Facultad de Ciencias Económicas y Empresariales

TRABAJO FIN DE GRADO
GRADO EN ADE INTERNACIONAL

SOCIAL RESPONSIBLE CONSUMPTION. CONSUMER BEHAVIOUR ANALYSIS

Edurne Ollobarren Garrido

DIRECTORA
María Luisa Villanueva Orbaiz

Pamplona- Iruña
13 de Junio de 2014
SUMMARY

It is important to consider that nowadays consumers behaviours are experimenting changes at time of purchasing, being more aware of the waste of resources and trying to control impulsive purchases. These changes can be named as the new “green-thinking” trend, which is being expanded in the society, and which has generated a great importance for both consumers and enterprises. Although there are individuals who perform responsible consumption practices because of an ethical responsibility feeling, we can´t forget the economic crisis consequences, which has obliged affected individuals to adopt responsible consumption behaviours.

In this context, this market research has been carried out to analyse the level of knowledge about responsible consumption initiatives owned by consumers, responsible consumption practices performed by them as well as the reasons and barriers of such practices. After the research, some conclusions obtained from the results and recommendations for public and private institutions are presented.

KEY WORDS

Responsible consumption
Consumer behaviour
Ethical responsibility
Economic crisis
## INDEX

1. INTRODUCTION ........................................................................................................1

2. LITERATURE REVIEW ..........................................................................................2
   2.1. Definition and features of responsible consumption .........................................2
   2.2. Responsible consumption information .............................................................3
       2.2.1. Initiatives carried out by institutions to promote responsible consumption ....3
       2.2.2. Consumers’ perception about the available information .............................6
   2.3. Consumers’ responsible consumption behaviours ............................................7
       2.3.1. Responsible consumption barriers ..........................................................8
   2.4. Economic situation .........................................................................................8

3. MARKET RESEARCH ............................................................................................10
   3.1. Survey methodology ......................................................................................10
       3.1.1. Sampling plan ..........................................................................................11
   3.2. Data analysis ..................................................................................................13
       3.2.1. Chi-square analysis ($\chi^2$) .....................................................................13
       3.2.2. ANOVA analysis ...................................................................................14

4. RESULT INTERPRETATION ....................................................................................14
   4.1. Description of the sample ...............................................................................14
   4.2. Responsible consumption information .........................................................15
       4.2.1. Consumers knowledge about initiative undertaken by public and private institutions ....15
       4.2.2. Consideration of consumers’ and personal efforts ...................................17
       4.2.3. Consumers’ level knowledge .................................................................21
   4.3. Responsible consumers behaviours .............................................................22
       4.3.1. Responsible consumption practices ......................................................23
       4.3.2. Water saving practices .........................................................................30
       4.3.3. Responsible mobility practices ..............................................................37
       4.3.4. Energy saving practices .......................................................................42

5. CONCLUSIONS .....................................................................................................51
6. RECOMMENDATIONS.................................................................53

BIBLIOGRAPHY.............................................................................55

ANNEXES..................................................................................57
1. INTRODUCTION

Nowadays, consumer behaviour has changed regarding to ways of acting, tastes and preferences, compared to a couple of decades ago. Some years ago, the general profile of consumers was that of a consumerist, referring to consumerism as a compulsive consumption of goods and services, far above of those that a person needs for living. In general, consumers had a good purchasing power at the same time they enjoyed the rise of the economy so that they had no problem in expending their money. In addition, advertising, the low quality of some products and the use of throwaway products, among others, have stimulated this consumerism.

About the same time, and mainly promoted by social movements of different nature (global warming concern, green thinking trend, environmental awareness, ecological movement, vegetarian movement…) and public institutions, it begins to talk about the necessity of being responsible when we buy and consume, and some consumers have been slowly picking up this influence in some plots of such behaviour (Fundación BBVA, 2008; ECOEMBES, 2009; Valencoso, 2013).

In a context like this, we can’t forget the economic crisis to explain the reasons why consumers adopt determining purchase and consumption behaviour. We might even think that it is not the ethical responsibility but the economic crisis the real reason for changes towards responsible behaviour being observed in the behaviour of consumers. (Pérez, 2010; Cador, 2010).

On the other hand, it is also true that there are consumers who express interest in these practices of responsible consumption and declare their intention to adopt, but then they do not do it. (Díaz-Pedregal and Ozcaglar-Toulouse, 2011).

For all the explained above, and given the importance that its knowledge can have for both businesses and public institutions, in this paper we will analyse the responsible behaviour of consumers and their adoption barriers.

This work is structured in the following way. First, we define the concept of "responsible consumption". Next, a literature review is carried out and allows us to pinpoint the objectives specified. Secondly, methodological aspects of market study are presented. Thirdly, achieved results are shown. Finally, conclusions and recommendations are displayed.

Be noted that the empirical part of the study has been focused on the analysis of quantitative results obtained through questionnaires given to individuals residing in Navarre.

1 Compulsive: impossible to resist to impulses
2. LITERATURE REVIEW

As it is studied in the consumer behaviour area, before adopting a particular behaviour or making a choice, consumers must be informed, collecting information from different resources since in order to select the appropriate alternative, specific knowledge is required.

In this first section, and after defining the term, we are going to make reference to different initiatives and information promoted by public institutions and specialised agencies in all concerning to responsible consumption. Moreover, we will address the perception that consumers have about the available information provided by them.

Then, in a second section, we will carry out a literature review about consumers’ behaviours performances related to responsible consumption.

2.1. Definition and features of responsible consumption

According to the United Nations definition “sustainable consumption and production (SCP) is about the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic material as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations” (Oslo, symposium, 1994).

Another possible definition of responsible consumption is that consumption that involves consuming a lower level of goods, consuming only that which is necessary, what we really need, without wasteful spending (ECODES).

And what do consumers understand about responsible consumption? (Consumo responsable y desarrollo sostenible, 2012, page. 17) We can distinguish 3 different ways for consumers to understand the concept of responsible consumption:

1. Responsible consumption as the idea of not spending, consuming what we really need and controlling unnecessary expenses.

2. Responsible consumption as an ethical responsibility activity, stressing social values related to the environment and the working conditions of those involved in the production process of products.

3. Responsible consumption as an economist and ecological mix interpretation, showing interest in energy sources and water scarcity.
Following, we present some relevant characteristics about responsible consumption, which are referenced in this webpage about responsible consumption:

- It is a **conscious** fact, since it is premeditated and places the free election of consumers.
- It is **critical**, since it wonders about social and ecological conditions in which the product/service has been elaborated.
- It is **ethical**, it is based in values such a responsibility, austerity as an alternative to consumerism, and respect of producers and consumers rights.
- It is **ecological**, by preventing wasteful spending of natural resources, as massive production harm the environment.
- It is **sustainable**, reducing unnecessary consumption can improve the welfare of the planet and less residuals are generated.
- It is **solidary** with future generations, since rights of present society are respected and rights of future society are assured.
- It is **socially fair**, as it is based on principles of non-discrimination and non-exploitation.
- It has the **power of social transformation**, Consumers have the power to transform a mere act of consumption into a true act of citizenship.

### 2.2. Responsible consumption information

#### 2.2.1. Initiatives carried out by institutions to promote responsible consumption

**Guidebooks**

Public institutions are concerned about informing consumers on different issues related to responsible consumption, by offering behavioural guidebooks and promoting responsible consumption among citizens. We can find several guidebooks both at international, national and autonomic levels as the *YouthXChange Guidebook: Training kit on responsible consumption* published by the United Nations Environment Programme (UNEP) (international level), *Guía para un consumo responsable* published by Hispacoop y el Observatorio de Responsabilidad Social Corporativa, in collaboration with la Federación de Cooperativas de Consumo de Euskadi (national level) and also the *Guía para un consumo responsable en Navarra* elaborated by the Navarre government (autonomic level).

---

Guidebooks links:


All these guidebooks are available free to the public.

**Informative labels**

Another measure that institutions have carried out is the use of informative labels. At time of making a purchase decision, as said before, it is essential for consumers to have available information about what they are going to pay for, which will allow them to choose the alternative which better meets their expectations. For this purpose, companies provide products’ information by means of labelling. We can find two types of labelling:

- Compulsory labelling, which gathers information about the name, brand, main characteristics, ingredients, manufacturing batch, weight, expiration date…
- Voluntary labelling, which provides additional information which must always be truthful.

This voluntary labelling is generally oriented towards responsible consumption. Under this labelling we can distinguish two types: environmental labelling and social labelling. Environmental labelling informs us about the environmental impact of a product. The main environmental label is the Eu Ecolabel.

According to the European Commission:

“The Eu Ecolabel helps you identify products and services that have a reduced environmental impact throughout their life cycle, from the extraction of raw material through to production, use and disposal”.

Talking about social labelling we must make reference to the one called Fair Trade.
Fair Trade is a supportive commercial system seen as an alternative to the conventional one that pursues the development of poor village and fights against poverty. According to the World Fair Trade Organization (WFTO) the internationally agreed definition of Fair Trade is the following:

"Fair Trade is a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers - especially in the South." (WFTO, 2009)

In Spain, the major guarantee label of Fair Trade is the FAIRTRADE label, managed in Spain by the Asociación del Sello de Productos de Comercio Justo, created in 2005 with the objective of expanding the impact of Fair Trade.

Legislative measures

In addition, public institutions also make available renewal schemes for consumers, with which individuals can renew some products and change them by others more efficient, receiving some financial help or discounts.

At national level we can mention the automobiles and appliances renewal schemes carried out by the Government of Spain, but also we can find other renewal schemes offered by autonomic government, in this case, the boiler renewal scheme of Navarra Government3.

Moreover, nowadays there are a great number of consumers who have adopted behaviours prompted by public institutions without realizing that they have been legislative measures.

A clear example of consumer behaviour change due to public institutions’ initiatives is recycling. Years before, people didn’t recycle because they only had a container and dumped all the waste in the same container. Today, with the availability of different containers for different materials (paper and paperboard, glass, organic material…) a large majority of consumers have embraced recycling as a daily behaviour.

2.2.2 Consumers’ perception about the available information

Having a look at the data provided in the study elaborated by the Club de Excelencia de Sostenibilidad, called *Consumo Responsable y Desarrollo Sostenible 2012* about Spanish responsible consumer behaviour and sustainable development, we observe that individuals consider that public and private agencies are the main external sources of information about responsible consumption (77% of the participants of the study support this affirmation), however consumers think that they are not informed enough and they rate to society with a fail in the degree of information related to responsible consumption issues.

Furthermore, we appreciate that individuals as a whole know enough ways to collaborate with responsible consumption. Almost all of the interviewees of the study have a little knowledge about attitude towards responsible consumption, particularly, they know more about issues related to energy, water and recycling (55% of participants consider recycling as a key collaboration attitude) but they have less knowledge about efficient transport and appliances.

However, although all the participants in the interview can together build enough size knowledge about ways of collaborating with responsible consumption, looking at them individually, the study shows that participants only are able to mention 3 ways of collaborating, on average. This means that society has not a good level of knowledge about attitudes related to responsible consumption.

Clearly we observe that public institutions and organizations are concerned about informing and training consumers with an active behaviour with respect to responsible consumption. However, we considered to what extent these activities are effective; referring to the mention example about recycling, there are still many consumers reluctant to recycling, and whose argument for not recycling is that they pay municipal garbage rates, so they are already paying for someone to be in charge of recycling.

Furthermore, it is obvious that consumers have access to a wide variety of information and guidebooks about responsible consumption but do they really make use of them, do they know that this information exist? If they know about this existence, do they pay attention and take action to change their consumption behaviour? A vast majority of society do not know of the existence of such guidelines, even though they are free available for the whole society.

Reached to this point we can introduce the term of “cognitive ambivalence” obtained from the classification of cognitive barriers to responsible consumption made by Catalin Stancu in her Master thesis *Meaning and practices regarding the concept of responsible consumer in the view of the Romanian consumers, 2011*. This term means that although consumers have plenty of available information about responsible consumption, processing this information requires time and effort and even the ones who are engaged in responsible consumption are not willing to make such efforts to acquire and process the information. That’s why, even knowing that information about responsible consumption exists and is available
without any economic cost, there are effort and time costs which consumer are not willing to face (Carrigan and Attalla, 2001; Shaw and Clarke, 1999)

In addition, we can also mention the existence of a possible bias in consumers related to the information they have about a particular brand which makes them show resistance towards negative information of the brand (Beckmann, 2007; Carrigan and Attalla, 2001; Valor, 2008, among others).

2.3. Consumers’ responsible consumption behaviours

Consumers can adopt and do adopt different responsible behaviours in many scopes of their daily life. This is evidenced by the numerous studies performed.

Retaking the study Consumo Responsable y Desarrollo Sostenible 2012, we observe in the data that most of consumers value the availability of reusable shopping bags in stores, however there are a 15% of consumers who don’t care about this issue; women are the ones who more value the use of recyclable shopping bags. Another widespread behaviour among consumers is the consideration of energy saving rather than looking at the price when buying some appliances.

Regarding to consumers evaluation about corporate social responsibility practices (CSR) of companies, consumers do not reward involved companies but they do punish those companies who are not engaged, by not buying their products.

In addition, as it is obvious the performed practice of consumers are the ones related to the knowledge they have, that is, practices related to energy, water and recycling. It is important to highlight that the most performed consumer behaviours regarding to responsible consumption are those related to recycling of waste. The next behaviour most performed among consumers is the use of energy saving light bulbs, followed by the reviewing of lights and lights turned off if these are not being used. It is also important to mention the behaviours with the lowest relevance for consumers and which are the least performed by them. These behaviours are turning off the electrical appliances not being used, use of water saving devices, turning off the heat when there is nobody at home and walking to places instead of using the car.

Talking about recycling and according to the studies Percepción de mensajes ambientales por parte del consumidor, (2013) and La cesta de la compra 2007.Estudio de factores socioeconómicos relacionados con la compra de productos envasados (2009) carried out by ECOEMBES, consumers consider that recycling contributes significantly to the improvement of the environment and highlight that seven out of ten households declare that they recycle their waste daily.
Furthermore, in the studies it is mentioned that consumers choose products whose packaging shows an eco-design. Consumers value that packaging, besides protecting products also reduce environmental impact during the distribution, storage and consumption of products. Therefore, they buy products whose packaging has been manufactured in resource-saving production processes: raw materials, water, energy… as well as those made from recycled materials.

However it is important to mention, that although the use of recycled materials has a high acceptance in the field of packaging among consumers, there exists still a rejection of recycled materials in the field of the product itself, seeing this as one of a lower quality.

2.3.1. Responsible consumption barriers

Once responsible consumption behaviours of consumers have been analysed, we can complement the classification of barriers to responsible consumption mentioned before (Stancu, 2011), adding two more barriers in relation to behaviour: motivational barriers and behavioural barriers.

The first barriers we talk are the motivational barriers, which explain that responsible consumption behaviour of consumers is influenced by personal moral values, relating these ones to the ethical obligation they think they have. While some consumers do not feel the need to be concerned with social issues, others feel the ethical obligation to engage in responsible consumption (Valor, 2008). However, this ethical obligation feeling have different levels of involvement among consumers and they are involved with social and environmental issues in different ways (Beckmann, 2007; Carrigan and Attalla, 2001; Valor, 2008).

Then behavioural barriers explain us that another obstacle that consumers have to face at time of being responsible consumers and which distances them from engaging in responsibility, is the unavailability or difficulty of finding fair products. In this way, the lack of an opportunity may be an impediment in behaving responsibly (Valor, 2008).

Another fact related is the high prices of products that are considered responsible products such as organic food and fair products, since responsible products have higher prices than conventional ones, and consumers prefer not to pay a higher amount of money.

This high prices barrier is supported by the affirmation made in the study mentioned before La cesta de la compra 2007.Estudio de factores socieconómicos relacionados con la compra de productos envasados, ECOEMBES, which presents that consumers consider that it is needed contributing to protect the environment but at the same time, they recognize that in their purchasing decisions aspects such as price or brand are more important. Since nowadays, the price is currently the major factor in the purchase of products, so asking
for a consumer financial sacrifice is usually rejected.

2.4. Economic situation

Despite all the above explained, as we have mentioned, we want to emphasise in the fact that the current economic recession context is a key agent for this change in consumers’ attitudes and the responsible consumption trend. That is why we wonder to which limit a consumer adopts responsible consumption patterns by free choice relying on ethical, ecological and social values, or are attitudes adopted “compulsory” because of fear of an uncertain future, which has made consumers to become more saver and foresighted.

In the article *Un nuevo consumidor* (ARAL, 2013), we can observe different consumption attitude adopted by consumers because of the crisis. With this economic situation, consumers have become price sensitive, they now visit different establishments in order to take advantage of offers and acquiring the products with best prices, going for store brands, with the aim of saving some money. Moreover, consumers write shopping lists to avoid impulsive purchases. Another attitude adopted is that consumers try to reduce waste spending by reducing their stock at home, spending everything they have in the storeroom, throwing less food, cooking a bigger quantity of food and keeping it for another day, and also by buying what it is necessary and what they are run out of.

However, we must to highlight that economic recession has obligated consumers to spend more time at home, which has caused a 3% increment of products consumed at home. Even though, this increment is not very significant as consumers have learnt how to benefit and share the goods and they only have had to buy a 1,3% more to supply this increase in consumption.

Another relevant fact in regard to responsible consumption of consumers is the economic recession situation experienced nowadays.

As we have mentioned above in the article *Un Nuevo consumidor* (ARAL), consumer behaviours have changed because of the crisis. Theses changes in attitudes are related to price sensitiveness but also to food quantity, stock at home and products expenditures. Furthermore, the data collected in the study *Consumo Responsable y Desarrollo Sostenible 2012* shows that there are consumers who have been obliged to perform responsible consumption attitudes in order to save money, products, energy and water, because of the crisis, but also, there are consumers who are not obliged to perform saving attitudes but who do it because of fear of an uncertain future.
3. MARKET RESEARCH

After having analysed the market background and reviewing several literature about responsible consumption we have found some uncovered issues, object of study. We have found that in spite of the availability of information, consumers feel themselves uninformed about responsible consumption. Also we have perceived that there are studies and articles about responsible consumption knowledge which are partial and no global, that is, studies and articles focused on particular areas of responsible consumption, and also we have only found few studies about behavioural barriers. Finally, we have observed that consumption behaviours might have changed because of the economic recession. Therefore, we are going to carry out a market research project focused on Social Responsible Consumer Behaviour in the region of Navarra.

Following, we present the objectives of our research paper:

- Analysing consumers’ knowledge about initiatives undertaken to promote responsible consumption.

- Distinguish the responsible consumption practices performed by consumers.

- Analysing reasons and barriers of such behaviours.

3.1. Survey methodology

Our research project is characterised by being a concluding research since we are going to work with a big and representative sample and with primary data collected through surveys, in order to achieved our fixed and defined objectives.

Our survey has been designed online by means of the website base called encuestafacil.com, and oriented to a target population, resident in Navarre whose age comprises between 18 and 69 years old, that is, individuals who are conscious about their consumer behaviour. The survey has been issued through two mediums: through an Internet link by means of social networks, in this case, by Facebook, and by paper questionnaires to reach that part of the population who don’t use social networks.

The questionnaire has been first written in Spanish and then translated to English. After the translation a native English individual has checked the English version in order to give feedback on the quality of the translation.

In the survey it is disclosed the institution involved in it (Universidad Pública de Navarra) in order to achieve a greater cooperation among respondents.

---

4 See Annex 1 for a replica of our questionnaire
The survey consists of 17 questions covering a total of 104 variables. Questions have been grouped into blocks according to the purpose to be achieved with each of them.

1. Five questions have been designed to answer our objective about consumers’ knowledge of institutions initiatives. (Questions 1-5)

2. Next five questions are aimed to collect information about responsible consumption activities performed by consumers in different fields and about the crisis influence on responsible consumption behaviour. (Questions 6-10) Fields:

2.1. Responsible consumption practices
2.2. Water saving practices
2.3. Energy saving practices
2.4. Responsible transport and mobility

3. Finally, last seven questions were designed to collect information about different social-demographic variables. (Questions 11-17)

The questionnaire has been distributed starting the 7th of May 2014 and finishing the collection of data the 15th of the same month.

3.1.1 Sampling plan

In order to determined the sample size needed for our study, we have assumed a sampling error of ± 9, taking a confidence level of 95.5% for p=1-p =50% for a Normal distribution. The following equation for proportions of infinite populations, in which \( n \) is the sample size, \( Z \) is the value of the table of the Normal distribution and \( e \) is the sampling error, has been used to compute the sample size, obtained a sample size of 123 individuals to work with.

\[
n = \frac{Z^2 P(1-P)}{e^2}
\]

From all the probability based sampling methods, we have used the proportionate stratified sampling in which the elements of the population have not the same probability of being included in the sample, in order to capture the heterogeneity of the population in terms of gender and age. However, in order to develop this type of sampling one of the requirements we need is the census of the total population of Navarre, which is difficult to acquire. Therefore, as we don´t have the census available for our study we chose a quotas sampling as an alternative for the stratified probabilistic sampling.
In order to apply the proportional affixation we have used a data collection provided by the Instituto de Estadística de Navarra (IEN) about the total population of Navarre\(^5\), and we have calculated the different quotas from the data available.

*Table. 3.1. Size distribution of the sample*

<table>
<thead>
<tr>
<th>AGE</th>
<th>MEN</th>
<th>WOMEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>38.383</td>
<td>37.067</td>
<td>75.450</td>
</tr>
<tr>
<td>30-49</td>
<td>107.793</td>
<td>100.600</td>
<td>208.393</td>
</tr>
<tr>
<td>50-69</td>
<td>75.412</td>
<td>75.189</td>
<td>150.601</td>
</tr>
<tr>
<td>TOTAL</td>
<td>221.588</td>
<td>212.856</td>
<td>434.444</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>MEN</th>
<th>WOMEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>11</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>30-49</td>
<td>31</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>50-69</td>
<td>21</td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63</td>
<td>60</td>
<td>123</td>
</tr>
</tbody>
</table>

Following we can see a table with the technical characteristics of our sampling.

\(^{5}\) See Annex 2
Table 3.2. Sampling technical sheet

| Collecting information technique | Individual survey conducted by a web based and by a paper questionnaire, depending on the individual. |
| Universe | Individuals residing in Navarre whose ages comprises between 18 and 69 years old. |
| Type of sampling | A mixture of stratified probabilistic sampling and quotas sampling. |
| Sample size | 123 interviews |
| Sampling error | A sampling error of ± 9, with a confidence level of 95.5% for \( p=1-p =50\% \) |
| Date of work | Interviews have been fulfilled from the 7th to the 15th of May 2014 |

### 3.2. Data analysis

In this study data collection has been carried out through questionnaires and handled by the statistical programme called SPSS. With the aim of making our analysis more bearable and working more deeply in relevant results, besides the use of multivariate techniques we have used a bivariate analysis, which relates two variables. When the relation established is between two nonmetric variables we use the chi-square analysis, however, when the relation is established between a nonmetric variable and a numerical one, we carry out the ANOVA analysis.

#### 3.2.1. Chi square analysis \( (X^2) \)

In this study the chi square test is used to determine whether there is a significant association between two nominal variables. Particularly, we have test the independence of sociodemographic variables with respect to different issue related to responsible consumption.

To test the independence of the variables we must state the following hypothesis for each test carried out.:

- **Null hypothesis** \( (H_0): \) The two variables are independent
- **Alternative hypothesis** \( (H_1): \) The two variables are dependent
3.2.2. ANOVA analysis

We have used the analysis of variances (ANOVA) to determine whether there is a significant association between a nominal variable and a numerical one. For this analysis the hypothesis presented to test the independence between variables are the same presented in the chis square analysis paragraph.

4. RESULTS INTERPRETATION

4.1. Description of the sample

Following, we show a table with the main characteristics of the sample population used in our study:

Table 4.1. Characteristics of the sample population

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>62</td>
<td>50.40%</td>
</tr>
<tr>
<td>Woman</td>
<td>61</td>
<td>49.60%</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29 years old</td>
<td>21</td>
<td>17.10%</td>
</tr>
<tr>
<td>30-49 years old</td>
<td>59</td>
<td>48.00%</td>
</tr>
<tr>
<td>50-69 years old</td>
<td>43</td>
<td>35.00%</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>Studies level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>3</td>
<td>2.40%</td>
</tr>
<tr>
<td>Primary studies</td>
<td>30</td>
<td>24.40%</td>
</tr>
<tr>
<td>Secondary studies</td>
<td>39</td>
<td>31.70%</td>
</tr>
<tr>
<td>University studies</td>
<td>51</td>
<td>41.50%</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>Principal occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time employment</td>
<td>24</td>
<td>19.50%</td>
</tr>
<tr>
<td>Full-time employment</td>
<td>49</td>
<td>39.80%</td>
</tr>
<tr>
<td>Domestic work (unpaid)</td>
<td>6</td>
<td>4.90%</td>
</tr>
<tr>
<td>Looking for a job</td>
<td>17</td>
<td>13.80%</td>
</tr>
<tr>
<td>Student</td>
<td>20</td>
<td>16.30%</td>
</tr>
<tr>
<td>Retired</td>
<td>7</td>
<td>5.70%</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>In charge of bills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>42</td>
<td>34.10%</td>
</tr>
<tr>
<td>Yes</td>
<td>81</td>
<td>65.90%</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
We observe that there were more people aged between 30 and 49 years old, and that there was a slight bias towards individuals with university studies and full-time employment, since a 41.50% of the respondents have university studies and a 39.80% are full-time employees. In any case, fulfilling the quotas shown in the following table, calculated above and shown again, the sample is representative of the general population.

Table 4.2. Representative quotas of the population

<table>
<thead>
<tr>
<th>AGE</th>
<th>MEN</th>
<th>WOMEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>11</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>30-49</td>
<td>31</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>50-69</td>
<td>21</td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63</td>
<td>60</td>
<td>123</td>
</tr>
</tbody>
</table>

4.2. Responsible consumption information

4.2.1. Consumers’ knowledge about initiatives undertaken by public and private institutions

One of the objectives of our study was to analyse consumers’ knowledge about initiatives undertaken by public and private agencies to promote responsible consumption. For this aim, participants were asked several questions and now we are going to present the results. In general, more than a half (65.90%) of the total sample affirm having knowledge about these initiatives. After making the chi-square test, the differences resulted significance only for gender, studies level and principal occupation. Following, we analyse the results in a deeper way according to the significant variables.

Graph 4.1 Knowledge of CR initiatives by gender

Graph 4.2. Knowledge of CR initiatives by studies level
Firstly, individuals were asked if they knew about any initiatives carried out by institutions, as we can see in the graph, introducing the results by the demographic variable of gender we observe that are women the ones who are more aware of the existence of institutional initiatives promoting responsible consumption, being a 80.30% of them with knowledge of some initiative and only a 19.70% of women who don´t have knowledge about it. However, the figures between men who have knowledge about the initiatives and men who don´t have it, are quite similar, being 51.60% from the total of men the ones who don´t know about initiatives undertaken by institutions.

Looking at the level of studies, we observe that are individuals who have university studies the ones who have more knowledge about responsible consumption. It is important to mention that although a 100.00% of those who are no schooling have knowledge about responsible consumption initiatives, this is not accurately representative since only 3 individuals of the total sample are no schooling people.

Focussing on the results according to the principal occupation of individuals, we observe that those who are looking for a job (88.20%) are the ones who are more aware of the existence of institutional initiatives promoting responsible consumption, being only a 11.80% of them who don´t know have knowledge about it. In addition, it is important to consider that respondents who develop domestic work (83.30%) and students (75.00%) are the next one who have more knowledge about initiatives undertaken by institutions.

On the other hand, if we look at individuals who have part- time and full- time jobs, we observe that they have less knowledge about this type of initiatives, being quite similar the numbers of those who have knowledge and those who don´t have it, in both types of jobs.

These results can be caused by two facts, the first reason could be that students, people who do domestic work and those who are looking for a job, don´t receive any salary so they must look for information in order to reduce their consumption. The other reason could be that those who have a job have less time to pay attention and get information about the initiatives undertaken by institutions.
Focussing on the study of those participants who state that they have knowledge about initiatives carried out by institutions to promote responsible consumption, we observe that from a list of 6 alternatives the ones which are more well-known among respondents are the “Boiler renewal plan” of Gobierno de Navarra (29.50%) and the “Automobile renewal plan” promoted by Gobierno de España (27.50%), followed by the use of labels such as Fair Trade or Ecolabel with a percentage of 25.60%.

In addition we observe that only a 1.00% of the individuals of the sample have knowledge about other initiatives different from the ones listed as options. These other initiatives mentioned are: “Mercado social de la Txantrea”, “SOM energía”, “REAS (Red de Economía Alternativa Solidaria)”, “LANDARE (Grupo de consumo)” and “Federación SETEM”.

**Graph 4.4. Initiatives known by consumers (%)**

![Percentage of initiatives known by consumers](image)

4.2.2. Consideration of consumers’ and personal efforts

In general, as it is confirmed in the study *Consumo responsable y desarrollo sostenible, 2012* consumers believe that public institutions are the main responsible for providing information and developing responsible consumption initiatives, and as our previous results show, there is a clear evidence that more than a half of the respondents are aware of the availability of such information. On the other hand, almost all the total population (91.90%) believe that consumers only make seldom and sometimes efforts to get themselves informed. After making the chi-square test, the differences resulted significance only for age, gender and studies level. These differences are analysis in the following paragraph.
Nevertheless, in spite of the existence of this knowledge about what public and private institutions carry out, we observe that around half of individuals of each age ranges confirm that they believe that consumers seldom make an effort to get themselves informed and around a 40.00% of individuals of each age group assert that consumers in general sometimes make an effort to get themselves informed. Another point to highlight is that there is no individual who believes that consumers do not bother to get informed and a few number of participants claim that there is not enough information available (3.40% of people aged between 30-49 and 7.00% of people aged between 50-69). There is a clear evidence that older people believe that there is not enough information available from the institutions, this thought can be result of the maturity and level of exigency of the older members.

At first sight explained results may point to a positive position about consideration of individuals about consumers effort in relation to the use of responsible consumption information, but this is not the real point, since only a 10.40% of the total believe that consumers frequently make efforts to get themselves informed, being the holders of this thought the individuals belonging to the ages groups of 30-49 and 50-69 years old.

Looking at the data from a gender differentiation perspective, we observe that women has a slightly more positive vision of the efforts made by consumers to get themselves informed, being a 41.00% of women who believe that consumers rarely strive to get informed, compared to a 54.80% of men who consider this statement.
Furthermore, a 50.80% of women consider that consumers sometimes make effort to get informed while 37.10% of men support this consideration.

Some relevant points to mention in this direction of women positive consideration compared to men consideration, is that an 8.20% of women believe that consumers frequently make efforts to get themselves informed while there isn’t any man who supports this thought. In addition, an 8.10% of men think that there is not enough information available for consumers.

Making reference to the studies level of respondents, we can observe that most of respondents, without showing relevant differences, believe that consumers sometimes make efforts to get themselves informed about responsible consumption issues. However it is interesting to point out that a 3.90% of people who have studied at university consider that consumers frequently make efforts to get informed, while a 10.00% of those who have primary studies reflect this.

Asking the respondents about their personal effort, results show a slightly more positive view, being 28.80% of people between 30 and 49 years old the ones who confirm exert frequently themselves to get informed, followed by people of ages between 50 and 69 where there is a 27.90% who frequently do it and by 14.30% of individuals of the age group of 18-29 years old.

The vast majority of individuals assert making efforts sometimes to make use of the information provided by institutions, being 61.90% of people between 18-29, 39.00% of people between 30-49 and 51.20% of people between 50-69 years old, the ones who confirm this assumption.

In addition, it is important to foreground that there is only a 2.30% of the total, and belonging this figure to the age group of 50-69 years old, who sustain that they never make any personal effort to get themselves informed about responsible consumption issues.
Furthermore, results present us quite similar figures in both women (47.50%) and men (46.80%) who state they sometimes make efforts to get themselves informed about responsible consumption. However, there are more women (36.10%) who frequently make use of the information provided, compared with 16.10% of men who frequently do it. Moreover, there is only a 16.40% of women who state making efforts seldom to get informed while there is a 35.50% of men who state they rarely make efforts to get themselves informed. Finally, it is important to mention that there is a 1.60% of men who confirm not making any effort to get informed about responsible consumption issues.

Looking at data according to the level of studies, we appreciate that most of the individuals, whichever their level of studies is, confirm making sometimes efforts to get informed about responsible consumption, what it is relevant to mention about this affirmation is that the 100.00% of those who are no schooling confirm this assumption, followed by a 50.00% of people with primary studies, 49.00% of people with university studies and 38.50% of people with secondary ones. In addition, they are those with university studies the ones who more frequently make efforts to get themselves informed (33.30%) and the ones who less times confirm making efforts seldom to get informed (17.66%).
Finally, as we can see in the table results, the average level of information does not reach the pass level, being this figure a 4.60 on average. However, we can mention that women feel they have a slightly more level of information (5.15 on average) compared with the one of men (4.05 on average). In addition, those who are no schooling believe they have on average a 5.33 level of information, followed by

---

6 Shaded areas indicate that there is a relationship between the two variables at a level of significance lower than 0.05
individuals who have study at university, whose level of information on average is 4.92. Finally, the ones who are in charge of bills at home have a higher level of information (4.88) of those who are not (4.07).

After all this analysed, we come to the conclusion that women and people who have studied at university are the ones who are more aware of the existence of responsible consumption initiatives carried out by public and private institutions. In addition, those who are looking for a job, students and people who do domestic jobs have more knowledge about responsible consumption initiatives than those who have full-time and part-time jobs. Furthermore, individuals have not a positive consideration about efforts made by consumers to get themselves informed, being only a 10.40% who believe that consumers frequently make efforts to use information, although is it important to mention that women have a more positive vision about consumers efforts. It is also significant to talk about the fact that older people believe there is not enough information available; this thought can be result of their maturity and level of exigency.

However, talking about personal efforts, the vast majority of participants confirm that they sometimes make efforts to get informed, although there are again women the ones who make more efforts to get themselves informed about responsible consumption issues.

Finally, consumers on average don’t consider themselves quite informed about responsible consumption issues, presenting a value of 4.60 on average of their level of information, and being women, people who are no schooling and people who have study at university, the ones who consider themselves more informed.

4.3. Responsible consumers’ behaviours

In this section, we are to analysis responsible consumers behaviours practiced in 4 different areas in order to achieve our objective of distinguishing the responsible consumption practices performed by consumers:

1. Responsible consumption practices
2. Water saving practices
3. Energy saving practices
4. Responsible transport and mobility
4.3.1. Responsible consumption practices

Following we present a summarising table in which we evaluate the different practices of responsible consumption according to different parameters: age, gender, level of studies, principal occupation and responsibility of bills at home. This table has helped us to analysis those variables in which there exists a significant difference among them.

From an overview perspective, we find a vast majority of the population (80.50%) assert reducing their level of consumption, while only a 39.00% of them declare buying ecological and fair trade products and more than the half of the total population (62.80%) confirm performing the practices of cooking more food and keeping it for another day.
Table 4.5. Responsible consumption practices

<table>
<thead>
<tr>
<th>Age</th>
<th>Recycling</th>
<th>Reducing consumption</th>
<th>Ecological / fair trade products</th>
<th>Distributor products</th>
<th>Shopping list</th>
<th>Reusable bags</th>
<th>Cook more and keep</th>
<th>Responsible clothes</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>95.90%</td>
<td>80.50%</td>
<td>39.00%</td>
<td>97.60%</td>
<td>74.80%</td>
<td>95.90%</td>
<td>61.80%</td>
<td>30.10%</td>
</tr>
<tr>
<td>30-49</td>
<td>96.20%</td>
<td>77.40%</td>
<td>37.30%</td>
<td>95.40%</td>
<td>72.00%</td>
<td>96.50%</td>
<td>57.40%</td>
<td>29.00%</td>
</tr>
<tr>
<td>50-69</td>
<td>98.00%</td>
<td>79.00%</td>
<td>37.20%</td>
<td>96.60%</td>
<td>72.10%</td>
<td>97.50%</td>
<td>74.10%</td>
<td>34.90%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>98.40%</td>
<td>67.40%</td>
<td>35.50%</td>
<td>96.80%</td>
<td>69.70%</td>
<td>100.00%</td>
<td>53.20%</td>
<td>21.00%</td>
</tr>
<tr>
<td>Woman</td>
<td>93.40%</td>
<td>93.40%</td>
<td>42.60%</td>
<td>98.40%</td>
<td>80.30%</td>
<td>91.80%</td>
<td>70.50%</td>
<td>39.30%</td>
</tr>
<tr>
<td>Studies level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>100.00%</td>
<td>33.30%</td>
<td>33.30%</td>
<td>100.00%</td>
<td>66.70%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>33.30%</td>
</tr>
<tr>
<td>Primary studies</td>
<td>100.00%</td>
<td>73.30%</td>
<td>66.70%</td>
<td>100.00%</td>
<td>76.70%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Secondary studies</td>
<td>100.00%</td>
<td>74.40%</td>
<td>23.10%</td>
<td>94.90%</td>
<td>71.80%</td>
<td>97.40%</td>
<td>53.80%</td>
<td>25.60%</td>
</tr>
<tr>
<td>University studies</td>
<td>90.20%</td>
<td>92.20%</td>
<td>35.30%</td>
<td>98.00%</td>
<td>76.50%</td>
<td>94.10%</td>
<td>56.90%</td>
<td>21.60%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>100.00%</td>
<td>95.80%</td>
<td>33.30%</td>
<td>100.00%</td>
<td>70.80%</td>
<td>91.70%</td>
<td>62.50%</td>
<td>45.80%</td>
</tr>
<tr>
<td>Full-time</td>
<td>95.90%</td>
<td>73.50%</td>
<td>42.90%</td>
<td>95.90%</td>
<td>75.50%</td>
<td>98.00%</td>
<td>65.30%</td>
<td>28.60%</td>
</tr>
<tr>
<td>Domestic job</td>
<td>100.00%</td>
<td>100.00%</td>
<td>83.30%</td>
<td>100.00%</td>
<td>66.70%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Looking for a job</td>
<td>88.20%</td>
<td>70.60%</td>
<td>23.50%</td>
<td>100.00%</td>
<td>76.50%</td>
<td>94.10%</td>
<td>70.60%</td>
<td>41.20%</td>
</tr>
<tr>
<td>Student</td>
<td>95.00%</td>
<td>90.00%</td>
<td>50.00%</td>
<td>95.00%</td>
<td>85.00%</td>
<td>95.00%</td>
<td>50.00%</td>
<td>20.00%</td>
</tr>
<tr>
<td>Retired</td>
<td>100.00%</td>
<td>57.10%</td>
<td>50.00%</td>
<td>100.00%</td>
<td>57.10%</td>
<td>100.00%</td>
<td>14.30%</td>
<td>0.00%</td>
</tr>
<tr>
<td>In charge of bills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>100.00%</td>
<td>75.10%</td>
<td>28.60%</td>
<td>97.60%</td>
<td>66.70%</td>
<td>97.60%</td>
<td>50.00%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Yes</td>
<td>93.80%</td>
<td>92.60%</td>
<td>44.40%</td>
<td>97.50%</td>
<td>79.00%</td>
<td>95.10%</td>
<td>67.90%</td>
<td>37.00%</td>
</tr>
</tbody>
</table>

7 Shaded areas indicate that there is a relationship between the two variables at a level of significance lower than 0.05
Recycling

Although our analysis has not found any significance difference about recycling, it is relevant to mention that almost everyone perform this practices (95.90%), having a 93.20% of the total who assert as main reason for its performance an ethical responsibility feeling.

Reducing consumption

Graph 4.11. Reducing consumption by gender, studies level, principal occupation and bills responsibility

In the area of behaviours related to responsible consumption performed by consumers, we observe that there are women the ones who have decided to reduce consumption (93.40%), compared with a 67.70% of men who performed this practice.

In addition, people who are studying or have studied at university are the ones who have reduced consumption more (92.20%), followed by people with secondary studies (74.40%), people with primary studies (73.30%) and people who are no schooling who only a 33.30% of them have decided to reduced consumption.

8 Take notice that there are only 3 no schooling individuals in the sample
Introducing the results by the variable of principal occupation, we appreciate that the 100.00% of people who performed domestic jobs have decided to reduce consumption at certain extend, this result sounds logic since they are the ones who are in charge of household’s expenditures. Also the vast majority of people who have part-time jobs (95.80%) and students (90.00%) have decided to reduce consumption, being retired individuals the ones who have less reduced consumption.

Finally, we also observe that people who are in charge of the bills of the household are the ones who have more adopted a behaviour compared with the ones who are not responsible for the bills. Being a 92.60% of individuals responsible for bills who have reduced consumption, and a 75.10% of people who are not in charge of bills who have adopted this practice.

Graph 4.12. Reasons for reducing consumption performance

Talking about the reasons why people have decided to reduce consumption we observe that a 37.80% of the total performed this practice because of the economic crisis, being ethical responsibility the next more spread reason (32.30%) among participants. However, there is also a 28.30% of people who have decided to reduce consumption because of an uncertain economic future, which means that the economic situation plays an important role in the decision of people to reduce consumption.

On the other hand the main reason why people don’t decide to reduce consumption is that they are not interested in it, being a 54.20% of the ones who don’t perform me who support this consideration. Then there is a 20.80% of people who don’t reduce consumption who state that reducing consumption is not effective, and also there is an 8.30% who don’t reduce consumption because they believe there is not enough information about it.
Purchase of ecological and fair trade products

Graph 4.13. Ecological/fair trade products by studies level and principal occupation

When it comes to talk about the purchase of ecological and fair trade products we observe that a 66.70% of people who have primary studies decide to buy this type of products, followed by a 35.30% of people who have studied at university. It is relevant to state that the figure of no schooling people who buy ecological and fair trade products (33.30%) is very closed to the figure of people with university studies, therefore, we can say that the level of studies is not a good trace of relationship with the purchase of ecological and fair trade products.

Moreover, we also appreciate that are people who have domestic jobs the ones who buy more ecological and fair trade products (83.30%) followed by a 50.00% of students who buy this type of products. Another important fact to mention is that retired people don´t buy this type of products, maybe this fact can be cause of the lack of information on the part of the older people.

Graph 4.14. Reasons for purchasing ecological/fair trade products

9 Take notice that there are only 3 no schooling individuals in the sample
Regarding to the main reasons why people decide to buy ecological and fair trade products, we observe that a 89.60% of people who buy them, do it because of the feeling of ethical responsibility, and also a 2.10% buy this type of products because of fair of an uncertain future, while an 8.30% give others reasons for this behaviour. Nevertheless, the vast majority of individuals decided not to buy this type of products, and the main reasons they state are especially economical reasons. As we observe in the graph a 64.06% of people who don´t buy ecological and fair trade products confirm that they don´t do it because it implies a higher economic cost, furthermore, a 21.32% of them declare that they don´t have enough information about this type of products.

Purchase of distributor products

Despite not finding any significant difference in this practice, we must mention that a 97.60% of individuals declare buying distributor products and the main reasons for buying them are related to economic issues, being a 47.20% of the total who buy distributor products because of the crisis and a 26.80% who do it because of the fear of an uncertain economic future.

Preparing shopping list

Regarding to the preparation of a shopping list at time of buying, we observe that a 74.80% of individuals do it, although a 43.90% give other reasons for this performance, in which we can enclose the fact of not forgetting products in these other reasons, and only a 17.90% prepare shopping lists because of the economic crisis.

Reusable bags

We observe from the data that the vast majority of people (95.90%) use reusable bags when going shopping and the main reason for this practices is the feeling of an ethical responsibility being an 86.20% who confirm this reason.

Cooking more food and keeping it

Graph 4.15. Cooking more food and keeping it by gender and principal occupation
Regarding to the practices of cooking more food and keeping it for another day, we observe that women are more likely to cook more and keep the food for another day (70.50%) while a 53.30% of men have adopted this behaviour related to responsible consumption.

In addition, we observe that all the individuals who work at home (100.00%) decide to cook more food and keep it, being those who are looking for a jobs the next ones who perform this practice the more (70.60%). It is also important to mention that there are significant figures of people with par-time jobs (62.50%), full-time jobs (65.30%) and students (50.00%) who decide to cook more food and keep it for another day.

Although roles at home have changed and inequalities between men and women are declining, there is still a big presence of women in household activities, therefore, it is logical that women and people who perform domestic job are likely to be the ones who cook more food with the intention of keeping it for another day.

**Graph 4.16. Reasons for cooking more food and keeping it**

Among the reasons why people decide to cook more food and keep it we can find that a 39.46% give other reasons for this performance, and then a 23.68% of them do it because of an ethical responsibility feeling, while a 21.08% and 15.78% of people who have adopted the behaviour of cooking more food and keeping it, practice it because of the economic crisis and the fear of an uncertain economic future, respectively. On the other hand, people who don’t cook more food with the intention of keeping it, a 38.34% affirm that they are not interested in this practice and a 19.12% of them declare that it implies a time and effort cost.

After analysis several responsible consumption practices, we can come to the conclusion that people in general carry out responsible consumption practices (reducing consumption, buying ecological/fair trade products, cooking more food and keeping it…) but that are women and people who have domestic jobs,
the ones who worry more about these issues. In addition, the main reasons for performing responsible consumption practices, in general are the feeling of an ethical responsibility and economic issues such as the crisis situation and the fear of an uncertain economic future.

**Purchase of responsible clothes**

Again, despite not finding any significant difference with respect to the purchase of responsible clothes, we observe that only a 30.10% of individuals declare buying this type of clothes, and among the reasons for people not to buy responsible clothes, we find the implication of a higher cost (22.80% of people confirm this) and the unavailability of enough information (26.80%).

**4.3.2. Water saving practices**

In this section we are going to analyse consumers’ behaviour with respect to water saving practices. Here, we also present a summarising table about water saving practices, similar to the one we shown in the responsible consumption paragraph.

From a general description of the results we appreciate that having a shower instead of a bath (98.40% of the total population) and using dishwashers and washing machines when full (87.70%) are the most performed water saving practices while there is only a 34.40% of the total population who confirm using water saving devices.
Table 4.6. Water saving practices

<table>
<thead>
<tr>
<th>Water saving devices</th>
<th>Dishwasher/washing machine full</th>
<th>Shower instead of bath</th>
<th>Irrigation at specific times</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>34.10%</td>
<td>87.00%</td>
<td>97.60%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>38.10%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>30-49</td>
<td>40.70%</td>
<td>88.10%</td>
<td>96.00%</td>
</tr>
<tr>
<td>50-69</td>
<td>23.80%</td>
<td>81.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>25.80%</td>
<td>87.10%</td>
<td>96.80%</td>
</tr>
<tr>
<td>Woman</td>
<td>43.30%</td>
<td>88.30%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Studies level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Primary studies</td>
<td>44.80%</td>
<td>86.20%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Secondary studies</td>
<td>20.50%</td>
<td>79.50%</td>
<td>94.90%</td>
</tr>
<tr>
<td>Universitary studies</td>
<td>35.40%</td>
<td>94.10%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>58.30%</td>
<td>79.20%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Full-time</td>
<td>29.20%</td>
<td>93.60%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Domestic job</td>
<td>33.30%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Looking for a job</td>
<td>17.60%</td>
<td>82.40%</td>
<td>88.20%</td>
</tr>
<tr>
<td>Student</td>
<td>40.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Retired</td>
<td>14.30%</td>
<td>42.90%</td>
<td>100.00%</td>
</tr>
<tr>
<td>In charge of bills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>31.70%</td>
<td>82.90%</td>
<td>95.10%</td>
</tr>
<tr>
<td>Yes</td>
<td>35.80%</td>
<td>90.10%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Shaded areas indicate that there is a relationship between the two variables at a level of significance lower than 0.05
Water saving devices

Graph 4.17. Water saving devices by gender and studies level

Introducing the results by the gender variable, we appreciate that a 43.30% of women declare they use water saving devices while a 25.80% of men declare using these devices. However if we talk in terms of studies level, we observe that people with the lowest level of studies are the ones who use more water saving devices, being a 100.00% of those who are not schooling\textsuperscript{11} and a 44.80% of people with primary studies. While, only a 20.50% of people with secondary studies and a 35.40% of people who have studied at university, use water saving devices.

Graph 4.18. Reasons for water saving devices use

Among the reasons why people decide to use water saving devices we observe that a 62.74% perform this behaviour because of an ethical responsibility feeling, followed by a 25.57% who use water saving devices because of the economic crisis and 6.99% of people who do it because of the fear of an uncertain economic future. However, the principal reason why people don`t use water saving devices is that they

\textsuperscript{11} Take notice that there are only 3 no schooling individuals in the sample
don’t have enough information about it, being a 69.93% of individuals who confirm this reason. Then, there is a 1.30% of people who don’t use water saving devices because it implies a higher economic cost.

**Graph 4.19. Dishwasher / washing machine when full**

![Dishwasher/ washing machine when full by occupation](image)

In view of the results related to the principal occupation of individuals we observe that all students and people who carried out domestic job decide to use dishwashers and washing machines when they are full. These two groups, are followed by a 93.60% of people who have full time and decide to use the machines when they are full.

A point important to highlight is that only a 42.90% of retired people make the decision of using these machines when they are full.

**Graph 4.20. Reasons for dishwasher / washing machines use when full**

!["Yes" reasons- dishwasher/washing machine when full and "No" reasons- dishwasher/washing machine when full](image)

If we look at the reasons why people use dishwashers and washing machines when they are full, we observe that a 55.06% of them do it because of an ethical responsibility followed by a 37.44% who do it for economical reasons, corresponding a 17.42% od this percentage to the economic crisis and a 20.22%
to the fear of an uncertain economic future. Then a 7.31% of individuals give other reason for the uses of dishwashers and washing machines when they are full. However, half of the individuals who do not use them when they are full declare that they don’t use it because they are not interested, followed a 35.70% who give other reasons and a 14.30% who believe it is not effective. Among these other reasons that people support for not using the dishwasher and washing machine when they are full we may state the necessity of using dishes and clothes before the machines are full due to the lack of replacement ones, stink that these machines emit if you wait longer… etc.

**Having a shower instead of a bath**

*Graph 4.21. Shower instead of a bath by occupation and bills responsibility*

When it comes to talk about the water saving practice of having a shower instead of having a bath, we notice that almost all the participants prefer to have a shower instead of a bath, being a 100.00% of the members of all the groups regarding to the principal occupation who decide to have a shower, except from those who are looking for a job, who are a 88.20% of them.

If we look at those who are responsible for bills of the household, we observe that there is a slightly difference between the ones who are not in charge of the bills and the ones who are in charge, being a 100.00% of those responsible for the bills who adopted this practices and a 95.10% of those who are not in charge, the ones who decide to have a shower instead of having a bath.
About the reasons why people decide to have a shower instead of a bath, we observe that a 67.80% of individuals do it because of an ethical responsibility feeling, followed by a 23.10% who give other reasons (speed and time saving could be one of this reasons). Furthermore, an 8.30% of people have shower instead of a bad because of the economic crisis and only a 0.80% do it because of fear of an uncertain economic future.

In addition, we must say that we haven’t present a graph with the reasons why people don’t carry out this practice since only 2 participants of the total sample declared it and confirmed that they didn’t do it because they believe it is not effective. However, in general, we observe that people is quite aware about the waste of water that it is produced when you take a bath.

**Irrigating at specific times**

**Graph 4.23. Irrigation at specific times by studies level and by principal occupation**

Looking at the practice of irrigating at specific times we observe that are people with primary studies the ones who more practice this activity (96.20%), followed by people with university (54.90%) and
secondary studies (51.30%). In addition, only a 33.30% of people who are no schooling confirm performing this activity.

Furthermore, we appreciate that retired people (100.00%) and people who carry out domestic jobs (83.30%) are the ones who most perform this activity, followed by people with part-time and full-time jobs, and being only a 17.60% of those who are looking for a job who decide to irrigate at specific times.

However, a point to emphasize is that respecting to those who are more likely to irrigate at specific times, there is not a clear evidence that they do it as a saving water practices or as a routine one.

Graph 4.24. Reasons for irrigating at specific times

Regarding to the reasons why people decide to irrigate at specific times we observe that more than a half (54.95%) do it because of an ethical responsibility feeling, while there is a 34.97% who declare they do it for other reasons.

The main reasons for not performing it, are because people consider they are not interested in irrigating at specific times (45.20%), other reasons (28.60%) and an 11.90% declare that they don’t have enough available information about it.

All in all, there is clear evidence that consumers are aware of the scarcity of water and the waste of this natural resource in routine daily activities. Due to this fact, consumers decide to perform activities such as using water saving devices, having a shower instead of a bath and using dishwashers and washing machines when they are full, basing their behaviours on ethical responsibility feelings, but also leaving a relevant role to economic issues.

12 Take notice that there are only 3 no schooling individuals in the sample.
4.3.3. Responsible mobility practices

In this section we are going to analysis consumers behaviour with respect to responsible mobility and transport practices. Again, we present a summarising table about responsible mobility practices.

From a general overview, we find that a 66.70% of the total population decide to walk instead of taking a vehicles, 43.90% declare using public transport and a 52.80% of individuals confirm sharing vehicles in their displacements.
Table 4.7. Responsible mobility practices

<table>
<thead>
<tr>
<th></th>
<th>Walking instead of Public transport</th>
<th>Sharing vehicles</th>
<th>Low consumption vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>66.70%</td>
<td>43.90%</td>
<td>52.80%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>76.20%</td>
<td>81.00%</td>
<td>90.50%</td>
</tr>
<tr>
<td>30-49</td>
<td>72.90%</td>
<td>35.60%</td>
<td>47.50%</td>
</tr>
<tr>
<td>50-69</td>
<td>53.50%</td>
<td>37.20%</td>
<td>41.90%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>54.80%</td>
<td>40.30%</td>
<td>48.40%</td>
</tr>
<tr>
<td>Woman</td>
<td>78.70%</td>
<td>47.50%</td>
<td>57.40%</td>
</tr>
<tr>
<td>Studies level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>100.00%</td>
<td>33.30%</td>
<td>33.30%</td>
</tr>
<tr>
<td>Primary studies</td>
<td>56.70%</td>
<td>38.70%</td>
<td>43.30%</td>
</tr>
<tr>
<td>Secondary studies</td>
<td>64.10%</td>
<td>41.00%</td>
<td>41.00%</td>
</tr>
<tr>
<td>Universitary studies</td>
<td>72.50%</td>
<td>51.00%</td>
<td>68.60%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>91.70%</td>
<td>41.70%</td>
<td>58.30%</td>
</tr>
<tr>
<td>Full-time</td>
<td>42.90%</td>
<td>22.40%</td>
<td>38.80%</td>
</tr>
<tr>
<td>Domestic job</td>
<td>100.00%</td>
<td>100.00%</td>
<td>33.30%</td>
</tr>
<tr>
<td>Looking for a job</td>
<td>70.60%</td>
<td>35.30%</td>
<td>70.60%</td>
</tr>
<tr>
<td>Student</td>
<td>75.00%</td>
<td>80.00%</td>
<td>85.00%</td>
</tr>
<tr>
<td>Retired</td>
<td>85.70%</td>
<td>71.00%</td>
<td>14.30%</td>
</tr>
<tr>
<td>In charge of bills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57.10%</td>
<td>47.60%</td>
<td>42.90%</td>
</tr>
<tr>
<td>Yes</td>
<td>71.60%</td>
<td>42.00%</td>
<td>58.00%</td>
</tr>
</tbody>
</table>

Shaded areas indicate that there is a relationship between the two variables at a level of significance lower than 0.05.
Walking instead of vehicles

Graph 4.25. Walking instead of vehicle by gender and principal occupation

When it comes to talk about responsible mobility practices we must mention that there is a 54.80% of men who prefer to go for a walk instead of taking a vehicle while women are more likely to go walking instead of taking a car (78.70%). Moreover, if we look at the principal occupation of individuals that people who carry out domestic jobs (100.00%), part-time jobs (91.70%) and those who are retired, are the ones who most adopt this practice. However, only a 42.90% of people who have full-time jobs use to go walking instead of taking a vehicle. Maybe, this is due to the fact that many people who have full-time jobs are away from home a lot of time and it can be more suitable for them to take a car.

Graph 4.26. Reasons for walking instead of taking a vehicle

The main reason for walking instead of using a car is that of feeling healthy and practicing physical exercise (72.00%) although a relevant number of individuals perform it because of ethical responsibility (19.50%), concerned about trying not to emit noxious gases.
On the other hand, we observe that the vast majority of those who don´t perform this activity (75.60%) state that it implies a time and effort cost, while there is a 14.60% who declare that they are not interesting in replacing their vehicles by the walking activity.

**Public transport**

*Graph 4.27. Public transport use by gender and principal occupation*

Regarding to the use of public transport we observe that it predominates the use of public transport among people of 18-29 years old, being a 81.00% of them who declare using it. However, numbers are quite lower with respect to members of the age groups of 30-49 and 50-69, being 35.60% and 37.20%, of them respectively, who use public transports.

In addition, a relevant data is that people with domestic jobs (100.00%), students (80.00%) and retired people (71.00%) are the ones who most use public transport, representing very high figures. On the other hand, we observe low figures in the use of public transport coming from people who have part-time jobs (41.70%), those who are looking for a job (35.90%) and people who have full-time jobs (22.40%).

*Graph 4.28. Reasons for using public transport*
Among the reasons why people use public transport, a 44.36% of individuals declare that they do it because of an ethical responsibility feeling, while a 20.38% of them state that the economic crisis has obligated them to use public transport and another 20.38% of participants state that they do it for other reasons, among which we can think about the unavailability of own vehicle… On the other hand, the main reason for not performing this activity is the implication of effort and time costs (60.96%), although there is a 27.53% of individuals who declare not being interested in using public transports.

**Sharing vehicle**

*Graph 4.29. Sharing vehicle by age, studies level and principal occupation*

Finally, respecting to responsible mobility practices, we must say that the vast majority of young people between 18 and 29 years old (90.50%) state performing the practice of sharing vehicles in their displacements while less than a half of the members of the age groups of 30-49 and of 50-69 years old declare performing this activity. Furthermore, are people with university studies the ones who most undertake the activity of sharing vehicles (68.00%) followed by people with primary studies (43.30%), secondary studies (41.00%) and no schooling individuals 14 (33.30%). According to the principal occupation of we observe that students (85.00%), people who are looking for a job (70.60%) and people

---

14 Take notice that there are only 3 no schooling individuals in the sample
who have part-time jobs (58.30%) are the ones who most share vehicles in their displacements, while there is only a 14.30% of retired people who declare sharing vehicles.

*Graph 4.30. Reasons for sharing a vehicle*

<table>
<thead>
<tr>
<th>&quot;Yes&quot; reasons- sharing vehicles</th>
<th>&quot;No&quot; reasons- sharing vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical responsibility</td>
<td>Higher economic cost</td>
</tr>
<tr>
<td>Economic crisis</td>
<td>Time and effort cost</td>
</tr>
<tr>
<td>Uncertain economic future</td>
<td>No effective</td>
</tr>
<tr>
<td>Other</td>
<td>There is not enough information</td>
</tr>
<tr>
<td></td>
<td>I’m not interested</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Regarding to the reasons why people share vehicles we observe that this practice is performed mainly by ethical responsibility (48.45%) but also because of the economic crisis (37.86%). However, the majority of people who don’t share their vehicles declare that they don’t do it because they are not interested in it.

Looking at the results of responsible mobility practices, we observe that responsible behaviours related to mobility are the least performed practices since people are not quite interested in them. Even though, the presence of ethical responsibility in this scope has an important place among consumers as well as economic issues.

**Purchase of low consumption vehicles**

Although our analysis has not found any significant difference with respect to the purchase of low consumption vehicles, we observe that there is only a 37.40% of individuals who affirm buying this type of vehicles and the main reason why people don’t buy low consumption vehicles is the implication of a higher economic price (35.00%), followed by a 14.60% of individuals who state they don’t have enough information about this type of vehicles.

**4.3.4. Energy saving practices**

In this section we are going to analyse consumers behaviour with respect to energy saving practices.

From a general perspective we can see that energy saving practices are the most popularized among individuals, being a vast majority of them who perform the practices, and being the lowest figures those of using thermostat with automatic shutdowns (63.40%) and the using appliances A++/A+/A (63.40%).

Again, we present a summarising table about energy saving practices.
Table 4.8: Energy saving practices\(^{15}\)

<table>
<thead>
<tr>
<th></th>
<th>Thermostat</th>
<th>Heating off overnight</th>
<th>Lower temperature</th>
<th>Saving lamps</th>
<th>Check lights and turn off</th>
<th>Favouring sunlight</th>
<th>Appliances A++/A+/A</th>
<th>Turn off unused devices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>63.40%</td>
<td>84.60%</td>
<td>80.50%</td>
<td>79.70%</td>
<td>96.70%</td>
<td>86.20%</td>
<td>63.40%</td>
<td>85.40%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>57.10%</td>
<td>81.00%</td>
<td>52.40%</td>
<td>85.70%</td>
<td>90.50%</td>
<td>81.00%</td>
<td>38.10%</td>
<td>85.70%</td>
</tr>
<tr>
<td>30-49</td>
<td>61.00%</td>
<td>76.30%</td>
<td>91.50%</td>
<td>78.00%</td>
<td>98.30%</td>
<td>84.70%</td>
<td>62.70%</td>
<td>83.10%</td>
</tr>
<tr>
<td>50-69</td>
<td>69.80%</td>
<td>97.70%</td>
<td>79.10%</td>
<td>79.10%</td>
<td>97.70%</td>
<td>90.70%</td>
<td>76.70%</td>
<td>88.40%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>48.40%</td>
<td>85.50%</td>
<td>80.60%</td>
<td>64.50%</td>
<td>95.20%</td>
<td>80.60%</td>
<td>50.00%</td>
<td>83.90%</td>
</tr>
<tr>
<td>Woman</td>
<td>78.70%</td>
<td>83.60%</td>
<td>80.30%</td>
<td>95.10%</td>
<td>98.40%</td>
<td>91.80%</td>
<td>77.00%</td>
<td>86.90%</td>
</tr>
<tr>
<td><strong>Studies level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>33.30%</td>
<td>100.00%</td>
<td>66.70%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>33.30%</td>
<td>66.70%</td>
<td>66.70%</td>
</tr>
<tr>
<td>Primary studies</td>
<td>66.70%</td>
<td>96.70%</td>
<td>86.70%</td>
<td>83.30%</td>
<td>100.00%</td>
<td>96.70%</td>
<td>70.00%</td>
<td>86.70%</td>
</tr>
<tr>
<td>Secondary studies</td>
<td>64.10%</td>
<td>92.30%</td>
<td>82.10%</td>
<td>64.10%</td>
<td>94.90%</td>
<td>79.50%</td>
<td>64.10%</td>
<td>87.20%</td>
</tr>
<tr>
<td>University studies</td>
<td>62.70%</td>
<td>70.60%</td>
<td>76.50%</td>
<td>88.20%</td>
<td>96.10%</td>
<td>88.30%</td>
<td>5.80%</td>
<td>84.30%</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>70.80%</td>
<td>66.70%</td>
<td>91.70%</td>
<td>70.80%</td>
<td>95.80%</td>
<td>87.50%</td>
<td>50.00%</td>
<td>83.30%</td>
</tr>
<tr>
<td>Full-time</td>
<td>69.40%</td>
<td>87.80%</td>
<td>81.60%</td>
<td>85.70%</td>
<td>98.00%</td>
<td>89.80%</td>
<td>75.50%</td>
<td>83.70%</td>
</tr>
<tr>
<td>Domestic job</td>
<td>83.30%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Looking for a job</td>
<td>52.90%</td>
<td>100.00%</td>
<td>88.20%</td>
<td>88.20%</td>
<td>100.00%</td>
<td>76.50%</td>
<td>70.60%</td>
<td>76.50%</td>
</tr>
<tr>
<td>Student</td>
<td>60.00%</td>
<td>80.00%</td>
<td>85.00%</td>
<td>85.00%</td>
<td>90.00%</td>
<td>80.00%</td>
<td>40.00%</td>
<td>90.00%</td>
</tr>
<tr>
<td>Retired</td>
<td>14.30%</td>
<td>85.70%</td>
<td>14.30%</td>
<td>14.30%</td>
<td>100.00%</td>
<td>86.70%</td>
<td>42.90%</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>In charge of bills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>50.00%</td>
<td>83.30%</td>
<td>83.30%</td>
<td>83.30%</td>
<td>95.20%</td>
<td>78.60%</td>
<td>50.00%</td>
<td>78.60%</td>
</tr>
<tr>
<td>Yes</td>
<td>70.40%</td>
<td>85.20%</td>
<td>77.80%</td>
<td>77.80%</td>
<td>97.50%</td>
<td>90.10%</td>
<td>70.40%</td>
<td>88.90%</td>
</tr>
</tbody>
</table>

\(^{15}\) Shaded areas indicate that there is a relationship between the two variables at a level of significance lower than 0.05
Use of automatic thermostat

Graph 4.31. Automatic thermostat by gender and bills responsibility

In view of the results related to the use of thermostat with automatic shutdown, we observe that are women the ones who are more likely to use automatic thermostat (78.70%), compared with a 48.40% of men who assert performing this energy saving practice. Furthermore, it is appreciable that a 70.40% of individuals who are in charge of the household bills decide to use automatic thermostat compared with a 50.00% of those who are not responsible for the bills, who declare using this type of thermostat. These results can be explain by the fact that people in charge of the bills are more aware of the high prices of energy and decide to use thermostat with automatic shutdown in order to save much energy as possible.

Graph 4.32. Reasons for automatic thermostat use
Looking at the reasons for this practice, the graph shows us that there is a 41.04% of individuals who use automatic thermostat because of an ethical responsibility feeling, while there is another 41.04% who use them because of economic issues, corresponding a 21.82% of this total to the reason of economic crisis and a 19.22% to the feeling of fear of an uncertain economic future.

On the other hand, a 64.46% of individuals who don’t use thermostats with automatic shutdown state that there is not enough information about this type of thermostat while a 15.62% consider that their use imply a higher economic cost and an 11.11% of them believe that the use of automatic thermostat is not effective.

**Heating off overnight**

*Graph 4.33. Heating off overnight by age and studies level*

In these graphs we can see that the large majority of people whose ages range between 50-69 years old (97.70%) have adopted the behaviour of turning off the heat at night, followed by a 81.00% of young people of 18-29 years old who also declare perform this practice and by a 76.30% of members of the 30-49 age group who decide to turn off the heat at night.

In addition, it is significant to mention that are no schooling people (100.00%), people with primary studies (96.70%) and with secondary studies (92.30%) the ones who most perform this activity, while there is a 70.60% of individuals who have studied at university who declare turning off the heat at night.
Among the main reasons for performing this activity, we see that economic issues play an important role, being 35.56% who confirm doing it because of the economic crisis and a 22.08% due to fear of an uncertain economic future, while there is a 21.18% of people who turn off the heat at night because of an ethical responsibility feeling.

However, if we look at the reason why people don’t turn off the heat at night we observe that although there is a 21.08% who declare not doing it because it implies a higher economic cost, there is a 26.27% who state not having enough information available about this practice and a 26.27% declare not being interested in turning off the heat at night.

**Lower temperature**

Regarding the behaviour of lowering the temperature of heat, we observe that people who are between 30-49 years old are the ones who most decide adopting this practice (91.50%), while there is a 79.10% of people in the age range of 50-69 who confirm lowering the temperature and only a 52.40% of young people of 18-29 declare performing this activity. Furthermore, looking at the principal occupation of individuals we observe...
that nearly all individuals declare lowering temperature except from retired people, who only a 14.30% of them confirm they lower the temperature. Finally if we look at those individuals who are or not in charge of the household bills, we appreciate that figures are very similar between the two positions, however, there is a slightly difference between them being a 83.30% of those who are not responsible for bills, who lower temperature and a 77.80% of people are in charge of bills who confirm lowering the temperature.

**Graph 4.36. Reasons for lowering temperature**

Looking at the reasons for lowering temperature we observe that 31.30% of individuals do it because of an ethical responsibility feeling, however economic issues are more important for individuals with respect to this practice, being a 41.40% of people who declare the lower temperature because of the economic crisis and a 19.20% who do it because of fear of an uncertain future. Regarding to the reasons why people don’t lower the temperature we observe that a large majority (45.80%) assert not being interested in it while a 41.70% of people who don’t perform this practice give other reasons for their reluctant position.

**Saving lamps**

**Graph 4.37. Saving lamps by gender, studies level and principal occupation**
When it comes to talk about the use of saving lamps we find that women are more likely to use saving lamps (95.10% of women use them) while only a 64.50% of men confirm using saving lamps. In addition, we observe that no schooling people (100.00%) and people with university studies (88.20%) are the biggest users of saving lamps.

Introducing the data by the principal occupation of respondents we observe that people who have domestic jobs (100.00%) and those who are looking for a job (88.20%), are the ones who more use saving lamps. Furthermore it is relevant to mention that a great number of people with part-time, full-time and students also use saving lamps. However, only a 14.30% of retired people declare using saving lamps.

Graph 4.38. Reasons for saving lamps use

Among the reasons why people decide to use saving lamps we observe that a 46.95% of individuals who use them do it because of an ethical responsibility, while a 21.42% use saving lamps as a consequence of the crisis and a 25.53% because of fear of an uncertain future, again economic issues retake importance in consumers’ behaviours. However the main reason why people confess don’t use saving lamps is because they believe there is not enough information available about it, although a 28.00% declare not using them because of the implication of a higher economic cost.

---

16 Take notice that there are only 3 no schooling individuals in the sample
Checking lights and turning off

Despite not having found any significant difference in the practice of checking lights and turning them off, it is relevant to mention that the vast majority of individuals (96.70%) perform this practice, being a 48.00% of individuals who do it because of the economic crisis and a 32.50% of them who do it because of an ethical responsibility feeling.

Favouring sunlight

Regarding to the practice of favouring sunlight we don’t observe any significant difference in it, but we observe that an 86.20% of people declare performing this activity, being the ethical responsibility feeling the main reason for its performance.

Use of appliances A++/A+/A

Graph 4.39. Appliances A++/A+/A by age, gender, principal occupation and bills responsibility

Regarding to the use of electrical appliances A++/A+/A we appreciate that older people are more likely to buy this type of appliances, being a 76.70% of individuals whose ages range between 50-69 who confirm adopting this practice and a 62.70% of people between 30-49 years old who buy appliances A++/A+/A, while there is only a 38.10% of people between 18-29 who assert purchasing this type of appliances. Moreover, are women the ones who more buy this type of appliances (77.00%), compared with a 50.00% of men who do it. In respect of the principal occupation of respondent we observe that are people with domestic jobs (100.00%), full- time jobs (75.50%) and those looking for a job (70.60%) the ones who purchase more this type of appliances, while there is only a 42.90% of retired
individuals and a 40.00% of students who declare using A++/A+/A appliances. Finally, we find that people who are in charge of the household bills are more likely to buy this type of appliances (70.40%) compared with a 50.00% of those who are not responsible for bills who state buying these appliances.

Graph 4.40. Reasons for using Appliances A++/A+/A

In order to finish our analysis of energy saving practices, we want to say that the main reason for people to buy appliances A++/A+/A is the feeling of an ethical responsibility feeling being 57.70% of consumers who declare using them for this reason. Nevertheless, there is a 20.50% of individuals who use them because of fear of an uncertain economic future and 12.80% participants who use them as a consequence of the crisis. Although there is a significant presence of economic reasons, ethical responsibility is predominant in this scope.

On the other hand, looking at the reasons why people don’t purchase appliances A++/A+/A we appreciate that a 66.70% declare that there is not enough information about this practice while a 17.80% confirm not buying them because of the higher economic cost it implies.

Abiding by what has been explain, we can state that saving energy practices are the most performed activities related to responsible consumption behaviour and although ethical responsibility reasons play an important role in consumers behaviours, the main reasons for the performance of saving energy practices are related to the economic recession and the fear of an uncertain economic future emerging in minds of consumers.
Turning off unused devices

Again, although there is any significant difference regarding to the practice of turning off unused devices, we observe that a 85.40% of individuals practice it and the main reasons for this performance are related to economic issues (39.80%) although there is an important role for ethical responsibility (38.20%).

5. CONCLUSIONS

This study has been carried out with the aim of analysing the awareness of consumers in Navarre about the initiatives undertaken by public and private institutions promoting responsible consumption, and about responsible consumption practices performed by consumers in their daily routine. We must situate this study in the context of the new “green-thinking” trend existing nowadays in consumers’ minds, but also, it has been focused on the economic situation influence that has lead consumers to take responsible behaviours.

Following we present conclusions obtained from the results discussed in the study:

- Residents of Navarre are in general quite aware of responsible consumption initiatives although it is remarkable that women and people with university studies are the ones who have more knowledge about institutional initiatives and responsible consumption information.

Furthermore, people who are looking for a job, those who have domestic jobs and students are more aware of the existence of initiatives promoting responsible consumption than those who have full and part-time jobs. This can be caused by the fact that those who have been mentioned in first position don’t receive any salary so they must look for information in order to reduce consumption, while those who have a job have less time to pay attention and get information about initiatives undertaken by institutions.

- Individuals have not a positive consideration about efforts made by consumers to get themselves informed about responsible consumption issues, being only a 10.40% who believe that consumers frequently make efforts to use information. However, talking about personal efforts, the large majority of participants confirm they sometimes make effort to get informed about these issues. It is important to mention that women have a more positive view about personal and consumers efforts.
Despite confirming the awareness of the existence of initiatives promoting responsible consumption, consumers on average don’t consider themselves quite informed on the part of public and private institutions, presenting a value of 4.60 on average of their level of information. Once more, women and people with university studies are the ones who consider themselves more informed, but even though being the highest ratings, the values are relatively low: 5.15 for the average level of information of women and 4.92 for the one of people with university studies.

People in general carry out responsible consumption practices (reducing consumption, buying ecological/fair trade products, cooking more food and keeping it…) but that are women and people who have domestic jobs, the ones who worry more about these issues. In addition, the main reason for performing responsible consumption practices, is the feeling of an ethical responsibility although economic issues such as the crisis situation and the fear of an uncertain economic future are gaining importance among individuals’ reasons for responsible consumption practices.

There is clear evidence that consumers are aware of the scarcity of water and the waste of this natural resource in routine daily activities. Due to this fact, consumers decide to perform activities such as using water saving devices, having a shower instead of a bath and using dishwashers and washing machines when they are full, basing their behaviours mainly on ethical responsibility feelings, but also leaving a place for economic issues. It is worth mentioning that students and people who carried out domestic jobs are more likely to perform water saving practices.

Regarding to responsible mobility practices, we observe that responsible behaviours related to mobility are the least performed practices since people are not quite interested in them. Even though, the presence of ethical responsibility in this scope has an important place among consumers not being economic issues as important as they are in other responsible consumption areas. The greatest performance of responsible mobility practices corresponds to the groups of young people (18-29 years old), women and people who have domestic jobs.

Saving energy practices are the most performed activities related to responsible consumption behaviour among consumers and although ethical responsibility reasons play an important role in consumers behaviours, the main reasons for the performance of saving energy practices are related to the economic recession and the fear of an uncertain economic future emerging in minds of consumers. Women, people who
have domestic jobs and those who are in charge of household bills, are the ones who pay more attention to the performance of saving energy practices.

- Finally, as it is disclosed in the above findings, we can conclude that women, people who is in charge of bills and people who develop domestic jobs are the most likely to perform responsible consumption practices. These results make us thinking that the reason why these groups are the ones who perform responsible consumption the most, is because they are the ones who are in charge of household issues and are more aware of the resources and money.

6. RECOMMENDATIONS

Concluding this study, and in view of the results obtained, a serie of recommendations that can be useful for enterprises, public and private institutions who want to promote responsible consumption, are presented:

- As it is disclosed in results, consumers are not quite satisfied and interested with respect the use and availability of responsible consumption information. Therefore, we recommend institutions to increase consumers’ interests by means of a public relations campaign, achieving a publicity to enable them to get a free space on the media through some news to persuade people.

- In view that consumers are not likely to make efforts and spend time in looking for information, we recommend enterprises and institutions to provide information in a more simple and comfortable way (sending guides, brochures, information by postal mail, emails…)

- Regarding to the fact that more that a half of individuals consider that there is not enough information available about the use of water saving devices, automatic thermostat and appliances A++/A+/A, enterprises should organise informative campaigns about these products, as well as, promotional campaigns offering discounts in the purchase of these type of products.

---

Public relations are a set of strategic communication activities coordinated and sustained over time, which are aimed to strengthen ties with different audiences, listening, informing and persuading them to achieve consensus, loyalty and support them in these and / or future actions.
• Consumers consider that ecological and fair trade products lead to higher economic costs and they are not willing to play more money for them. We recommend institutions and enterprises to make emphasis on raising awareness among people about the reasons why this type of products have a higher price and encourage them to buy ecological and fair trade products.

• Finally, regarding to the fact that responsible mobility practices are the ones least performed by consumers, we recommend organising informative campaign and emphasising on these responsible area practices and informing about the benefits offered by the use of public transport and going walking instead of taking vehicles. In addition, as there is a 64.84% of individuals who are not interested in sharing vehicles, public institutions should promote services as Blablacar\textsuperscript{18} to arouse the interest of those who are reluctant to this practice.

\textsuperscript{18} Blablacar is a community of users based on trust that connects drivers with empty seats with passengers who are looking for a trip.
BIBLIOGRAPHY


- ECOEMBES. (2013). Estudio de la Percepción de Mensajes Ambientales por parte del Consumidor.


- Fundación Centro de Recursos Ambientales de Navarra, CRANA.


• Valencoso, César; (2013). Un nuevo consumidor. ARAL, 8-11.

ANEXXES

Annex 1- Questionnaire replica

OBJECTIVE OF THE QUESTIONNAIRE

The aim of this questionnaire is to collect information about consumer behaviour in all concerning to responsible consumption. Collected information by means of this questionnaire will be use for the development of the final degree project “Study of social responsible consumer behaviour in Navarra”.

INFORMATION AND KNOWLEDGE

Following, you will be asked some questions about your knowledge and use of information related to responsible consumption, provided by institutions.

1. Do you know any initiative carried out by public or private institutions to promote responsible consumption?
   - Yes
   - No

2. If your answer was “Yes”, could you check which of these ones do you know?
   - “Guía para un consumo responsable” (Hispacoop y Observatorio RC)
   - “Guía para un consumo responsable en Navarra” (Gob. Navarra)
   - “Manual de educación para un consumo responsable” (Naciones Unidas)
   - “Actúa, consejos para una vida sostenible” (Greenpeace)
   - “Boiler Renewal Plan” (Gob. Navarra)
   - “Automobile Renewal Plan” (Gob. España)
   - Labelling (Fair Trade, Ecolabel…)
   - Other (please, specify):
3. Do you think that despite having available information about consumption, consumers make efforts to get themselves informed and have knowledge about it?

- Frequently
- Sometimes
- Seldom
- Never
- There is not enough information available

4. Personally, do you make any effort to inform yourself and use provided information?

- Frequently
- Sometimes
- Seldom
- Never

5. In general, if 10 is completely informed and 0 is not informed, until what extend do you consider yourself informed about responsible consumption issues?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
RESPONSIBLE BEHAVIOUR

Now, we present you some questions related to activities daily performed by you in collaboration to responsible consumption.

6. Personally, would you say that you perform some practices in favour of responsible consumption?

- [ ] Frequently
- [ ] Sometimes
- [ ] Seldom
- [ ] Never
RESPONSIBLE CONSUMPTION

7. Think about your daily activities, check which of the following activities do you carry out, as well as the reasons of such behaviour. (If you perform the activity, go to the column “Yes” reasons; if you don’t perform the activity go to the column “No” reasons).

- Recycling
- Reducing consumption
- Buying ecological and/or fair trade products
- Buying product without brand; distributors product
- Preparing shopping list
- Use of reusable bags
- Cooking more food and keeping it
- Natural fabrics clothes and produced under dignified working conditions
- Other

<table>
<thead>
<tr>
<th>Check</th>
<th>“Yes” reasons</th>
<th>“No” reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Ethical responsibility</td>
<td>Means a higher economic cost</td>
</tr>
<tr>
<td>No</td>
<td>Due to economic crisis</td>
<td>Means a time and effort cost</td>
</tr>
<tr>
<td></td>
<td>The crisis does not force me but I am afraid of an uncertain future</td>
<td>It is not effective since the rest don’t do it</td>
</tr>
<tr>
<td>Other</td>
<td>I don’t have enough information</td>
<td>I’m not interested</td>
</tr>
<tr>
<td></td>
<td>I’m not interested</td>
<td>Other</td>
</tr>
</tbody>
</table>
8. In relation to water consumption, indicated which of the following activities do you carry out, as well as the reasons of such behaviour. (If you perform the activity, go to the column “Yes” reasons; if you don’t perform the activity go to the column “No” reasons).

- Use of water saving devices
- Use of dishwasher/ washing machine when they are full
- Shower instead of a bath
- Irrigate at specified times
- Other

<table>
<thead>
<tr>
<th>Check</th>
<th>“Yes” reasons</th>
<th>“No” reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Ethical responsibility</td>
<td>Means a higher economic cost</td>
</tr>
<tr>
<td>No</td>
<td>Due to economic crisis</td>
<td>Means a time and effort cost</td>
</tr>
<tr>
<td></td>
<td>The crisis does not force</td>
<td>It is not effective since the rest</td>
</tr>
<tr>
<td></td>
<td>me but I am afraid of an</td>
<td>don’t do it</td>
</tr>
<tr>
<td></td>
<td>uncertain future</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>I don’t have enough</td>
<td>I’m not interested</td>
</tr>
<tr>
<td></td>
<td>information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
Regarding to energy saving, indicate which of the following activities do you carry out, as well as the reasons of such behaviour. (If you perform the activity, go to the column “Yes” reasons; if you don’t perform the activity go to the column “No” reasons).

- Use of thermostat (automatic shutdown)
- Heating off overnight
- Lowering the temperature of the heating
- Saving lamps
- Checking lights and turning off
- Favouring sunlight
- Purchasing appliances A++ / A+/A
- Turning off unused electronic devices
- Other

<table>
<thead>
<tr>
<th>Check</th>
<th>“Yes” reasons</th>
<th>“No” reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Ethical responsibility</td>
<td>Means a higher economic cost</td>
</tr>
<tr>
<td>No</td>
<td>Due to economic crisis</td>
<td>Means a time and effort cost</td>
</tr>
<tr>
<td></td>
<td>The crisis does not force me but I am afraid of an uncertain future</td>
<td>It is not effective since the rest don’t do it</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>I don’t have enough information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m not interested</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>
TRANSPORT

10. Regarding to energy saving, indicate which of the following activities do you carry out, as well as the reasons of such behaviour. (If you perform the activity, go to the column “Yes” reasons; if you don’t perform the activity go to the column “No” reasons).

- Walking instead of using a vehicle
- Use of public transport
- Sharing vehicle on the go
- Choosing low consumption cars
- Other

<table>
<thead>
<tr>
<th>Check</th>
<th>“Yes” reasons</th>
<th>“No” reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Ethical responsibility</td>
<td>Means a higher economic cost</td>
</tr>
<tr>
<td>No</td>
<td>Health/Physical exercise</td>
<td>Means a time and effort cost</td>
</tr>
<tr>
<td></td>
<td>Due to economic crisis</td>
<td>It is not effective since the rest don’t do it</td>
</tr>
<tr>
<td></td>
<td>The crisis does not force me but I am afraid of an uncertain future</td>
<td>I don’t have enough information</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>I’m not interested</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>
**SOCIODEMOGRAPHICS**

11. Gender
   - Man
   - Woman

12. Age
   - 18-29 years old
   - 30-49 years old
   - 50-69 years old

13. Studies level
   - No schooling
   - Primary studies
   - Secondary studies
   - University studies

14. Who do you live with?
   - I live alone
   - I live in a student apartment
   - I live with my parents
   - I live with my couple
   - I live with my couple and children
   - Other (please specify)

15. How many people are in your household?
16. Main occupation
   ○ Part-time employment
   ○ Full-time employment
   ○ Domestic work (unpaid)
   ○ Looking for a job
   ○ Student
   ○ Retired
   ○ Other (please specify)

17. In your household, are you in charge of gas, water, electricity…etc. bills?
   ○ Yes
   ○ No
Annex 2- Table of total population of Navarre (IEN)

Comunidad Foral de Navarre

<table>
<thead>
<tr>
<th>AMBOS SEXOS</th>
<th>VARONES</th>
<th>MUJERES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>644,477</td>
<td>320,933</td>
</tr>
<tr>
<td>0-4</td>
<td>34,804</td>
<td>17,960</td>
</tr>
<tr>
<td>5-9</td>
<td>34,350</td>
<td>17,543</td>
</tr>
<tr>
<td>10-14</td>
<td>31,713</td>
<td>16,229</td>
</tr>
<tr>
<td>15-19</td>
<td>29,915</td>
<td>15,280</td>
</tr>
<tr>
<td>20-24</td>
<td>31,763</td>
<td>16,176</td>
</tr>
<tr>
<td>25-29</td>
<td>37,704</td>
<td>19,151</td>
</tr>
<tr>
<td>30-34</td>
<td>49,260</td>
<td>25,212</td>
</tr>
<tr>
<td>35-39</td>
<td>55,773</td>
<td>29,016</td>
</tr>
<tr>
<td>40-44</td>
<td>53,151</td>
<td>27,780</td>
</tr>
<tr>
<td>45-49</td>
<td>50,209</td>
<td>25,785</td>
</tr>
<tr>
<td>50-54</td>
<td>44,852</td>
<td>22,860</td>
</tr>
<tr>
<td>55-59</td>
<td>39,069</td>
<td>19,689</td>
</tr>
<tr>
<td>60-64</td>
<td>35,000</td>
<td>17,433</td>
</tr>
<tr>
<td>65-69</td>
<td>31,680</td>
<td>15,430</td>
</tr>
<tr>
<td>70-74</td>
<td>23,437</td>
<td>11,082</td>
</tr>
<tr>
<td>75-79</td>
<td>23,049</td>
<td>10,326</td>
</tr>
<tr>
<td>80-84</td>
<td>19,687</td>
<td>7,960</td>
</tr>
<tr>
<td>85 y más</td>
<td>19,061</td>
<td>6,021</td>
</tr>
</tbody>
</table>

Fuente: Instituto de Estadística de Navarra