaging strategies that these companies implement. The issues for the customer emerges whilst endeavouring to clarify the legitimacy of the claims should they even give it a second thought. It has stated that consumers should be aware of their actions in their purchasing behaviour in order to make a change (Moser, 2015). In any case, numerous shoppers essentially do not see how green products help the earth how little impact they have on harming the natural environment as much the advantages are known (Capstick et al., 2015).

Another obstacle for buyers to consume green products is costly pricing. According to Gleim et al. (2013) the costly prices of green products are being stated as a barrier for consumers to buy green products. Most offerings which are green or eco-friendly are evaluated at a higher cost than expected against their rivals. That is because of the expanded costs organisations will incur during the manufacture of the products just as during the exploration of environmental options (Gleim et al., 2013). Additional issues with green advertising can emerge when accompanied with the view that shopper recognition of eco-labelled products are substandard. The practice of placing an excessive amount of green advertising can have an adverse effect and may overwhelm the buyer.

Additionally, greenwashing plays a significant role in the misconception of green products that portray an organisations' positive sustainability claims which are not necessarily true but only used for marketing purposes (Laufer, 2003). Therefore, to create a compelling green marketing strategy, eco-labels that are enlisting the help of third party accreditation are seen as an effective way to establish credibility and build trust with consumers. These consumers need confirmation that the products and services are proven to be actually eco-friendly. As a result, eco-labels are seen as fundamentally useful through communicating with customers and increasing the credibility of such a product (Sharma and Kushwaha, 2019). It has been believed that producing and selling offerings which are ensured through a 3rd party eco-label, is the most effective approach to set up validity for the product and the organisation (ibid).

Environmental concerns are on the rise, and businesses now are facing huge demand from consumers in relation to their environmental effect and sustainability activities. The green consumer has become a driving factor for businesses, and these environmental consumers are now generating a new economy (Hart, 1997). Thus, it is essential to ascertain consumers attitudes because green marketing and green consumption behaviours are pointing out little understanding about how consumers explain their green consumption behaviour and what drives them to buy green products. Ellen et al. (1991) discuss that there has been a gap between what consumers claim about their green purchasing and how they behave. Eco-labelling practise as a guide for consumers to make conscious decisions is worth more investigation in the generation Y (Millennials) segment as it shows a willingness in terms of green purchasing decisions (Furlow and Knott, 2009).

1.2 Importance of The Study

As an expansive idea, Green marketing and associations have simultaneously have shifted their attention to be increasingly more sustainable; thus, utilisation of more environmentally-friendly offerings prioritised. Green marketing strategies focus on changing consumers' purchasing behaviour patterns towards sustainable products which are regarded all the more ecologically well disposed. The issue has arisen in influencing consumers' attitudes. Therefore, Eco-labels schemes have been found in the literature as a powerful acknowledgement strategy in influencing consumer in purchasing green products as well as increasing awareness in that field (Cerri et al., 2018). The main goal of eco-labels is to build trust with consumers by

communicating through labels which are sustainable and conditioned fairly in supplying processes. Consumers' food consuming preferences can have a significant impact on leveraging the strategy in the ecological problems the industry and world confronted (Laufer, 2003).

This study proposes the general understanding of eco-labels in the food industry in Ireland and investigates whether eco-labels have an impact on consumers purchasing behaviour. This research also seeks to assist businesses to ascertain the green buying behaviour of generation Millennials and encourage firms to take into consideration of going green. Thus this research will help organisations to strengthen their CRS strategies concerning highlighted consumers' understanding of eco-labels in Ireland.

1.3 Rationale of The Study

Environmental conscious behaviour in purchasing behaviour set to become a vital factor in changing the supply chain with the intent to influence the manufacturing process for the sake of protecting natural resources. Consumers' role and its purchasing behaviour patterns have been widely researched by academics and marketers, in particular, addressing the likely indicators of eco buying. Recent findings regarding ecological consumers buying patterns lead to attributing subjective components of the behaviour; likewise, consumers' concerns on excessive utilisation of natural resources (Paul, Modi and Patel, 2016).

On the other hand by the time literature emphasise the socio-economic and demographics impact on eco buying, Nuttavuthisit and Thhgensen (2015) focused on the significance of trust as a fundamental element in buying decision and has drawn attention that trust as the primary influencer to drive consumers to buy green products. Similarly, Atkinson and Rosenthal, (2014) in their research had explained the corporate labels' influential positive effect on the consumer buying decision.

Recent findings regarding green buying have led to ecolabels becoming an effective acknowledgement strategy in informing consumers as well as a driving purchase (Cerri et al., 2018). Without trust in the promotion of green products, buyers are hesitant to the practice of

their green buying behaviour, due to not knowing what is available as an actual green product and not believing any green claims by corporations. This altogether harms the upright Hoover of organisations advancing their green offerings, and buyers prefer other options which are the thing that supports organisations towards putting more effort to assets in productivity and lessening their natural effects as a competitive advantage (Arseculeratne and Yazdanifard, 2013).

An essential area in the field of green marketing, ecolabels impact on purchasing behaviour has been widely researched; however, millennials' attitude towards green food products in Ireland have not been dealt with in-depth yet. Thus, in this research, it aims to fill this gap and contribute to the literature by defining Millennials knowledge of eco-labels in Ireland and its impact on their buying behaviour. It is believed that looking at consumers' understanding of eco-labels and its usage, whether it leads to buying would be interesting to bring up to the literature. Besides, it has been investigated their willingness to pay which would have a positive impact on discovering demand from a consumer in Ireland to help organisations to adjust their green marketing strategy. It has been discovered that there is very limited research on applications of eco-labels in the food industry, investigating whether millennial consumers understand such labels and level of understanding affects them to pay extra for green products. This research purpose is to fill this research gap and place the current study within the green marketing literature.

1.4 Research Aim and Objectives

In this research, in order to contribute to the literature, the exploration design tends to respond to research objectives through surveys with a quantitative analysis methodology. The main objective of the study is to understand whether eco-labels have a positive impact on Millennial consumers purchasing decisions in Ireland. It has also tried to ascertain if eco-labels are an effective marketing strategy which acts as an informative factor for consumers; hence drives actual buying as well as increases awareness of green products from a consumer perspective.

According to the theory Opportunity and Ability act as a mediator factor which affects in strengthening the relationship between motivation and the behaviour. AMO theory helps to

explain independent variables in an understanding of the behaviour. In the green marketing context, AMO theory has been used for evaluating the understanding of the green messages from consumers (Grunert et al., 2014). According to the literature, environmental concerns and self-identification play a vital role in consumers buying behaviour as well as their level of understanding, usage and these eco-labelled products availability in stores and accessibility for customers. The following are the hypotheses according to consumers' green buying behaviour towards eco-labelled products which have been created around the literature, and AMO theory supports these claims as a theoretical framework.

1.4.1 Research Objectives

The purpose of this research is to gain understanding of eco-labels interpretation and usage from the consumers perspective and their level of willingness to pay for green products. It will be assessed in three categories relatively back to the AMO theory, which stands for an understanding of individuals behaviour by categorising in Ability, Motivation and Opportunity components as main drivers to actual behaviour.

1.4.1.1 Consumer motivation

Obj 1.1: Investigate the role of Environmental concerns in the purchasing eco-labeled products with respect to the socio-demographic factors.

H1) Consumers who have environmental concerns purchase eco-labeled green products.

Obj 1.2: Investigate the role of self identification in the purchasing eco-labeled products.

H2) There is a positive correlation between consumers self identity and purchasing eco-labeled products.

1.4.1.2 Ability

Obj 2.1 : Investigate Consumer understanding of sustainability schemes in the context of food labels and financial capabilities regarding to Age, Cultural Background, Education and Financial stability

H3) Consumers who have knowledge about ecolabels schemes in the food context buy eco-labeled products.

Obj 2.2: Financial ability (willingness to pay for green products)

H4) Consumers who have financial abilities are seeking to buy green products.

1.4.1.3 Opportunity

Obj 3.1: Investigate the role of Ecolabels in the purchasing green products

H5) Ecolabels are an effective acknowledgement schemes that increase awareness about green products

H6) There is a positive correlation between buying eco-labeled products and availability in store

The alternative hypotheses stated above claim the positive correlation between each factor and buying green products. The null hypotheses are for indicating the opposite claim of alternative hypotheses which stand for no correlation between the factors stated above and consumers' environmental behaviour to buy green products.

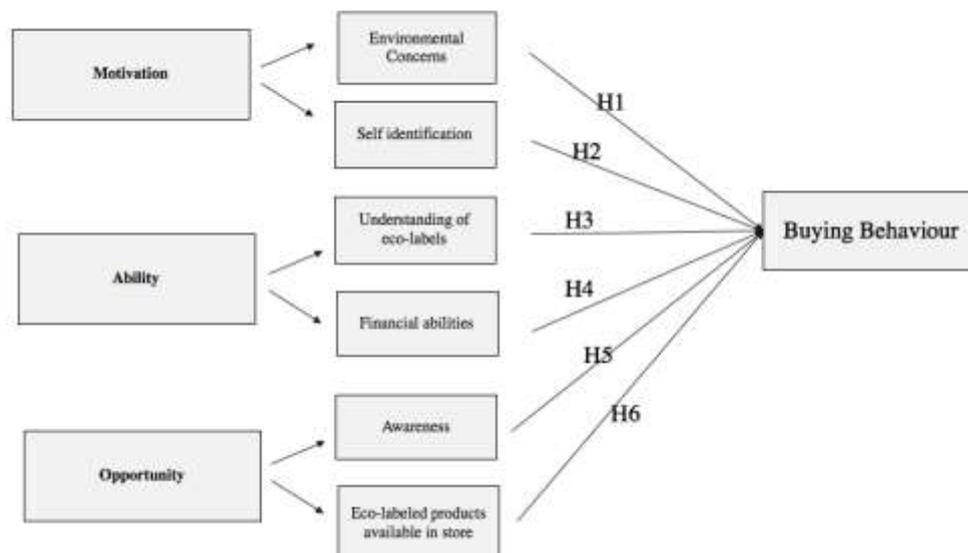


Figure 0-1 Hypotheses framework

1.5 Methods and Scope of The Research

Department of Agriculture Food and the Marine , (2019) recently published that demand for green food products in Ireland is on the rise, the report has stated that high quality (38%) is one of the main drivers to purchase organic foods from an Irish consumer, whilst eco-labelled products have been seen as a substantial reason to purchase green by %34. Despite the presence of consumers who show positive attitude in buying green, many factors still remain that stops consumers to take into account environmental purchasing behaviour. During the survey, it also has been recognised that the main challenge for purchasing green food products in Ireland is the costly price which 48% of consumers stated that is a big obstacle for them to buy as well as addressing the very limited green options available in stores. Nevertheless, it has not been searched in detail what are the motivations and beliefs that drive consumers to purchase green products in Ireland. Thus it has been found worthy of investigating consumers behaviour in the green food context in Ireland.

Sustainability in Irish industry survey also provides promising insights in Irish food industry context which most businesses that were surveyed are truly embracing sustainability at the core of their operations and apply to their food chain processes (O’Sullivan, 2010). Therefore, it is seen that there is an effort and progress in the Irish market that this research could contribute by its findings on Millennials consumers attitude that can help organisations to shape their green marketing strategies towards. Given that the examination addresses presented above in research objectives segment, try to comprehend the consumers understanding and belief systems on green purchasing, previous researches empowers a quantitative methodology for the successful assortment of such information (Boztepe, 2012); Brécard et al., 2012); Chekima et al., 2016). Thereby in this primary research, quantitative research methodology will guide the study with intend to discover consumers behaviour from a Millennials sample population which has been selected as representative of the population in Ireland.

1.5.1 Primary Research Sample: Millennials

Generation can be characterised as a member of people within a specific age group which disclose similar attitudes with respect to beliefs, way of life and making choices. Ages are impacted by numerous variables, for example, language, culture, thus influence the way they

behave in a certain way (EGRI et al., 2004). Millennials (Gen Y) consumers who were born between in the range of 1980 and 1994 (Griffin, 2002). These age groups selected to investigate due to previous studies show that Gen Y generation has a buying power than other age groups as well as showing willingness to buy green products (Aksoy & Özsönmez, 2019).

1.5.2 Scope of The Study

Through online surveys to reach an age group who were born between 1980 and 1996, it has been focused on acquiring an understanding of their knowledge and behaviour towards eco-labelled products. It has focused on to see the association between variables that effects on the consumer behaviour aligned with the research objectives. Representative sample group has enabled for a complete examination of the essential data gathered to shed light on the objectives of the study.

1.6 Dissertation Structure

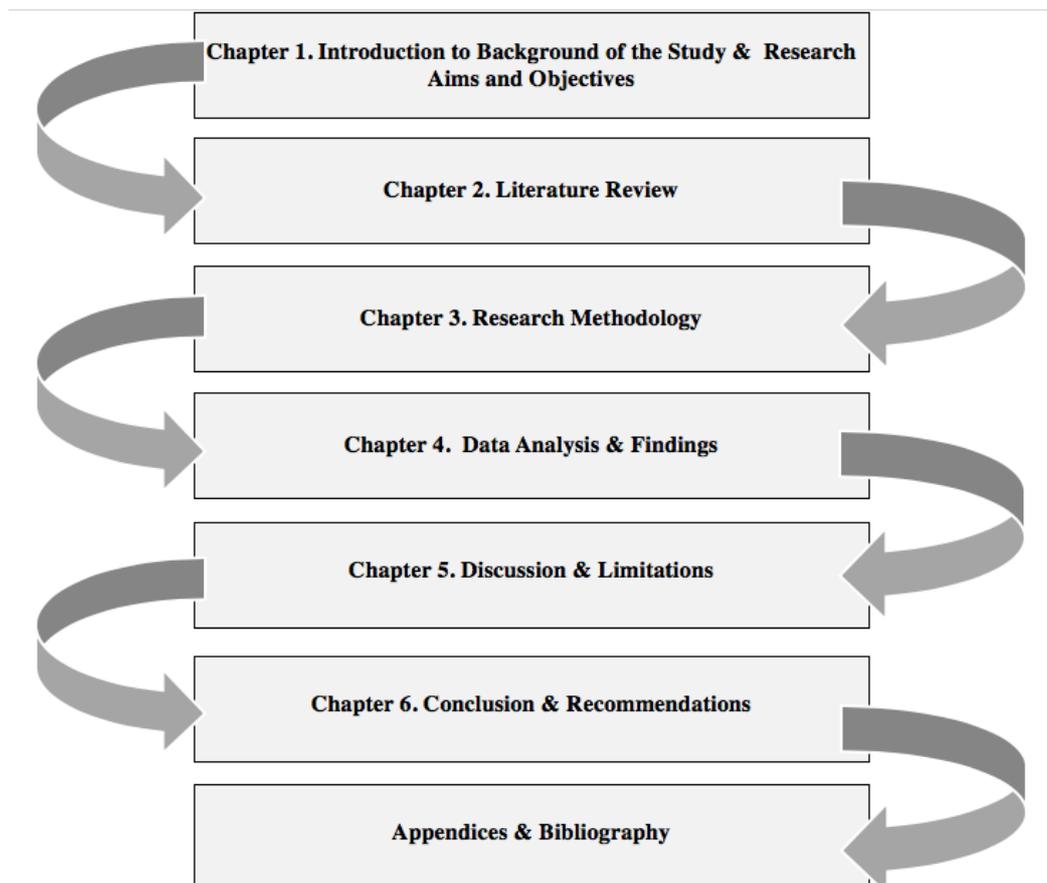


Figure 0-2 Dissertation Structure

This dissertation divided into six main parts and additionally, appendices and bibliography included. In the first chapter, it is presented the aim and objectives of the study by providing background and defining research gap for the study.

Chapter 1 will sumup the aim of the study, following by a literature review presented in Chapter 2. The literature review will cover current literature in the field of green marketing, ecological consumers and ecological behaviour, sustainability and buying decision making. In Chapter 3, the practioner will highlight the selected methodology, which was used to complete the dissertation. Then in Chapter 4 findings will be examined which were interpreted from the research conducted. Chapter 5 conclusion will be made by discussing the results from the data regards to literature reviews. In conclusion, it will be addressing important implications and recommendations in Chapter 6.

Chapter 2: Literature Review

2.0 Introduction

Green marketing has become a critical topic which has been widely researched and, revealed insights about green consumer behaviour. Chapter 2 will be dealt with examining the literature in the Green Marketing field. Main coverages of the research will be green marketing, green products and green consumer, green-conscious consumer behaviour and eco-labels impact on changing behaviour in buying green products.

2.1 Green marketing

Concept of sustainability as an idea in the context of marketing has a significant rise in terms of offering solutions to environmental problems which has been faced in marketing (Hult, 2011). It is accepted that economic development has significantly impacted society and nature, and underlines after embracing an assortment of the executives approaches Pandit et al. (2011) that mirrors business responsibility regarding the more extensive cultural great (Matten and Moon, 2008). That enables firms' focus to be raised from meeting the needs of consumers to managing the wider market-related issues related to the economy, society and natural environment. It has led to the discussion of including economic performance as well as social and environmental impact in business evaluation. Consequently, there can be witnessed worldwide public concern about the degradation of environmental quality caused by the harmful effects of industries practices and stricter environmental regulations created by governments across borders (Kumar & Ghodeswar, 2015).

Green marketing is widely considered to be the most critical force in changing production systems and influencing conscious consumer behaviour towards a sustainable future (Kumar & Ghodeswar, 2015). Green marketing subjects are depicted from literature, expanding advertising direction and promoting blend structures. As society turns out to be progressively worried about the loss of natural resources and focuses on environmentalism, organisations adjust their organisational behaviour to take a closer approach to consumers concerns (Matten & Moon, 2008).

Green marketing signifies the practice of providing products and services that have not to harm the environment throughout its course. It is essential that Green Marketing as a technique is utilised for achievements of businesses financial, key objectives, while it decreases its negative impacts on the natural environment (Leonidou et al., 2013).

2.2 Green Marketing Influence on Consumer Action Towards Green Products

While Leonidou et al. (2013) explain it from a business aspect, Welford (2013) and Peattie (1995) defined it from the consumers' angle that green marketing stands for an understanding of consumers wants and satisfaction while making margin as well as the pursuit of sustainable activities in the meantime. Concerning green marketing, various definitions can be made from another aspect; however, Harrison (1993) explanation is considered to be valuable as it has combined with consumer behaviour. With respect to his interpretation, green marketing is an approach that includes demonstrating consumer progress of becoming opt for environmentally-friendly products which could have a positive impact on consumers' purchasing intentions (Harrison, 1993).

Green Marketing practice is classified by Peattie, (2001) in three different categories, which is important to organisations to understand the gradual shift towards going-green, that is tied up as Ecological marketing, Environmental marketing and Sustainable marketing. Ecological marketing has narrowed down the centre of the attraction towards initiatives which is mainly decreasing the reliability of a certain harmful product (Peattie, 2001). Secondly, Environmental marketing aims to reduce the harmfulness of production by responding to ecological consumers' demand and making room for competitive advantage accordingly. Lastly, sustainable marketing is explained as a direct shift towards sustainability and meeting considering the environmental expenditure of manufacturing and consumption in order to create a sustainable economy (ibid). Leonidou et al., (2013) Similarly agreed and added on by proving the effectiveness of sustainable marketing in terms of its contribution to the bottom line. They illustrate that green marketing programs that are adopted to organisations eventually have an impact and paid off (Leonidou et al., 2013).

Looking at the aspect of demand from the consumers, the number of research as of late coordinated at attempting to comprehend green buyers and their attitudes have been extensive (Hughner et al., 2007). The way can clarify the reason that natural products are possessing a perpetually focal situation in the worldwide food showcase and worldwide consumption.

2.3 Green Products and Green Consumer

Durif et al. (2010) describe that green products are the total attribute that embrace recycling or renewable materials and that reduce the environmental damage as well as increasing the wellbeing of the natural environment throughout its course. Green consumers who value its relationship with the environment are defined as being conscious of consuming green products. The green consumer has described an individual who is willing to become compatible with environmentally-friendly attitudes and buys green products as opposed to other standards options (Boztepe, 2012). According to Boztepe, one of the main differentiators in green consumers is that they have a belief that every individual's contribution to the environment can have a huge impact. Therefore, it is believed by green consumers that taking precautions need not the government to be on its own or any business only; consumers also should play its role in this manner and take prompt actions to help to protect the nature (Shamdasani Chon-Lin and Richmond, 1993).

2.4 Green Conscious Consumption Behaviour

There has been considerable growing interest in green consumers and their purchasing behaviour. Studies have illustrated that growing numbers of ecological consumers have taken a massive role in terms of leading the industry towards sustainable activities such as the going-green movement and its application of sustainable practices (Hart, 1997). Nevertheless, there are remained numbers of individuals who have shown reluctance towards green buying and marketing activities accordingly.

Green consumer behaviour attributes to a conscious attitude which reduces the negative effect of consumption on the natural environment in the entire procedure of procurement, use and removal, particularly at the aspect of buying green products (Pagiaslis & Krontalis, 2014). Many research has deduced that intention to consume green products can actively indicate the

green consumption behaviour which is gathered under three main categories. The primary branch investigates the contrasts between green purchasers to distinguish the individual attributes of green consumers through market division instruments (Tung et al., 2017). Past examinations illustrate that there are critical contrasts in the green consumption attitudes of various buyers for example, sex, age, instruction, family size and family salary (Chekima et al., 2016). As a result of the belief that demographics are not sufficient to conclude green consumption behaviour, the focus has been shifted towards consumer behaviour theory, and they tried to explain through perceived value, identification of self and knowledge of environment by adding new behavioural variables around “Theory of Planned Behaviour” (Zhang et al., 2019).

Due to claimed independent factors varying from situation to situation, it has concluded that it is hard to comprehend such complex behaviour towards green products. Lastly, the tendency to understand the complex decision-making process towards the green products approach has been taken and discovered the rationale behind deciding sustainable products (Maniatis, 2016). The logic perspective accepts that consumers gather; however, much data as could reasonably be expected when considering green buying to settle on sensible choices (Cerri et al., 2018).

2.4.1 Environmental Concerns As a Main Motivation in Green Purchasing

Another ecological consumption explanation made based on Ecological Value Theory. That represents consumer behaviour which has been driven by specific pro-social and moral values that leads consumers to make decisions align with their value systems and beliefs (Sullins et al., 1995). Afterwards, value orientation theory has been expanded with bringing the new term called "biospheric" which means individuals who are grateful for natural surroundings and show appreciation towards natural environments. Therefore, it has been created a new paradigm by Dunlap and Van Liere (1978) that consumers globally that include growing numbers of individuals who advocate the belief that there should be a limit of utilizing natural sources and that the natural environment should be protected.

It should not be forgotten that consumers are individuals that have divergent perspectives, choices and motivations that lead them to shop for green products. In order to explain the motivations that drive consumers in terms of the decision-making process, Hierarchy of Needs Pyramid created by Maslow gives information about explaining the consumer behaviour (Jaju,

2016). The basic needs for human beings are identified in five hierarchical layers that are: Physiological, Safety, Love and Belonging, Esteem Need and Self Actualisation (Maslow, 1943). Maslow's needs model can illuminate the motivations behind green consumer purchasing behaviour. As a result of green consumers' intention to ensure their sheltered condition, they consider health needs.

On the other hand, they purchase green products but trade them in a way that entails them to be part of a specific environmentalist community that explains their need of fulfilment of life, love and belonging needs. Thus, that helps to robust their self-esteem and self-actualization (Groening et al., 2018). It is stated that most of the consumers who tend to buy green products are young educated people who buy green products to reward themselves in response to their hard-work (Laroche et al., 2001). There has been recognised as a positive correlation between millennials green consumer behaviour between green products (Aksoy & Özsönmez, 2019).

2.5 Understanding of Eco-labels

2.5.1 Classification of Eco-labels

Eco-labels on products can be sorted in many ways. There are primary purposes of separation, to be specific, regardless of whether the plan is obligatory or voluntary and whether affirmation (conceding of the rights to utilize the name) is completed autonomously or not (Horne, 2009). Required ecological labelling is commonly recommended by law and comes out increasingly predominant for explicit execution issues, for example, water or vitality expending types of equipment (Abaza et al., 2005). As to naming, the International Standards Organization (ISO) has divided eco-labelling schemes into three classes (Horne, 2009). The first category consists of the third party certificated products marks the outsider ensured their ecological logo relation with confirmed products (Horne, 2009). They are the most known usage of Eco-labels. The second category of Eco-labels are self-affirmations of producers, merchants, wholesalers or retailers, while the rest of the Eco-labels give numerical results of a course of ecological information in a progressively comprehensive report (Horne, 2009). The effects recognizable sustainable standards containing preservation of natural resources, value carried by generations over time and participative vote based system put into use progressively intensive assessment of ecological labels (Abaza et al., 2005).

2.5.2 Eco-labels As a Key Driver for Green Consumption

There has been a great effort by public and independent organisations to communicate through green related information on food packages in order to inform consumers by adding labels on products. They are necessary to motivate consumers towards sustainable consumption behaviour as well as leading organisations to initiate sustainable production systems. Eco-labeling aims to acknowledge consumers on how the production impacts on the environment for a particular product being purchased. As a result, it provides information to fulfil its purpose through aiming to change the consumer behaviour towards green products as well as encouraging businesses to take this measure into consideration in their process of production and providing product & services to its customers (Galarraga Gallastegui, 2002).

According to Dosi and Moretto (2001) the method of reasoning of ecolabelling is to empower firms to procure the ability to pay for the claimed natural products by initiating customers to differentiate "green" products than others. Thus, ecolabelling is predicted to encourage sustainable change and to lessen the harm on the natural environment. From another perspective Thøgersen et al. (2010) justified eco-labels as an indicator of consumers response to green products which seems to be a useful approach towards changing consumer behaviour and observing the impact because consumers response is vital as they are the main actors who influences the way products being produced. Therefore, it is accepted that ecolabels create space where consumers' reactions can be observed.

It has been believed label schemes can develop trust with consumers from a business perspective as well as improving its reputation while initiating raising awareness amongst customers and eventually help to preserve nature (Morris, 1997). However, despite the clarity of purpose in ecolabels, there is still considerable uncertainty with regard to evaluation of its impacts. One of the main limitations of ecolabels is to be categorised in two levels which are its effects on the natural environment and its impact on an economic scale that are totally distant aspects of each other in the business context.

Between all ecolabel schemes the outstanding logos are mainly Fair Trade , the Rainforest Alliance, different carbon list plans as well as animal protection logos. According to Ecolabel Index, (2020) roughly 457 current ecolabels are accessible in 199 countries, of which 25 sectors

incorporate measures for Fast moving consumer goods. The target of these labels is to raise awareness and address fair conditions on the process of production and illuminate the consumer such that can advance conscious green behaviour.

2.5.3 Usage of Eco-Labels in Food & Beverages Industry

According to the current literature, many studies have been focused on main sustainable logos which are fair treatments to animals and fair trade logos that show the treatment of the employees and supply chain which has been operated ethically. Numerous investigations centred around customer aspiration on buying green products and their level of willingness to purchase over others as well as a behavioural driver towards green buying decisions (Grunert et al., 2014); (Esteves et al., 2017). Despite general willingness to pay more for green products, it has been found that high costs of such products were also what hinders consumers from buying as a primary reason (Barbarossa & Pastore, 2015).

On the other hand for Animal and natural resources protection labelled products, it has been discovered that understanding of such labels and the measures they depend on can take up a considerable part in impacting buying intention (Lin and Huang, 2012). Following this discovery, De Boer et al. (2007) have indicated that the consideration of insights regarding creature government assistance measures for meat and dairy items can prompt positive customer responses, however, the direct effect on willingness to buy continues with being limited. Examining thought processes in order to reveal the actual reason to buy fair trade labelled products, Joshi and Rahman (2015) found that main intentions are not merely determined by characteristic thought processes in moral issues, yet can likewise be influenced by additional social factors, for example, the worry for individual recognition in their social circle.

Consumers who are aware of the selection of sustainable choices during the decision making process address that worth of the consumers' lifestyles and factors affecting their buying pattern. In the contemporary world, the purchaser has been influenced by its peers and feels the weight of gathering conduct due to the expanding importance of community (Sarti et al., 2018). Correspondingly variable influences such as encouragement from members of the family or peers who are in close could have significant importance in either assisting the making the purchasing decision in the context of energy conservation (Bartiaux, 2008).

Besides; consumer admitted that they had been affected by the information given on the food labels too (Weisstein et al., 2017). However, it has been stated in the report that even though there is a general concern about the environment, individuals may not be tentatively conscious about their buying behaviour that can result in having a damaging effect on nature, and report address to that level of understanding being pretty low (Corner et al., 2012a).

EPA research conducted by Dunne, Convery, and Pender (2007) has demonstrated that the level of awareness in environmental problems in Irish customers and the effect of their buying choices remains very low. Moreover, the purchaser was discovered to be giving little consideration to the ecological information which they were given, and the research features the absence of instruction plans accessible to support both consumers and retailers to use ecological message which is directly given (Dunne et al., 2007).

2.6 Eco-labelling As an Acknowledgement Strategy

Eco-labelling, as an acknowledgement strategy, has been studied to ascertain the key factors in consumers' choice of green products. Given information through environmental labels as a scheme as an attempt to raise awareness by explaining through symbols and information on the product which has a permanent life cycle (Ouellette, 2007). Influence of Eco- labels in individual consumption patterns have been studied widely. According to the literature, it has illustrated a piece of evidence that eco-labels are one of the magnificent factors that portray the influence on green buying decisions (Cerri et al., 2018).

To give insight to individuals is vital to raise environmental behaviours and to purchase sustainable products. Cerri et al. (2018) posit that there is an interplay between information and concerns and worries about the natural environment that is existence in green product buying intention. Absence of information in sustainable products can be considered as boundaries that retain consumers making their choice of environmentally-friendly goods.

It has been instructed by Taufique et al. (2017) that absence of trust from consumers perspective is the point in questioning the credibility of eco-labels. (Ranjan and Kushwaha, 2017) propose that the explanation for this consumer's doubt is not comprehended to its benefits and lack of understanding in interpreting these labels. The perceived idea that is comprehended

proposes eco-labels pull in purchasers by clarifying the products sustainable effect on the natural environment (Ranjan and Kushwaha, 2017).

2.6.1 Consumer Attitudes towards Eco-labels

Studies on Eco-labels have progressed comprehension of several distinct key motivations which may influence consumers to prefer particular products with labels and comparing with others that do not have such sustainable marks on them. According to Brécard et al. (2012) consumers' choice of green labelled products extended to protect natural resources and environmental concerns while declining with regards to price sensitivity due to expensive green products as opposed to others.

Other examinations have connected consumers' values to their choices for eco-labelled products (Greibitus et al., 2015). However, degree of green consuming information and comprehension of environmental labels have been recognised to have a small impact, which could hinder compatibility of these environmental schemes when settling on food decisions (Peschel et al., 2016).

Intending to clarify green buying behaviour, the past researches have mainly centred explaining fundamental attitudes and certain behaviours by defining values to the customers which lead purchasing green products (Young et al., 2010). Ajzen & Fishbein, (1980) has tried to explain human behaviour towards sustainable products predominantly through the theory of reasoned action and theory of planned behaviour (Ajzen, 1991). These theories stated that consumers green behaviour is driven by personal attitude and collective rules accepted by the society as well as perceived behavioural control added later on by Ajzen.

Despite the accepted positive attitude towards green buying, it has been recognised a poor association between claimed and actual buying behaviour (Grunert et al., 2014). Meaning environmental concerns as a driver do not always result in actual buying, even consumers understand the labels. The mentality aims to conduct models such as attitude-intention-behaviour models likewise overlook outer impacts of the ecological and situational factors on buyer behaviour (Kumar et al., 2017).

2.6.2 Gen Y As a Growth Driver in Green Products

The intention to buy green products can be distinctive depending on consumers socio-economic status and demographic backgrounds. Researches have addressed the main changes in consumption patterns that people who are using a higher volume of sustainable goods in their daily life (Cerri et al., 2018). As reported by Branley (2013) in terms of food consumption in Ireland, individuals who have a part-time job tend to spend money on fresh beverages and foods. On the other hand, full-time employees are more tend to choose to buy organic foods. According to a study conducted by Aksoy and Özsönmez (2019) willingness for purchasing fair trade goods on Generation Y, shows evidence which is the trust that shows a correlation between involving a product and individuals belief system. Therefore; Generation Y, specifically, are more rely on sustainable products and services. Trust also stands out as an important element involvement of product. Correspondingly, an ethical approach has been playing a vital role great extend in consumers behaviour (Clark, 2009).

2.6.3 Ability-Motivation-Opportunity Theory to Explain Consumer Behaviour

To investigate in-depth study has been expanded and green consumer behaviour explained around Motivation, Ability and Opportunity framework, which is based on the main psychological explanation of human beings' behavioural pattern (MacInnis et al., 1991). AMO theory explains human behaviour as being dictated by three different aspects; there are Ability, Motivation and Opportunity (MacInnis et al., 1991). According to the theory Opportunity and Ability act as a mediator factor which affects in strengthening the relationship between motivation and the behaviour. AMO theory helps to explain independent variables in an understanding of the behaviour. In the green marketing context, AMO theory has been used for evaluating the understanding of the green messages from consumers (Grunert et al., 2014).

One of the components of the independent variables is Ability which is influenced by financial, emotional, cognitive and social-cultural resources with respect to education and age. Ability is defined as an individuals' perception of the easiness or hardship of acting on the behaviour of

their interest (Hughes, 2007). Meaning, it stands for consumers' understanding of sustainability in the context of food labels and financial capabilities.

According to Grunert et al. (2014) in like manner conceptualized willfulness as a directing element, yet additionally indicated an alternate idea identified with Opportunity in the development of the impression of encouraging conditions—how much an individual accepts that foundation exists to help the system, that was a concept of an immediate impact on real action of a consumer.

MacInnis and Jaworski (1989) present "Opportunity" as a significant factor is introduced, for the reasons for their structure concerning buyer reactions to promotions, as a consciousness of the conceivable negative impact which an absence of chance has on a buyer's processing of information given. Absence of Opportunity is relied upon to hinder the actual behaviour. Situational factors, for example, interruptions, and elements of constrained time, are here viewed as potential impacts on buyers' chance to process promotions. Meaning, availability of the information or message regarding to timely manner, repetition and control of information in the marketing context stands for current availability on store and accessibility for its customers.

Motivation is an essential psychological application that counts on leading research has been conducted by Bayton (1958) who characterizes it as wishes, inclinations or wants that assess the beginning of conduct that becomes the behavioural patterns. Individual value drivers towards the action influence motivation. In other words, personal relevance, needs and goals, self-concept are stood for motivation, and it corresponds to individuals environmental concern as the main motivation towards act in the sustainability market context (Grunert et al., 2014).

2.7 Conclusion

Eco-labels, as an effective marketing strategy, has been researched widely in the green marketing field. The literature suggests that consumers play a significant role in changing sustainable consumption behaviour; therefore, it is worth looking at what behavioural patterns are being observed and which belief systems drive consumers to purchase sustainable products.

Eco-labels have seen an effective way to communicate with consumers to make a sustainable claim on the packaging; however, it has been recognized by the literature that many green claims that are necessarily not true can result in greenwashing; thus cause trust issues with consumers.

Many studies demonstrate that belief systems such as environmental concerns and self-identification drives consumers in purchasing green products. However; their claim on buying cannot necessarily proof that it has been put into actual action because the costly price has been a big obstacle for consumers to shift their attitudes towards the concept of sustainability. On the other hand, it has been discovered by the scholars that green-conscious consumers show a willingness to pay for green products over other options even though they do not necessarily have a stable income.

Evidence suggests that eco-labels on packaging can build trust and that are considered to be a mediator between companies green marketing activities and communicating with their consumers. Therefore, eco-labels can raise awareness and motivate consumers to buy sustainable products.

Chapter 3: Research Methodology

3.0 Introduction

The research methodology is the way through which practitioners need to perpetuate their exploration of the research. Saunders, Lewis, Thornhill, (2019) portrayed research as an activity embraced by individuals that focuses on efficiently discovering things, along these lines expanding their insight about the subject. It demonstrates specific procedures which the researcher define their research problem and set targets and present their results from data acquired during the examination time frame (Kothari, 2004). This methodology section likewise illustrates how the examination result toward the end will be acquired following meeting the goal of the investigation. This part subsequently talks about the examination techniques that were utilised during the research procedure.

3.1 Research Methodology and Structure

The methodology is described as the construction of an appropriate approach that leads researchers to find their answers to their research question. It demonstrates the form of constructing the research question and set objectives of the research as well as helping through interpreting the results of the study through the data gathered. Main important decision in look into the research design process is the decision to be made with respect to examine approach since it decides how applicable data for an investigation will be acquired.

The purpose of this research is to exhibit in quantitative method, whether eco-labels have a positive impact on Millennial consumers' purchasing behaviour in Ireland. The main focus of the study is to reveal the factors that may affect the demographic characteristics of the potential and existing Millennial consumers' consumption of green products and their attitudes related to the eco-labels given on the package and to analyse the extent to which these eco-labels are related to the Millennials consumers decision to purchase green products.

The research method received in the exposition was gotten from the Research Onion Saunders et al. (2019) so as to accomplish this objective in an organised manner.

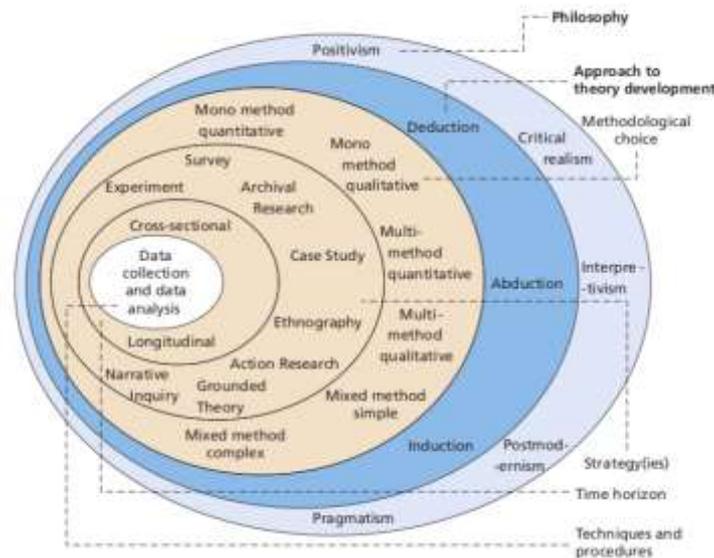


Figure 0-1 Research Onion (Saunders et al., 2012)

Research Onion model emblematically represents the manners by which various components engaged with the examination could be inspected to build up the research plan.

3.1.1 Research philosophy

The knowledge development it is embarked on conducting this research is answering the specific problem. As indicated by Saunders et al. (2019) the research philosophy that is implemented to the study consists of significant assumptions from the way the practitioners perceive the world. Scruggs et al. (1987) feature that business and the academic practitioners should know about the suggestions and philosophical responsibilities that the decision of the research system may issue.

Research philosophy alludes to the arrangement of standards with respect to the perspective from which the exploration is directed. It is mainly categorised in three main branches that are Ontology, Epistemology and Axiology (Saunders et al., 2019).

Ontology attributes to the validness of the data and its understanding of reality, while epistemology points out to the legitimate data needed for assessment and how can be understood. It is utilised in academic examinations are frequently broken down into Positivism and interpretivism, where interpretivism believes that singular spectators have their own discernment and understanding the reality and Positivism expect that information is free of the subject being considered. Subsequently, positivist examinations are testing the phenomena in order to reveal the result and expected to be scientific, while interpretivism contemplates are regularly subjective and qualitative in nature. The four significant research philosophies supporting business research incorporate Positivism, Interpretivism, Critical Realism, Post modernism and Pragmatism (Saunders et al., 2019).

3.1.1.1 Positivism

Positivism is an epistemological approach which supports the idea of utilisation of the strategies for the characteristic sciences to the investigation of social reality (Bell et al., 2018). Positivism is broadly comprehended to depend on the gathering information about real discernible factors to set up regularities and circumstances and logical results connections. Subsequently, this examination worldview looks to have a vigorous methodological structure so that results can be effectively duplicated (Driscoll et al., 2010). The positivist worldview inclines toward quantifiable factors that are fit to measurable examination.

3.1.1.2 Interpretivism

The interpretive approach is regularly related to qualitative research and research that is on a limited group of people (Saunders et al., 2019). Moreover, it has a lower structure than positivists methods (quantitative methods), which makes it less organised way of doing research (Bell et al., 2018). That is because interpretive research looks to comprehend real abstract factors as it were the interpretive worldview advocates that people see both social, physical real factors in various manners. Hence, this methodology stresses the part of people in answering the research question. As per (Bordens & Abbott, 2002) this empowers scientists to build up a socially built delineation of the real world. The less organised methodology,

various translations and analytical bases may bring about more exceptional variety of results (Chowdhury, 2014). Consequently, it is believed that this exploration uncovers the best level of likeness to the interpretive philosophy.

3.1.1.3 Critical Realism

Realism heavily depends on the logical line of inquiry. As indicated by Saunders et al. (2019) the essence of fundamental reality is that what we sense is at last reality and that material exist free of the mind.

From critical realists point of view, the most significant philosophical thought is reality, a construction of the philosophy being essential (Fleetwood, 2005). It is considered that reality to be outer and autonomous, yet not straightforwardly available through our perception and knowledge of it. Instead, what it is being experienced is empirical, in other words sensations, which are a portion of the appearances of the things in reality, instead of the definite actual things. It has been emphasised how regularly our senses misdirect us (Saunders et al., 2019)

3.1.1.4 Pragmatism

Pragmatism is for ideas or hypothesis that are just important in the case in strong relevance that it strengthens the argument (Tschaepé, 2015). From a pragmatist point of view, looking from one single perspective of understanding the world can ever give a whole image of the world. Hence, the most pivotal determinant of a scientist's position is eventually the exploration question (Teddlie & Tashakkori, 2003). It doesn't suggest the utilisation of numerous strategies, yet instead, they utilise the techniques that encourage sound, stable and relevant information to be gathered (Kelemen & Rumens, 2008).

With regards to the chosen philosophy of the epistemological research, Positivism will guide the framework for the methodology because it is an appropriate method of answering the research question which hypothesises that try to prove correlations between cause and effects.

3.1.2 Research Approach

Saunders et al. (2007) recommend in the research onion that a suitable research approach should be decided. Two main approaches are defined that are the deductive and the inductive research approach.

The deductive methodology begins with a particular speculation advancement dependent on the literature examination that has been addressed by the researcher, and continuously attempts to approval to the hypothesis and analyse in the event that it holds specifically related circumstances (Wiles et al., 2011). The development of deductive research approach is from general to specific that general is gathered by the literature and specific stands for the findings of the research (Kothari, 2004).

The inductive methodology is formed through the way of understanding from the particular to the general (Bell et al., 2018). In this methodology, there is no structure that at first educates the information assortment, and the examination centre would thus be able to be framed after the information has been gathered (Flick, 2018).

The inductive approach is generally utilised in subjective research (qualitative), where the lack information of a hypothesis advising the processes of discovery might be of advantage by reducing the potential for specialist inclination in the information assortment stage (Bell et al., 2018). Focus groups and interviews are conducted for the explicit research question (Flick, 2018). Nevertheless, Inductive methodology similarly may be utilised viably inside positivist systems, where the acquired data is broken down first, and critical samples are utilised to illuminate the impact accordingly to the outcomes.

In terms of the taken research approach, deductive will be followed through the prove of claimed hypothesis because it is suggested that deduction leads in identifying the correlations between characters utilising statistical data (Saunders et al., 2007). Besides deduction is related with the positivist philosophy (ibid).

Saunders et al. (2019) alluded to main three approaches to research which are exploratory, descriptive and explanatory. Exploratory investigation refers to the aim of discovering research

that targets looking for new knowledge, posing new inquiries to build up a full comprehension of an issue or circumstance (Hair et al., 2015). Secondly, Descriptive examination is explained by Hair et al. (2015) as an experience and execution related research intended to create a precise portrayal of people and to give proportions of occasions or circumstance. Lastly, Explanatory investigation cause and effect related research that centres around considering a circumstance or an issue to clarify the connection between factors (Saunders et al., 2019) which means with Rahi's words (2017) Explanatory research perspective that mainly concentrates on explaining the angle of the study in detail.

In this study correlation between Eco-labels and its positive impact on consumers purchasing decision will be analysed. Therefore, this explanatory research involving quantitative analysis method will be using statistics to reveal the trust of consumers behaviour within a specific territory. It is also stated by Saunders et al. (2019) that quantitative data analysis generally is included a deductive design approach taken from a positivist philosophical view. Therefore, this study most intently lines up with the deductive methodology.

3.1.3 Research Strategy

The strategy part included in the Research Onion involves different techniques which are including Experiment, Archival Research, Action research, ethnography, case study, grounded hypothesis (M Saunders et al., 2019).

With the end goal of the paper, it has been decided to survey to gather quantitative information to be utilised for Explanatory research. Survey technique has the focal points that it is seen as legitimate by individuals and is anything but difficult to clarify and comprehend (M Saunders et al., 2019). Besides, surveys permit more authority over the examination procedure through inspecting and offers the likelihood to produce discoveries delegate for a whole populace (Hair et al., 2015) which costs less than gathering information for an entire populace (Saunders et al., 2019). Besides, research strategy is the way which the examination means to respond to the exploration question (ibid). In this research, it has utilised survey which is ordinarily combined with the deductive research approach.

In surveys, questionnaires are widely used and similarly as with any examination methodology have extensive qualities and shortcomings. The most noteworthy downside of embracing a survey technique is the limitation to reflect individuals opinions due to sorting answers given during questionnaires (Ang, 2008). Surveys are commonly simple to clarify and comprehend and empower the assortment of profoundly revealed information (Sekaran & Bougie, 2016). A quantitatively based study methodology encourages the utilisation of clear and inferential measurements. This technique can create models that clarify the idea of connections between factors.

In this study, investigating consumer behaviour qualitative research seems like an adequate method to use due to its nature of acquiring an in-depth understanding of a topic in a subjective manner varied from cultural and social forms (Bell et al., 2018). However, qualitative strategy limits the size of the population, therefore, limits to the capacity of reaching out to more individuals. Therefore, in this study, it is looked at Millennials consumer behaviour in Ireland; thus, a large sample size will be beneficial for the prospect of the study. As mentioned in the literature review, a quantitative method was used to broaden this area of study. Thus survey is finalised as an appropriate method to understand the correlation between eco-labels and consumer behaviour from a large sample size.

3.1.4 Methodological Choice

Methodology indicates various techniques which can be used by analysts to point out the research question (Ahrens, 2008). It has been emphasised by Saunders et al. (2019) that one of the major methodological decisions identifies with whether quantitative, qualitative or mix strategies are utilised. The main distinction between these methods is that quantitative research depends on the interpretation of the numerical data gathered from a wide sample size while qualitative interpretation of the data relies on the small size of participants subjective opinions (Saunders et al., 2019). As mentioned in the strategy Survey will be utilised to reveal this research result, because it is believed to be an appropriate method of reveal information from a large sample group (Sue & Ritter, 2007). The examination includes quantitative investigation utilising the mono strategy, which the data collection will be operated through an online survey. The quantitative examination was considered reasonably appropriate for this exploration for

the accompanying reasons. From the other aspect, the size of the sample group and time limit lead qualitative strategy not as appropriate for this research.

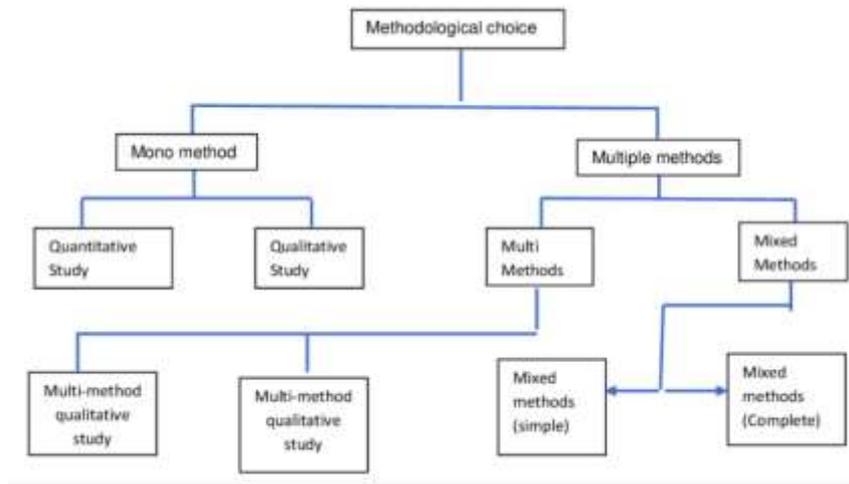


Figure 0-2 Methodological choices: Adapted from Saunders et al. (2012)

The questionnaire has distributed in web 2.0 to collect data online from individuals in Ireland. This study utilises contemporary, substantial statistical measures to interpret data. This examination utilises the mono method as the vast majority of the past investigations mentioned in the literature have utilised a similar methodology.

3.1.5 Time horizon

Explained by Saunders et al. (2007) time horizons are essential for the research structure exclusively apart from the research methodology utilised. There are divided into two categories which are Longitudinal and Cross-sectional. When the research is being repetitively pursued over time, that indicates Longitudinal study. In contrast, Cross-sectional study has a defined time constraint which is limited to a specific period of time. This research is also restricted to a particular time. Subsequently, the cross-sectional time horizon is utilised.

3.1.6 Quantitative Primary Data Collection

3.1.6.1 Data collection technique

According to Saunders et al. (2019) questionnaires give researcher chance to gather data from a wide sample size by reducing the risk of distorting of responses. Aim to collect data from a specific geography, this study has applied the questionnaire as a way of collecting data for this quantitative study. Questionnaire as a term is defined by Saunders et al. (2019) that is the way gathering data from respondents where they answer structured sets of questions on a logical sequence. In order to examine the eco-labels interpretation from Millennial consumers in Ireland, online survey has considered being an appropriate method. It is also versatile and create greates opportunity for compherend understanding of the subject (Waters & Waters, 2008).

Additionally, examined literature on consumer behaviour on green products has been conducted on a quantitative analysis by following questionnaire methods. Meaning it is considered to be the most suitable method based on academic sources. Even though qualitative methods can be considered as an alternative approach to take for this research, having a specific time to complete this research as well as unprecedented pandemic which has taken place during the study made it inappropriate to conduct face to face interviews and gatherings for focus groups. It is believed that online surveys are universally accepted practical tools due to easy access through technology and convenience (Oakshott, 2011).

The questionnaire was designed by the practitioner, which consists of 28 questions subdivided into six sections aligned with the research objectives. Briefly, it has been introduced the topic of the research, and individuals informed about the confidentiality of the study. In the first section, individuals were asked to fill their demographics and administrative information which are mainly age, gender, residence, incomes that have been covered by six questions. It is suggested by Oakshott (2011) that keeping questions precise and clear is fundamental in terms of getting a high response rate. Therefore, questions designed to be as simple and specific as possible.

Apart from the first section, rest of the questionnaire has divided into subheadings aligned with hypothesis and questions designed to answer hypothesis namely; *"Investigating consumer understanding of sustainability schemes in the context of food labels"*, *"Investigate the role of environmental concerns in the purchasing of eco-labelled products"*, *"Investigate the role of self-identification in purchasing eco-labelled products"*, *Consumers' willingness to pay for green products*, and lastly *"Investigate the role of Ecolabels in the purchasing of green products"*.

For designing the questionnaire, several question types were provided. There are various ways of asking questions that can be posed, which are mainly closed-ended and open-ended question (M Saunders et al., 2019). According to Oakshott (2011) close-ended questions provides an advantageous method of gathering data, and that is nearly simpler to dissect.

In this research, to understand consumers level of temptation to buy eco-labelled products, closed questions were asked in a varied way, which are multiple-choice, checkboxes and the linear scale. In the rating scale questions, individuals were asked to indicate by picking the boxes from one to five how strongly they agreed or disagree with each statement given in the survey. Survey participants also asked to put a tick mark in checkboxes according to the statement of their thoughts on the appropriate option.

Questions were structured logically and concise to prevent different interpretation and leading, web-based surveys distributed to the audience through the internet, and they asked to be self-completed. Additionally, a pilot test was conducted with eight respondents before it sent to the audience. Through gathered feedback from participants as well as academics necessary adjustments were made, and the questionnaire was sent in 9th June to 24th June.

3.1.6.2 Choice of Sampling

Sampling is an important procedure in the scholarly research that improves the clarification of information assortment. In other words it provides various methods to enable research to decline in amount of data that is needed to be gathered only from a subgroup instead of all cases (Saunders et al., 2012). Because it would not be practicle to survey whole population

due to time constraints as well as the need for quick action to interpret data. In order to define right sample technique, it has inclusively examined the options of sampling in quantitative analysis. Mainly, there are categorised probability sampling and non-probability sampling which are defined based on members probability of being known and calculated. Probability sampling methods required a sample frame, thus they are found time consuming according to Saunders et al. (2012). In contrast non-probability sampling methods give researcher to select their members of the population on a purpose in order to contact with hard to identify group members of the population.

Convenience sampling could be the choice for this research which is alluded to as opportunity testing is commonly the most productive and affordable type of inspecting (Etikan et al., 2016). Test members are commonly chosen on the premise that they are prepared, accessible and advantageous to the specialist (Rahi, 2017). Thusly, it can be bias.

In this study, to acquire participants non-probability method were used and self-selection sampling was found appropriate, because it enables respondents to identify their willingness to participate in the research (Saunders et al., 2012). In contrast according to Bethlehem (2010) self-selection prompts an absence of representativity and hence it may be one-sided.

This study survey, Millenials in Ireland population has defined as target population and sampled in self-selective way. It has advertised through social media and data collected from individuals who filled the survey voluntarily online aligned with the self selection method.

In addition, response is important for pratitioners who convey surveys (Saunders et al., 2012). Because, there is always a chance to reveice low response rate due to respondents rejection to participate in study. According to Draugalis and Plaza (2009) low respond rates can affect the credibility of any explortory reserach.

3.1.7 Quantitative Data Analysis

There are a wide range of measurable strategies that analysts can utilize to break down information (Cramer, 2003). These strategies anyway can be categorised into parametric and non-parametric tests (Saunders et al., 2012). Parametric tests implies a typical feature of a

populace. Parametric tests such as Pearson Correlation test that utilised in this study it is believed that the populace is regularly disseminated (Månsson et al., 2004).

On the other hand, non-parametric tests are progressively moldable, they do not have as unbending necessities on the populace from which the example is being drawn (Schmidt, 1997). Non parametric tests may neglect to perceive connections or contrasts which are in truth measurably huge (Cramer, 2003). The particular non-parametric test used in this examination is Pearson Correlation. It can be utilized to measure the quality of the connection between two constant factors (Saunders et al., 2012). Moreover, correlational designs can provide information about the relationship between two variables, yet not used for cause and effects realtionships. This technique is used consistently inside the area of business and the executives research and is especially valuable for ordinal or positioned information (Cramer, 2003).

The tests where led utilizing the well known factual program, SPSS. The tests used will be one followed, as the idea of the connections between factors is indicated in the speculation.

The data were presented using frequency tables, percentage and descriptive statistics, to show the result from testing the hypotheses. To assesst reliablitiy of the data for the construct of this research study Cronbach alpha was conducted. Because it is the well known method to calculte Cronbach's alpha coefficient for establishing internal consistency.

To dissect the connections between variables Pearson Correlation test and Regression examination are both used. While Correlation analysis stands for the level of affiliation, the association between dependent and independent varilables are illustrated by regression analysis (Ludbrook, 2010).

3.1.8 Ethical Considerations

This examination includes collaboration with people and inspects individuals behavioural patterns. Subsequently, moral contemplations were essential at all phases of the examination. This investigation met the prerequisites of the Ethical consideration of National College of Ireland. Thus, all members were guaranteed privacy and namelessness. (Singer, Hippler and Schwarz (1992) stated that individuals who participate to survey may feel compromised if they feel that their confidentially are not being protected. As a result, as it was presented by Iversen et al. (2006) the researcher may have difficulties to get high response rate to complete the study.

Collected data, will remain exclusively and securely in researchers ownership. Ultimately, the motivation behind this investigation was concisely and plainly disclosed to members. Moreover, all members were assured that finishing the questionnaire was altogether intentional depend on individuals willingness to participate (Saunders et al., 2007).

Chapter 4: Data Analysis & Findings

4.0 Introduction

In this section, the results of the numerical data gathered through surveys are presented. Participants filled the questionnaire relative to their opinions on the ecological behaviours, which enable the researcher to conclude this study. Although there is a restricted time limit in completing the data collection, the online survey made it possible to interpret the information gathered about consumers opinion and knowledge about buying eco-labelled products as well as investigating variables which impact their purchasing behaviour.

To begin with, the findings from the data is demonstrated with graphs and interpretation are made. In the following chapter, the outcomes are linked back with the information gained through examining the literature which enabled researcher make an inference about Millennials green purchasing behaviour and factors that has a great impact on their behaviour. Lastly, it is presented the interpretations of the results which may have significant implications on the industry in terms of business activities towards green marketing on Millennials consumers in Ireland.

4.1 Data Presentation

This section consists of the presentation, analysis and interpretation of the data retrieved from the questionnaire.

The data were presented using frequency tables, percentage and descriptive statistics, to show the result from testing the hypotheses. The data for this study was analysed using the statistical package for social sciences (SPSS) and the hypothesis was tested using regression and correlation analysis.

4.1.1 Table of Respondents

Questionnaire	Respondent	Percentage (%)
Filled and valid	107	82.9
Filled and not valid	22	17.1
Total distributed	129	100

Table 1 Respondents Rate

Above is a tabular representation of a total of 129 questionnaires that were distributed but only 107(82.9%) were filled and valid and 22 (17.1%) were filled but invalid. This study records 82.9% response rate because of the simplicity of the questions asked.

4.1.2 Table of Response According to Residence

Residence	Frequency	Percentage (%)
Ireland	95	88.8
UK	5	4.7
Europe	6	5.6
Others	1	0.9
Total	107	100

Table 2 Response According to Residence

The table above shows that 95(88.8%) are from Ireland. It is important to note that since the study has to do with respondents who are in Ireland alone which represents the 88.8% of total respondents in this study as seen above, all other respondents from UK, Europe and other countries will be dropped and Ireland will represent 100% response rate. So therefore, the analysis of this study will be done based on the 95 respondents and not the total filled and valid respondents of 107.

4.1.3 Demographic Representation of Respondents Data

Gender	Frequency	Percentage
Male	31	32.6
Female	64	67.4
Total	95	100
Age		
18-25 years old	26	27.2
26-40 years old	46	48.4
41-55 years old	13	13.7
56 years and above	10	10.5
Total	95	100
Education		
High school degree or equivalent	1	1.1
Some college but no degree	15	15.8
Associate degree	11	11.6
Bachelor degree	36	37.9
Masters degree	30	31.6
Doctorate or PhD	2	2.1
Total	95	100
Income		
Less than 10,000	12	12.6
10,000 to 24,000	27	28.4
25,000 to 49,000	33	34.7
50,000 to 75,000	13	13.7
Prefer not to answer	10	10.5
Total	95	100

Table 3 Demographic Representation of Respondents Data

The table above shows the demographic representation of respondent's data. From the gender section 31(32.6%) are male and 64(67.4%) are female. From this frequency analysis the female gender has the highest percentage which indicates most of the respondents for this study. Most of the respondents are from 26-40 years. The education section shows that high school degree or equivalent is 1(1.1%), some college but no degree is 15(15.8%), associate degree represents

11(11.6%), bachelor degree represents 36(37.9%), master’s degree represents 30(31.6%), doctorate or PhD stands at 2(2.1%).

4.1.4 Reliability Statistics

Cronbach Alpha	Items
0.909	22

From table above, the research instrument is reliability as the Cronbach alpha value printed a score above 0.909. Therefore, the scale items were found to be reliable for the construct of this research study.

4.1.5 Perception of Eco-labels

S/N	Have you seen any of these logos before	Frequency	Percentage
1	I have seen these logos before	86	90.5
2	I have not seen these logos before	9	9.5
Total		95	100
I acknowledge that I understand what these logos mean			
1	Yes, I do understand	82	86.3
2	No, I do not understand	13	13.7
Total		95	100

Table 4 Perception of Eco-labels

From table above, the respondents were asked if they have seen any logo displayed in the questionnaire and 86(90.5%) which represented the majority mentioned that they have while 9(9.5%) said they have not. Been that most of the respondents have seen the logos before they were familiar with eco-labelled products and able to answer the questions. Also, further

questions were asked if the respondents understood what those labels meant and 82(86.3%) acknowledge that they knew what it meant, while 13(13.7%) did not know what it meant.

4.1.5.1 Opinion of Respondent on Understanding of Eco-Labels

S/N	Understanding of Eco-Labels	Frequency	%	
Q1	I know that Eco-labels acts as an informative policy instrument with the purpose of guiding consumers about sustainable consumption	Strongly disagree	5	5.3
		Disagree	7	7.4
		Neutral	14	14.7
		Agree	29	30.5
		Strongly agree	40	42.1
		Total	95	100
Q2	I know that Ecolabeling is designed to encourage sustainable change and to lessen the harm on the natural environment	Strongly disagree	6	6.3
		Disagree	2	2.1
		Neutral	12	12.1
		Agree	24	25.3
		Strongly agree	51	53.7
		Total	95	100
Q3	I take into account eco-labels to see if the contents are environmentally safe when deciding to buy a product.	Strongly disagree	8	8.4
		Disagree	16	16.8
		Neutral	16	16.8
		Agree	24	25.3
		Strongly agree	31	32.6
		Total	95	100

Table 5 Understanding of Eco-labels

The table above, represents questions that are under the sub-variable understanding of eco-labels. The first question indicates that 5(5.3%) of the respondents strongly disagree, 7(7.4%) disagree, 14(14.7%) were neutral while a majority either agree or strongly agree with the statement which represented 29(31.8%) and 40(42.1%) respectively. Question 2, indicates that 6(6.3%) of the respondents strongly disagree, 2(2.1%) disagree, 12(12.6%) were neutral while a majority either agree or strongly agree with the statement which represented 24(25.3%) and 51(53.7%) respectively. From question 3, it indicates that 8(8.4%) of the respondents strongly disagree, 16(16.8%) both disagree and were neutral, while a majority either agree or strongly agree with the statement which represented 24(25.3%) and 31(32.6%) respectively. Below is a

graphical illustration of respondents who *know that Ecolabeling is designed to encourage sustainable change and to lessen the harm on the natural environment* with an overwhelming majority of 51(53.7%) leaning towards strongly agree.

4.1.5.2 Opinion of Respondent on Environmental Concerns

S/N	Environmental Concerns		Frequency	%
Q1	I believe individuals have control over industrial growth and my demand for green products will impact corporate production outputs	Strongly disagree	8	8.4
		Disagree	13	13.7
		Neutral	21	22.1
		Agree	28	29.5
		Strongly agree	25	26.3
		Total	95	100
Q2	I believe that there should be a limit of utilizing natural sources and that the natural environment should be protected; thus I buy eco-labelled products	Strongly disagree	5	5.3
		Disagree	3	3.2
		Neutral	15	15.8
		Agree	35	36.8
		Strongly agree	37	38.9
		Total	95	100
Q3	I purchase eco-labelled products because I believe I contribute to the preservation of natural resources with my actions.	Strongly disagree	5	5.3
		Disagree	7	7.4
		Neutral	20	21.1
		Agree	33	34.7
		Strongly agree	30	31.6
		Total	95	100
Q4	I will not choose products which have no labels or indications whether it is recyclable or sustainable.	Strongly disagree	14	14.7
		Disagree	24	25.3
		Neutral	31	32.6
		Agree	15	15.8
		Strongly agree	11	11.6
		Total	95	100
Q5	I feel good about buying products which are less damaging to the environment	Strongly disagree	4	4.2
		Disagree	1	1.1
		Neutral	9	9.5
		Agree	19	20.0
		Strongly agree	62	65.3
		Total	95	100

Table 6 Opinion of Respondent on Environmental Concerns

The table above, represents questions that are under the sub-variable environmental concerns. The first question indicates that 8(8.4%) of the respondents strongly disagree, 13(13.7%) disagree, 21(22.1%) were neutral while a majority either agree or strongly agree with the

statement which represented 28(29.5%) and 25(26.3%) respectively. Question 2, indicates that 5(5.3%) of the respondents strongly disagree, 3(3.2%) disagree, 15(15.8%) were neutral while a majority either agree or strongly agree with the statement which represented 35(36.8%) and 37(38.9%) respectively. From question 3, it indicates that 6(5.3%) of the respondents strongly disagree, 7(7.4%) while a majority either agree or strongly agree with the statement which represented 33(34.7%) and 30(31.6%) respectively. Question 4, indicates that 14(14.7%) of the respondents strongly disagree, 31(32.6%) were neutral while a majority either agree or strongly agree with the statement which represented 15(15.8%) and 11(11.6%) respectively.

Below is a graphical illustration of respondents who *feel good about buying products which are less damaging to the environment* with an overwhelming majority of 62(65.3%) leaning towards strongly agree.

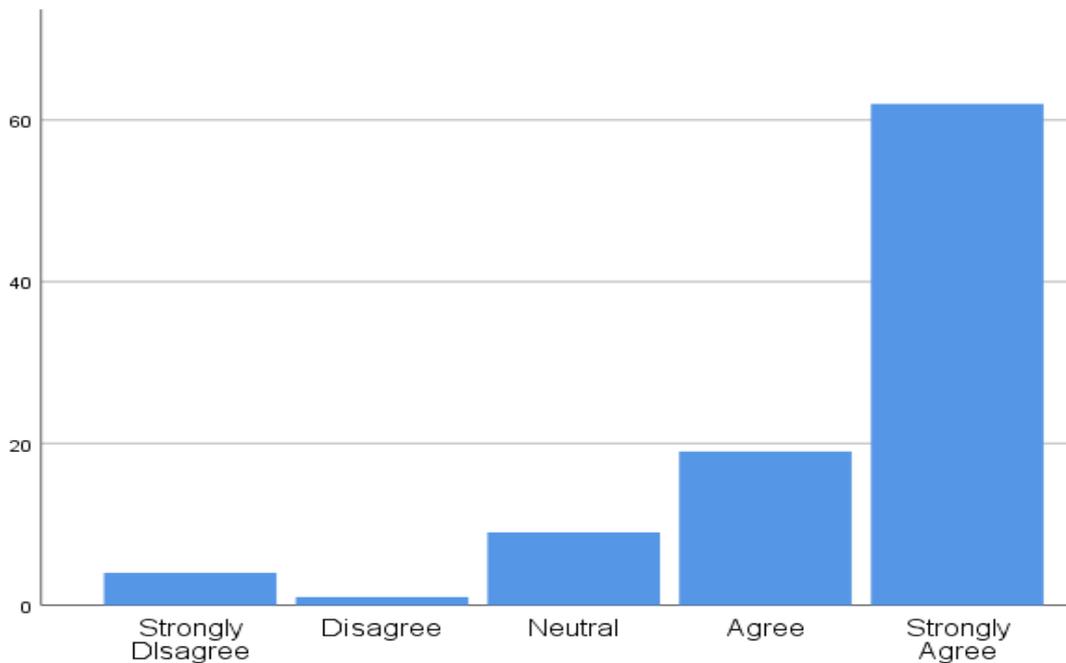


Figure 0-3 Opinion of Respondent on Environmental Concerns

4.1.5.3 Opinion of Respondent on Self-identification

S/N	Self-identification		Frequency	%
Q1	My friend's positive attitudes towards environmentalism influence my consumption of green products	Strongly disagree	9	9.5
		Disagree	12	12.6
		Neutral	19	20.0
		Agree	29	30.5
		Strongly agree	26	27.4
		Total	95	100
Q2	I purchase green products as it suits my lifestyle and it gives me a sense of fulfilment and belonging	Strongly disagree	6	6.3
		Disagree	11	11.6
		Neutral	16	16.8
		Agree	35	36.8
		Strongly agree	27	28.4
		Total	95	100
Q3	Buying green products is a way of expressing myself because I respect nature	Strongly disagree	9	9.5
		Disagree	6	6.3
		Neutral	19	20.0
		Agree	32	33.7
		Strongly agree	29	30.5
		Total	95	100
Q4	I really find Eco-label schemes engaging and relevant to my lifestyle	Strongly disagree	8	8.4
		Disagree	17	17.9
		Neutral	18	18.9
		Agree	29	30.5
		Strongly agree	23	24.2
		Total	95	100

Table 7 Opinion of Respondent on Self-identification

The table above, represents questions that are under the sub-variable self-identification. The first question indicates that 9(9.5%) of the respondents strongly disagree, 12(12.6%) disagree, 19(20.0%) were neutral while a majority either agree or strongly agree with the statement which represented 29(30.5%) and 26(27.4%) respectively.

From question 3, it indicates that 9(9.5%) of the respondents strongly disagree, 6(6.3%) disagree, 19(20.0%) were neutral while a majority agree and strongly agree with the statement which represented 32(33.7%) and 29(30.5%) respectively. Question 4, indicates that 8(8.4%) of the respondents strongly disagree, 17(17.9%) disagree, 18(18.9%) were neutral while a

majority either agree or strongly agree with the statement which represented 29(28.0%) and 23(24.2%) respectively.

Below is a graphical illustration of one of the questions where response to the statement *I purchase green products as it suits my lifestyle and it gives me a sense of fulfilment and belonging* (question 3) was asked with an overwhelming majority leaning towards agree.

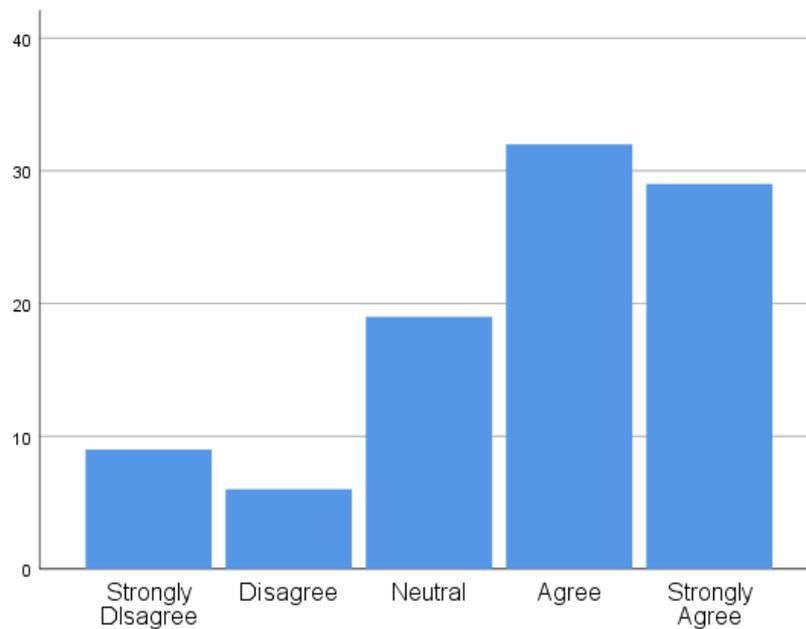


Figure 0-4 Opinion of Respondent on Self-identification

4.1.5.4 Opinion of Respondent on Financial Abilities

S/N	Financial Abilities		Frequency	%
Q1	I choose to buy a product connected with an environmental cause, even when the price of it is higher	Strongly disagree	7	7.4
		Disagree	13	13.7
		Neutral	23	24.2
		Agree	37	38.9
		Strongly agree	15	15.8
		Total	95	100
Q2	I buy green products even though I do not have a stable income	Strongly disagree	11	11.6
		Disagree	18	18.9
		Neutral	32	33.7
		Agree	23	24.2
		Strongly agree	11	11.6
		Total	95	100

Table 8 Opinion of Respondent on Financial Abilities

The table above, represents questions that are under the financial abilities. The first question indicates that 7(7.4%) of the respondents strongly disagree, 13(13.7%) disagree, 23(24.2%) were neutral while a majority either agree or strongly agree with the statement which represented 37(38.9%) and 15(15.8%) respectively. Question 2, indicates that 11(11.6%) of the respondents strongly disagree, 18(18.9%) disagree, 32(33.7%) were neutral while a majority either agree or strongly agree with the statement which represented 23(24.2%) and 11(11.6%) respectively.

Below is a graphical illustration of one of the questions where response to the statement I choose to buy a product connected with an environmental cause, even when the price of it is higher (question 1) was asked with an overwhelming majority of 37(38.9%) leaning towards agree.

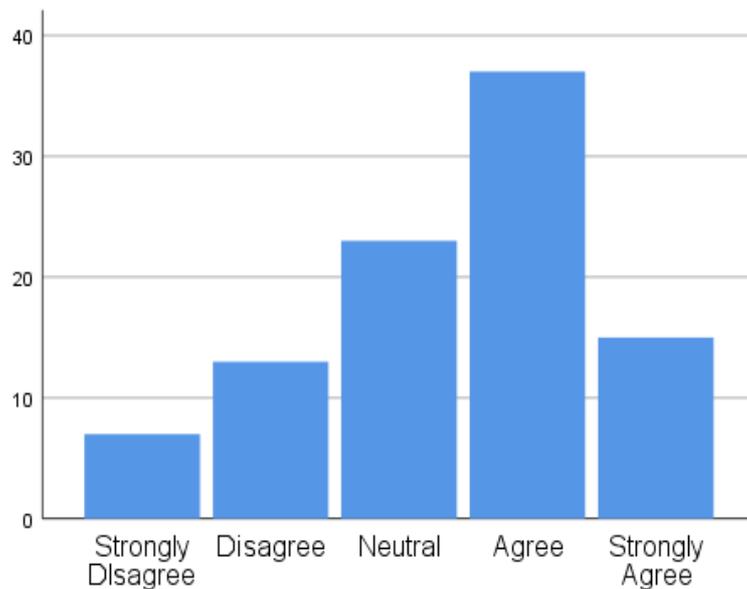


Figure 0-5 Opinion of Respondent on Financial Abilities

4.1.5.5 Opinion of Respondent on Awareness

S/N	Awareness	Frequency	%	
Q3	I am aware of the eco-labels logos on packaging	Strongly disagree	1	1.1
		Disagree	7	7.4
		Neutral	10	10.5
		Agree	44	46.3
		Strongly agree	33	34.7
		Total	95	100

Table 9 Opinion of Respondent on Awareness

The table above, represents questions that are under the awareness. The question indicates that 1(1.1%) of the respondents strongly disagree, 7(7.4%) disagree, 10(10.5%) were neutral while a majority agree and strongly agree with the statement which represented 44(46.3%) and 33(34.7%) respectively. Below is a graphical illustration.

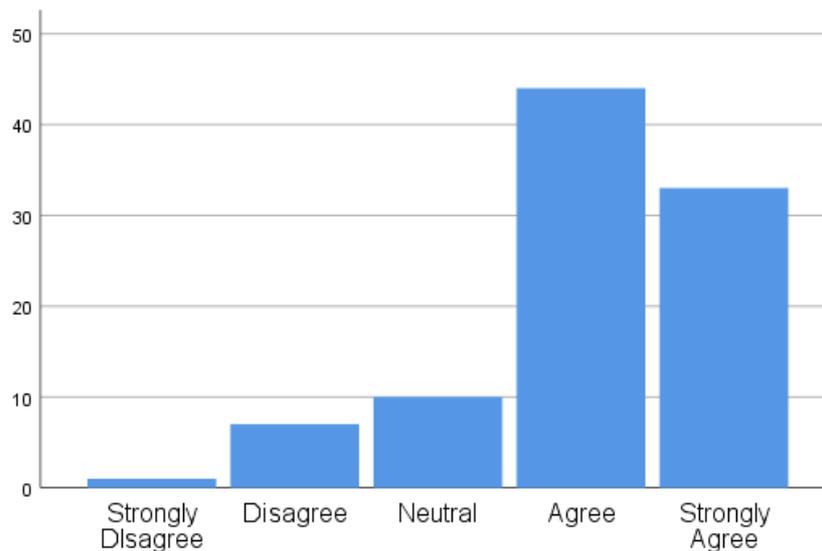


Figure 0-6 Opinion of Respondent on Awareness

4.1.5.6 Opinion of Respondent on Ecolabel products

S/N	Ecolabel products		Frequency	%
Q1	I look for eco-labels on products to make sure it is sustainable before I buy it	Strongly disagree	7	7.4
		Disagree	15	15.8
		Neutral	29	30.5
		Agree	32	33.7
		Strongly agree	12	12.6
		Total	95	100
Q2	I believe eco-label schemed products are an indicator of green products which increases my knowledge of the range of environmentally-friendly products available	Strongly disagree	2	2.1
		Disagree	3	3.2
		Neutral	21	22.1
		Agree	45	47.4
		Strongly agree	24	25.3
		Total	95	100
Q3	I buy green food and drink products if they have sustainable labels on them (such as fair trade, recycle)	Strongly disagree	5	5.3
		Disagree	6	6.3
		Neutral	20	21.1
		Agree	39	41.1
		Strongly agree	25	26.3
		Total	95	100
Q4	Ecolabels are necessary to motivate me to buy green food products	Strongly disagree	11	11.6
		Disagree	8	8.4
		Neutral	23	24.2
		Agree	27	28.4
		Strongly agree	26	27.4
		Total	95	100
Q5	I avoid buying products which do not have any ecolabels on them	Strongly disagree	14	14.7
		Disagree	24	25.3
		Neutral	31	32.6
		Agree	12	12.2
		Strongly agree	14	14.7
		Total	95	100

Table 10 Opinion of Respondents on Eco-label products

The table above, represents questions that are under the ecolabel products.

Below is a graphical illustration of one of the questions where response to the statement I believe eco-label schemed products are an indicator of green products which increases my knowledge of the range of environmentally-friendly products available (question 2) was asked with an overwhelming majority of 45(47.4%) leaning towards agree.

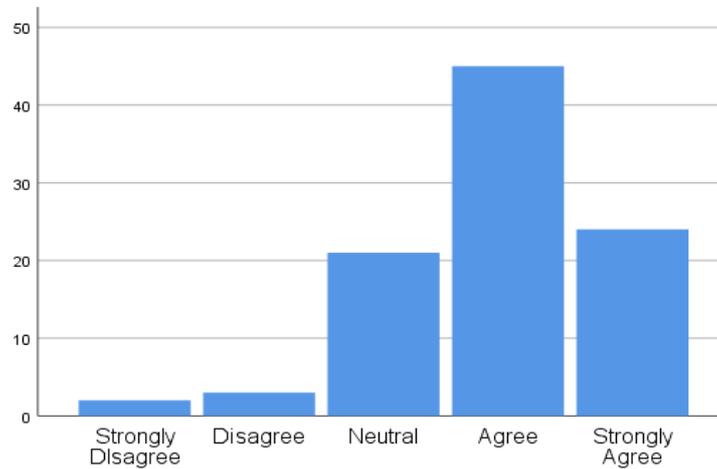


Figure 0-7 Opinion of Respondents on Eco-label products

4.2 HYPOTHESES TESTING

All the hypothesis raised in this study were tested using Regression and Pearson Correlation analysis. Based on the study's main objective of understanding whether eco-labels have a positive impact on Millennial consumers purchasing decisions in Ireland. The table below present the result of regression analysis for each of the hypothesis as it relates to millennials who are within 26-40 years of age.

4.2.1 Regression Analysis

Hypotheses	Tools	F-Value	R Square	Std. Error of The Estimate	Df	P-Value	Decision
H ₁ - Consumers who have environmental concern purchase eco-labelled green products	Regression Analysis	22.879	0.342	.68569	1	.000	Rejected null hypothesis
H ₃ - Consumers who have knowledge about ecolabels schemes in the food context buy eco-labelled products	Regression Analysis	15.861	0.265	.72477	1	.000	Rejected null hypothesis
H ₄ - Consumers who have the financial abilities are seeking to buy green products	Regression Analysis	19.221	0.304	.70525	1	.000	Rejected null hypothesis
H ₅ - Eco-labelled are an effective acknowledgement scheme that increase awareness about green products	Regression Analysis	8.760	0.166	.77200	1	.005	Rejected null hypothesis

Table 11 Regression Analysis

H₁- Consumers who have environmental concern purchase eco-labelled products.

The analysis indicate that the R square is 0.342 if expressed as percentage will indicate 34.2% which signifies that 34.2% variance in environmental concern can be explained by eco-labelled products. With a significance level (sig =.000) and F value of 22.879, this indicates that the P value is ≤ 0.05 . Thus, the null hypothesis was rejected, while the alternate hypothesis was accepted. Therefore, consumers who have environmental concern purchase eco-labelled green products.

H₃- Consumers who have knowledge about ecolabels schemes in the food context buy eco-labelled products.

The analysis indicate that the R square is 0.265, if expressed as percentage will indicate 26.5% which signifies that 26.5% variance in understanding of eco-labels can be explained by eco-

labelled product. With a significance level (sig =.000) and F value of 15.861, this indicates that the P value is ≤ 0.05 . Thus, the null hypothesis was rejected, while the alternate hypothesis was accepted. Therefore, consumers who have knowledge about ecolabels schemes in the food context buy eco-labelled products.

H4- Consumers who have the financial abilities are seeking to buy green products.

The analysis indicate that the R square is 0.304 if expressed as percentage will indicate 30.4% which signifies that 30.4% variance in financial abilities can be explained by eco-labelled product. With a significance level (sig =.000) and F value of 19.221, this indicates that the P value is ≤ 0.05 . Thus, the null hypothesis was rejected, while the alternate hypothesis was accepted. Therefore, consumers who have the financial abilities are seeking to buy green products.

H5- Eco-labelles are an effective acknowledgement scheme that increase awareness about green products.

The analysis indicate that the R square is 0.166 if expressed as percentage will indicate 16.6% which signifies that 16.6% variance in awareness can be explained by eco-labelled products. With a significance level (sig =.005) and F value of 8.760, this indicates that the P value is ≤ 0.05 . Thus, the null hypothesis was rejected, while the alternate hypothesis was accepted. Therefore, eco-labelled are an effective acknowledgement scheme that increase awareness about green products. The details of the results can be found in the Appendix section of the study.

4.2.2 Pearson Correlation Analysis

		Self-identification	Eco-labeled Product	Awareness
Self-identification	Pearson Correlation	1	.672	.111
	Sig (2-tailed)		.000	.464
	N	46	46	46
Eco-labelled Product	Pearson Correlation	.672	1	.407
	Sig (2-tailed)	.000		.005
	N	46	46	46
Awareness	Pearson Correlation	.111	.407	1
	Sig (2-tailed)	.464	.005	
	N	46	46	46

Table 12 Pearson Correlation analysis

To test the notion of hypothesis two and six, over nine questions were asked based on the sub-variables in the study Self-identification, Awareness and Eco-labelled Product. They were analysed using Pearson Correlation to show the strength of the relationship and its directions. The Self-identification and Eco-labelled Product variable had a Pearson Correlation of 0.672, which is considered a strong positive correlation. It was also significant as it had a value of 0.000. Based on this result we accept that there is a relationship between these two variables and we reject the null hypothesis (H_02) that there is no positive correlation between consumers self-identity and purchasing eco-labelled products.

The sixth hypothesis was tested using a Pearson Correlation to know if there is a positive correlation between buying eco-labelled products and availability in store. The variable considered for this test was awareness and Eco-labelled Product. The test had a Pearson Correlation of 0.407, which is considered a weak positive correlation. It was also significant as it had a value of 0.005. Based on this result we accept that there is a relationship between these two variables and we reject the null hypothesis (H_06) that there is no positive correlation between buying eco-labelled products and availability in store. The details of the results can be found in the Appendix section of the study.

Chapter 5. Discussion & Limitations

5.0 Introduction

This section presents the discussion about the argument generated throughout the literature review which is explaining the Millennial consumers buying behaviour towards green products and revealing eco-labels as a great acknowledgement strategy in order to inform consumers as well as raising awareness and driving buying behaviour. There are also assumptions made including the research as well as recommendations for future studies.

This study's exploration focus was on understanding whether eco-labels have a positive impact on Millennial consumers purchasing decisions in Ireland. It has also tried to ascertain if eco-labels are an effective marketing strategy which act as an informative factor for consumers; hence drives actual buying as well as increasing awareness of green products from a consumer perspective. As mentioned before, the rising significance of green marketing as a subject has been investigated by the industry and scholars deeply; thus it is thought to be worth knowing about the level of consumer knowledge in such green products and the main drivers which leads them to take action to buy them. In this study, regression and correlation analysis conducted as well as concerns with the descriptive analysis by supporting objectives of the study. Inferential statistics allowed the researcher to infer data about the Millennials in Ireland as a population from sample evidence.

5.1 Eco-label's Impact on Millennials Consumer Purchasing Behaviour Concerning with Demographics

The main aim of the study was to reveal the strong correlation between eco-labels as an informative marketing strategy which drives Millennial consumers to purchase green products over other options. It has proven throughout the study that millennials are seeking to buy green products.

Considerable examination exertion has been devoted to contemplating consumers beliefs and values as indicators of feasible purchaser buying behaviour. In any case, the inclination to overrate the impact of individual-related factors, such as, environmental beliefs and values and to disregard situational factors.

Personal values are accepted to be unsteady after some time and to change across various settings and circumstances (Steenkamp & de Jong, 2010). In the literature, Ajzen and Fishbein (1980) mentioned human behaviour theory which explains that human behaviour towards green products is mainly driven by personal attitudes and collective rules accepted by the community and by individuals peers. In this study, it has been proven through surveys that individuals' green buying behaviour is driven by their personal beliefs and belongings to society.

In this study in contrast to Peschel et al. (2016) claim on level of conscious behaviour and recognition of eco-labels, it has been recorded that eco-label symbols have a high impact on the consumers' decision making process to buy green products. This study has supported Branley (2013) in terms of food consumption in Ireland; individuals opt for paying for green products even though they do not have a stable income. According to a study conducted by Aksoy and Özsönmez (2019) willingness for purchasing fair trade goods on Generation Y, shows evidence which is the trust that shows a correlation between involving a product and individuals belief system. As a result of this study, has been found a strong relationship between generation Y and their sustainable buying behaviour accordingly.

5.2 Investigating Millennial Consumer's Understanding of Sustainability Schemes in The Context of Food Labels

Perception of sustainable labels' level of understanding was tested in the survey by asking them whether they have recognised eco-label symbols on the package before as well as asking to pick choices from strongly agree to disagree from a scale if they were familiar with the logos and make their buying decisions accordingly. According to results, consumers own experience and intelligence which will assess the knowledge of deciding to purchase green products and

afterwards coordinate a reasonable methodology for the degree of intention (Cerri et al., 2018). %42.1 of the Millennials consumers stated that they know that Eco-labels acts as an informative policy instrument to guide consumers about sustainable consumption as well as admitting that they consider buying through these labels availability on products.

From the outcome of the mediating role of environmental knowledge, it was discovered that customer view of sustainable marking schemes positively affects the green buying conduct (Ranjan & Kushwaha, 2017). That also revealed from the study that there is a strong connection between the understanding of eco-labels and recognisable proof of sustainable products and the environmental consumers' behaviour.

Corner, Whitmarsh and Xenias (2012) posited that despite general environmental concerns, people tend to make their decisions unconsciously, which may have a detrimental effect on the environment. In the same report, individuals' degree of understanding recorded pretty low; however, the level of understanding resulted as considerably high from a sample size in the research.

5.3 Investigate The Role of Environmental Concerns in The Purchasing of Eco-labelled Products

The primary attribute of the Millennials is that this generation group are worried about the environmental problems the world is confronting and subsequently that influences the manner in which they buy food. This generation Y is looking for green products which are as indicated by their values and belief systems and which compliments their food consumption habits (Aksoy & Özsönmez, 2019). It has revealed that they embrace the belief that there should be a limit of utilizing natural sources and that the natural environment should be protected, similarly Smith (2010) states that millennials aim to choose products that meet their moral and ethical values, no matter what the price of the product is.

The outcome of the study illustrates that most of the Millennial consumers relate themselves with part of an ecological assurance. In the general concept, understanding is thought to be a

significant obstacle for ecolabels to achieve its goal to inform individuals to buy green products; however, the results show that consumers who understand the labels believe that these labels are engaging and play a mediator role to raise awareness about green products to the consumers.

5.4 Investigate The Role of Self-identification in Purchasing Eco-labelled Products.

In this research, it has examined what degree of self-identification is effective on purchasing eco-labelled products associated with the individual's values, and it was revealed that environmentalism is one of the primary values which impacts in motivating consumers to use eco-labelled products.

Participants stated in the survey that they purchase green products because of their lifestyle that gives fulfilment of life and belonging to them. Thus, that helps to robust their self-esteem and self-actualisation (Groening et al., 2018). It has also been discovered that consumers prioritise collective idealisation as opposed to individualistic, which leads them to draw attention to environmental issues; thus buying sustainable food products. Therefore; this study also releases that Millennials consumers in Ireland are influenced by their peers due to being members of a sense of community and the expanding importance of community (Sarti et al., 2018). They feel attached to the environmental community; therefore, they prefer consuming green products.

5.5 Consumer's Willingness to Pay For Green Products

In research, environmental issues are increasingly becoming more critical (Dunlap & Scarce, 1991). People believe that environmental problems will become more serious (Ottman et al., 2006); consumers do not buy some products due to their environmental characteristics (Peattie, 2001) they even determined that they could afford to pay more to buy eco-friendly products.

Various examinations focused around customer aspiration on purchasing sustainable products and their degree of ability to buy over others just as a behavioural driver towards green purchasing choices (Grankvist & Biel, 2007). In this research, Millennials in Ireland have shown a willingness in moderate level to buy more over other products even though they do not have stable income considerably. They choose to buy a product connected with an environmental cause, even when the price of it is higher was measured considerably high in terms of consumers responses in the survey which explained in the data analysis section.

It is found that purchasers are eager to settle up to 5% extra for green items however a few different investigations have shown that a more significant expense may beat moral contemplations (Sodhi and Singh, 2017) and buy likelihood for sustainable diminishes as the cost premium expands (Grunert et al., 2014). The nearness of natural professional decision available has likewise been found to have an impact on green consumer behaviour. It is true to say that numerous buyers are eager to buy sustainable food products, yet this does not interpret into activities because of limited availability.

5.6 Role of Ecolabels in The Purchasing Green Products As An Acknowledgement Strategy

This study presents a piece of strong evidence on buying green food products if they have sustainable labels attached (such as fair trade, recycled) from Millennials consumers in Ireland.

Ecolabels are necessary to motivate consumers towards sustainable consumption behaviour as well as helping to build consumer awareness of environmental issues (Testa et al., 2015). In this study, there was a significant positive correlation between Millennial consumers awareness and availability of eco-labelled products. Millennial consumers moderately agreed that eco-labelled products are an indicator to green products which increase their knowledge on environmentally-friendly products; therefore Ecolabels are accepted as an effective acknowledgement strategy which increases awareness about green products (in response to Hypothesis 5) has been proven.

It has been recognised in the literature that conflicting perspectives when all is said and done while many scholars have expressed that green buying are not driven by environmental schemes on the package while others have expressed that ecolabels do draw in customers attention in this way affecting their purchasing behaviour (Leire & Thidell, 2005). The discoveries from this research agree on the argument that green millennial buyers are decidedly affected by ecolabels which have been proven with the hypothesis in the data analysis section. The majority of 51(53.7%) millennials by leaning towards strongly agree, agreed that they know that Ecolabeling is designed to encourage sustainable change and to lessen the harm on the natural environment.

Chapter 6. Conclusion, Limitations and Recommendations

6.1 Conclusion

Eco-labels as an effective marketing strategy has been expanding its applicability and positively impacting both in preserving the natural environment as well as changing consumer buying behaviour towards sustainable products. Thus that helps to create a sustainable production chain by impacting companies and consumers for the goodwill of the natural environment. The significance of the eco-labels are undeniable; because they are suggested as an indicator of sustainable products as an informative strategy, therefore it has benefits for informing consumers about green products and raising awareness amongst them.

The main aim of this research was to investigate the impact of Eco-labels on driving Millennial consumers buying behaviour in the food industry in Ireland. It has intended to understand consumer understanding of eco-labels and main behavioural drivers to purchase green products.

Literature addressed dependent and independent variables of consumer behaviour in purchasing intention; that is consumer motivation as a primary driver of buying behaviour, Ability which indicates an understanding of eco-labels on packaging and Opportunity that stands for usage of such labels and making it available in stores to communicate through consumers about green products (Grunert et al., 2014). From the information gathered from the literature review, in this study, an online survey has undertaken to analyse consumer behaviour critically.

Concerning testing adequately the hypotheses of the study, it is essential to address that practitioner acquired a comprehensive idea of the eco-labels impact on millennials consumers buying behaviour. To reach that conclusion, this study utilised quantitative analysis by conducting online surveys. The approach taken allowed the researcher to gather the idea of consumer behaviour towards green products from a large sample in Ireland, whether eco-labels have a positive impact on buying intention.

6.1.1 Consumer Motivation As a Driver of Purchasing Intention

The literature suggests consumer value as the main driver towards action (Zhang et al., 2019). Therefore, to investigate the role of values which are defined as environmental concerns and self-identification have been examined.

The more consumers have environmental concerns about preserving nature and creating a sustainable economy for the food production chain; the higher is likewise the degree of utilization of ecolabels as an acknowledgement of green products. On the other hand, the impacts are not solid, and the low degree of utilization is not because of a correspondingly low degree of apprehension about green issues identified with food production. Despite what might be expected, when given some information about the degree of environmental concerns about protecting natural environment identified with supportability in food production as a whole, there is commonly a modestly significant level of concern.

In this exploration, it has inspected what level of self-identification proof as another motivation that has an impact on buying eco-labelled products related with the individual's values, and it was covered that environmentalism is one of the essential value which impacts in urging millennial consumers to buy eco-labelled green products.

6.1.2 Economic, Emotional Capability Towards the Understanding of Eco-labels

In this research, has been investigated consumer understanding of Eco-labels in the context of food labels and financial capabilities regarding Age, Cultural Background, Education and Financial Stability.

This research has revealed that the absence of utilization of eco-labels can likewise be identified with the absence of comprehension of consumers about such green products. Sustainability is intangible and sophisticated terminology used for protecting the green environment; therefore, consumers may experience confusion to associate the eco-labels to the concept of sustainability. This research demonstrates that many millennial consumers show a

willingness to be part of natural preservation, and less significantly to moral issues that are additionally part of the more extensive scope of sustainability.

From the financial aspect, millennial consumers who have financial abilities are seeking to purchase green products, and they are willing to pay more for eco-labelled green products. They prefer purchasing green products connected with an environmental cause, even when it cost more was measured considerably high.

6.1.3 The Role of Ecolabels in The Purchasing Green Products

According to the theoretical framework, Opportunity acts as a mediator factor which has an impact in strengthening the relationship between motivation and the behaviour in purchasing intention. Opportunity stands for the availability of eco-labelled products for the use of consumers and informative communicators, which helps to explain independent variables in an understanding of consumer behaviour. In this research, it has been revealed that Eco-labels, as an acknowledgement strategy, has a more significant impact on the purchasing green products.

Furthermore, comprehension of eco-label has a strong relationship with raising awareness of green consumption, and it has proven that it is a great communicator with consumers about the concept of sustainability.

To sum up, the findings researcher concluded that;

- 1) Environmental concerns and self-identification motivate millennial consumers to purchase of green products; thus, eco-labels may help to protect the natural environment.
- 2) Understanding of eco-labels on packaging in the context of food is important; therefore, in order to increase the impact, it is essential to build trust with consumers by developing one main eco-label scheme which is valid and easy to understand.
- 3) Consumers show a willingness to pay more for green products; thus eco-labels can make a difference by giving companies a competitive advantage, and it can have a positive impact on the production chain of food for the goodwill of a sustainable system.

4) Eco-labels can be considered as a communication strategy with green consumers and can be used for encouraging consumers as well as make consumers more aware of environmental problems the world faces today.

6.2 Limitations

This study has revealed insights on consumer perception of Eco-Labels in Ireland; however, there were limitations which narrow down the scope of the research. Firstly, the study majorly focused on residence in Ireland; therefore, the sample size was limited. Due to focusing on Millennial consumers narrowed down the research in a way that others' opinions on eco-labels were eliminated. Gathering data through online surveys can be considered as a limit for this study. Because, even though focus groups and in-depth interviews can be considered as an alternative approach to take for this research, having a specific time to complete this research as well as unprecedented Covid-19 pandemic which has taken place during the study made it inappropriate to conduct face to face interviews and gatherings for focus groups. The improper portrayal of the objective populace was another disadvantage of the study because the study aims to understand Millennials opinion on the subject, thus limits by only getting partial information about the knowledge of a sample size. Therefore, the findings of the research are not generalised; however, it can be suggested.

6.3 Recommendations For Further Research

It has been recognised that the green market is still considered to be a niche for products which have environmentally-friendly schemes on them to communicate with customers. Despite the gradual increase of consumers' knowledge about sustainable products, it is hard to put the actual conscious buying behaviour into practice. However, the results from Millennials consumers were promising.

6.3.1 Academic Research

In this research, the particular focus was the food industry, thus for further research to examine the impact of ecolabels on consumers buying behaviour other industries and categories can be applied to expand the scope of the field of the research. The millennial generation was centre of the attention in this research, for deep diving into Irish consumers attitude towards sustainable goods, research can broaden looking at coming up generations attitude as well as investigating more with qualitative methods by interviewing individuals to comprehend the green behaviour.

The future examination could adopt another strategy to this investigation by utilising mixed methodology, utilising overview to gather the quantitative information supplemented with subjective information by methods of focus groups and face to face interviews to consider the drivers of conscious buyer behaviour. Studies could be attempted to distinguish why green promoting affects the ecological behaviour of buyers negatively, although ecolabels have been found to affect the equivalent positively. Therefore, it can be focused on greenwashing, and it can build a new strategy in order to gain trust from consumers. As per (Gorard and Taylor, (2004) utilising different strategies research configuration is a superior method of getting increasingly exact outcomes.

6.3.2 Green marketing business

Research has revealed great insight into a Millennial consumers attitude towards green products in Ireland; therefore, companies can consider using targeted green marketing strategies either for their corporate social responsibility campaigns or contribute to their bottom line. Through using eco-labeled products companies can build trust with their customers by increasing transparency as well as encouraging consumers to create sustainable environments.

Appendices

Appendix 1 – Questionnaire

Eco-label's Impact on Consumer Purchasing Behaviour

The survey is a research study which is conducted by a Masters student as a final project. The purpose of this study is to understand whether eco-labels' (as a Green Marketing activity) have an impact on consumers purchasing behaviour.

Eco-labels are small symbols on the packaging which signify that the manufacturer and product developers have taken into consideration how their products impact on the environment through the production chain.

All responses given by you will be kept strictly confidential, anonymous and used for academic purposes only. Your contribution will greatly benefit our research and impact the outcome of the study.

If you are a resident in Ireland and over 18, I would kindly invite you to participate in this 6-8mins length questionnaire. It is super important to answer all questions patiently due to its direct effect on the accurateness of the study 🙌

Many thanks for your time and consideration.

Selin Özer

**Required*

1. What is your gender?

Mark only one oval.

Female

Male

2. What is your age?

Mark only one oval.

18-25 years old

26-40 years old

40-55 years old

56+ years old

3. What is the highest level of education you have completed or the highest degree you have received?

Mark only one oval.

- No schooling completed
- High school degree or equivalent
- Some college but no degree
- Associate degree
- Bachelor degree
- Masters degree
- Doctorate or PhD

4. Please specify your ethnicity. *

Mark only one oval.

- White
- Hispanic or Latino
- Black or African American
- Native American
- Asian / Pacific Islander
- Other: _____

5. Which of these describes your personal yearly income? *

Mark only one oval.

- Less than 10.000
- 10.000 to 24.000
- 25.000 to 49.000
- 50.000 to 75.000
- Prefer not to answer

6. where is your residence?

Mark only one oval.

- Ireland
- Uk
- Europe
- Other: _____

7. What is your gender?

Mark only one oval.

Female

Male

8. What is your age?

Mark only one oval.

18-25 years old

26-40 years old

40-55 years old

56+ years old

9. What is the highest level of education you have completed or the highest degree you have received?

Mark only one oval.

No schooling completed

High school degree or equivalent

Some college but no degree

Associate degree

Bachelor degree

Masters degree

Doctorate or PhD

10. Please specify your ethnicity. *

Mark only one oval.

White

Hispanic or Latino

Black or African American

Native American

Asian / Pacific Islander

Other: _____

11. Which of these describes your personal yearly income? *

Mark only one oval.

- Less than 10,000
- 10,000 to 24,000
- 25,000 to 49,000
- 50,000 to 75,000
- Prefer not to answer

12. where is your residence?

Mark only one oval.

- Ireland
- Uk
- Europe
- Other: _____

Investigating consumer understanding
of sustainability schemes in the context
of food labels

Please indicate how strongly you agree or disagree
with each statement regarding your ecological
knowledge

Please look at the picture below and answer the question accordingly



13. Have you seen any of these logos before?

Tick all that apply.

- I have seen these logos before
- I haven't seen these logos before

14. I acknowledge that I understand what these logos mean?

Mark only one oval.

- Yes, I do understand
- No, I do not understand

15. I know that Eco-labels acts as an informative policy instrument with the purpose of guiding consumers about sustainable consumption.

Mark only one oval.

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

16. I know that Ecolabeling is designed to encourage sustainable change and to lessen the harm on the natural environment.

Mark only one oval.

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

17. I take into account eco-labels to see if the contents are environmentally safe when deciding to buy a product.

Mark only one oval.

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

Investigate the role of environmental concerns in the purchasing of eco-labelled products.

Please indicate how strongly you agree or disagree with each statement regarding your values and beliefs.

18. I believe individuals have control over industrial growth and my demand for green products will impact corporate production outputs.

Mark only one oval.

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

19. I believe that there should be a limit of utilizing natural sources and that the natural environment should be protected; thus I buy eco-labelled products.

Mark only one oval.

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

20. I purchase eco-labelled products because I believe I contribute to the preservation of natural resources with my actions.

Mark only one oval.

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

21. I will not choose products which have no labels or indications whether it is recyclable or sustainable.

Mark only one oval.

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

22. I feel good about buying products which are less damaging to the environment.

Mark only one oval.

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

Investigate the role of self-identification in purchasing eco-labelled products.

Please indicate how strongly you agree or disagree with each statement on the scale.

23. My friend's positive attitudes towards environmentalism influence my consumption of green products.

Mark only one oval.

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

24. I purchase green products as it suits my lifestyle and it gives me a sense of fulfilment and belonging.

Mark only one oval.

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

25. Buying green products is a way of expressing myself because I respect nature.

Mark only one oval.

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

26. I really find Eco-label schemes engaging and relevant to my lifestyle.

Mark only one oval.

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

Consumers' willingness to pay for green products.

Please tick for each of the following statements in line with the extent to which you agree with the statement.

27. I choose to buy a product connected with an environmental cause, even when the price of it is higher.

Mark only one oval.

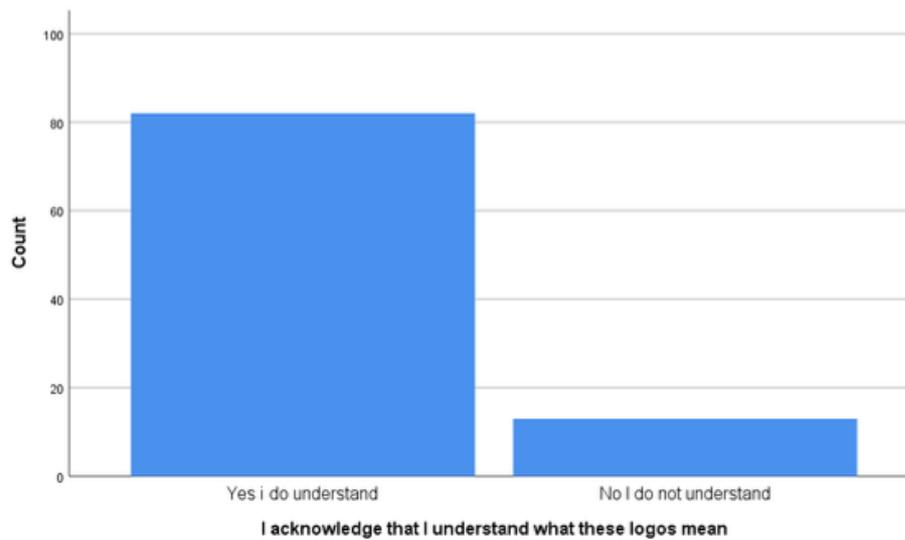
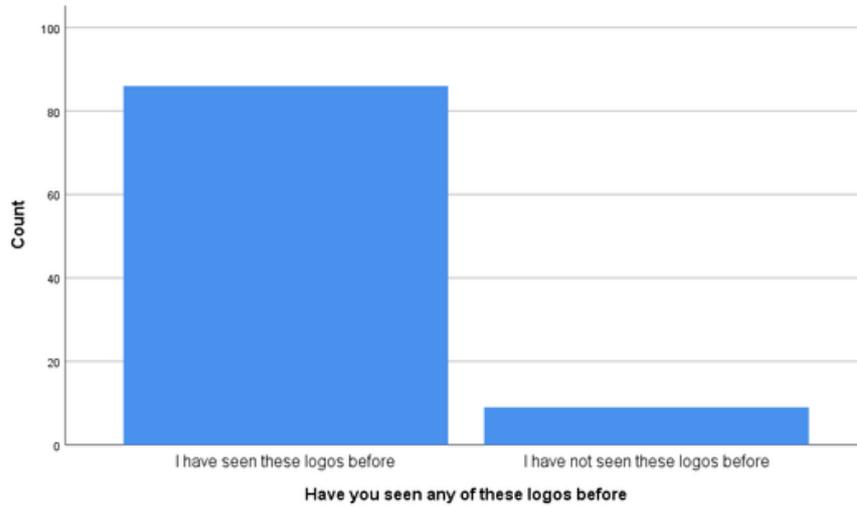
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

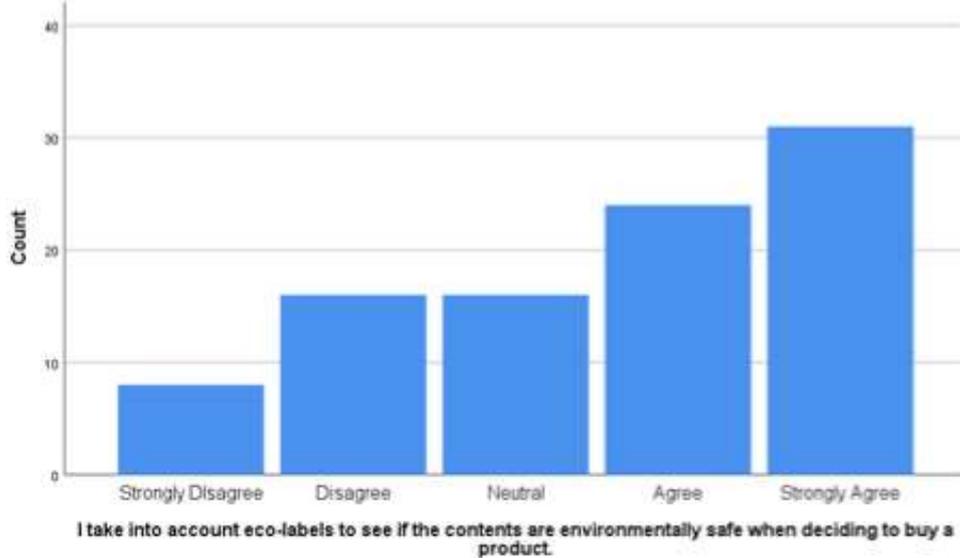
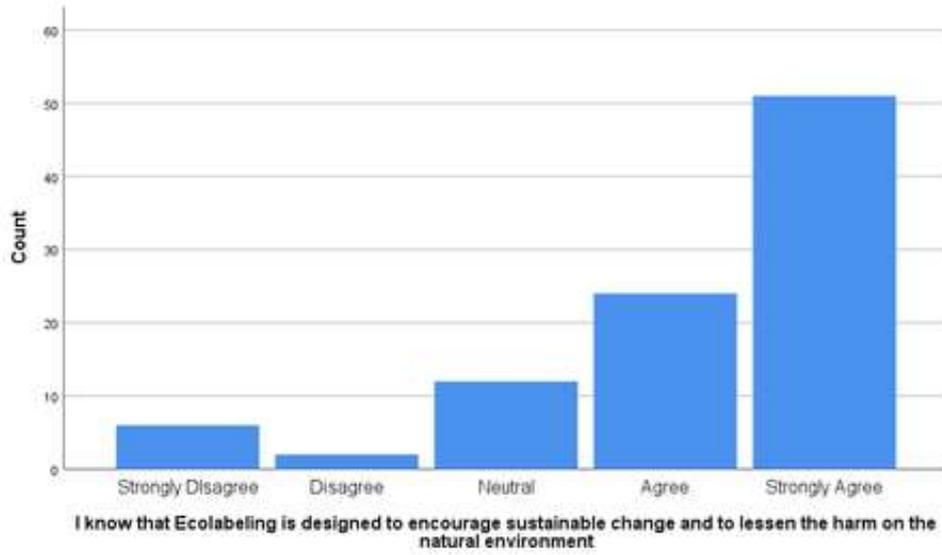
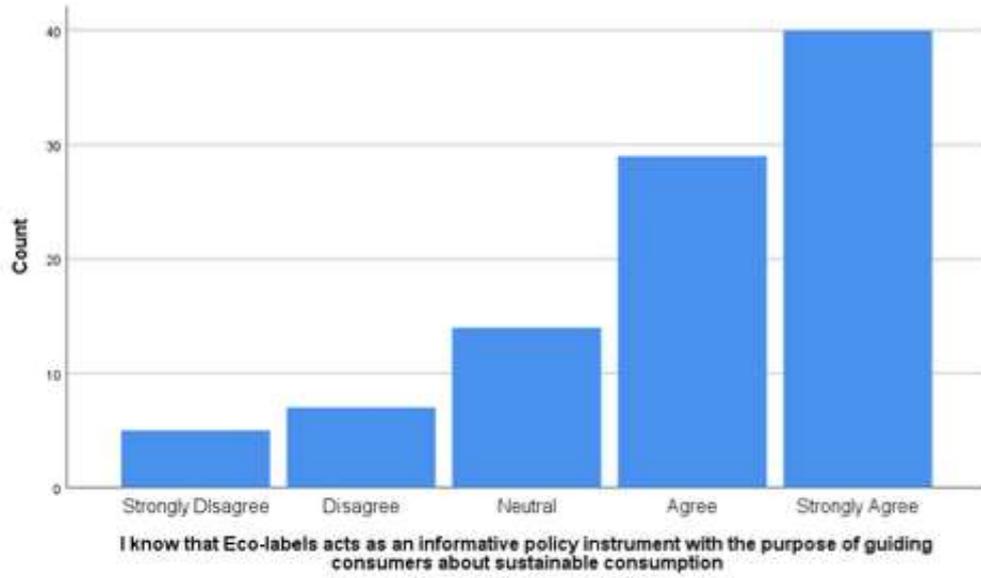
28. I buy green products even though I do not have a stable income.

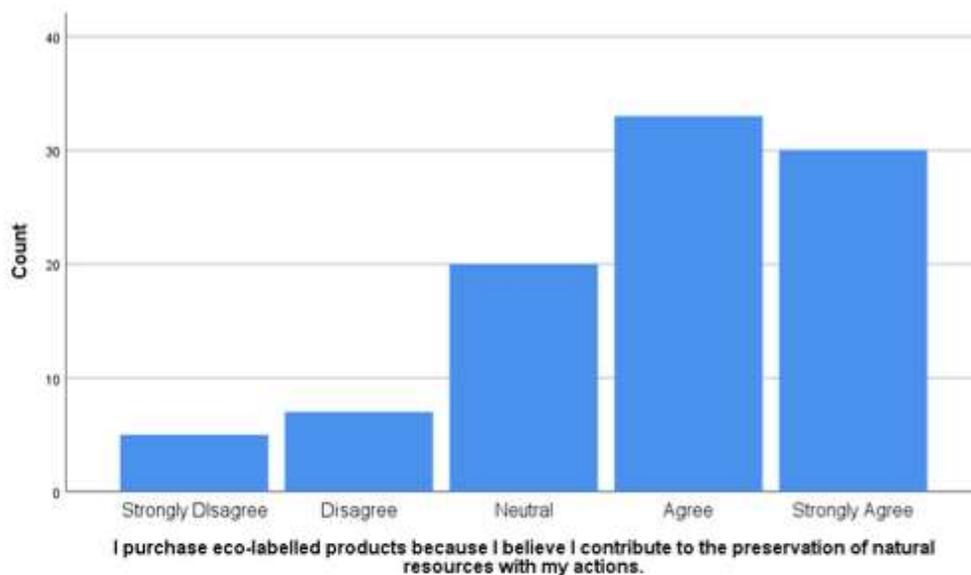
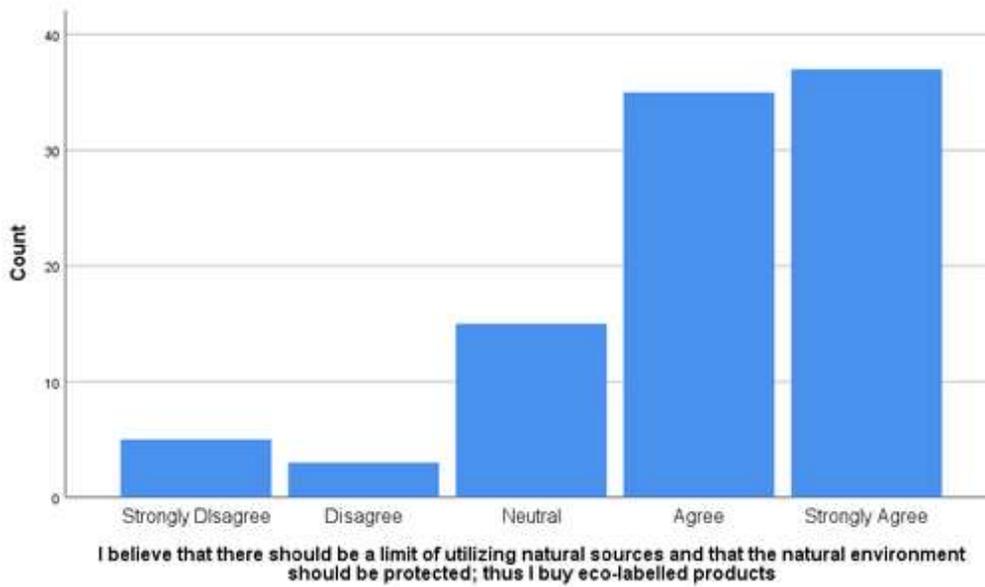
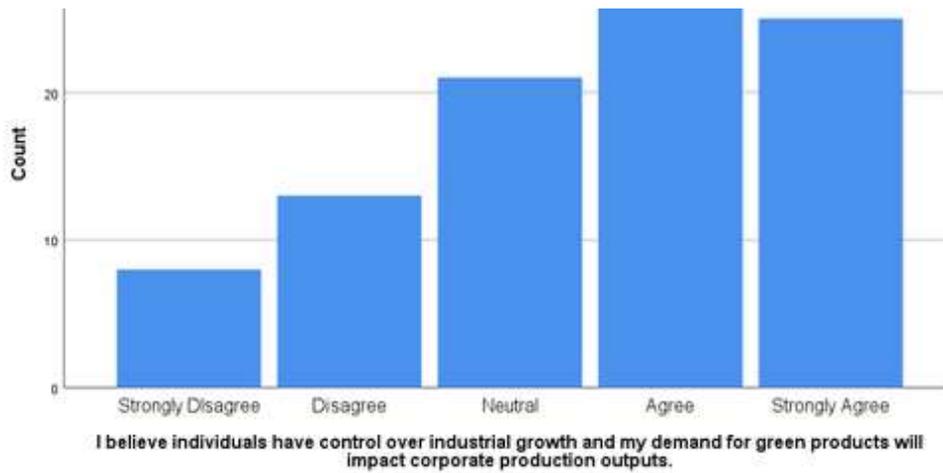
Mark only one oval.

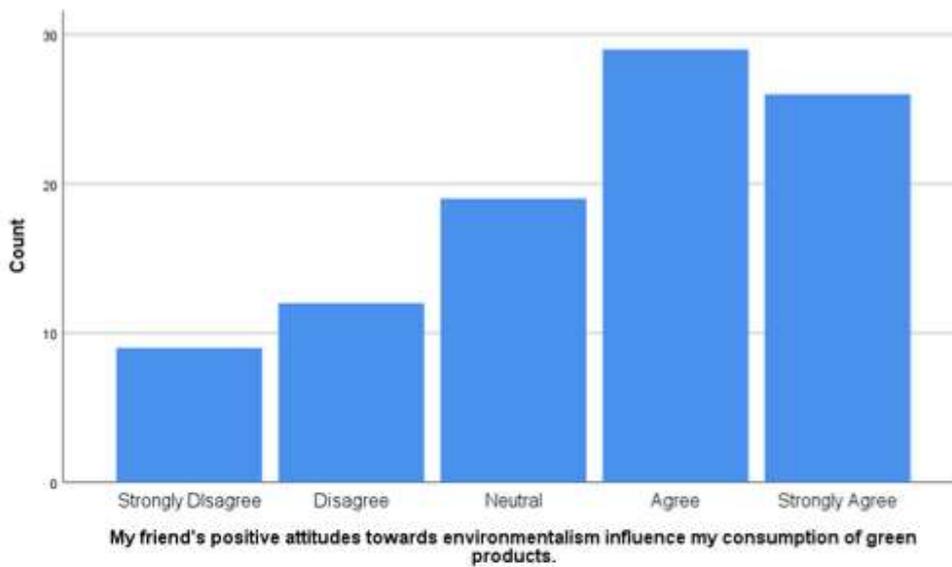
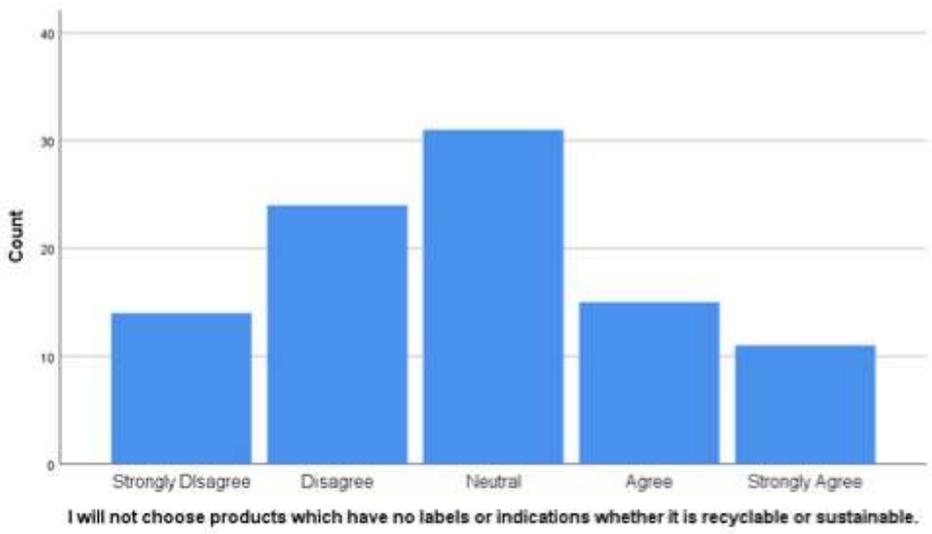
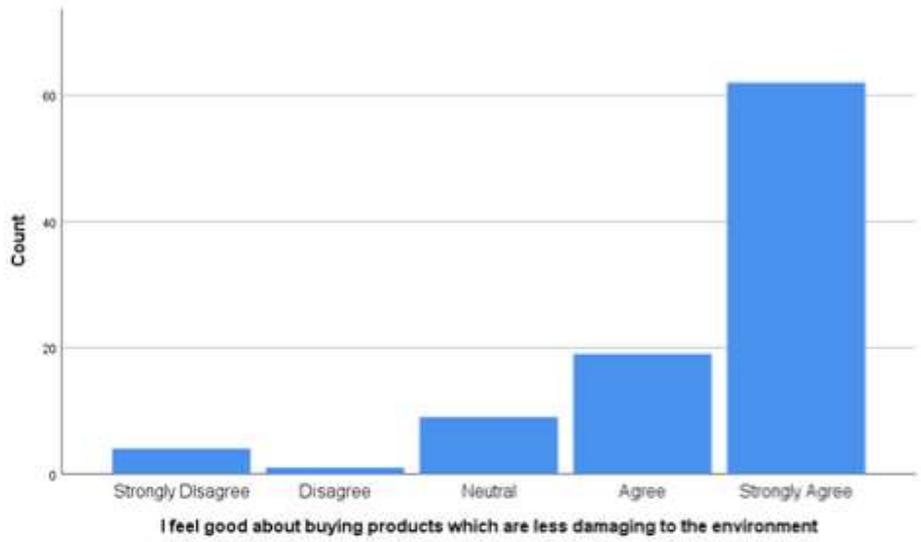
- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

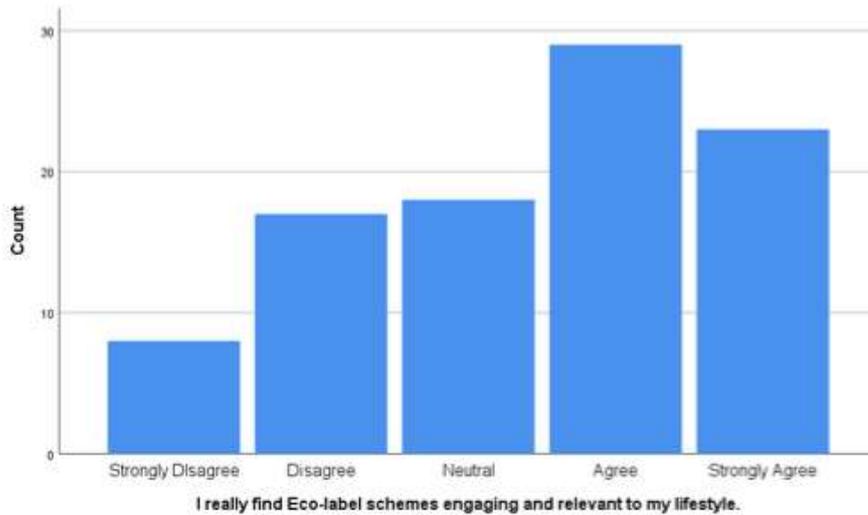
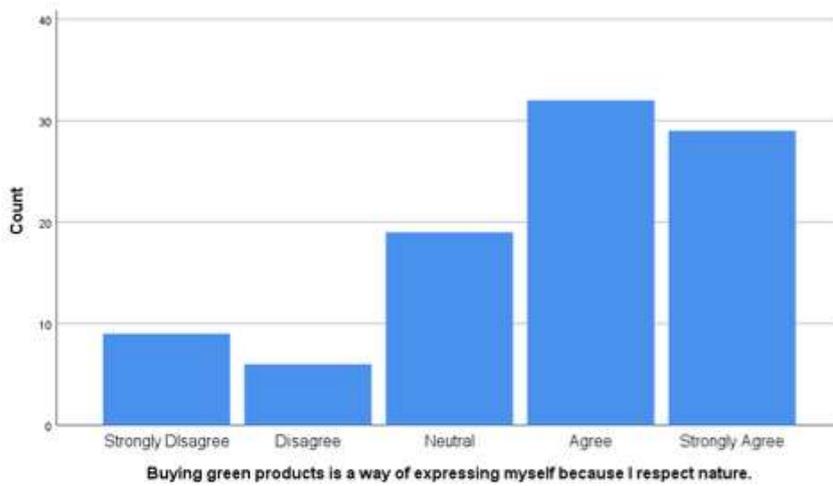
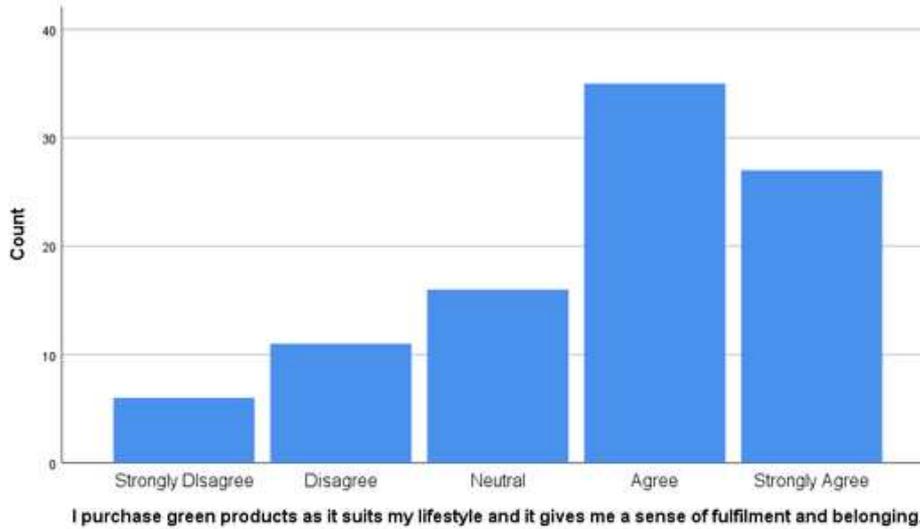
Appendix 2 – Results Representation in Bar Charts

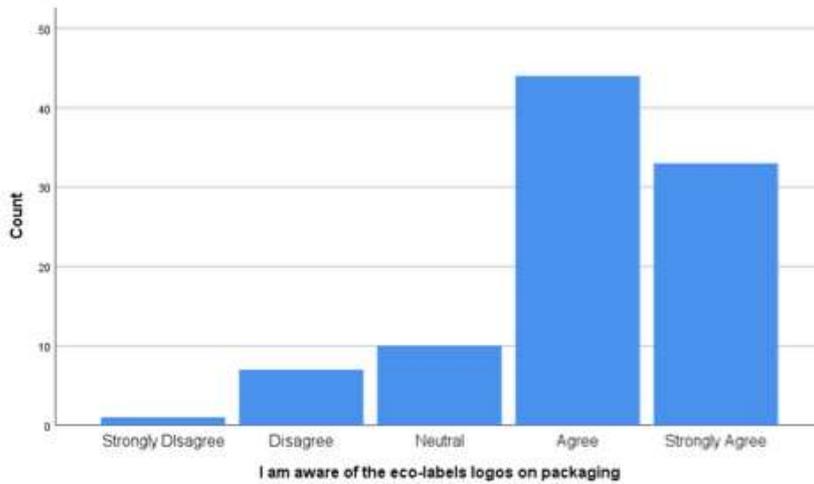
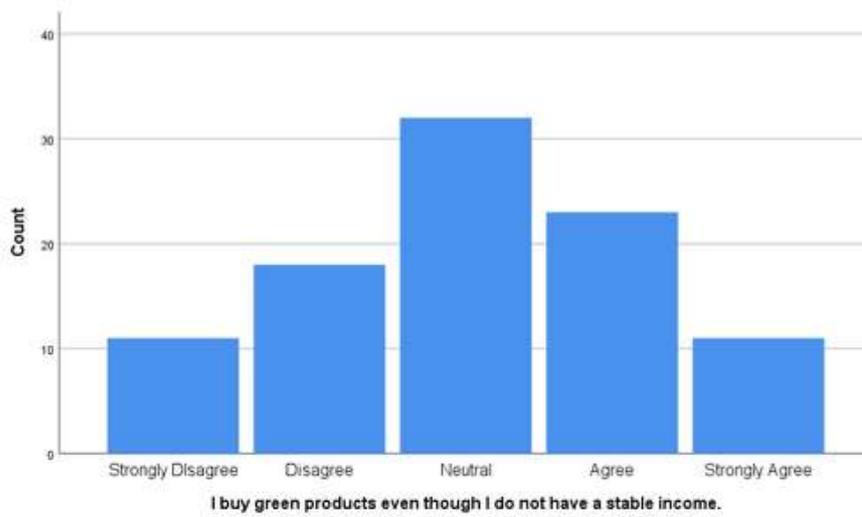
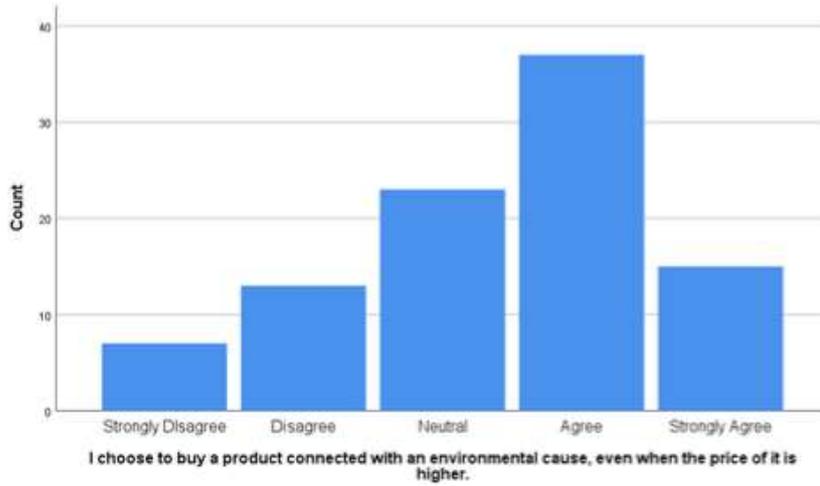


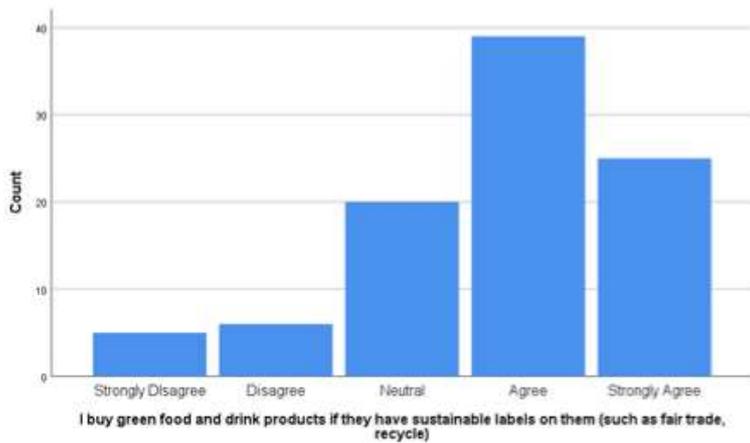
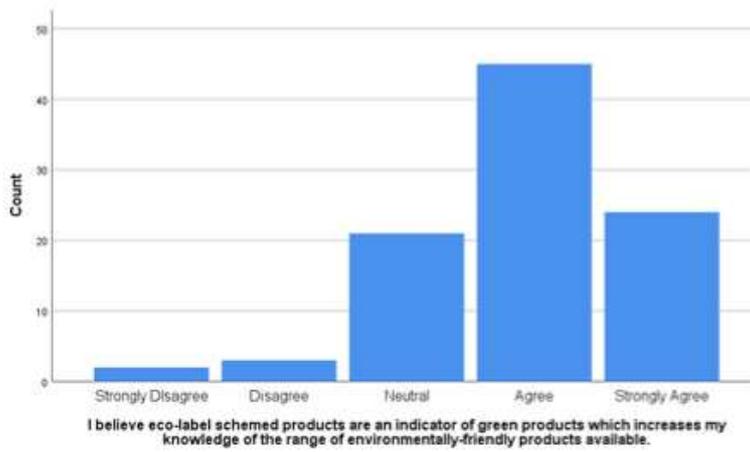
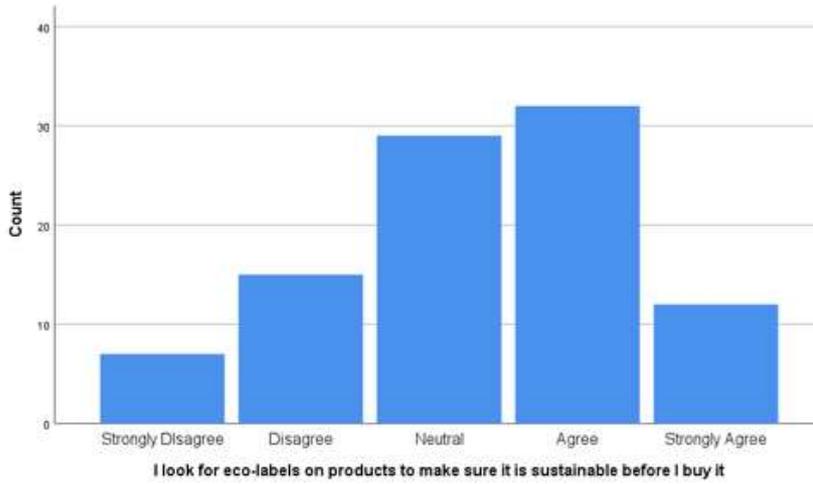


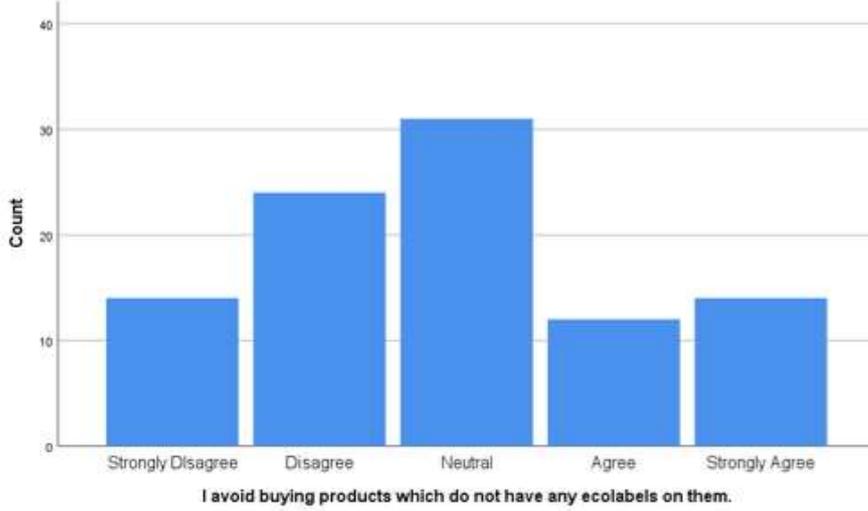
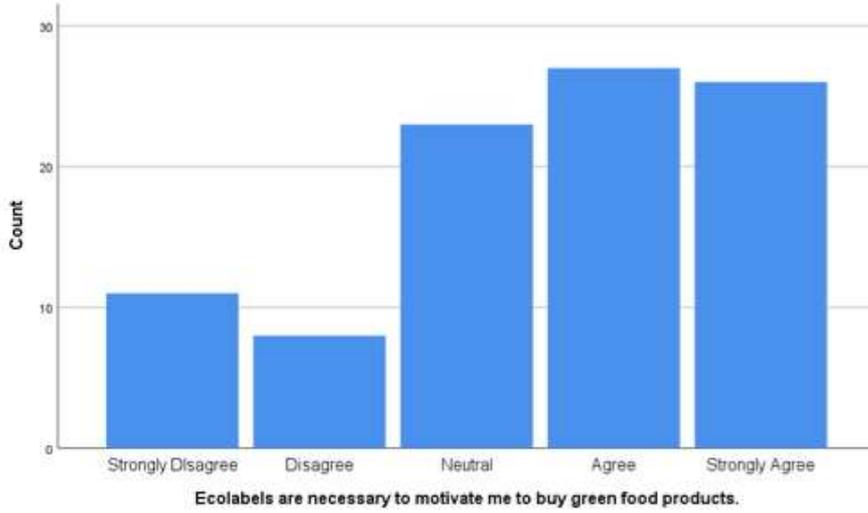












Appendix 3 – Correlation Results

Model Summary

What is your age	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
18-25 years old	1	.593 ^a	.351	.324	.60148
26-40 years old	1	.585 ^a	.342	.327	.68569
41-55 years old	1	.848 ^a	.720	.694	.42956
56 years and above	1	.901 ^a	.812	.788	.54787

a. Predictors: (Constant), Environmental_concerns

ANOVA^a

What is your age	Model		Sum of Squares	df	Mean Square	F	Sig.
18-25 years old	1	Regression	4.702	1	4.702	12.996	.001 ^b
		Residual	8.683	24	.362		
		Total	13.385	25			
26-40 years old	1	Regression	10.757	1	10.757	22.879	.000 ^b
		Residual	20.687	44	.470		
		Total	31.444	45			
41-55 years old	1	Regression	5.207	1	5.207	28.219	.000 ^b
		Residual	2.030	11	.185		
		Total	7.237	12			
56 years and above	1	Regression	10.355	1	10.355	34.497	.000 ^b
		Residual	2.401	8	.300		
		Total	12.756	9			

a. Dependent Variable: Eco_product

b. Predictors: (Constant), Environmental_concerns

Coefficients^a

What is your age	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
18-25 years old	1	(Constant)	1.215	.630		1.928	.066
		Environmental_concerns	.593	.165	.593	3.605	.001
26-40 years old	1	(Constant)	1.269	.470		2.700	.010
		Environmental_concerns	.611	.128	.585	4.783	.000
41-55 years old	1	(Constant)	.072	.640		.113	.912
		Environmental_concerns	.869	.164	.848	5.312	.000
56 years and above	1	(Constant)	-1.307	.857		-1.526	.165
		Environmental_concerns	1.238	.211	.901	5.873	.000

a. Dependent Variable: Eco_product

ANOVA^a

What is your age	Model		Sum of Squares	df	Mean Square	F	Sig.
18-25 years old	1	Regression	5.483	1	5.483	16.654	.000 ^b
		Residual	7.902	24	.329		
		Total	13.385	25			
26-40 years old	1	Regression	14.211	1	14.211	36.283	.000 ^b
		Residual	17.233	44	.392		
		Total	31.444	45			
41-55 years old	1	Regression	4.747	1	4.747	20.967	.001 ^b
		Residual	2.490	11	.226		
		Total	7.237	12			
56 years and above	1	Regression	9.643	1	9.643	24.776	.001 ^b
		Residual	3.113	8	.389		
		Total	12.756	9			

a. Dependent Variable: Eco_product

b. Predictors: (Constant), Self_identification

Coefficients^a

What is your age	Model		Unstandardized Coefficients		Standardized	t	Sig.
			B	Std. Error	Coefficients Beta		
18-25 years old	1	(Constant)	1.815	.415		4.369	.000
		Self_identification	.454	.111	.640	4.081	.000
26-40 years old	1	(Constant)	1.341	.365		3.677	.001
		Self_identification	.593	.098	.672	6.024	.000
41-55 years old	1	(Constant)	.703	.607		1.158	.271
		Self_identification	.784	.171	.810	4.579	.001
56 years and above	1	(Constant)	-.048	.763		-.063	.952
		Self_identification	.965	.194	.869	4.978	.001

a. Dependent Variable: Eco_product



ANOVA^a

What is your age	Model		Sum of Squares	df	Mean Square	F	Sig.
18-25 years old	1	Regression	3.246	1	3.246	7.683	.011 ^b
		Residual	10.139	24	.422		
		Total	13.385	25			
26-40 years old	1	Regression	8.332	1	8.332	15.861	.000 ^b
		Residual	23.113	44	.525		
		Total	31.444	45			
41-55 years old	1	Regression	3.403	1	3.403	9.763	.010 ^b
		Residual	3.834	11	.349		
		Total	7.237	12			
56 years and above	1	Regression	8.008	1	8.008	13.494	.006 ^b
		Residual	4.748	8	.593		
		Total	12.756	9			

a. Dependent Variable: Eco_product

b. Predictors: (Constant), Understanding

Coefficients^a

What is your age	Model		Unstandardized Coefficients		Standardized	t	Sig.
			B	Std. Error	Coefficients Beta		
18-25 years old	1	(Constant)	2.084	.508		4.103	.000
		Understanding	.337	.122	.492	2.772	.011
26-40 years old	1	(Constant)	1.900	.407		4.665	.000
		Understanding	.420	.106	.515	3.983	.000
41-55 years old	1	(Constant)	1.412	.662		2.133	.056
		Understanding	.479	.153	.686	3.125	.010
56 years and above	1	(Constant)	-1.380	1.383		-.998	.348
		Understanding	1.240	.337	.792	3.673	.006

a. Dependent Variable: Eco_product

ANOVA^a

What is your age	Model		Sum of Squares	df	Mean Square	F	Sig.
18-25 years old	1	Regression	6.427	1	6.427	22.172	.000 ^b
		Residual	6.957	24	.290		
		Total	13.385	25			
26-40 years old	1	Regression	9.560	1	9.560	19.221	.000 ^b
		Residual	21.884	44	.497		
		Total	31.444	45			
41-55 years old	1	Regression	.753	1	.753	1.278	.282 ^b
		Residual	6.484	11	.589		
		Total	7.237	12			
56 years and above	1	Regression	8.221	1	8.221	14.503	.005 ^b
		Residual	4.535	8	.567		
		Total	12.756	9			

a. Dependent Variable: Eco_product

b. Predictors: (Constant), Financial_Ability

Coefficients^a

What is your age	Model		Unstandardized Coefficients		Standardized	t	Sig.
			B	Std. Error	Coefficients Beta		
18-25 years old	1	(Constant)	1.338	.460		2.909	.008
		Financial_Ability	.668	.142	.693	4.709	.000
26-40 years old	1	(Constant)	1.842	.385		4.788	.000
		Financial_Ability	.506	.115	.551	4.384	.000
41-55 years old	1	(Constant)	2.366	.953		2.484	.030
		Financial_Ability	.321	.284	.323	1.130	.282
56 years and above	1	(Constant)	.512	.850		.602	.564
		Financial_Ability	.876	.230	.803	3.808	.005

a. Dependent Variable: Eco_product

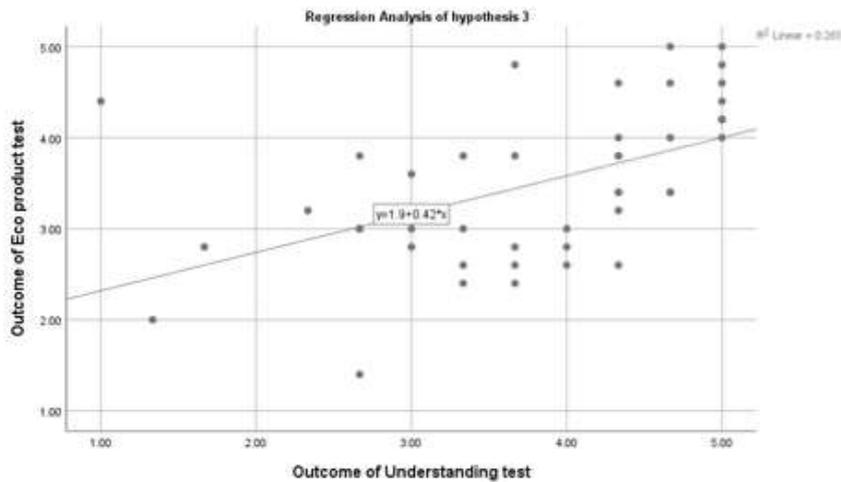
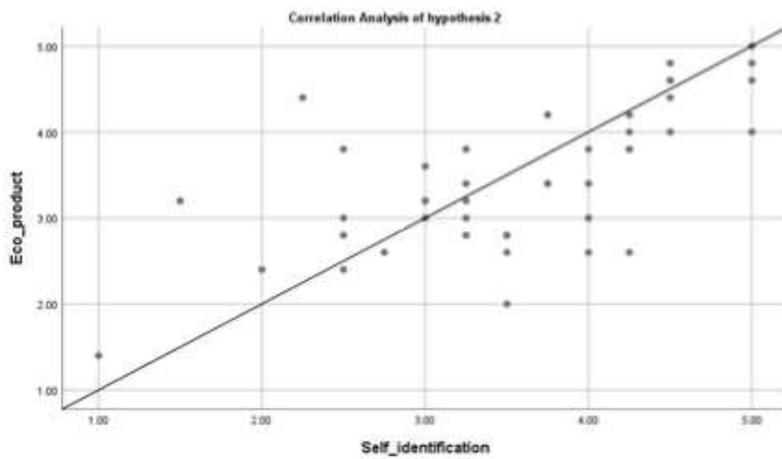
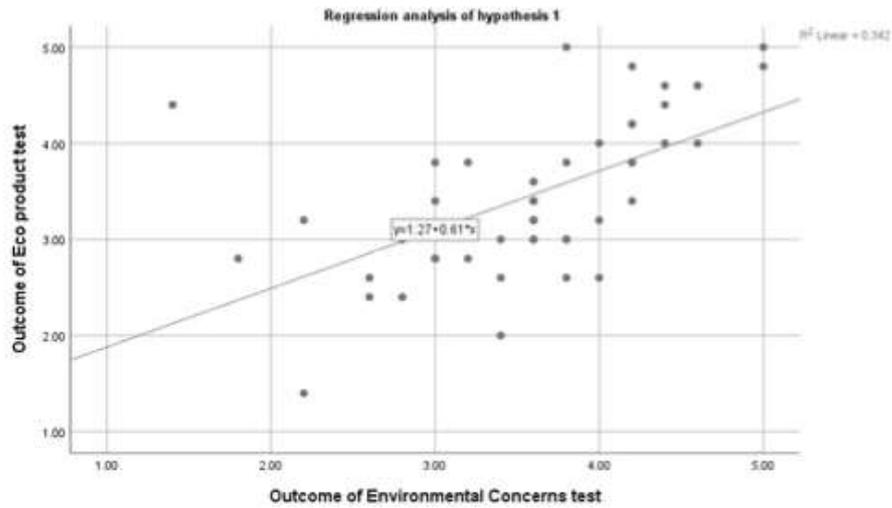
ANOVA^a

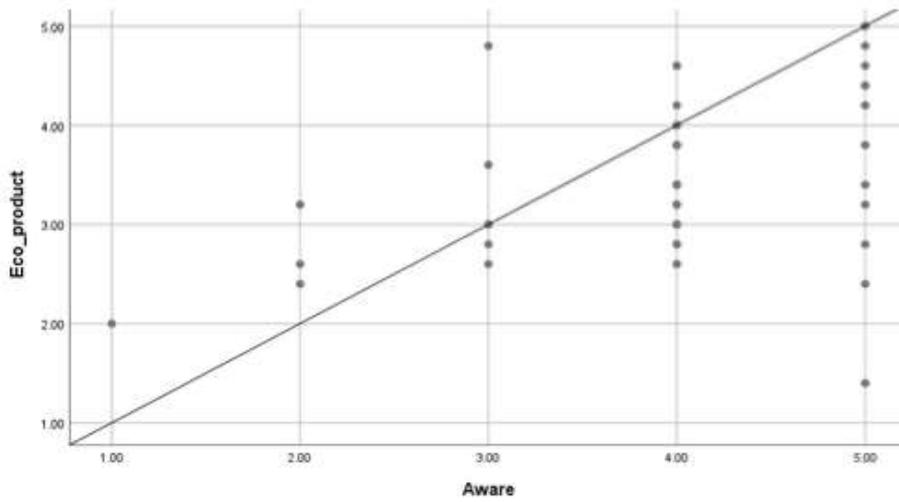
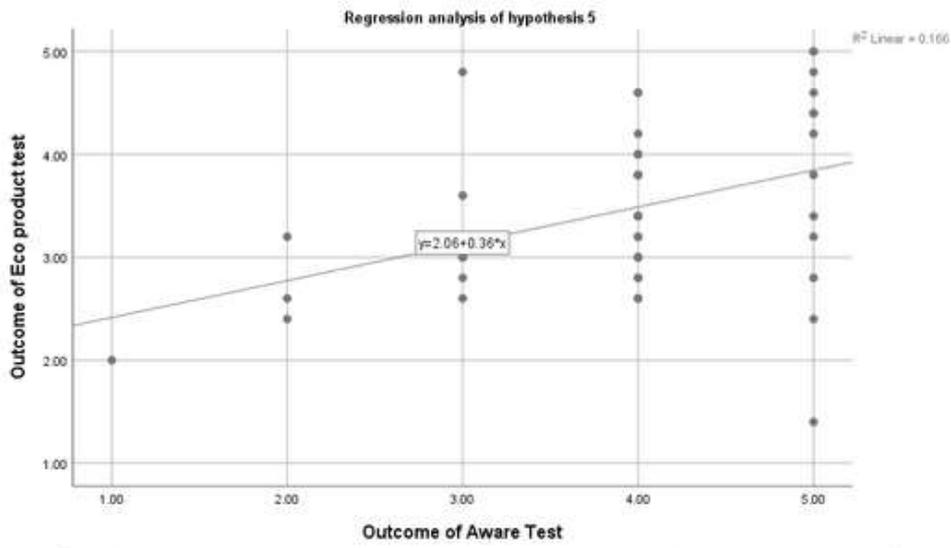
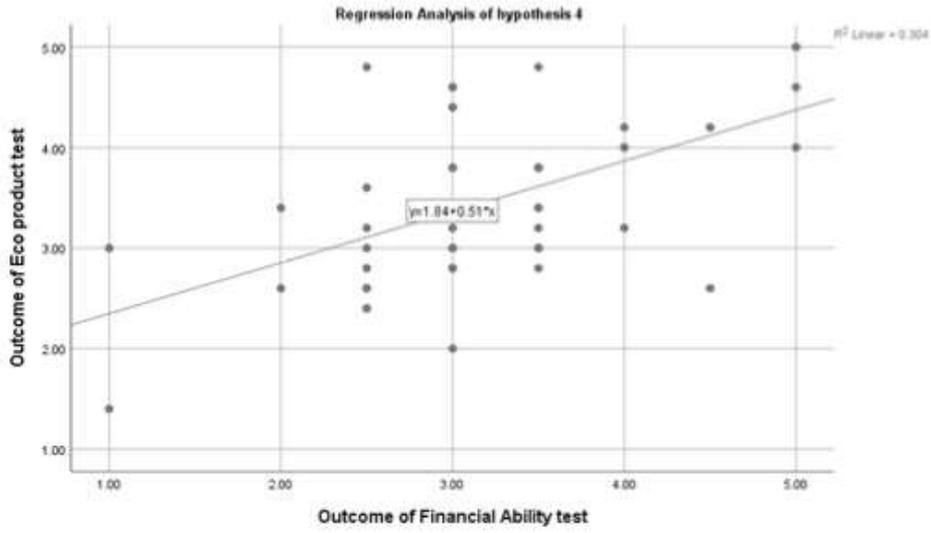
What is your age	Model		Sum of Squares	df	Mean Square	F	Sig.
18-25 years old	1	Regression	3.491	1	3.491	8.467	.008 ^b
		Residual	9.894	24	.412		
		Total	13.385	25			
26-40 years old	1	Regression	5.221	1	5.221	8.760	.005 ^b
		Residual	26.224	44	.596		
		Total	31.444	45			
41-55 years old	1	Regression	1.828	1	1.828	3.718	.080 ^b
		Residual	5.409	11	.492		
		Total	7.237	12			
56 years and above	1	Regression	8.662	1	8.662	16.924	.003 ^b
		Residual	4.094	8	.512		
		Total	12.756	9			

a. Dependent Variable: Eco_product

b. Predictors: (Constant), Aware

Appendix 4 Regression Analysis of Hypotheses





Bibliography

- Abaza, H., Cosbey, A., Gonzalez, A., Lohsomboon, P., Mallet, P., Ng, G., Polak, J., Solgaard, A., Sonnemann, G., Steenblik, R., Stilwell, M., Tebar-Less, C., Whelan, T., & Zarrilli, S. (2005). *The Trade and Environmental Effects of Ecolabels: Assessment and Response* <https://unep.ch/etb/publications/Ecolabelpap141005f.pdf>
- Ahrens, T. (2008). Overcoming the subjective-objective divide in interpretive management accounting research. In *Accounting, Organizations and Society* (Vol. 33, Issues 2–3, pp. 292–297). Elsevier Ltd. <https://doi.org/10.1016/j.aos.2007.03.002>
- Ajzen, I. (1991). The Theory of Planned Behavior. In *ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES* (Vol. 50).
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior* (2nd ed.). N.J.: Prentice-Hall.
- Aksoy, H., & Özsönmez, C. (2019). How Millennials' Knowledge, Trust, and Product Involvement Affect the Willingness to Pay a Premium Price for Fairtrade Products? *Asian Journal of Business Research*, 9(2), 105. <https://doi.org/10.14707/ajbr.190062>
- Ang, J. B. (2008). A survey of recent developments in the literature of finance and growth. *Journal of Economic Surveys*, 22(3), 536–576. <https://doi.org/10.1111/j.1467-6419.2007.00542.x>
- Arseculeratne, D., & Yazdanifard, R. (2013). How Green Marketing Can Create a Sustainable Competitive Advantage for a Business. *International Business Research*, 7(1), 1–8. <https://doi.org/10.5539/ibr.v7n1p130>
- Atkinson, L., & Rosenthal, S. (2014). Signaling the green sell: The influence of eco-label source, argument specificity, and product involvement on consumer trust. *Journal of Advertising*, 43(1), 33–45. <https://doi.org/10.1080/00913367.2013.834803>
- Barbarossa, C., & Pastore, A. (2015). Why environmentally conscious consumers do not purchase green products: A cognitive mapping approach. *Qualitative Market Research*, 18(2), 188–209. <https://doi.org/10.1108/QMR-06-2012-0030>
- Bartiaux, F. (2008). Does environmental information overcome practice compartmentalisation and change consumers' behaviours? *Journal of Cleaner Production*, 16(11), 1170–1180. <https://doi.org/10.1016/j.jclepro.2007.08.013>
- Bayton, J. A. (1958). Motivation, Cognition, Learning—Basic Factors in Consumer Behavior. *Journal of Marketing*, 22(3), 282–289. <https://doi.org/10.1177/002224295802200305>

- Bell, E., Bryman, A., & Harley, B. (2018a). *Business research methods* (5th ed.). Oxford University Press.
- Bethlehem, J. (2010). Selection Bias in Web Surveys. *International Statistical Review*, 78(2), 161–188. <https://doi.org/10.1111/j.1751-5823.2010.00112.x>
- Bordens, K., & Abbott, B. (2002). *Research design and methods: A process approach*. McGraw-Hill. <https://psycnet.apa.org/record/2001-18329-000>
- Boztepe, A. (2012). European Journal of Economic and Political Studies Green Marketing and Its Impact on Consumer Buying Behavior. *European Journal of Economic and Political Studies*, 5(1). <http://www.academia.edu/download/49801226/83-167-1-SM.pdf>
- Branley, A. (2013). *The impact of greenwashing on green marketing in Ireland* [Institute of Technology Sligo]. <http://dspace-test.interleaf.ie/handle/20.500.12065/617>
- Brécard, D., Lucas, S., Pichot, N., & Salladarré, F. (2012). Consumer preferences for eco, health and fair trade labels. An application to seafood product in France. *Journal of Agricultural and Food Industrial Organization*, 10(1). <https://doi.org/10.1515/1542-0485.1360>
- Capstick, S., Whitmarsh, L., Poortinga, W., Pidgeon, N., & Upham, P. (2015). International trends in public perceptions of climate change over the past quarter century. *Wiley Interdisciplinary Reviews: Climate Change*, 6(1), 35–61. <https://doi.org/10.1002/wcc.321>
- Cerri, J., Testa, F., & Rizzi, F. (2018). The more I care, the less I will listen to you: How information, environmental concern and ethical production influence consumers' attitudes and the purchasing of sustainable products. *Journal of Cleaner Production*, 175, 343–353. <https://doi.org/10.1016/j.jclepro.2017.12.054>
- Chekima, B. C., Syed Khalid Wafa, S. A. W., Igau, O. A., Chekima, S., & Sondoh, S. L. (2016). Examining green consumerism motivational drivers: Does premium price and demographics matter to green purchasing? *Journal of Cleaner Production*, 112(4), 3436–3450. <https://doi.org/10.1016/j.jclepro.2015.09.102>
- Chowdhury, M. F. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal of Philosophy*, 4(3), 432–438. <https://doi.org/10.4236/ojpp.2014.43047>
- Clark, D. (2009). *The rough guide to green living*. Dorling Kindersley Ltd.
- Corner, A., Whitmarsh, L., & Xenias, D. (2012a). Uncertainty, scepticism and attitudes towards climate change: Biased assimilation and attitude polarisation. *Climatic Change*, 114(3–4), 463–478. <https://doi.org/10.1007/s10584-012-0424-6>
- Corner, A., Whitmarsh, L., & Xenias, D. (2012b). Uncertainty, scepticism and attitudes towards climate change: Biased assimilation and attitude polarisation. *Climatic Change*, 114(3–4), 463–478. <https://doi.org/10.1007/s10584-012-0424-6>

- Cramer, D. (2003). *Advanced Quantitative Data Analysis*. McGraw-Hill Education.
- de Boer, J., Hoogland, C. T., & Boersema, J. J. (2007). Towards more sustainable food choices: Value priorities and motivational orientations. *Food Quality and Preference*, 18(7), 985–996. <https://doi.org/10.1016/j.foodqual.2007.04.002>
- Department of Agriculture, F. and the M. (2019). *REVIEW OF ORGANIC FOOD SECTOR AND STRATEGY FOR ITS DEVELOPMENT*. www.agriculture.gov.ie
- Department of Jobs, E. and I. (2013). *Progress report on Growth and Employment in the Green Economy in Ireland*. 1–44. <https://dbei.gov.ie/en/Publications/Publication-files/Green-Economy-Progress-Report-2013.pdf>
- Dosi, C., & Moretto, M. (2001). Is ecolabelling a reliable environmental policy measure? *Environmental and Resource Economics*, 18(1), 113–127. <https://doi.org/10.1023/A:1011101604084>
- Draugalis, J. L. R., & Plaza, C. M. (2009). Best practices for survey research reports revisited: Implications of target population, probability sampling, and response rate. *American Journal of Pharmaceutical Education*, 73(8). <https://doi.org/10.5688/aj7308142>
- Driscoll, D. A., Lindenmayer, D. B., Bennett, Cary, G. J., Clarke, M. F., Dexter, James, S., Kay, G., Keith, D. A., MacGregor, C., J. E. M., & York, A. (2010). Fire management for biodiversity conservation: Key research questions and our capacity to answer them. *Biological Conservation*, 143(9), 1928–1939. <https://doi.org/10.1016/j.biocon.2010.05.026>
- Dunlap, R. E., & Scarce, R. (1991). Poll Trends: Environmental Problems and Protection. *The Public Opinion Quarterly*, 55(4), 651–672. <https://doi.org/10.2307/2749413>
- Dunlap, R. E., & Van Liere, K. D. (1978). The “new environmental paradigm.” *Journal of Environmental Education*, 9(4), 10–19. <https://doi.org/10.1080/00958964.1978.10801875>
- Dunne, L., Convery, F. and Pender, A. (2007). *The Use And Regulation Of Environmental Claims As A Means For Promoting Sustainable Consumption In Ireland : Final Report*. <https://researchrepository.ucd.ie/handle/10197/812>
- Durif, F., Boivin, C., & Julien, C. (2010). (PDF) In Search of a Green Product Definition. *Innovative Marketing*, 6(1), 22–31.
- Ecolabel Index. (2020). *Ecolabel Index | Who’s deciding what’s green?* <http://www.ecolabelindex.com/>
- EGRI, C. P., RALSTON, D. A., MILTON, L., NAOUMOVA, I., PALMER, I., RAMBURUTH, P., POTOCHAN, V. V., FURRER, O., & DALGIC, T. (2004). MANAGERIAL PERSPECTIVES ON CORPORATE ENVIRONMENTAL AND SOCIAL RESPONSIBILITIES IN 22 COUNTRIES. *Academy of Management Proceedings*, 2004(1), C1–C6. <https://doi.org/10.5465/ambpp.2004.13857751>

- Ellen, P. S., Wiener, J. L., & Cobb-Walgren, C. (1991). The Role of Perceived Consumer Effectiveness in Motivating Environmentally Conscious Behaviors. *Journal of Public Policy & Marketing*, 10(2), 102–117. <https://doi.org/10.1177/074391569101000206>
- Esteves, M. C., Dean, D., & Balzarova, M. (2017). Assessment of building products attributes — A comparative study between eco-labelled and non-eco-labelled products available in the New Zealand market. *Sustainable Production and Consumption*, 10, 100–109. <https://doi.org/10.1016/j.spc.2017.02.003>
- Etikan, I., Abubakar Musa, S., & Sunusi Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fleetwood, S. (2005). Ontology in Organization and Management Studies: A Critical Realist Perspective. *Organization*, 12(2), 197–222. <https://doi.org/10.1177/1350508405051188>
- Flick, U. (2018). *Designing Qualitative Research* (5th ed.). SAGE Publications
- Furlow, N. E., & Knott, C. (2009). Who's Reading the Label? Millennials' Use of Environmental Product Labels. *Journal of Applied Business and Economics*, 10(3), 1–12. <http://www.digitalcommons.www.na-businesspress.com/JABE/Jabe103/FurlowWeb.pdf>
- Galarraga Gallastegui, I. (2002). The use of eco-labels: A review of the literature. *European Environment*, 12(6), 316–331. <https://doi.org/10.1002/eet.304>
- Gleim, M. R., Smith, J. S., Andrews, D., & Cronin, J. J. (2013). Against the Green: A Multi-method Examination of the Barriers to Green Consumption. *Journal of Retailing*, 89(1), 44–61. <https://doi.org/10.1016/j.jretai.2012.10.001>
- Grankvist, G., & Biel, A. (2007). The impact of environmental information on professional purchasers' choice of products. *Business Strategy and the Environment*, 16(6), 421–429. <https://doi.org/10.1002/bse.565>
- Grebitus, C., Steiner, B., & Veeman, M. (2015). The roles of human values and generalized trust on stated preferences when food is labeled with environmental footprints: Insights from Germany. *Food Policy*, 52, 84–91. <https://doi.org/10.1016/j.foodpol.2014.06.011>
- Griffin, M. D. (2002). Millennials Rising: The Next Great Generation. *Journal of Consumer Marketing*, 19(3), 282–285. <https://doi.org/10.1108/jcm.2002.19.3.282.4>
- Groening, C., Sarkis, J., & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. In *Journal of Cleaner Production* (Vol. 172, pp. 1848–1866). Elsevier Ltd. <https://doi.org/10.1016/j.jclepro.2017.12.002>
- Grunert, K. G., Hieke, S., & Wills, J. (2014). Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy*, 44, 177–189. <https://doi.org/10.1016/j.foodpol.2013.12.001>

- Hair, J. F., Wolfinbarger Celsi Arthur Money, M. H., Samouel, P., & Page, M. J. (2015). *Essentials of Business Research Methods* (2nd ed.). ME Sharpe.
- Harrison, E. (1993). *Going green: How to communicate your company's environmental commitment* (1st ed.). Homewood, IL: Richard, D. Irwin.
- Hart, A. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review*, 75(1), 66–77.
- Horne, R. E. (2009). Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption. *International Journal of Consumer Studies*, 33(2), 175–182. <https://doi.org/10.1111/j.1470-6431.2009.00752.x>
- Hughes, J. (2007). The ability - Motivation - Opportunity framework for behavior research in IS. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 4–9. <https://doi.org/10.1109/HICSS.2007.518>
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2–3), 94–110. <https://doi.org/10.1002/cb.210>
- Hult, G. T. M. (2011). Market-focused sustainability: Market orientation plus! *Journal of the Academy of Marketing Science*, 39(1), 1–6. <https://doi.org/10.1007/s11747-010-0223-4>
- Iversen, A., Liddell, K., Fear, N., Hotopf, M., & Wessely, S. (2006). Consent, confidentiality, and the Data Protection Act. *British Medical Journal*, 332(7534), 165–169. <https://doi.org/10.1136/bmj.332.7534.165>
- Jaju, A. (2016). *A study of the Impact of Green Marketing on Consumer Purchasing Patterns and Decision Making in Telangana, India*. National College of Ireland.
- Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1–2), 128–143. <https://doi.org/10.1016/j.ism.2015.04.001>
- Kelemen, M. L., & Rumens, N. (2008). *An Introduction to Critical Management Research* (1st ed.). SAGE
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd ed.). New Age International.
- Kumar, B., Manrai, A. K., & Manrai, L. A. (2017). Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study. *Journal of Retailing and Consumer Services*, 34, 1–9. <https://doi.org/10.1016/j.jretconser.2016.09.004>
- Kumar, P., & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence and Planning*, 33(3), 330–347. <https://doi.org/10.1108/MIP-03-2014-0068>

- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503–520. <https://doi.org/10.1108/EUM0000000006155>
- Laufer, W. S. (2003). Social Accountability and Corporate Greenwashing. In *Journal of Business Ethics* (Vol. 43, Issue 3, pp. 253–261). Springer. <https://doi.org/10.1023/A:1022962719299>
- Leire, C., & Thidell, Å. (2005). Product-related environmental information to guide consumer purchases - A review and analysis of research on perceptions, understanding and use among Nordic consumers. *Journal of Cleaner Production*, 13(10–11), 1061–1070. <https://doi.org/10.1016/j.jclepro.2004.12.004>
- Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). “Greening” the marketing mix: Do firms do it and does it pay off? *Journal of the Academy of Marketing Science*, 41(2), 151–170. <https://doi.org/10.1007/s11747-012-0317-2>
- Lin, P. C., & Huang, Y. H. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22(1), 11–18. <https://doi.org/10.1016/j.jclepro.2011.10.002>
- Ludbrook, J. (2010). Linear regression analysis for comparing two measurers or methods of measurement: But which regression? *Clinical and Experimental Pharmacology and Physiology*, 37(7), 692–699. <https://doi.org/10.1111/j.1440-1681.2010.05376.x>
- MacInnis, D. J., & Jaworski, B. J. (1989). Information Processing from Advertisements: Toward an Integrative Framework. *Journal of Marketing*, 53(4), 1–23. <https://doi.org/10.1177/002224298905300401>
- MacInnis, D. J., Moorman, C., & Jaworski, B. J. (1991). Enhancing and Measuring Consumers’ Motivation, Opportunity, and Ability to Process Brand Information from Ads. *Journal of Marketing*, 55(4), 32–53. <https://doi.org/10.1177/002224299105500403>
- Maniatis, P. (2016). Investigating factors influencing consumer decision-making while choosing green products. *Journal of Cleaner Production*, 132, 215–228. <https://doi.org/10.1016/j.jclepro.2015.02.067>
- Månsson, R., Tsapogas, P., Åkerlund, M., Lagergren, A., Gisler, R., & Sigvardsson, M. (2004). Pearson Correlation Analysis of Microarray Data Allows for the Identification of Genetic Targets for Early B-cell Factor. *Journal of Biological Chemistry*, 279(17), 17905–17913. <https://doi.org/10.1074/jbc.M400589200>
- Maslow, A. (1943). *A Theory of Human Motivation* (4th ed., Vol. 50). Psychological Review.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424. <https://doi.org/10.5465/AMR.2008.31193458>
- Morris, J. (1997). *Green Goods? Consumers, Product Labels and the Environment* (8th ed.). IEA Environment Unit.

- Moser, A. K. (2015). Thinking green, buying green? Drivers of pro - Environmental purchasing behavior. *Journal of Consumer Marketing*, 32(3), 167–175. <https://doi.org/10.1108/JCM-10-2014-1179>
- Nuttavuthisit, K., & Thhgensen, J. (2015). The Importance of Consumer Trust for the Emergence of a Market for Organic Food: The Case of Thailand. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2550049>
- O’Sullivan, M. (2010). The sustainability of industrial development in Ireland. *Regional Studies*, 34(3), 277–290. <https://doi.org/10.1080/00343400050015113>
- Oakshott, L. (2011). *Essential Quantitative Methods* (5th ed.). Palgrave Macmillian.
- Ottman, J. A., Stafford, E. R., & Hartman, C. L. (2006). Avoiding green marketing myopia: Ways to improve consumer appeal for environmentally preferable products. *Environment*, 48(5), 22–36. <https://doi.org/10.3200/ENVT.48.5.22-36>
- Ouellette, C. (2007). *Empowering consumers’ choice: A new eco-label revealing environmental impact of products and services* [The International Institute for Industrial Environmental Economics]. <http://lup.lub.lu.se/student-papers/record/1324705>
- Pagiaslis, A., & Krontalis, A. K. (2014). Green consumption behavior antecedents: Environmental concern, knowledge, and beliefs. *Psychology and Marketing*, 31(5), 335–348. <https://doi.org/10.1002/mar.20698>
- Pandit, A., Jeong, H., Crittenden, J. C., & Xu, M. (2011). An infrastructure ecology approach for urban infrastructure sustainability and resiliency. *2011 IEEE/PES Power Systems Conference and Exposition, PSCE 2011*. <https://doi.org/10.1109/PSCE.2011.5772587>
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>
- Peattie, K. (1995). Environmental marketing management: Meeting the green challenge. *Financial Times Management*.
- Peattie, Ken. (2001). Towards Sustainability: The Third Age of Green Marketing. *The Marketing Review*, 2(2), 129–146. <https://doi.org/10.1362/1469347012569869>
- Peschel, A. O., Grebitus, C., Steiner, B., & Veeman, M. (2016). How does consumer knowledge affect environmentally sustainable choices? Evidence from a cross-country latent class analysis of food labels. *Appetite*, 106, 78–91. <https://doi.org/10.1016/j.appet.2016.02.162>
- Rahi, S. (2017). Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*, 6(2). <https://doi.org/10.4172/2162-6359.1000403>

- Ranjan, R. K., & Kushwaha, R. (2017). *Impact of Green Marketing Strategies on Consumer Purchase Behaviour*. 7(3/4), 9–22.
- Sarti, S., Darnall, N., & Testa, F. (2018). Market segmentation of consumers based on their actual sustainability and health-related purchases. *Journal of Cleaner Production*, 192, 270–280. <https://doi.org/10.1016/j.jclepro.2018.04.188>
- Saunders, M, Lewis, P., & Thornhill, Pitman, A. (2007). *Research methods for business* (4th ed.). Harlow: Pearson Education Limited.
- Saunders, M, Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th edn.) Harlow (8th ed.). Harlow: Pearson Education Limited.
- Saunders, Mark, Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students* (6th ed.). Harlow: Pearson Education Limited.
- Schmidt, R. C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision Sciences*, 28(3), 763–774. <https://doi.org/10.1111/j.1540-5915.1997.tb01330.x>
- Scruggs, T. E., Mastropieri, M. A., & Casto, G. (1987). The Quantitative Synthesis of Single-Subject Research. *Remedial and Special Education*, 8(2), 24–33. <https://doi.org/10.1177/074193258700800206>
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. In *John Wiley & Sons*.
- Shamdasani, P., Chon-Lin, G. O., & Richmond, D. (1993). Exploring Green Consumers in an Oriental Culture: Role of Personal and Marketing Mix Factors. *ACR North American Advances*, 20(1), 488–493. <https://www.acrwebsite.org/volumes/7504/volumes/v20/NA-20/full>
- Sharma, N. K., & Kushwaha, G. S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, 1(42). <https://doi.org/10.5070/g314233710>
- Singer, E., Hippler, H. J., & Schwarz, N. (1992). Confidentiality assurances in surveys: Reassurance or threat? *International Journal of Public Opinion Research*, 4(3), 256–268. <https://doi.org/10.1093/ijpor/4.3.256>
- Smith, K. T. (2010). An examination of marketing techniques that influence millennials' perceptions of whether a product is environmentally friendly. *Journal of Strategic Marketing*, 18(6), 437–450. <https://doi.org/10.1080/0965254X.2010.525249>
- Sodhi, P., & Singh, R. P. (2017). Factors affecting consumers' attitude towards purchasing green packaged food products: An integrated conceptual framework. *International Journal of Business Excellence*, 13(4), 521–535. <https://doi.org/10.1504/IJBEX.2017.087758>

- Sony, A., & Ferguson, D. (2017). Unlocking consumers' environmental value orientations and green lifestyle behaviors A key for developing green offerings in Thailand. *Asia-Pacific Journal of Business Administration*, 9(1), 37–53. <https://doi.org/10.1108/APJBA-03-2016-0030>
- Steenkamp, J.-B. E. M., & de Jong, M. G. (2010). A Global Investigation into the Constellation of Consumer Attitudes toward Global and Local Products. *Journal of Marketing*, 74(6), 18–40. <https://doi.org/10.1509/jmkg.74.6.18>
- Sue, V. M., & Ritter, L. A. (2007). *Conducting Online Surveys* (2nd ed.). SAGE Publications
- Sullins, E. S., Hernandez, D., Fuller, C., & Tashiro, J. S. (1995). Predicting who will major in a science discipline: Expectancy–value theory as part of an ecological model for studying academic communities. *Journal of Research in Science Teaching*, 32(1), 99–119. <https://doi.org/10.1002/tea.3660320109>
- Taufique, K. M. R., Vocino, A., & Polonsky, M. J. (2017). The influence of eco-label knowledge and trust on pro-environmental consumer behaviour in an emerging market. *Journal of Strategic Marketing*, 25(7), 511–529. <https://doi.org/10.1080/0965254X.2016.1240219>
- Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. *Handbook of Mixed Methods in Social and Behavioral Research*, 13–50.
- Testa, F., Iraldo, F., Vaccari, A., & Ferrari, E. (2015). Why Eco-labels can be Effective Marketing Tools: Evidence from a Study on Italian Consumers. *Business Strategy and the Environment*, 24(4), 252–265. <https://doi.org/10.1002/bse.1821>
- Thøgersen, J., Haugaard, P., & Olesen, A. (2010). Consumer responses to ecolabels. *European Journal of Marketing*, 44(11), 1787–1810. <https://doi.org/10.1108/03090561011079882>
- Tschaepe, M. D. (2015). Pragmatics and Pragmatic Considerations in Explanation. *Contemporary Pragmatism*, 6(2), 25–44. <https://doi.org/10.1163/18758185-90000115>
- Tung, T., Koenig, H. F., & Chen, H. L. (2017). Effects of Green Self-Identity and Cognitive and Affective Involvement on Patronage Intention in Eco-Friendly Apparel Consumption: A Gender Comparison. *Sustainability*, 9(11), 1977. <https://doi.org/10.3390/su9111977>
- UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE. (1992). <http://unfccc.int/resource/docs/convkp/conveng.pdf>
- Waters, D., & Waters, C. (2008). *Quantitative methods for business*. Pearson Education Ltd.
- Weisstein, F. L., Song, L., Andersen, P., & Zhu, Y. (2017). Examining impacts of negative reviews and purchase goals on consumer purchase decision. *Journal of Retailing and Consumer Services*, 39, 201–207. <https://doi.org/10.1016/j.jretconser.2017.08.015>

- Welford, R. (2013). From Green to Golden: the Hijacking Environmentalism. In *Routledge*. Routledge.
- Wiles, R., Crow, G., & Pain, H. (2011). Innovation in qualitative research methods: a narrative review. *Qualitative Research*, *11*(5), 587–604. <https://doi.org/10.1177/1468794111413227>
- Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2010). Sustainable consumption: Green consumer behaviour when purchasing products. *Sustainable Development*, *18*(1), 20–31. <https://doi.org/10.1002/sd.394>
- Zhang, L., Fan, Y., Zhang, W., & Zhang, S. (2019). Extending the Theory of Planned Behavior to Explain the Effects of Cognitive Factors across Different Kinds of Green Products. *Sustainability*, *11*(15), 4222. <https://doi.org/10.3390/su11154222>