

LEARNER NUMBER	51708299
NAME	Romulo Galdino Lomba
COURSE	BABS
DISSERTATION TOPIC	Impact of Environmental Factors on Consumer Buying Behavior in Irish Food Industry
SUPERVISOR	John Dunne
WORD COUNT	8851
DUE DATE	30/11

I certify that:

I consent to having my dissertation be retained in the library for the purpose of future research.            Yes (X)            No

[Note that if no check boxes are selected, this dissertation will be regarded as NOT properly submitted, and may be subject to a late submission penalty]

#### INTELLECTUAL PROPERTY STATEMENT

By checking the box below: I/we (if submitting on behalf of a group) certify that this assignment is my/our own work and is free from plagiarism. I/we understand that the assignment may be checked for plagiarism by electronic or other means and may be transferred and stored in a database for the purposes of data-matching to help detect plagiarism. The assignment has not previously been submitted for assessment in any other module or to any other institution.

(X) Agree

Signature: Romulo Galdino Lomba

Date: 29/11/2022

Notes:

For the dissertation to count as a valid submission the learner will need to provide the following:

1 electronic copy via Moodle. There is no need for a hard copy .

Evidence of the Primary Research MUST be included in the appendix of the report. That includes a copy of questionnaires, interview schedules, or observation diaries,. One interview transcript should be included as a full transcript plus a summary of all other interviews are to be kept as a back up by the student. ( see template on moodle on what should be included in all aspects of the report)

The text should be double-spaced throughout and single column format (A4) with 2cm for left and right-hand margins and 2.5cm at head and foot. Text should be justified, standard 12 point, footnotes 10 point, and in Times New Roman. Page numbers should be at the bottom-right. Do not use line and paragraph spacing. Harvard Referencing shall apply. Keep formatting to a minimum and avoid underlining.

[insert dissertation here]

## **Abstract**

The increasing adverse effect on the environment due to human activities has raised the environmental concern. The research focuses upon the impact of environmental factors on the green purchasing behavior in the Irish food industry. These environmental factors include social influence, environment attitude and concern, concern of self-image and green marketing. The Irish food industry has grown rapidly over the past years and is expected to grow which also indicates new variety in food industry, thus it is important to understand environmental factors which can lead to green purchasing behavior to reduce the impact on environment. Quantitative research method has been used, and the primary data is collected using survey questionnaire. The research and its results are based upon the secondary and primary research, based upon the findings specifically from the Irish food industry. The results shows that these environmental factors have positive impact on green purchasing behavior, additionally most of the consumers are also willing to pay higher price for environmental friendly products in food industry and reduce the wastage.

## Table of Contents

Abstract .....	3
Chapter 1: Introduction .....	5
1.1-Background of Research.....	5
1.2-Rationale for the study.....	6
1.3-Statement of the Research Objectives .....	7
1.4-Information Gathering and Data Collection .....	7
1.5-Expected Outcomes of the Study.....	7
1.6-Chapter by Chapter Overview .....	7
Chapter 2: Literature Review .....	8
2.1- Introduction .....	8
2.2- Green Purchasing Behavior .....	9
2.3- Green Marketing.....	10
2.4- Social Influence .....	11
2.5- Environmental Attitude and Concern .....	11
2.6- Concern of Self-image.....	12
Chapter 3: Methodology .....	13
3.1- Theoretical Paradigm.....	13
3.2- Justification for Adoption of Method .....	13
3.3- Sampling Technique and Sample Size .....	14
3.4- Method of Analysis .....	15
3.5- Ethical Considerations.....	15
Chapter 4: Findings and Discussion .....	16
4.1- Introduction .....	16
4.2- Demographic Information .....	16
4.3- Green Marketing and Consumer Buying Behavior .....	17
4.4- Environmental Attitude and Concern and Consumer Buying Behavior .....	18

4.5- Social Influence and Consumer Buying Behavior .....	20
4.6- Concern of self-image and Consumer Buying Behavior .....	21
Chapter 5: Conclusion, Limitation and Recommendations .....	22
References .....	24
Appendix .....	26
Appendix 1: Informed Letter of Consent .....	26
Appendix 2: Sample Questionnaire .....	28
Appendix 3: Questionnaire Responses .....	30

## **Chapter 1: Introduction**

### **1.1-Background of Research**

The growing industrialization and introduction of various technology in the industries has increased the adverse impact on the environment. This effect is evident on both the

developed and developing countries in the form of global warming that leads to extreme weather conditions. However, along with the increase in environmental impact the concern of people is also rising, this is somehow leading to environmental friendly practices. Due to increasing environmental damage the buying patterns of the consumer are also changing in order to protect the environment by purchasing and supporting environmental friendly products. However, it is important to analyze the impact different environmental factors make on the consumer buying behavior (Woo & Kang, 2021). The research focuses upon the environmental factors, demonstrating how the consumer behavior is associated with various environmental factors. This enables to understand the high impacting factors and how they can be used to influence the behavior in positive manner.

## **1.2-Rationale for the study**

During the past few decades the rise in the consumption of products and services by the consumer has led to the depletion of the natural resources mainly the non-renewable energy sources. Their excessive usage has damaged the earth's natural climate leading to various problems associated with global warming. On the other hand, this increased environmental damage has also alerted the consumers and they are willing to change their buying patterns which has given rise to the term 'green consumption'. The consumers are more informed than ever due to easy access to technology and internet, thus while involving in green consumption they are concerned regarding purchasing, usage, wastage and disposing of the products. However, different factors impact the green purchasing behavior of each consumer. These factors include green marketing, social influence, environmental attitude and concern and concern of self-image (Rahman & Joshi, 2015).

The Irish food industry has grown over the past few years in terms of its size and revenue. During 2021 the industry had USD 10.55 billion in its revenue, and it is expected to grow up to USD 12.22 billion till 2026. This indicates the increased production and consumption of Irish food industry which is leading to environmental concerns. It is important to study the factors that can lead to green purchasing behavior in order to protect the environment (Statista, 2022). The research question in order to explore relationship between these environmental factors and consumer buying behavior is: "What impact does different environmental factors have on consumer buying patterns in Irish Food industry?"

### **1.3-Statement of the Research Objectives**

The research objectives are as follows:

- I. Investigation of strength of the correlation between environmental factors and consumer buying behavior in Irish food industry
- II. Exploring the correlation between environmental factors and consumer buying behavior. The environmental factors taken into consideration includes:
  - Green Marketing
  - Social Influence
  - Environmental Attitude/ Concern
  - Concern of Self-image

### **1.4-Information Gathering and Data Collection**

The research includes usage of primary and secondary data in order to achieve the research objectives. The primary data is collected using the questionnaire survey, and the secondary data is collected using journal articles which are credible source of information.

### **1.5-Expected Outcomes of the Study**

The expected outcome of the study is clear understanding of relationship between different environmental factors with the consumer buying behavior. It is expected that the study would be able to demonstrate the extent to which each factor impacts purchasing pattern in Irish food industry.

### **1.6-Chapter by Chapter Overview**

The research paper includes the literature review which helps to understand the development of this field over past years. It also includes the methodology for the research indicating the method used. Followed by analysis and discussion of the data collected through the primary research, it also includes its comparison from the results of secondary data. This leads to the conclusion of the research, along with the recommendations derived through the results of research along with the limitations faced while conducting the research.

## **Chapter 2: Literature Review**

### **2.1- Introduction**

The world has become a global village it has become relatively easier to source products throughout the world, which has also given rise to variety of options for people and wastage of food. The improvements in technology and the rapid industrialization from 1760 to 1840 has led to the rapid growth of food industry. This led to depletion of natural resources along with the climate change, after these worst effects many environmental friendly movements were launched. The sustainable developed goals by UN are a part of this concern for environment. The rising global warming and adverse effects on environment lead to change in the consumer buying behavior in order to show responsible attitude towards environment. Many brands converted their practices and introduced eco-friendly products. Despite all the efforts it is important to know that how their purchasing behavior is impacted by the environmental factors (Kwazo, et al., 2014). Green food production and consumption contributes to the environmental pollution as it utilizes sustainable methods for the production of the food. By the introduction of the sustainable food products the consumer behavior has changed based upon their environmental preferences (Wang, et al., 2020).

The rapid advancement in the technology has brought variety of options for consumers but it is also damaging the environment. It is important to understand the environmental factors that impact the consumer buying behavior, and lead them towards the green purchasing behavior. The consumer buying behavior in order to protect the environment is more commonly referred as green purchasing behavior. During the recent times the awareness of environmental conservation has increased among the people, especially during covid-19 when their actions were turned more towards protecting the environment. The relationship between the environmental factors and green purchasing behavior helps the marketers to focus upon those aspects, as this would enhance the eco-friendly products and their consumption. The literature suggests that consumer buying behavior in different industries is impacted by the environmental factors, and this effect is positive (Sun, et al., 2022).

The following sections of the literature review focuses upon the green purchasing behavior which is the dependent variables, and the environmental factors which are the independent variables. The review focuses upon different themes represented by the authors in literature regarding the relationship between green purchasing behavior and the environmental



factors including concern of self-image, environmental attitude and concern, green marketing and social influence.

## **2.2- Green Purchasing Behavior**

The increasing environment issues has increased the concern for the environment by the people which has given rise to the green purchasing behavior. The green purchasing behavior can be related with different environmental factors. The green purchasing behavior has opened up new area of study for researchers and marketers. The green purchasing behavior is commonly referred as the purchasing of sustainable products that are not harmful for the environment, they are usually recyclable after use so they do not cause damage to environment even after disposal. The research utilizes quantitative methods in order to understand the environmental factors impacting green purchasing behavior. The statistical analysis from the research presents that consumer attitude and concern, social influence, self-image concern and green marketing impacts the green purchasing behavior and have a positive relationship (Jaiswal & Kant, 2018).

The consumers have increased the demand for green products that are environment friendly, this has forced the companies to involve in sustainable production. The companies also pay more attention to the production of sustainable products in order to restore the environment. According to previous studies around 30% of consumers have shown their concern towards the environment. The author utilizes the theory of planned behavior, in order to study the relationship between environmental factors and the consumer buying behavior, also termed as green purchasing behavior. The author divides the environmental factors into three aspects, including cognitive, personal and social. The results of research indicates positive relationship among these factors and green purchasing behavior, with the highest positive relationship of personal and social factors with the green purchasing behavior (Zhuang, et al., 2021).

The research conducted by Nam, et al (2017) studies the impact of environmental factors on purchase intention of consumers in the food industry. The study uses quantitative research focusing upon theory of planned behavior. The study indicates positive behavior of the consumer towards purchasing green products. The study indicates that the attitude of people towards environmental, social influence and green marketing efforts are leading towards responsible consumer behavior, which can be termed as green purchasing behavior. However,

the results of the study indicates that businesses needs to focus upon green marketing, as it will not only help to inform people about eco-friendly products but it would also be source of awareness for people. Alagarsamy et al (2021) suggests that the food industry has an important impact by the sustainable practices that they adopt, from the production till they reach the final consumer including the logistics as well. The consumer buying behavior depends upon the environmental factors in food industry based upon their cognitive, personal and social preferences.

### **2.3- Green Marketing**

The food industry along with agriculture industry has seen immense growth over past 20 years, which has also given rise to usage of latest technology impacting environment. It has become vital and critical to focus upon promoting sustainable products in food industry. Marketing plays an important role in transforming the behavior of people, thus the green marketing needs to be implemented by the businesses in order to spread awareness among the consumer and change their consumer buying behavior. The research focuses upon the effect of the green marketing on consumer buying behavior using qualitative methods. The results of the research indicates that the food companies utilize the green marketing tactic in order to achieve the competitive advantage. This indicates that there is a positive relationship between green marketing and the consumer buying behavior which leads to responsible consumption of products in the food industry (Alexa, et al., 2021).

According to Sharma (2021), the green marketing is one of the major factor impacting the consumer buying behavior. The research takes into account various studies conducted using the thematic analysis. This represents that there are various, social, cognitive and personal factors impacting the consumer buying behavior. The social factor includes the social influence and the green marketing efforts/ However, the study mainly focuses upon green marketing representing that the efforts by green marketing impacts the green purchasing behavior, but there is a gap due to the effect of other factors such as environment attitude and the concern of self-image among the consumers. According to Delabre et al. (2021), food systems are source of 60% of global loss of biodiversity, which is leading to environmental damage. One-third of the food goes to waste, and people needs to be aware of this. In spreading positive awareness about sustainable food consumption the green marketing plays an important role leading to positive consumer buying behavior.

## **2.4- Social Influence**

The social influence can be termed as the social identity of the person or the group with which it associates itself. The social group tends to influence the behavior of person in certain ways based upon the interests of the group. The social influence plays an important role in changing the consumer behavior, thus the attitude of group towards the environmental protection effects the individual green purchasing behavior. The research utilizes questionnaire survey in order to study impact of social influence on consumer buying behavior. The social influence impacts the individuals which are mostly the late adopters as compared to the early adopters. However, the social influence has impact on the green purchasing behavior based upon the activities and interests of the group (Tjokrosaputro & Cokki, 2019). According to Axsen and Kurani (2012), the social influence impacts the consumer behavior towards the environmental friendly products that include the low carbon products as well. The social influence impacts the way of thinking towards the certain products and the environmental friendly products. Moreover, the qualitative research also indicates that the buying power of the consumer also defines the social group he belongs to and their perspective about environmental friendly products.

The research utilizes quantitative method in order to study impact of environmental factors on consumer buying behavior. The analysis of the results from survey data represents a strong impact of social influence on consumer buying behavior in consumers from generation Y. The results from the research also indicates that the focus of the marketing campaigns should be towards friends and family as it impacts the social influence of people thus giving rise to green purchasing behavior. based upon the gender the results show that female tend to change their consumer buying behavior more likely based upon the social influence as compared to men (Anvar & Venter, 2014).

## **2.5- Environmental Attitude and Concern**

The tendency and willingness of people to purchase the environmental friendly products differ for each person based upon their concern and attitude towards the environment. The research focuses upon studying the impact of environmental attitude and concern on the consumer buying behavior. The environmental attitude of the consumer involves the belief and desire of the individual towards the environment in order to protect it from the degradation being caused by human activities. The environmental attitude in which the person is concerned

about the environment and changes the way he behaves to protect the environment can be termed as environmental friendly. The environmental concern means the consciousness of individual towards the environment and the willingness to reduce the environmental problems by individual actions. The research utilized quantitative research based upon primary data, the results indicate that the positive environmental attitude and concern have a significant positive impact on consumer buying behavior leading to the green purchasing behavior. However, the environmental attitude and concern is personal factor that impacts the buying behavior, the attitude and concern towards the environment can positively be influenced by spreading awareness for the environmental issues being caused by human activities (Esmailpour & Bahmiary, 2017).

According to Dagher (2015) the increasing awareness about the environmental damage among people has led to an increase in positive attitude and concern towards the environment. The research utilizes questionnaire in order to collect consumer data, the results of the research indicates that the green marketing is increasing the positive consumer attitude and concern towards the environment leading to green purchasing behavior. The research focuses upon more positive attitude and concern by females for environment as compared to men which influences their buying behavior. Kaufmann et al (2012), suggests that the concern among the consumers for the environment impacts the consumer buying behavior regardless of the industry, however the demographic factors such as age, income and gender play an important role in defining the level of impact. The environmental factors i.e. environmental attitude and concern have significant positive impact on the consumer buying behavior, as it leads to responsible buying of the products which have less or no impact on the environment.

## **2.6- Concern of Self-image**

The concern of self-image is a personal factor that impacts the consumer buying behavior, and it is one of the most important factor. This refers to the totality of thoughts and feelings possessed by a person for environment and it impacts the way in which the individual acts. According to the research and the quantitative analysis the concern of self-image has a direct positive relationship with influencing green purchasing behavior (Kaufmann, et al., 2012). The self-image of the person represents the willingness of the person to participate in environmental protection and thus defines the actions of the individuals. The qualitative research indicates that the concern of self-image positively impacts the consumer buying patterns as it is the cognitive structure impacting the choices. The research suggests that the

other environmental factors also impacts the change in the behavior along with concern of self-image. However, the concern of self-image among individual can be enhanced by creating awareness regarding the environmental damages which could lead to responsible behaviors (Rahman & Joshi, 2015). The self-image in environmental conservation can also be termed as the self-green, as the research indicates that the concern of self-image determines the trust of consumer on environment friendly products, thus leading to change in their buying behavior. The concern of self-image helps to promote environmental friendly behavior as the green brands and their message resonates by the internal desires of the consumers. Thus the self-image of the person leads to green purchasing behavior (Klabi & Binzafrah, 2022).

## **Chapter 3: Methodology**

### **3.1- Theoretical Paradigm**

The research follows the approach of ontology while collecting the data and in its interpretation in order to achieve the desired objectives. The research mainly focuses upon understanding the relationship between the environmental factors and the consumer buying behavior narrowing the scope specifically to the Irish food industry. The ontological approach helps to focus upon the relationship between the various factors that impact the consumer behavior. This takes into consideration the social interaction of the individuals, and the impact of each environmental factor. The available researches as indicated in literature review do not focus mainly upon Ireland thus it helps to understand the relationship of environmental factor and green purchasing behavior specifically in Ireland. Along with this the approach of post positivism is used, as the participants are asked close ended question with the help of questionnaire. The participants have to choose from the given option, and these responses help to discover relationship between environmental factors and the consumer buying behavior. The validity of the data is ensured as the sample size is greater than 100 which helps to represent the larger population making it generalizable. The data collected through credible secondary resources is used alongside the primary data to make the research valid and reliable.

### **3.2- Justification for Adoption of Method**

The research follows the quantitative approach, which is achieved with the help of primary data collected through the survey questionnaire. The secondary research made it evident, that in order to understand the consumer behavior based upon each variable it is

important to collect the primary data and use it for the interpretation (Rahman & Joshi, 2015). Furthermore, the literature review indicates that not much research is conducted for the food industry of Ireland, thus in order to collect recent data for the basis of research the quantitative method of research is used with the help of google forms. The quantitative method of data collection used helps to gather the recent data, which provides the knowledge and understanding of the people specifically the consumers in Ireland. It would help to understand the relationship clearly leading to effective achievement of the overall research objective.

The research utilizes the survey questionnaire developed through google forms in order to collect the responses, this includes the closed ended question which can be rated on the Likert scale from 1-5. In this case 1 represents strongly disagree and 5 represents strongly agree, rest of the options falling in between them. The other question includes the scale from 1-5 which represents 1 as 'not at all' and 5 represents 'too much'. This questionnaire design was chosen in order to collect the quantitative data which helps to define the extent and strength of relationship between environmental factors and the consumer buying behavior individually. The questions are designed around each variable so that the relationship between each dependent and independent variable can be closely studied. The questionnaire acts as the fast and efficient way to collect the information. The anonymity offered while filling in the online questionnaire survey also helps to increase the reliability of the results and reduces biasness. In Addition to this the usage of questionnaire as part of the quantitative research have helped in effective and easy sorting of the data for further analysis.

### **3.3- Sampling Technique and Sample Size**

The research focuses upon the investigation of correlation between environmental factors and the consumer buying behavior. In order to effectively achieve the objective of the research the findings from primary data and secondary data are used. The research utilizes the green purchasing behavior of consumers as the dependent variable and environmental factors as the independent variables which includes environmental attitude and concern, concept of self-image, green marketing and social influence. The secondary data is collected from the journal articles from credible resources including Science Direct, EBSCO Host, Research Gate, SAGE, Elsevier, Jstor and Google Scholar. The journal articles and there findings are skimmed through in order to set the basis for primary research, and also compare and contrast the findings from the research. This helps to create reliable conclusions regarding

the achievement of objective which is understanding the relationship between dependent and independent variables.

The primary data is collected using the questionnaire which is developed through the Google forms. The online google forms helped to circulate the questionnaire using the online link, it helped in easy collection, storage and interpretation of the data. The results collected from online questionnaire also helps to gather more reliable results as it reduces the response bias. However, it was easy to make answering all the question compulsory on the google forms with just one click, this helped to reduce the non-response bias. The data is collected using the *convenience sampling*, the google forms were distributed among the people residing in Ireland through the WhatsApp group, and they were asked to share with their peers who are also in Ireland. As the study was mainly focused upon the food industry of Ireland. 102 respondents answered the survey questionnaire in order to provide quantitative data which is set as the basis for the research. The questionnaire does not include any jargons or slang words which make it easier for the respondents to understand it and answer to best of their knowledge. The respondents are not labelled because the collective statistics are used for the analysis and anonymity is maintained.

### **3.4- Method of Analysis**

The method of analysis would be based upon the quantitative research, the survey questionnaire includes 34 different questions among which 4 are demographic questions. These demographic questions including gender, age, income and qualification helps to understand the population. The analysis would be conducted using the graphs developed through Google forms, the findings from these graphs would be backed and compared by the findings from the secondary data. The analysis would include results for relationship of each independent variable with the dependent variables which is consumer buying behavior. The primary and secondary research would allow to understand the extent of relationship between variables.

### **3.5- Ethical Considerations**

This research is mainly focused upon the consumer buying behavior and how it changes based upon different environmental factors, so it can be termed as the consumer research. While collecting the data directly from consumers and then analyzing the data it is important to make the research ethical. First of all the research includes the respondents which are above

18 years, which means that no minors are the part of study. Secondly, the respondents are asked to fill the consent form before being part of the survey, this ensures that the respondents are not being forced and exploited. Moreover, no personal information of the respondents such as name, email or address of the respondents is asked which helps to maintain the confidentiality and anonymity of the participants. This helps to get the unbiased responses and reliable results. Alongside, it is made sure that the research is being conducted for the academic purposes and the results of the survey will not be used for any sort of marketing activity. The results from the survey questionnaire would also be destroyed after the academic purpose of the research is achieved, which helps to prevent respondents and their data from being exploited. These ethical considerations helps to protect the consumers from exploitation and also provides unbiased responses for the research.

## **Chapter 4: Findings and Discussion**

### **4.1- Introduction**

The research focuses upon investigating the impact of environmental factors on the consumer buying behavior. The literature suggests that environmental attitude and concern, concern of self-image, green marketing and social influence impacts the consumer buying behavior and tends to change it into green purchasing behavior. The research indicates that these factors have direct positive relationship with consumer buying behavior, as focusing upon these factors increases the acts of environmental protection (Kaufmann, et al., 2012). The following sections includes the analysis of the data collected through the primary research in the light of findings from secondary research. It includes the demographic information, relationship of green marketing, environmental attitude and concern, social influence and concern of self-image with the consumer buying behavior.

### **4.2- Demographic Information**

The data collected through questionnaire survey represents the gender, qualification, age and income of the participants. The age and income are asked in different brackets to maintain confidentiality of the respondents. The 55.9% of the total population were male, 43.1% were female and 1% preferred not to tell their gender. This represents that the results from the data includes more responses form the male as compared to the female (Appendix 3-Chart1). The respondents were asked regarding their qualification to better know about the



composition of those responding. Most of the population was represented by master students which is 49% and 29.4% either completed or were in their Bachelors. However, a small proportion of the respondents were either PHD or beyond PHD. It represents that the respondents had educational background and possesses the knowledge of green marketing, another reason for such response is that the questionnaire were mostly circulated among the university students and their acquaintances (Appendix 3- Chart2).

The respondents were provided different age brackets and were asked regarding their age, no respondent was under age of 18. However, the major population of the study was from 18-25 years, 26-33 years and 34-41 years being 25.5%, 33.3% and 26.5% respectively (Appendix 3- Chart3). The income of the respondents was also asked providing different income brackets, the major population fell between €8000-12000 which constituted of 47.1% of the total population. The lowest income bracket provided was €2000-4000 and only 4.9% of population fell in this income bracket (Appendix 3- chart4). The data of income and age represents that the population includes of adults majorly which also fall in high income bracket. The education also represents that they would be aware of the sustainable consumption and environmental friendly practices, thus making the responses more authentic and reliable.

#### **4.3- Green Marketing and Consumer Buying Behavior**

The marketing plays an important role in informing the consumers and spreading awareness about the environmental friendly products. The marketing influences the consumer to purchase environmental friendly and green products contributing to the wellness of overall environment (Alexa, et al., 2021). The respondents were presented with statement that ‘environmental advertisement enhances my knowledge about green environmentally-friendly products’. They had to rate from Strongly Disagree to Strong Agree, the responses indicates that 66.7% of population strongly agreed and 23.5% agreed to the statement. This represents that the majority of people think that green marketing plays an important role in increasing their knowledge about the environmental friendly products in the food industry (Appendix 3- Chart5).

The environmental friendly advertisement not only serve the purpose of persuading consumers to buy those products but also increases the awareness and influence among the people (Rahman & Joshi, 2015). The respondents were asked if they enjoy watching the environmental friend advertisement, and 73.3% of the population strong agreed to this

statement and 20.8% of people agreed to the statement. This indicates that such advertisements are a source of enjoyment for people as well alongside information as they get to know about new sustainable variety in the food industry (Appendix 3- Chart6). Informed decision making is an important aspect which influences the consumer buying behavior, and is influenced by the knowledge of the consumer. The consumers now are more informed than ever due to easy access to technology and information in form of advertisements on different media platforms (Alexa, et al., 2021). The respondents were represented with the statement that ‘environmentally-friendly food advertisement guide customer to make an informed purchasing decision in food industry’ to this most of the respondents said that they strongly agree and agree with this statement, the statistics being 74.5% and 18.6% respectively. This represents that the green marketing helps the consumers to make informed purchasing decision in the food industry in case of Ireland (Appendix 4- Chart7).

The analysis of the data from the primary and secondary research, represents a positive relationship between consumer buying behavior and the green marketing. As the data represents that consumer buying behavior and their knowledge is influenced by the marketing regarding environmental friendly products. The more knowledge of the environmental friendly products increases awareness thus leading to the green purchasing behavior.

#### **4.4- Environmental Attitude and Concern and Consumer Buying Behavior**

Based upon the literature review the environmental attitude and environmental concern are directly related with the consumer buying pattern, as they represent the willingness of the individuals towards protecting the environment. The environmental attitude and concern leads to positive consumer behavior in order to protect the environment (Dagher, et al., 2015). The respondents were asked if they think that Eco-brands are symbol of product reliability in food industry, to this question most of the respondents strongly agreed and agreed with proportion of 61.8% and 33.3% respectively (Appendix 3- Chart9). This stat represents that most of the people have a positive attitude towards the eco-brands as they consider them to be reliable in the food industry. Another similar question was asked regarding the truthfulness of the eco-brands, and most of the population strongly agreed and agreed to this statement i.e. 65.7% and 29.4% respectively (Appendix 3- Chart10). Representing that most of the people exhibit positive attitude towards the environmental friendly brands considering them and their claims to protect the environment as truthful in the Irish food industry.

The positive environmental attitude promotes the environmental friendly behavior, and promotion of the environmental friendly products at the individual levels. The environmental concern determines the level of willingness of person to adopt to recyclable practices that are best for the environment (Anvar & Venter, 2014). The respondents were asked if they agree that environmental protection works are needed in Ireland food industry, to this most of the respondent strongly agreed (73.5%) and agreed (22.5%). In response only 1% of people strong disagreed with the statement. This represents the level of concern among people for the environment, and willingness to make changes in the current practices for sustainable future in Ireland (Appendix 3- Chart18).

The food industry is known to be one of the largest producer of waste, leading to highest pollution and wastage levels (Kaufmann, et al., 2012). The respondents were asked if they were worried regarding degrading environmental quality in Ireland. To this statement around 18.6% people disagreed and 35.3% strongly disagreed. Despite the disagreement 46.1% of the people agreed and strongly agreed with the statement. This represents that most of the people are little concerned about the worsening environmental conditions of Ireland (Appendix 3- Chart24). In another question the people were asked if the environment of Ireland is there major concern and most of the people agreed and strongly agreed to it which summed up for 92.1% of total population. Representing that people in Ireland have major concern for the environment degradation (Appendix 4- Chart25).

The people having positive environmental attitude and concern are likely to be concerned about the environment and look for positive ways in order to conserve the environment (Nam, et al., 2017). The respondents were asked if they think that environmental quality in Ireland could be improved and most of the people strongly agreed and agreed to it representing the willing to see and bring about the change representing changes in buying behavior (Appendix 3- Chart27). The respondents were also asked if they would pay higher in order buy environmental friendly products and 63.7% strongly agreed and 13.7% agreed that they would be willing to pay higher (Appendix 3- Chart34).

The analysis of primary and secondary represents that the consumers with positive attitude and concern are likely to positively impact consumer buying pattern. The higher the environmental attitude and concern higher would be the positive change in consumer buying behavior.

#### **4.5- Social Influence and Consumer Buying Behavior**

The social group determines the green purchasing behavior among the consumers. The group with higher trend towards the green purchasing behavior leads to positive influence on the consumer buying behavior (Aksen & Kurani, 2012). The respondents were asked if they learn about environment friendly food products from their friends and learn about environmental issues from their friends. To these questions most of the respondents said that they discuss too much with their friends, which represents they are more inclined towards the green purchasing behavior (Appendix 3- Chart11 and Chart12). In another question they were asked how much they tend to discuss regarding the food products and the issue of unsustainable food products with their friends, to which 72.5% and 73.5% of respondents said that they discussed too much with their friends (Appendix 4- Chart13 and Chart14). The respondents were also asked that how often they buy environmental friendly food products with their friends and 93 out of 102 respondents said they discuss it too much (Appendix 3- Chart15). They were also asked if they share information with their friend regarding environmental friendly food products and 93 out of 102 discussed it too much (Appendix 3- Chart16). None of the respondent said that they do not discuss with friends in all of the questions.

The rise in the environmental protection awareness makes it important for the social groups as more people become aware (Klabi & Binzafrah, 2022). The respondents were asked if they think awareness should be risen for sustainable food in Ireland, and majority of respondents agreed that there should be greater awareness for such products (Appendix 3- Chart19). Humans are social animals and they feel connected to particular group if they resonate the behavior of group (Woo & Kang, 2021). The respondents were asked if they think being environmental friendly makes them socially attractive, and majority of population agreed to it i.e. 90.2% (Appendix 3 – Chart28). This represents that the social activities have a positive impact on consumer buying behavior. The respondents were also asked if they feel that they would be considered ‘outdated’ if they do not support environment protection, to which majority agreed(Appendix 3- Chart30). Representing that the social image and influence impacts consumer buying behavior and their participation in environmental protection efforts having direct positive relationship.

#### **4.6- Concern of self-image and Consumer Buying Behavior**

The awareness of the environmental friendly products and sustainable consumption is important in order to influence the consumer behavior. The totality of beliefs of person can be termed as self-image and it influences the buying behavior (Klabi & Binzafrah, 2022). The respondents were asked if they were aware of eco-friendly food that protects nature ecosystem and 62.7% strongly agreed and 31.4% agreed to their knowledge about eco-brands (Appendix 3- Chart8). The self-image represents the willingness to change the buying pattern for environment, the respondents were asked if they think it is essential to promote green living in Ireland and majority of population agreed with it (Appendix 3- Chart17). In a few questions respondents were asked to respond upon their perception about spending on environmental protection. They were provided with statements such as environmental protection is waste of money, it is none of my business, it is meaningless and it is unwise to spend money on it. The majority of the respondents i.e. more than 90% disagreed with the statement (Appendix 3- Chart20, Chart21, Chart22 and Chart23).

The emotional attachment also represents the self-image of people representing their views about the environmental protection (Rahman & Joshi, 2015). The respondents were asked if they emotionally feel attached to environmental protection issues and most of them agreed, which constituted of 91% of total population (Appendix 2- Chart 26). Most of the respondents feel that supporting environmental protection makes them feel special for their inner selves in food industry. The respondents were asked if they prefer environmental friendly product of food industry in order to satisfy themselves and majority i.e. more than 90% of people agreed with the statements (Appendix 3- Chart31, Chart32 and Chart33). This represents positive relationship between the concern of self-image in order to protect environment and the consumer buying behavior as they tend to make responsible purchase decisions.

## **Chapter 5: Conclusion, Limitation and Recommendations**

The research aimed to investigate the relationship between the environmental factors and the consumer buying behavior, which is done using primary and secondary data. The results from the research indicates that the environmental factors have an impact on the consumer buying behavior, which means that positive influence of these environmental factors increases the green purchasing behavior among the consumers. The literature represents the trend of food industry, however, it also indicates the growing concern about the environmental degradation of the environment. The research indicates that people are also willing to pay higher amounts for buying environmental friendly products, which represents the willingness of people to adapt to change and protect the environment. However, the research indicates strong relationship between the consumer buying behavior and environmental attitude and concern. This represents that the concern of person towards environment also determines his buying behavior. Alongside, a strong relationship between the green marketing and the consumer buying behavior is also investigated through the research. As the green marketing not only persuades to buy environment friendly products but are also source of awareness for those who do not know. Moreover, the relationship between the social influence and the green purchasing behavior is also evident indicating that the social gathering of person also determined the buying behavior. The higher the social influence regarding the sustainable food and environmental issues, the higher would be the green purchasing behavior among the consumers. Thus it indicates that all the independent variables have a direct positive relationship with consumer buying behavior in Irish food industry which is represented by primary and secondary research. The data collected from the secondary data supports the claims developed through the primary research, as it confirms the relationship between the independent and dependent variables.

Despite the thorough conduction of the research using primary and secondary data there are still some limitation from this research. The data collected is based upon 102 respondents, but higher respondents such as more than 1000 would generate more generalizable results. Despite the sample size of 102, it was demographically diverse which makes it generalizable on the population of Ireland. Additionally, there were less journal articles that focused upon Ireland or specifically, the food industry in Ireland. This led to lack in the availability of secondary data for environmental factors and consumer buying behavior in Irish food industry. There are less recent and up to date journal articles available based upon the food industry, as

it is relatively newer trend. Moreover, due to constraint of time and resources more sophisticated tools such as regression and correlation are not used, which would help to analyze the results effectively. The relationship between the variables is discovered through the research, however, the expected outcome was to measure the extent of impact each variable has. But due to limited resources it was not made possible to measure the extent of impact in numerical form.

The results of the research represent that there is strong relationship between environmental factors and the consumer buying behavior. This indicates that marketers should focus upon green marketing and other such environmental tools in order to raise the concern among people which would promote the green purchasing behavior. For the future research it is recommended that the sample size should be kept higher keeping in consideration the time limits. This would enable larger population size making it more generalizable. Along with this sophisticated quantitative methods such as regression, correlation should be used in order to generate the results. As it would enhance the ease to analyze the quantitative data collected through primary research. However, it is important to study each variable independently in order to develop the relationship between dependent variable and each of the independent variables.

## References

- Alagarsamy, S., Mehroliya, S. & Mathew, S., 2021. How green consumption value affects green consumer behaviour: The mediating role of consumer attitudes towards sustainable food logistics practices. *Vision: The Journal of Business Perspective*, 25(1), pp. 65-76.
- Alexa, L., Apetrei, A. & Pislaru, M., 2021. Fast Fashion - An Industry at the Intersection of Green Marketing with Greenwashing. *International Symposium "Technical Textiles - Present and Future"*, pp. 263-268.
- Anvar, M. & Venter, M., 2014. Attitudes and purchase behaviour of green products among generation Y consumers in South Africa. *Mediterranean Journal of Social Sciences*, 5(21), pp. 183-194.
- Axsen, J. & Kurani, K. S., 2012. Social Influence, Consumer Behavior, and Low-Carbon Energy Transitions. *Annual Review of Environment and Resources*, Volume 37, pp. 311-340.
- Dagher, G., Itani, O. & Kassar, A., 2015. The impact of environment concern and attitude on green purchasing behavior: Gender as the moderator. *Contemporary Management Research*, 11(2), pp. 179-205.
- Delabre, I. et al., 2021. Actions on sustainable food production and consumption for the post-2020 global biodiversity framework. *Science Advances*, 7(12).
- Esmailpour, M. & Bahmiary, E., 2017. Investigating the impact of environmental attitude on the decision to purchase a green product with the mediating role of environmental concern and care for green products. *Management & Marketing*, 12(2), pp. 297-315.
- Jaiswal, D. & Kant, R., 2018. Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, Volume 41, pp. 60-69.
- Kaufmann, H., Panni, M. & Orphanidou, Y., 2012. Factors affecting consumers' green purchasing behavior: An integrated conceptual framework. *Amfiteatru Economic Journal*, 14(31), pp. 50-69.
- Klabi, F. & Binzafrah, F., 2022. The Mechanisms for Influencing Green Purchase Intention by Environmental Concern: The Roles of Self-Green Image Congruence and Green Brand Trust. *South Asian Journal of Management*, 16(1), pp. 76-101.
- Kwazo, H., Muhammad, M., Tafida, G. & Mohammed, S., 2014. Environmental Impact of Technologies. *Academic Journal of Interdisciplinary Studies*, 3(7), pp. 83-86.
- Nam, C., Dong, H. & Lee, Y., 2017. Factors influencing consumers' purchase intention of green sportswear. *International Journal of Interdisciplinary Research*, 4(1), pp. 1-17.
- Rahman, Z. & Joshi, Y., 2015. Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1-2), pp. 128-143.
- Sharma, A., 2021. Consumers' purchase behaviour and green marketing: A synthesis, review and agenda. *International Journal of Consumer Studies*, 45(6), pp. 1217-1238.
- Statista, 2022. *Food - Ireland*. [Online] Available at: <https://www.statista.com/outlook/cmo/food/ireland#revenue> [Accessed 14 October 2022].
- Sun, X., Tian, Z., Wang, J. & Su, W., 2022. The Impact of Environmental Commitment on Green Purchase Behavior in China. *International Journal of Environmental Research and Public Health*, 19(14).
- Tjokrosaputro, M. & Cokki, C., 2019. The Role of Social Influence Towards Purchase Intention With Value Perception as Mediator: A Study on Starbucks Coffee as an Environmentally Friendly Product. *Advances in Economics, Business and Management Research*, Volume 145, pp. 183-189.
- Wang, J., Nguyen, N. & Bu, X., 2020. Exploring the roles of green food consumption and social trust in the relationship between perceived consumer effectiveness and psychological wellbeing. *International Journal of Environmental Research and Public Health*, 17(13).



Woo, E.-J. & Kang, E., 2021. The Effect of Environmental Factors on Customer's Environmental Protection Pattern: An Empirical Text Analysis in the Literature. *International Journal of Environmental Sciences*, 7(1).

Zhuang, W., Luo, X. & Riaz, M., 2021. On the factors influencing green purchase intention: A meta-analysis approach. *Frontiers in Psychology*, Volume 12.

## **Appendix**

### **Appendix 1: Informed Letter of Consent**

The purpose of this research project is to study impact of environmental factors on the consumer buying behavior in Irish food industry.

This is a research project being conducted by Romulo Galdino Lomba

You are invited to participate in this research project because you live in Ireland and are above 18 years.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time.

The procedure involves filling an online survey, your responses will be confidential and we do not collect identifying information such as your name, email address or IP address. The survey questions will be about

We will do our best to keep your information confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the surveys will not contain information that will personally identify you. The results of this study will be used for scholarly purposes only and may be shared with academic staff in ICD.

This research is being carried out by Romulo Galdino Lomba as part of a Degree in Business Studies in Independent Colleges Dublin. The study is being conducted under the supervision of Prof Andrew Deegan and Dr. Daniel O'Sullivan (School of Business ICD) and has been granted ethical approval by Independent College Dublin.

If you have any questions about the research study, please contact Dr. Daniel O'Sullivan  
daniel.osullivan@independentcolleges.ie

This research has been reviewed according to Independent College Dublin procedures for research involving human subjects.

#### **Question Title**

**ELECTRONIC CONSENT: Please select your choice below.**

**Clicking on the "agree" button below indicates that:**

- you have read the above information
- you voluntarily agree to participate
- you are at least 18 years of age

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

- Agree
- Disagree

## Appendix 2: Sample Questionnaire

1. Gender
2. Qualification
3. Age
4. Income
5. Environmental advertisement enhances my knowledge about green environmentally-friendly food products (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
6. I enjoy watching broadcast environmentally-friendly food advertisement (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
7. Environmentally-friendly food advertisement guide customers to making an informed purchasing decision (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
8. I am aware of food eco-brands (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
9. Eco-brand is symbol of product reliability in food industry (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
10. I believe eco-brand is truthful in food industry (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
11. How much do you learn about environmentally-friendly food products from your friends (1= Not at all, 5=Too much)
12. How much do you learn about environmentally-friendly food products issues from your friends (1= Not at all, 5=Too much)
13. How much do you discuss with your friends about environmentally-friendly food products (1= Not at all, 5=Too much)
14. How much do you discuss with your friends about environmentally-friendly food products issues (1= Not at all, 5=Too much)
15. How often do you buy environmentally-friendly food products with your friends (1= Not at all, 5=Too much)
16. How often do you share information regarding environmentally-friendly food products with your friend (1= Not at all, 5=Too much)
17. It is essential to promote green living in Ireland (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)

18. I strongly agree that more environmental protection works are needed in Ireland (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
19. It is very important to raise environmental awareness among Irish people (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
20. Environmental protection works are simply a waste of money and resources (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
21. Environmental protection issues are none of my business (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
22. I think environmental protection is meaningless (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
23. It is unwise for Ireland to spend a vast amount of money on promoting environmental protection (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
24. I am worried about the worsening of the quality of Ireland's environment (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
25. Ireland's environment is my major concern (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
26. I am emotionally involved in environmental protection issues in Ireland (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
27. I often think about how the environmental quality in Ireland can be improved (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
28. Supporting environmental protection makes me more socially attractive (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
29. Supporting environmental protection makes me special (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
30. I will be perceived by others as "outdated" if I do not support environmental protection (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
31. When I want to buy a food product, I look at the ingredients label to see if it contains things that are environmentally-damaging (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
32. I prefer green food products over non-green food products when their product qualities are similar (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)
33. I choose to buy food products that are environmentally-friendly (Strongly Disagree, Disagree, Neural, Agree, Strongly Agree)

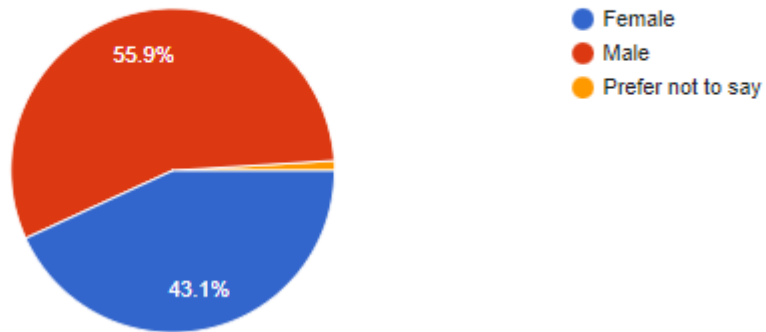
34. I buy green food products even if they are more expensive than the non-green ones  
(Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)

### **Appendix 3: Questionnaire Responses**

Chart1

### Gender

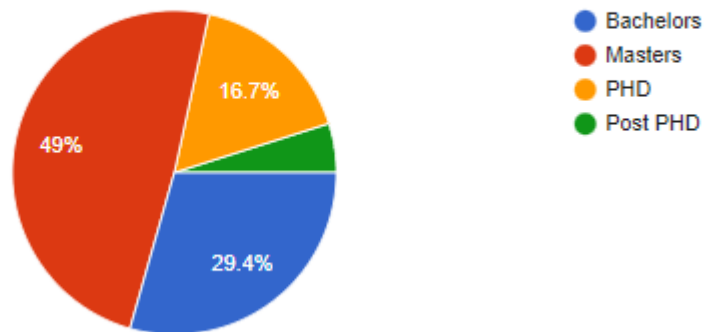
102 responses



### Chart2

#### Qualification

102 responses



---

### Chart3

#### Age

102 responses

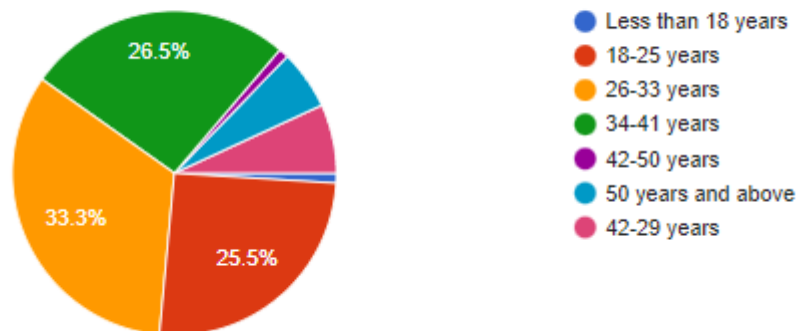


Chart4

Income

102 responses

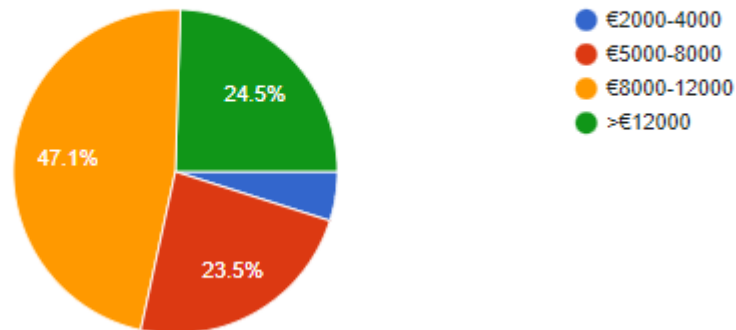


Chart5

Environmental advertisement enhances my knowledge about green environmentally-friendly food products

102 responses

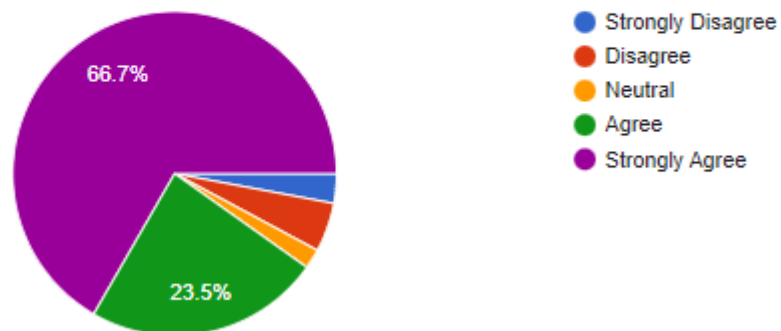


Chart6

I enjoy watching broadcast environmentally-friendly food advertisement

101 responses

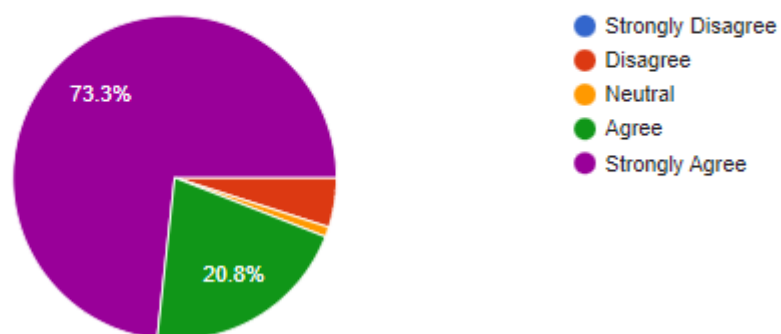




Chart7

environmentally-friendly food advertisement guide customers to making an informed purchasing decision

102 responses

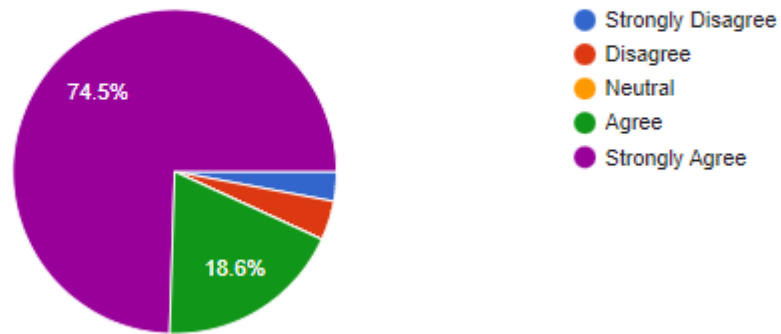


Chart8

I am aware of food eco-brands

102 responses

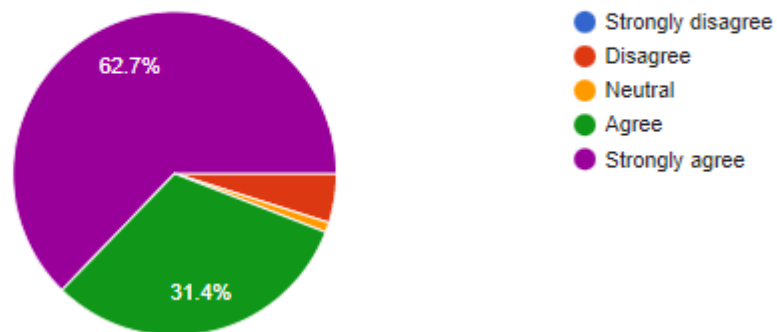


Chart9

### Eco-brand is symbol of product reliability in food industry

102 responses

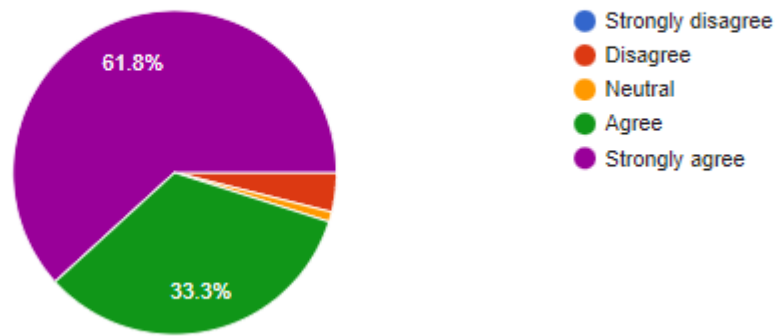


Chart10

### I believe eco-brand is truthful in food industry

102 responses

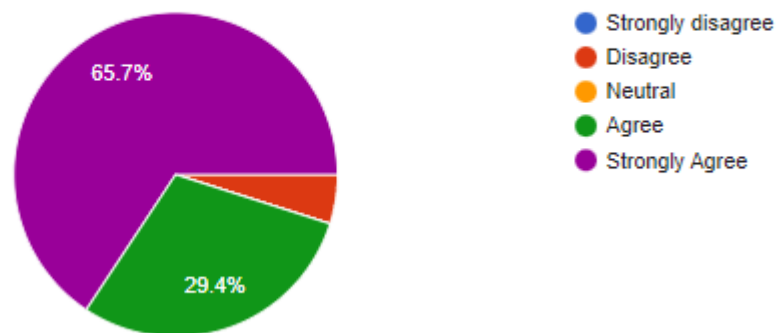


Chart11

### How much do you learn about environmentally-friendly food products from your friends

 Copy

102 responses

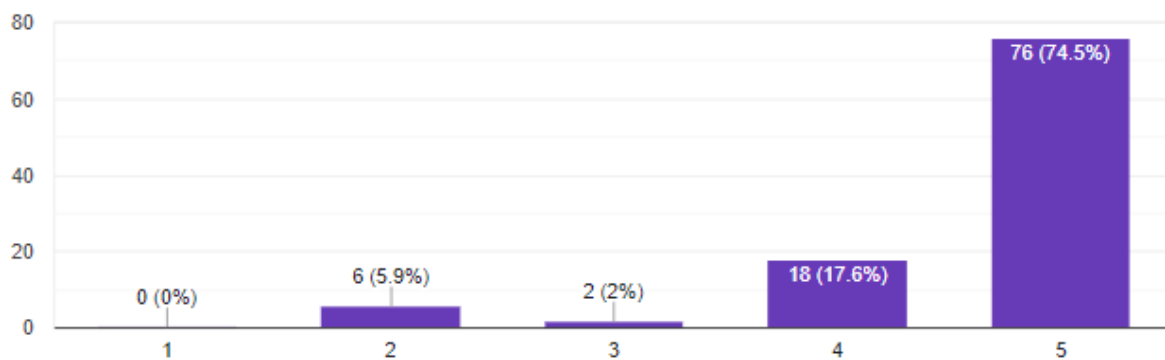


Chart12

How much do you learn about environmentally-friendly food products issues from your friends



102 responses

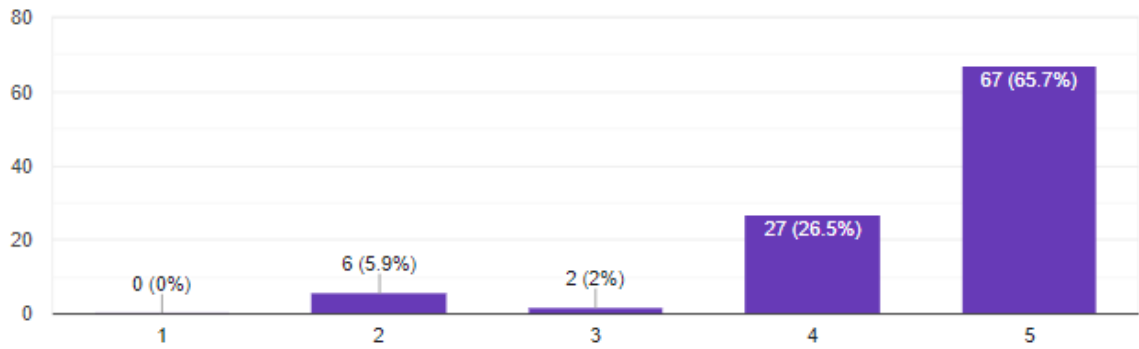


Chart13

How much do you discuss with your friends about environmentally-friendly food products



102 responses

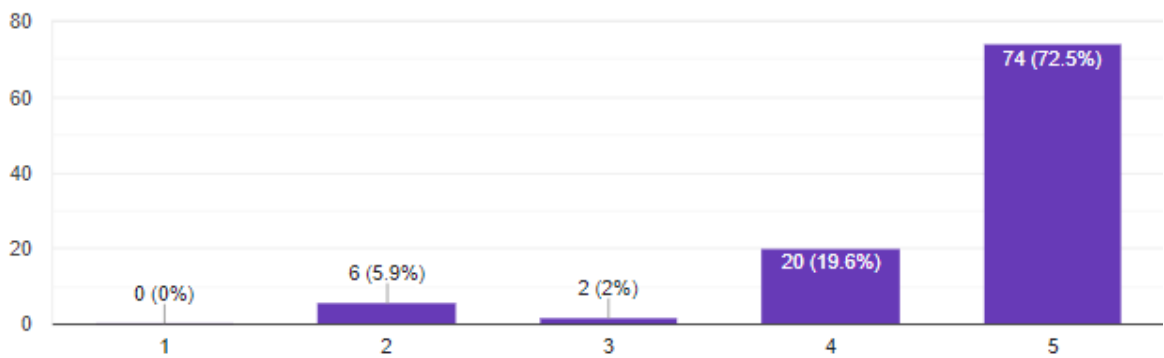


Chart14

How much do you discuss with your friends about environmentally-friendly food products issues

 Copy

102 responses

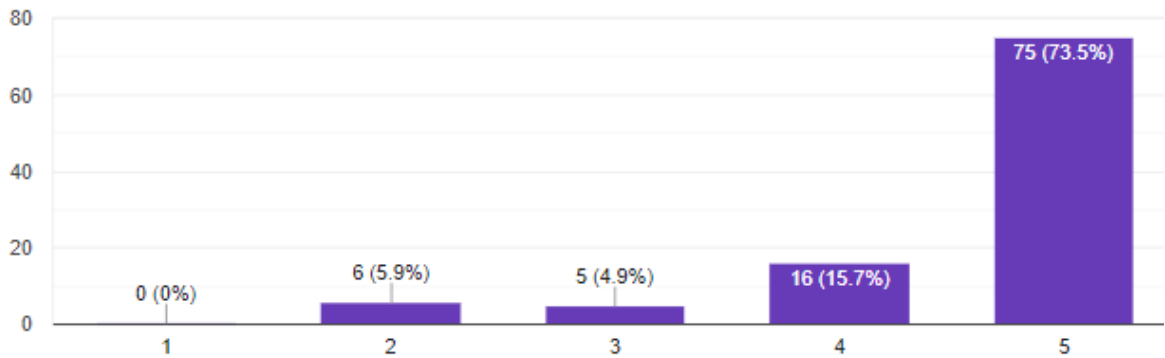


Chart15

How often do you buy environmentally-friendly food products with your friends

 Copy

102 responses

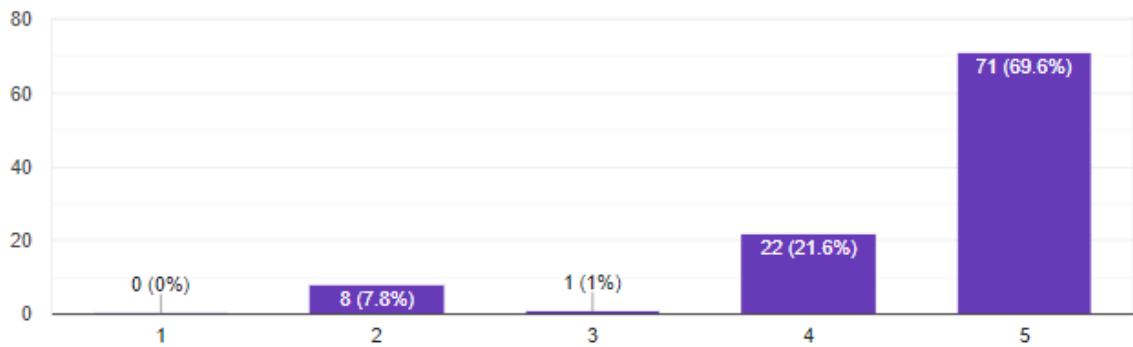


Chart16

How often do you share information regarding environmentally-friendly food products with your friend

 Copy

102 responses

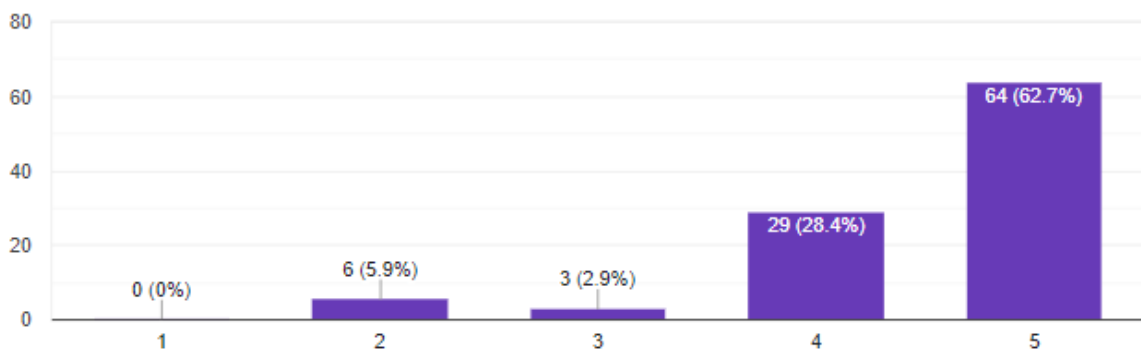


Chart17

It is essential to promote green living in Ireland

102 responses

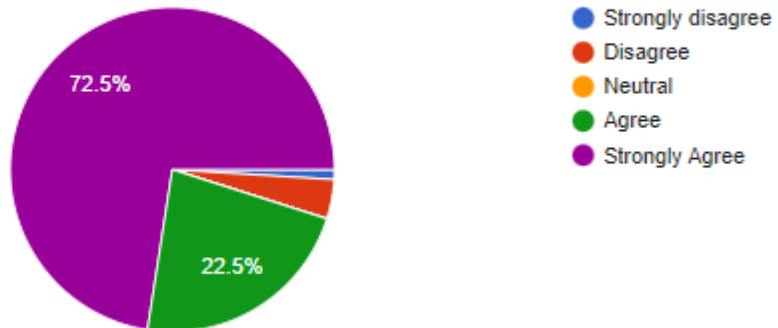


Chart18

I strongly agree that more environmental protection works are needed in Ireland

102 responses

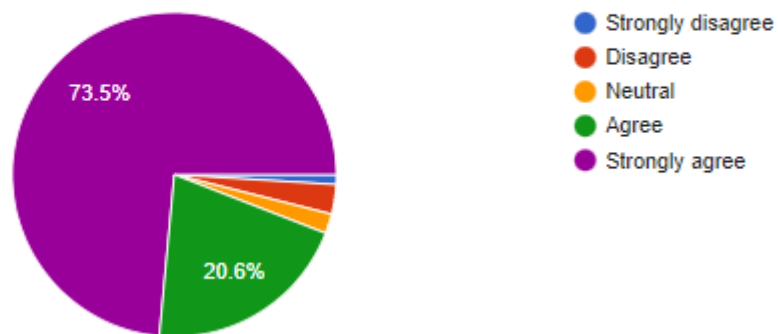


Chart19

It is very important to raise environmental awareness among Irish people

102 responses

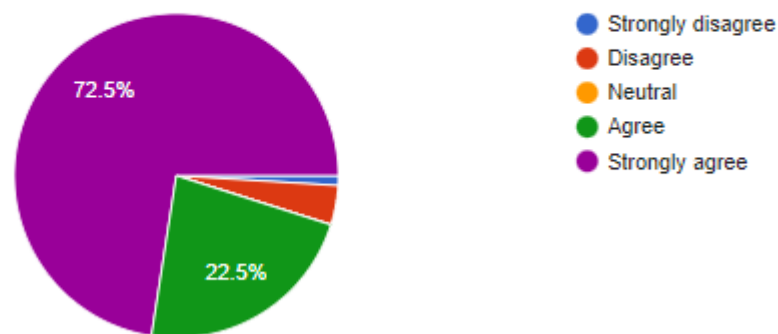


Chart20

Environmental protection works are simply a waste of money and resources

102 responses

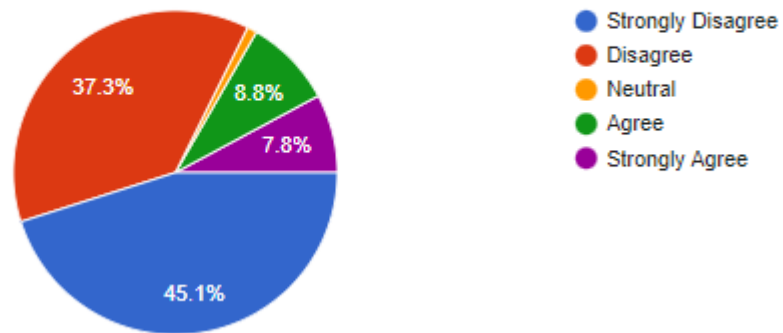


Chart21

Environmental protection issues are none of my business

102 responses

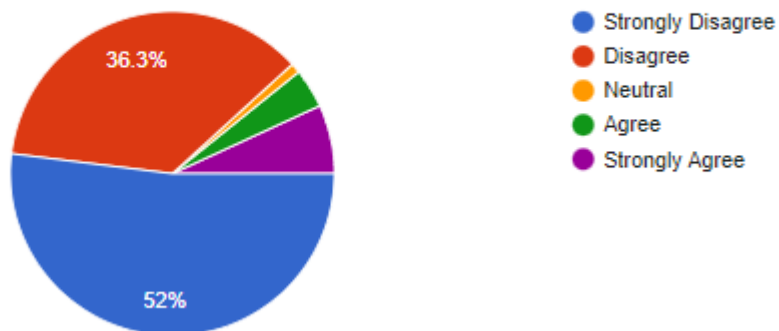


Chart22

I think environmental protection is meaningless

101 responses

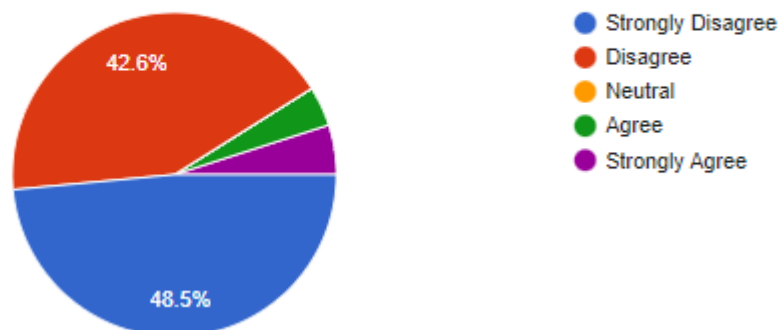


Chart23

It is unwise for Ireland to spend a vast amount of money on promoting environmental protection

102 responses

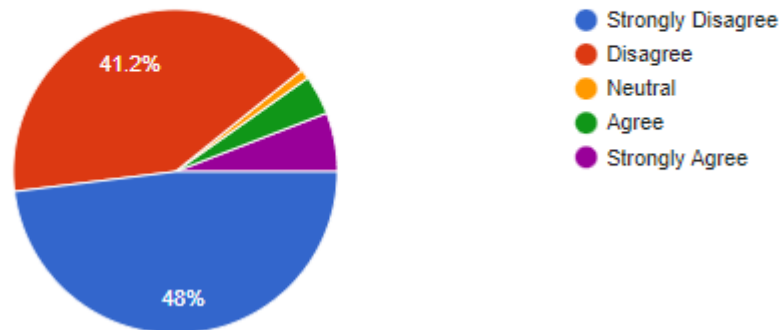


Chart24

I am worried about the worsening of the quality of Ireland's environment

102 responses

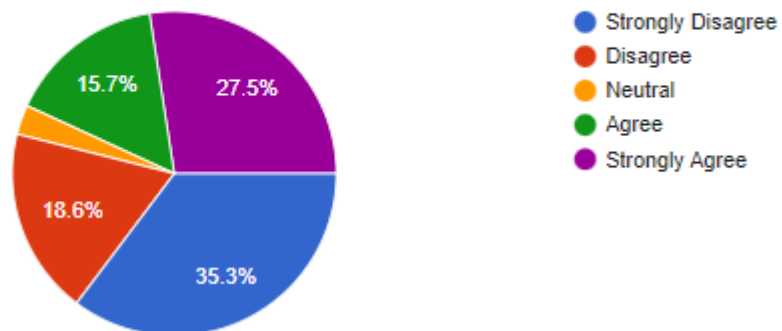


Chart25

Ireland's environment is my major concern

102 responses

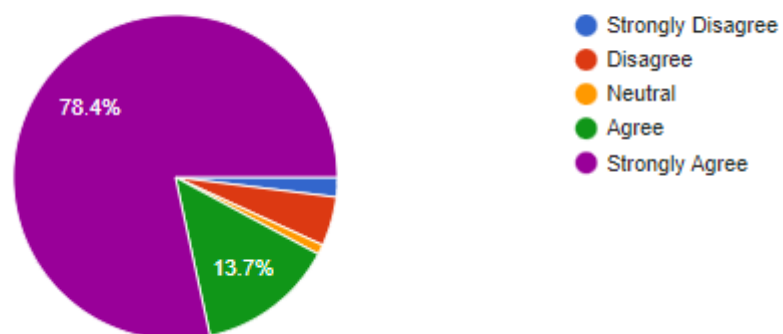


Chart26

I am emotionally involved in environmental protection issues in Ireland

102 responses

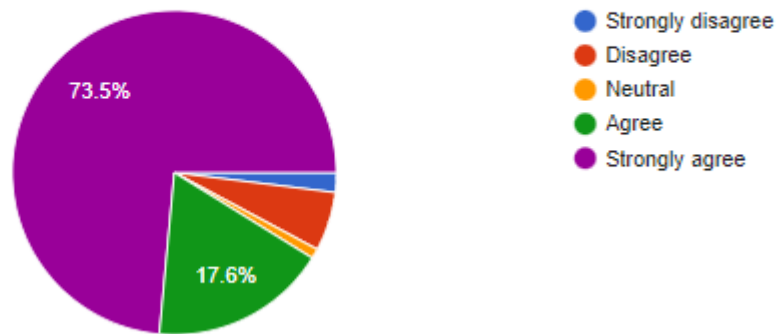


Chart27

I often think about how the environmental quality in Ireland can be improved

102 responses

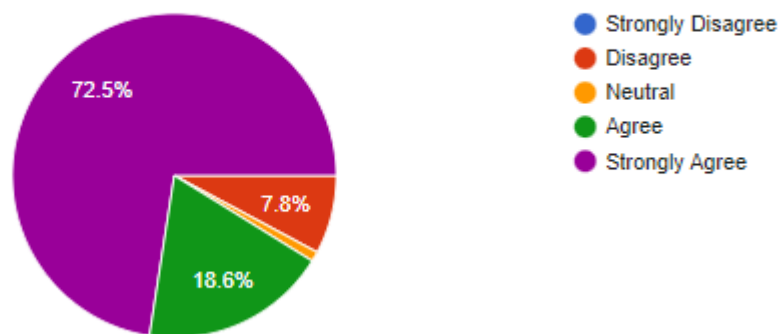


Chart28

Supporting environmental protection makes me more socially attractive

102 responses

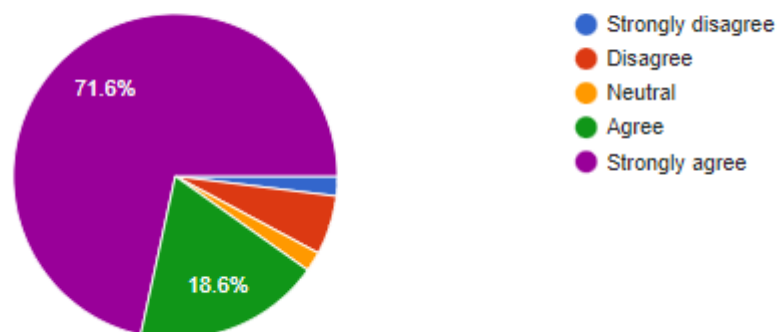




Chart29

Supporting environmental protection makes me special

102 responses

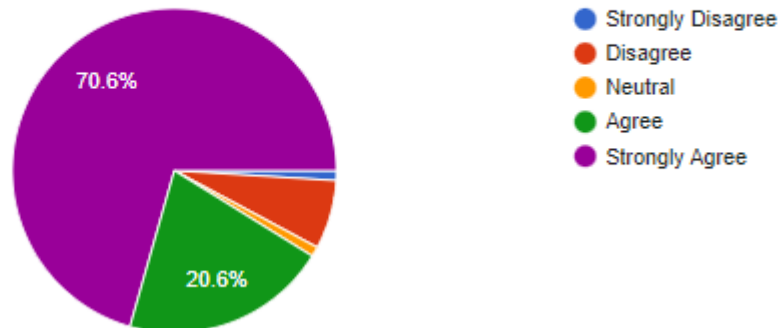


Chart30

I will be perceived by others as "out-dated" if I do not support environmental protection

102 responses

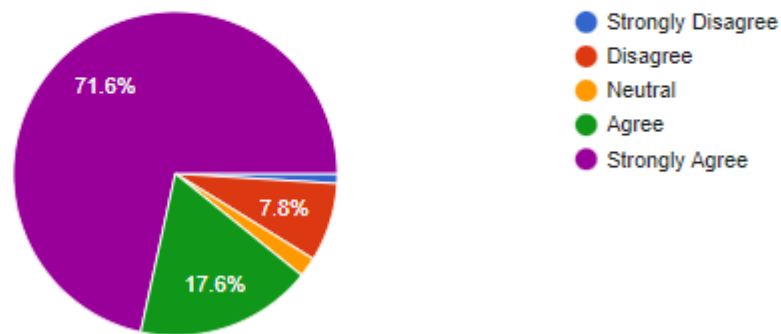


Chart31

When I want to buy a food product, I look at the ingredients label to see if it contains things that are environmentally-damaging

102 responses

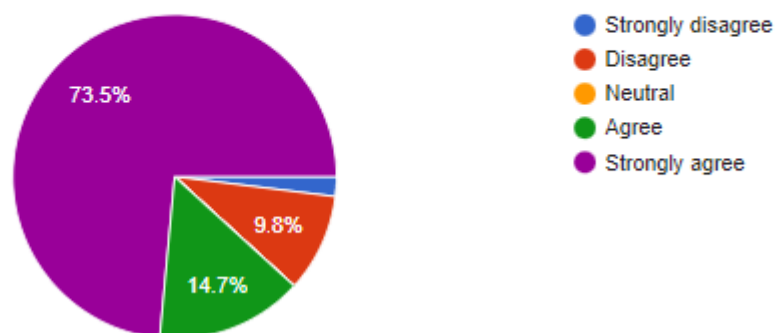


Chart32

I prefer green food products over non-green food products when their product qualities are similar

102 responses

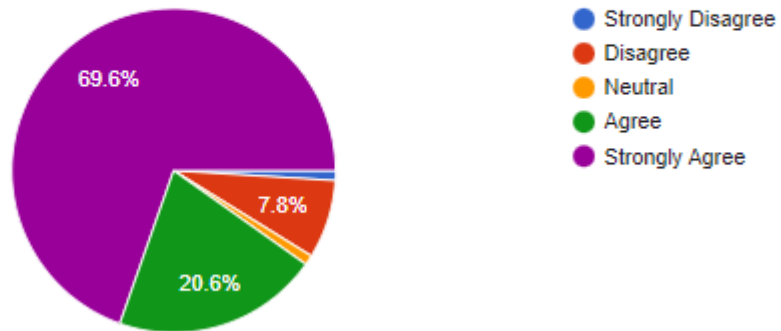


Chart33

I choose to buy food products that are environmentally-friendly

102 responses

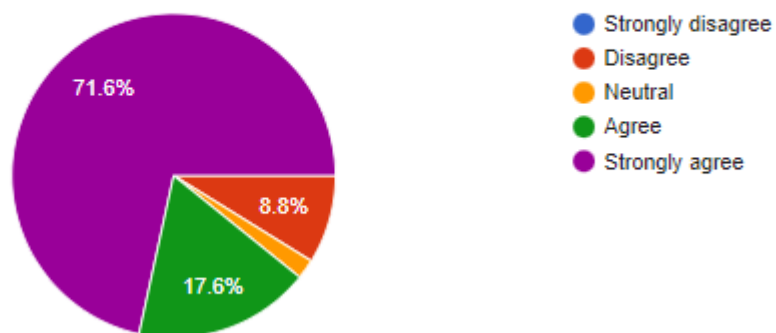


Chart34

I buy green food products even if they are more expensive than the non-green ones

102 responses

