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"IMAGE AND INFLUENCE OF ONLINE ADVERTISMENT TOOLS FROM CONSUMERS' PERSPECTIVE"

What do Internet users consider about the emerging advertisements and publicity at the time they are browsing the web?

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RESUMEN

Durante los últimos años, la transformación digital ha sido inminente a escala mundial, proporcionando tal evolución, que ha sido reconocida como la revolución industrial de nuestra era. La publicidad ha sufrido una transición simultánea al uso de las nuevas tecnologías, proporcionando nuevos y mejores métodos tanto en la comunicación a los consumidores, como en el posterior análisis de su efecto. A través de esta investigación, se ha recogido el impacto que tiene la publicidad online en los usuarios, que percepciones despierta y cuál es el resultado que causa en su comportamiento. Se han encontrado resultados relevantes respecto a los distintos tipos de anuncios, además de diferentes efectos según la edad de los participantes. Por ejemplo, los anuncios a través de redes sociales son los que despiertan una imagen más positiva entre los usuarios. Por otro lado, se ha descubierto la necesidad de mejorar la reputación de anuncios en formato de video, para así lograr reducir el comportamiento que lleva a evitarlos. El análisis de estas implicaciones pueden llevar a una serie de estrategias futuras.

PALABRAS CLAVE: Publicidad online, Nuevas tecnologías, Percepción del consumidor, Adopción de innovaciones

ABSTRACT

Throughout these recent years, a worldwide imminent digital transformation has happened, being recognized as the industrial revolution of our era due to the evolution it has provided. Publicity has suffered a simultaneous transition to the use of these updated technologies, supplying new and better methods in consumer communication and in the subsequent analysis of results. By means of this investigation, it has been collected the impact of online publicity on users, together with the stimulated perceptions and the final results on their behavior. Relevant outcomes have been found in respect to the different categories of advertisements, in addition to the effects regarding participants' age. For example, social ads stimulate the most positive image among users. On the other hand, it has been discovered the necessity to improve video ads reputation, in order to reduce the users ad avoidance behavior. The subsequent analysis of these implications can drive future strategies.

KEYWORDS: Online publicity, New technologies, Consumers perception, Innovations adoption

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1. INTRODUCTION

Data has been recognized as the technology that has become a key revolution in our era, specially during last years. Its use has a critical impact in how companies can determine the success or failure of a product, technique or publicity, being the later the target of this study. This phenomenon is in synergy with the incremental use of online technologies, which have changed the means we use to interact, get informed or even go shopping. Publicity has as well suffered this transformation, making their online format be more relevant each day.

Through National Statistic Institute of Spain (INE, 2022) data, we know that approximately 87,1% of the Spanish population between the ages 16 to 74, use the internet on a daily basis. According to a survey displayed on Statista, in 2022, 53% of Spaniards used the audiovisual platform Youtube everyday (32% of them more than once). Also, in 2021, Facebook was the most popular social network, followed by Instagram.

All this data gives us an image of the impact that online advertisement can achieve. For these reasons, companies strive to introduce their marketing strategies inside this new social trend. The aim of this investigation is to gather insight on the image perceived by internet users towards online advertisement, together with the impact that can provoke on their behavior.

The structure in which the paper is organized is composed of five sections. The first part consists of the **introduction**, which presents the ideas and structure of the study, together with the **conceptual framework.** The latter exposes the main related concepts, in this case the increasing use of the Internet in our lives and how this affects the way the advertisement world has evolved, together with some previous insights on users´ perception and habits.

The second part corresponds to the **objectives** of the study. Section number three presents the **design of the research**, i.e, the choice of surveys as the primary data collection technique, the design of the questionnaire and the sampling plan. Then, the surveys are performed and collected according to the selected sample. The fourth part corresponds to the **data analysis and results**, which present the methodology and the techniques used for the investigation, together with the most significant outcomes obtained from those procedures.

Finally, the fifth part harmonizes the principal **conclusions** obtained from the theoretical and practical investigation, together with its current implications and future investigation lines.

2. CONCEPTUAL FRAMEWORK

2.1. The beginning of marketing through the internet

Technological advances have improved and simplified most web pages service to ordinary users. This is translated not only into easier usage of the different platforms, but also into an increase of confidence and trust at the time of using them. Users nowadays rely much more on these shopping methods, and this is reflected in the increasing number of clients (Charm T. et al., 2020). But when did the explosion of digital marketing start? What are the causes that have changed the way companies perform their advertising campaigns nowadays?

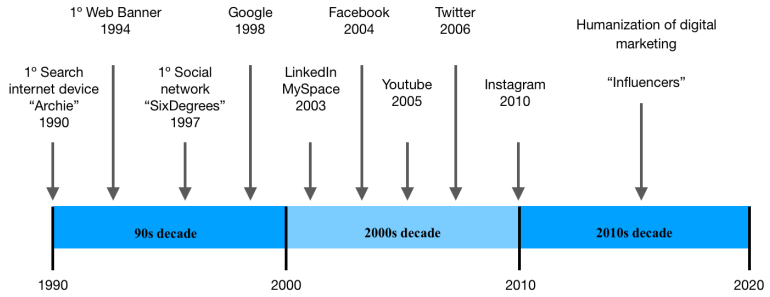
In 1990, the first ever internet search device was born and just some years later, in 1997, one of the biggest successes in the recent history of human communication was created, the first social network, "SixDegrees" (BBC News, 2019), one predecessor of the well-known Facebook. In 1998, the most ever employed internet search device, Google, appeared, which has evolved with the aim of giving its users exactly what they need (google.com). Throughout the 21st century, the internet has matured from a brand-nucleus to a user-nucleus, where users not only consume but also generate digital content (Evoluciona, 2020).

Since 2004, Facebook has been at the lead, connecting people around the world and adapting to the needs of its users (Naveira A., 2021). Additionally, this community's forums diversified and specialized, for example the social network LinkedIn appeared in 2003 with the objective of connecting people professionally (LinkedIn). The video and audiovisual platform, YouTube, was born in 2005, some years later Twitter or Instagram were also going to take part in the everyday life of people around the world.

The 2010s comes with the "humanization" of digital marketing. A new figure appears in social networks known as "influencers", referring to people that eventually are followed in their online profiles by thousands or millions of people (Evoluciona, 2020). This revolution has caused the creation of new occupations inside companies, for example the figure of community manager, which is in charge of controlling all the enterprise

social media or websites (Rebollo-Bueno, S., 2019). Another factor that will shape not only publicity, but the way people consume content and communicate, is the increasing need of "quick" information and stimulus, where short videos became the trend that is prevailing. Looking at the beginning of our decade, companies take into account the importance of consumer opinion and personalization in their products. This is going to be key in online marketing today.

Graph 1. Chronology of internet and digital marketing landmarks - *Source: Own elaboration*



Microsoft Word Document

More information regarding online marketing history:

2.2. Characteristics of online advertisement market

Consumers seek each time more personalization in their products, for the ones that better fit in with their necessities. For this reason, it is important to gather information and adapt the publicity to the consumers' personal interests and to the online platform they are using, in this way it is easier to achieve a positive impact (Ungerman K. et al, 2020). The first step to achieve this goal is to know how the online advertisement world works and the different characteristics that shape its advantages and disadvantages (Veleva and Tsvetanovas, 2020). In addition, we must distinguish if these positive or negative features belong either to companies or to consumers. Here we will show advantages and disadvantages referring to consumers' perspective, due to the orientation of the research, but those referring to companies are shown in *Appendix I*.

Advantages of digital marketing

From the consumer's perspective, there are several benefits they can obtain from digital marketing compared to traditional advertisement. One of the biggest characteristics this kind of marketing can achieve is the **high level of interactivity and feedback with consumers.** This creates an opportunity for greater personalization in each consumer's

necessities and preferences. Receiving consumer feedback enables the companies to create a dynamic environment where innovation and change is an everyday issue.

As a result, it derives a **high degree of personalization from each advertisement.** All the amount of data collected from consumers' online information allows to create individual advertisements and subsequently to respond to their needs in order to increase satisfaction.

The fact that it is transmitted through the internet allows for **communication and interaction with users.** Consumers can solve doubts and receive the information they need. Companies can have direct contact with their real and potential customers, build trust and get feedback on the products and services they offer. Advantages like the one just mentioned **increase the attractiveness of the companies' websites.** In addition, through the development of advertisements or publications related to the company's activity, familiarity and engagement is created between the users and the company.

Another important factor in our everyday more digitalized world is that this kind of advertisement provides **great technological comfort for consumers.** Digital technologies allow them to receive much more and better information about products and services they are interested in, buy them from anyplace and save time. In addition, this **allows companies to reach more consumers** through social networks and buyers are better informed.

Disadvantages of digital marketing

Considering consumers' perspective on the benefits of digital marketing, we must also look at the negative features from this kind of publicity that can have significant damaging effects on how consumers perceive such products or companies.

The first and most relevant counterproductive effect of digital marketing is the repercussion of **overloading the web space with online advertising messages.** Excess of online advertising messages (banners, appearance of open and closed windows, interruption of videos, etc.) can lead to consumer irritability, which will strongly affect their attitude towards companies. By doing this, the **online reputation of companies can be ruined by negative feedback.** Negative comments about products or trademarks are visible and accessible to all users. This can seriously damage companies image and lead to customer outflow.

Also, another disadvantage born from the internet is the **lack of consumer trust.** Digital marketing campaigns involve the use of technologies that track and collect data from users, this leads to privacy issues including the security of their privacy. Therefore, people take a serious distrust of this type of marketing and often refuse to participate. This topic of online trust and its impact on online marketing strategies is becoming increasingly important. Following these lines, **online marketing campaigns can be perceived by users as precarious,** this can happen if they are not professionally designed and properly targeted.

In addition, **digital marketing forces to build company-consumer relationships, which cannot see each other in real life.** This requires companies to gather knowledge on online consumer behavior and for consumers to look for accurate information about companies. Not taking this into account can lead to lower efficiency, since it does not know the particularities of consumer behavior and the relationships that are created online.

2.3. Categorization of online platforms and online advertisement

In the immensity of the internet, digital platforms can be classified according to utility, user needs and purpose. Moreover, in recent years several types of online adverts have been created in order for companies to publicize their products and services. For conducting this project, first it is important to know which platforms exist and how the different types of advertisements work and affect the perception in each of them.

2.3.1. Categorization of online platforms

Online platforms follow many categorizations, which classified them according to multiple different characteristics and features. For conducting this project, we are going to focus on three main digital spaces where users are prone to receive advertisements:

- **Social platforms -** This type of platform is going to be the main area of study, as they have a significant congregation of users with different demographic profiles. These platforms enable the connection and communication of people wherever they are located in the world, in this category we include the well-known social networks.

- **Audiovisual platforms** - in these platforms users can find content that is composed of videos or audios which users can consume in their different visual interface.
- **Online commerce platforms** - this type of web page is also known as e-commerce platforms and consists of virtual shops where users or consumers can both buy and sell different commodities, directly from a company or between them.

Even though we must consider there are many other online platforms in the classification (OnlineWeb, 2021; EU Commission, 2016). For example, **educational digital platforms, payment platforms, news platforms, image platforms (**considered a subdivision of the audiovisual platforms), **game platforms, banking platforms**, **stock-exchange platforms** and **specialized platforms,** which include all the platforms that are specialized in a concrete consumer need, for example language translators or editing videos.

In the following table several examples are displayed for the different types of online platforms, in bold the ones chosen for the study.

Category of digital platform	Examples
Social platforms	Facebook / Instagram / Twitter / WhatsApp
Audiovisual platforms	YouTube / Netflix / Vimeo
Online commerce platforms	AliExpress / Amazon / eBay
Educational digital platforms	Google Classroom / Canvas / Moodle
Payment platforms	PayPal / Stripe / Neteller / Amazon Pay
News platforms	Emol / The Clinic / El Mostrador
Image platforms	Pinterest / ClipBoard / Pexles
Banking platforms	BCI Santander / Caixa Bank / BBVA
Stock-exchange platforms	XTB / Plus500 /Capex / eToro
Specialized platforms	Final Cut Pro X / Traductor Google
Game platforms	Epic game store / Origin / Discord

Table 1. Category of digital platforms and examples – *Source: Own elaboration*

2.3.2. Categorization of online advertisement

There are many kinds of online advertisements and because the internet and publicity worlds are constantly evolving, also the methods used by companies change and develop over time. Following a general classification of several types of adverts, in this study we are going to focus on the perception of internet users towards “Social network advertisement”, “Online video advertisement” and “Native advertising”, which are extensively used by companies and are easily recognizable to users (CyberClick, 2022):

- **Social network advertisement (Social ads) -** This kind of publicity has gained a lot of importance in recent years, due to the fact that more and more people every day are connected to several social networks. These platforms are used not only to communicate but also to share and give opinions, so this is going to have repercussions also in publicity. It also allows easy segmentation of the potential consumers.
- **Online video advertisement** - They are usually used in audiovisual platforms like YouTube and because audiovisual content is significantly entertaining to users, this is an easy way to introduce publicity. In this category can be included the advertisement videos performed by relevant people with mass influence, where they are remunerated in order to use their image and advertise such product (in addition, this kind of publicity shares characteristics with native advertising).
- **Native advertisement** - This kind of advertisement is all the publicity that joins and merges with the content of the website where they are located, with the aim to look just like principal content themselves. They can take the form of, for example, "in-feed ads" (fused with the content in such a way that it does not disrupt the users experience) or "content recommendation ads" (which are found alongside an article or at the end of it, with the initiative of suggest ads or content to the users). The positive characteristic of this kind of publicity is that it is not intrusive to the consumers' experiences.

The selection of these three specific categories, responds to their wide relevance in today's digital marketing, together with an easy identification and knowledge from internet users. Additionally, several other types of advertisement can be found online, such as the **SEM (Search Engine Marketing),** where companies invest in order to appear in first positions by paying (Eserp). Traditional post mail has been substituted by digital mail services, as **email marketing** (Reul M., 2021*)*. **Display advertisements** include all the adverts which contain an image or video shown in any webpage, usually use "cookies" to customize and personalize publicity (Torregosa J.). Or the **retargeting or remarketing** who recall and remember the company product to users that have previously visited the business website (CyberClick).

2.4. Users' perception and behavior towards online advertising tools

According to Barrio Carrasco J., (*2015*), in his thesis "*La influencia de los medios sociales digitales en el consumo*", there are several factors inside advertising in digital platforms that influence the decision-making process of consumers.

Images are a key component in the decision-making process of potential consumers, especially in social networks. An appealing image leverages users' confidence in the product and generates greater push on a future purchase. Users participating in the survey relate the use of images to social networks, like Instagram (95%), Pinterest (65%), Facebook (42%) or Twitter (28%). Moreover, 17% of consumers who have used social networks as the means to purchase a product, have been motivated by a promotional image related to such goods and 34% of survey respondents state that they get to interact with a brand or company after seeing an online advertisement in social platforms, like Twitter.

Another important publicity factor is the positive **opinions of other consumers**, who transfer their experience from previous purchases to future buyers. This will be key in their decision-making process. From the results, 66% of respondents consider other users' opinions very relevant. In order to reach such opinions consumers, use social networks, specialized websites or blogs. It is important to **create confidence** in consumers through advertising, this is a valuable factor for users in order to gain loyalty with products or companies. Many brands or companies are taking advantage in building these trust relations by creating communication channels with consumers or collective tools in their digital platforms.

The creation and popularity of many different platforms have shaped new shopping habits where consumption is more interactive and influenced by social circles and experiences.

An important consumer behavior phenomenon is the so-called **ROPO (Research Online Purchase Offline)**. This occurs when users search for information online (or receive information in the form of digital publicity), but end up buying these products physically offline, which usually is a more trustful channel to consumers. On the other hand, it is important to consider that even if the final purchase is made offline, consumers trust the information they receive through online means and consider it key in their decision-making process. Likewise, 61% of surveyed consumers express that

their main source of information is the internet, but less than half finally make the purchase by online means.

According to Hermann R. (*2020*), from the paper "*Consumers´ Perception of Online Video Advertising*", it gathers the **key elements of a successful advertising video** (using YouTube as the investigation field). Results from the study show that there are various elements that have a positive effect on consumers' perception when companies are promoting a brand, product or service by online video publicity. Such key factors valued by users are: **entertainment, informativeness, customization and interactivity,** which cause a positive effect over the company or product.

Another important factor is understanding **how consumers perceive unsolicited advertising**, vital for developing effective digital marketing strategies (*Romano, R., 2022*). Undesirable publicity causes ad-avoidance behavior, feelings of intrusiveness and privacy concern issues.

In order to conduct this study, it is important to consider these factors and research for further knowledge of what do consumers consider about the emerging advertisement and publicity when they are making use of digital platforms.

3. OBJECTIVES

The moment an enterprise launches an online advertisement might seem difficult to capture the attention of the immensity of web users. Before creating any next commercial project, it is important to know which are the potential customers and which is their attitude towards the various types of online publicity. In this way, the path to achieve success in each campaign is going to be straightforward. Therefore, the main motivation of this project is addressed through the following question: What is the image and influence of digital advertisement and publicity from consumers perspective in Spain?

From this initial question we have stabilized the main objective, which is to gather information about the different perception of consumers towards online advertisement. Then, there are several sub objectives we are looking forward to achieving in order to settle on the main objective. In particular, to analyze:

1) Consumers' use and perception of online publicity. (Analysis of online publicity as a whole and different types of online publicity- i.e., depending on the platform-)
2) Consumers' behavior after receiving online publicity.
3) Differences in consumers' perception and behavior towards online publicity according to demographic profile

Table 2. Sub objectives of the study and information needs

SUB OBJECTIVE	INFORMATION NEEDS

Consumers' perception of online publicity	• Use of different platforms
	• Levels of online advertising
	• Evaluation of ad's elements
	• Image of online advertising by platform (social ads, video ads and native ads) regarding:
	  • Information
	  • Interactivity
	  • Entertainment
	  • Customization
	  • Product attraction
	  • Use of platforms
	  • Trust on the product
	• Utility of ads by platform

Consumers' behavior after receiving online publicity	• Whether they purchase/think about purchasing the product after seeing such ads by platform • Whether the advert change their perception of the product or the perception of the online platform • Whether they stopped using an online platform due to advertisements • Know if they had paid for not having publicity in online platforms • Perception of general influence of advertising on their purchasing decisions

Differences on consumers' perception and behavior towards online publicity according to demographic profile	• Behavior depending on the different types of **online publicity platforms** (social media, audiovisual platforms, and e-commerce platforms)
	• Behavior depending on the **demographic profile**
	  • Consumers age and gender
	  • Personal income, job status or educational level
	  • Frequency of internet usage (daily, occasional…)
	  • Reasons for internet usage (work, social, shopping…)
	  • Degree of comfort/ familiarization with the Internet usage

4. RESEARCH DESIGN

In order to be able to respond to the project objectives, the following marketing research has been designed and performed. Before covering the analysis and results it is important to go through the nature of the investigation, the different sources of

information, the method used in the data collection and the sampling plan used for the market research.

4.1. Nature of the Investigation

The nature of the marketing research is an **exploratory investigation**. Due to the immensity of digital advertising methods and the volatile essence of the internet, where new ways of publicity update every day, the purpose of the project is to gather and research about the image and behavior of users after receiving online advertisement. The aim is to share an approximation that, with further investigation, assists future online marketing campaigns. Besides, as we will later explain, we will use non-probability sampling which enables to generalize the results of the study.

4.2. Sources of information

Secondary data has enabled us to contextualize the digital transformation we are experiencing nowadays, the distinct characteristics that differentiate online publicity, together with the different existing categories of ads and the impact that has on users' perception and behavior. Besides, due to the inexistence of secondary data to cover all the information needs to reach the required objectives for the population of interest, primary data has been used.

4.3. Method for primary data collection

The method used for data collection has been through the performance of a **survey**. Surveys allow us to massively supply and record data from many individuals, making the investigation quicker and less costly. Also, it simplifies data collection to the concrete answers displayed, helping in the subsequent data analysis (Arias, A. and Fernández, B., 1998). In this case, according to the number of answers needed and the time disposed, an online survey has been selected to be the most appropriate. In addition, results obtained have been easily transformed for their study. The survey was created and distributed through “Google Forms”, which also facilitated the access, by just requiring a Google account.

After an introduction contextualizing the project and the purpose of the survey, the questionnaire was divided into three different sections (the complete questionnaire is included in *Appendix II*).

The first division is composed of questions describing the personal profile of the participants. There are five questions regarding: age, gender, educational level, occupation and province of residence; plus, two more questions contextualizing the internet use of participants. This first section will also enable us to reject individuals outside the objective population.

Then the second division collects information regarding "*Users' Perception and image regarding each type of online advertisement*", which is directly related to sub objective 1 "*Consumers' perception of online publicity*". At the same time, this section is segregated into two separate parts, the first one composed of questions about the use of different platforms, which one displays more publicity or requires respondents to rate different ads characteristics. Then, the second part constitute the broadest part of the questionnaire, which ask participants to rate social ads, video ads and native ads according to several properties: "*Information*", "*Interactivity*", "*Entertainment*", "*Customization*", "*Product attraction*", "*Use of platforms*" and "*Trust on the product*", being previously informed with a brief explanation on each different type of advertisement.

Lastly, the third section collects information about "*Users´ behavior after receiving the online advertisement*", which is connected to sub objective 2 "*Consumers' behavior after receiving online publicity*". This part of the questionnaire addresses the following issues: whether users considered buying the advertised product, if the perception of the product or online platform changes after visualizing publicity (in a positive or negative way), whether they have stop using an online platform or pay to avoid publicity and provide to what degree advertisements influence their decisions.

4.4. Sampling plan

4.4.1 Population and sampling frame

The selected studied population is composed of people between 18 years old and 60 years old from Spain, both male and females, disregarding their residence place.

This age interval has been selected for two reasons. First of all, in order to assure we have consent from each of the individuals in providing their data and opinions through the survey, we require them to be of legal age over 18 years old, conversely, we would have required parental authority to underage participants. Secondly, the population has been limited to people under 60 years old due to the technological nature of the study.

Online publicity is displayed on the internet where users access through mobile phones, computers, tablets, etc... Population over 60 years old might be more reluctant to adopt such new technology.

Younger generations are more familiar with the use of the Internet, as it has established in our lives in a decisive way and has become the most important information and communication channel in worldwide societies. The consequence of this event is that more traditional broadcast methods (for example the television), have become eventually less and less used each year and have been substituted by Internet-related devices, such as mobile phones, computers or tablets, which result in more convenience for increasingly more people.

Table 3. Percentage of households in Spain which have computer/laptop, Internet access, landline phone and mobile phone from 2006 to 2021.

Household total % (Years)	Household with computer at home	Household with internet access	Household with land line phone	Household with mobile phone
2006	55,9 %	38 %	82,8 %	87,2 %
2013	73,3 %	69,7 %	77,9 %	96,1 %
2021	77,9 %	95,9 %	67,2 %	99,5 %

Source: Own elaboration. Data retrieved from INE (Instituto Nacional de Estadística)

In this table (Table 1), we can see the evolution of four TIC technology parameters in Spanish households obtained from the Instituto Nacional de Estadística (INE). They show the percentage evolution of the Spanish population that has a computer at home, access to the internet at home, landline phones at home and mobile phones at home, compared with data from three different years (2006, 2013 and 2021).

We can check that eventually the number of people who dispose of a computer at home has increased from 55,9% of the population in 2006 to 77,9% in 2021. This shows how accessible it is for people to use a computer nowadays and the impact that it can have in the publicity market. Furthermore, the evolution in the access to internet to Spanish households represents an even more noticeable and immense change from only 38% in 2006 to 95,9% in 2021. This means that almost all the population has access to the internet and can be targeted by different advertisements in an online approach. On the other hand, the telephone industry has undergone a great transformation. Eventually less and less people dispose of a landline phone at home compared to some years ago, but the mobile phone industry is at its peak, with 99,5% of the population having one in its possession.

Because there is no geographical distinction in the use or reception of online publicity, the sampling frame has included any individual residing in the Spanish territory, under the population of interest (between 18 and 60 years old).

4.4.2. Sampling method and sampling size

Due to the **exploratory nature** of the project, we do not look for a statistically representative sample, subsequently non-probabilistic methods have been used.

In addition, two personal characteristics (age and gender) have great significance in the compliance of the objectives, then we require to obtain sufficient responses for each of the age groups and genders, in order to have a complete spectrum of answers. Sampling size, the main objective has been to collect data from at least 150 individuals.

During an approximate period of two weeks, data from each of the required age-gender profiles has been gathered. Survey has been distributed through personal contacts and their social networks until having reached a proper amount of sampling units required according to the sampling frame, subsequently being able to begin with responses and data analysis.

5. RESULTS

5.1. Sample Description

During the primary data collection, the survey was answered by 177 people in total. However, the final database is composed of 164 valid questionnaires, due to the removal of incomplete questionnaires and the ones answered by people below 18 years old or above 60 years old, which are participants outside the target population. To describe the sample, we are going to classify and analyze these 164 participants between 18 and 60 years old according to five characteristics: age, gender, occupation, level of studies and region of residence.

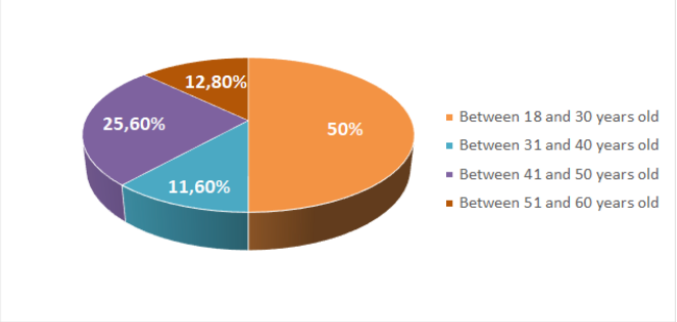
Table 4. Sampling units according to gender and age

	Between 18 and 30 years old	Between 31 and 40 years old	Between 41 and 50 years old	Between 51 and 60 years old	TOTAL
Male	34 (20,7%)	10 (6,1%)	8 (4,9%)	6 (3,7%)	58 (35,4%)
Female	48 (29%)	9 (5,5%)	34 (20,7%)	15 (9,1%)	106 (64,6%)
TOTAL	82 (50%)	19 (11,6%)	42 (25,6%)	21 (12,8%)	164

Source: Own elaboration

The two most relevant demographic characteristics are gender and age, considering that in several investigation objectives they are going to be included in the analysis.

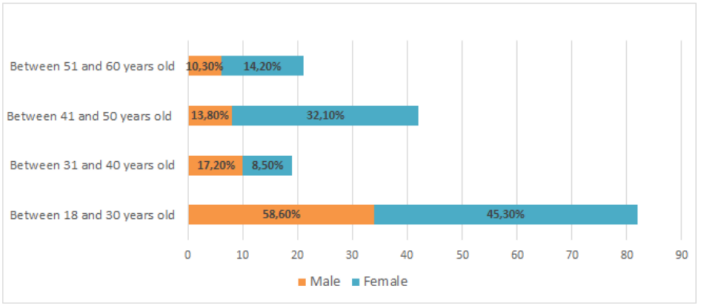
Graph 2. Sampling units by age



Source: Own elaboration

Neither the age or the gender ranges are in accordance with the population proportions, as we can see in Table 3 and Graph 2. Females represent 64,60% of the survey participants (106 sampling units) and men 35,40% (58 sampling units), which are respectively above and below the optimal 50% for each gender. On the age side, participants between 18 and 30 years old represent 50% of the sample and the age group between 31 and 40 years old only the 11,60% of the sample.

Graph 3. Proportion of individual by age and gender

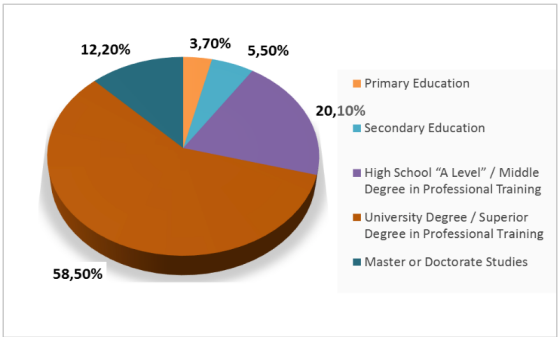


Source: Own elaboration

Graph 3 illustrates the proportion of individuals by age and gender, showing the number of male and female sample individuals in each age group (in the horizontal axis) and the total proportion of all the sample units according to age-gender parameters. For example, inside the age group 31 to 40 years old, 10 sample individuals are males, reflecting an overall sampling proportion of males in such age group of 17,20% of all male participants.

Nevertheless, these biases do not interfere in the investigation due to its **exploratory nature**. Even though the sample is not a complete faithful representation of the population, it can give us plenty of information regarding considerations of internet users about advertisement and publicity at the time they are browsing the web.

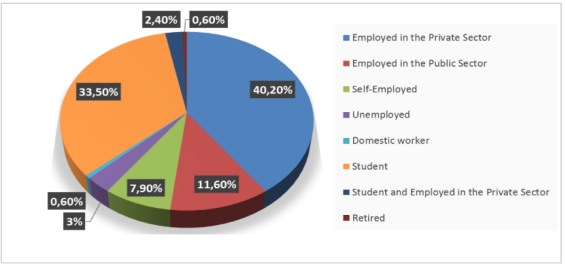
Graph 4. Sampling units by education level



Source: Own elaboration

Moreover, the education level and occupation of the individuals has also been recorded in order to contextualize further the profile of the analyzed sample. Graphs 4 and 5, show respectively the results for both parameters, reflecting a majority of respondents having a university degree (58,50%). Whereas on the occupation chart, being employed in the private sector (40,20%) or currently being a student (33,50%), are the two predominant occupations.

Graph 5. Sampling units by occupations



Source: Own elaboration

Lastly, individuals were classified according to their regions of residence inside the Spanish territory. From the total of the 52 provinces, answers were collected from 13 of them (Table 13 - *Appendix I*).

5.2. Sub Objective 1: Consumers' perception of online publicity

5.2.1. Sub Objective and information needs

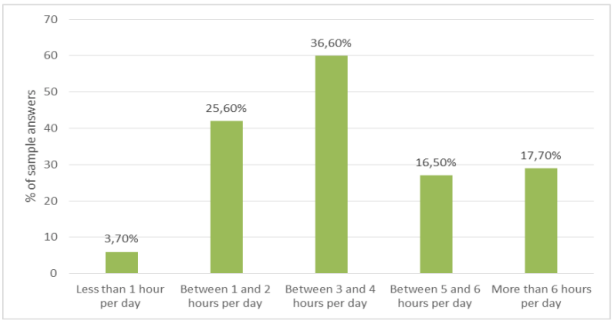
Sub Objective: Consumers' use and perception of online publicity, according to age. Analysis of online publicity and its different types (i.e., depending on the platform).

The former information needs are included in Table 2 and correspond to the questions: 6 / 7 / 8 / 9 /10 / 11(A-H) & 18 of the questionnaire (*Appendix II)*.

5.2.2. Results from the analysis

First of all, in order to contextualize the online habits of respondents we have collected information about internet frequency use (expressed in hours per day) and the internet usage purposes of the participants.

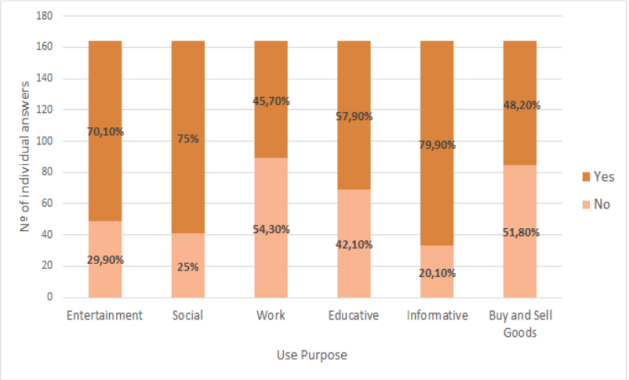
Graph 6. Internet frequency use (excluding working hours)



Source: Own elaboration

Graph 6 shows that the average **time interval of daily internet use** (excluding working hours) is between 3 and 4 hours. Age is a significant determinant here, the younger the age group, the more internet consumption hours per day, as can be seen in Graph 45 (*Appendix I*).

Graph 7. Sample Units by Internet Use Purpose



Source: Own elaboration

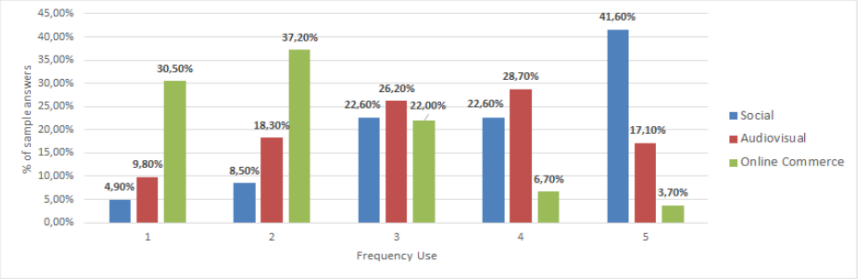
Then, we can compare the **internet use purposes** of the respondents in Graph 7. Looking at the answers´ means for each usage intention, internet use purposes can be distinguished according to: first, reasons with higher number of positive respondents, like social interactions (75%) or informative aims (79,9%), which clearly state these are general reasons of almost all the respondents. Then, other categories like entertainment (70,1%) or internet use with educational aims (57,9%) also reflect positive results above 0,5 but not as significant as the previous two. Finally, working (45,7%) or buying and selling goods online (48,2%) are not as popular among the respondents, as average means are close but still below 0.5.

Comparing each internet user's purpose by age, we can foresee the differences in the groups´ main intentions. First, in order to check whether these differences are meaningful, we must look at its significance through the **Chi-Square coefficients** (all are non-metric variables). Our null hypothesis (H0) is that there are no significant differences in these purposes regarding age; conversely our alternative hypothesis (H1) is that there are significant differences in these purposes regarding participants' age.

In the case of "*Entertainment", "Social", "Work"* and *"Educational"* purposes, at a 5% level of significance, the Chi-Square coefficients are all less than 0,05. Then, we can reject the null hypothesis and assume there are significant differences in the internet's use for these four purposes in respect to age. On the other hand, in this case of *"Informational"* and "*Buy-sell goods*" purposes, at a 5% level of significance, the Chi-Square coefficients are 0,181 and 0,327, which are bigger than 0,05. Subsequently, we cannot reject H0, confirming there are no significant differences in the use of the internet for these two purposes in respect to age.

We can check these results on Graphs 47, 48, 49 and 50 (*Appendix I)*. Within participants from 18 to 30 years old, there is a generalized massive end goal for social media and entertainment internet use (91,50% and 76,80% respectively) and very low rates for work purposes. Inside the division from 31 to 40 years of age, the main target is entertainment and information purposes (89,50% and 84,20%). On the other hand, participants from 41 to 50 years old have a remarkable use for informative purposes (81,00%) and very low rates for educational ones. Finally, for the age group between 51 to 60, there is a huge consistency towards its use for informative purposes (95,20%) and small rates for educational purposes.

Graph 8. Frequency use in each platform – Proportions

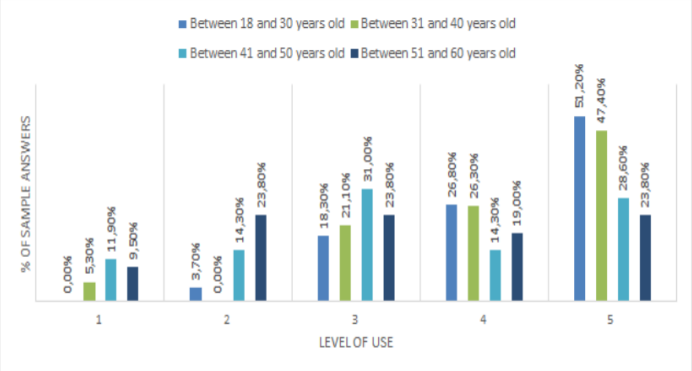


Source: Own elaboration

Regarding the first information need "*a) Use of different platforms*", Graph 8 shows the participants' use of different online platforms. In a scale from 1 to 5, the average mean for social platform use is 3,87, which represents a high average use of this media by the respondents. The next most used platforms are the audiovisual ones, with a 3,25-mean value of the answers. Finally, online commerce platforms have a relatively low mean (2,16) which is below the average of 2,5 indicating a non-recurrent use by the majority of the respondents.

In order to get better insights into these practices, we can check if there are any relevant differences regarding age.

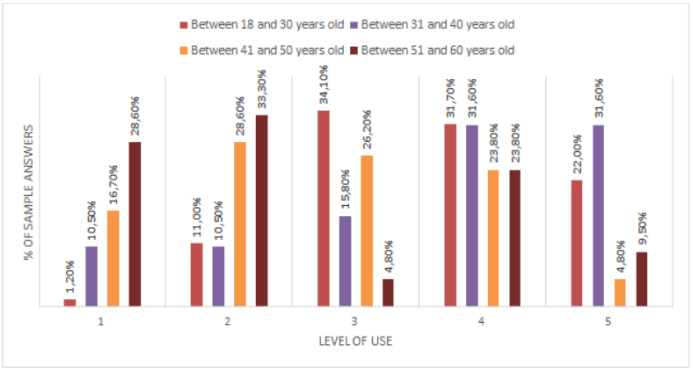
Graph 9. Frequency use of social platforms by age groups – Proportions



Source: Own elaboration

In the case of social platforms, at a 5% level of significance, the Chi-Square coefficient is 0,003. Then, we can reject H0 and accept the alternative hypothesis, confirming that there are significant differences in frequency use of social platforms in respect to age. The age group of participants between 18 and 30 years old are the ones with a more sizable use of online webs, with 51,2% of the cluster classifying their use on the highest score, 5 points (Graph 9).

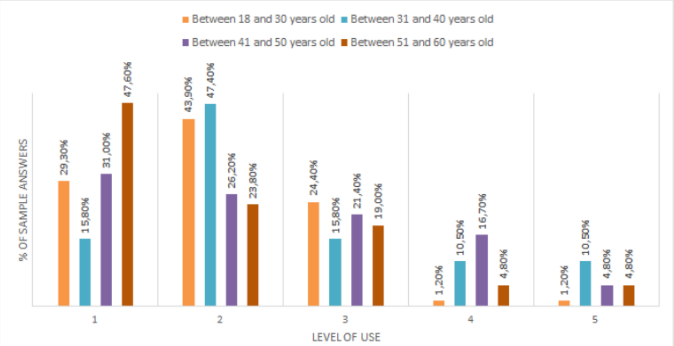
Graph 10. Frequency use of audiovisual platforms by age groups – Proportions



Source: Own elaboration

Regarding audiovisual platforms, at a 5% level of significance, the Chi-Square coefficient is < 0,001. Consequently, we can reject the null hypothesis and accept the alternative, confirming that there are significant differences in frequency use of audiovisual platforms in respect to age. In this case, results are less uniform than in the social platforms case. The age group with the highest usage score is the one of participants between 31 and 40 years old with 31,6% of the answers in both 4 and 5 score.

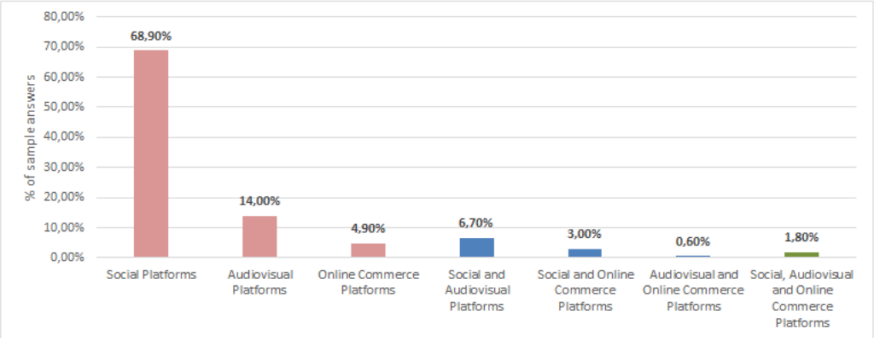
Graph 11. Frequency use of online commerce platforms by age groups – Proportions



Source: Own elaboration

Finally, observing online commerce platforms results, at a 5% level of significance, the Chi-Square coefficient is 0,034. Again, we can reject H0 and accept H1, proving that there are significant differences in frequency use of online commerce platforms in respect to age. We can prove a decreasing tendency in all age groups, being highly prevalent and a very low use of this kind of online webs. As it can be seen in Graph 11, in this case the age group with slightly top scores is the 31 to 40 age cluster.

Graph 12. Platforms with more publicity perceived – Proportions



Source: Own elaboration

Regarding the second information need "*b) Levels of online advertising*", on Graph 12 we can see the proportions of the sample answers considering which are the **platforms with more publicity perceived**. Platforms considered in the questionnaire are the ones selected in Section "*2.3.1. Categorization of online platforms"*, which are chosen to be more relevant and in accordance with the three types of online advertisement selected. The color pattern is decomposed by answers with only one platform in red, answers selecting two different platforms in blue and answers considering all the platforms have abundant publicity in green.

Remarkably, social platforms are perceived as the ones with higher online advertisement, with 68,90% of total survey answers, followed by audiovisual platforms (14,00%) and online commerce platforms (4,90%) individually. We must highlight some

low but still significant numbers regarding replies on two or more platforms, being the combination social-audiovisual 6,70% of the answers; social-online commerce 3,00%; audiovisual-online commerce just 0,60% and, finally, considering all requested platforms, 1,80% of responses.

Following the third information need "*c) Evaluation of ad's element*", it has been considered six parameters to measure the **impact of several advertisement elements** on consumers: "*Message*", "*Music*", "*Price*", "*Content regarding the product*", "*Content regarding who transmits the message*" and "*Duration*".

Table 5. Mean answers regarding the evaluation of advertisement elements

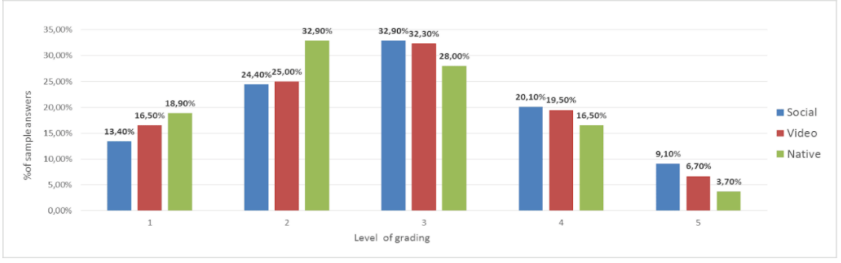
	Means
Message	5,80
Music	5,59
Price	7,05
Content - Product	7,16
Content - Who transmits the message	5,83
Duration	6,74

Source: Own elaboration

Comparing the overall mean answers for each aspect (Table 5), we observe that all means are above 5, which represents positive significance on all advertisement parameters. "*Content regarding the product*" is the most meaningful parameter for survey participants with 7,16 points mean, whereas "*Music*" is the factor with least mean score (5,59 points). Proportions of the rest of factors are shown in *Appendix I* (Graphs 51, 52, 53, 54, 55 and 56).

The following information need "*d) Image of online advertising by platform regarding several factors*", comprises a large part of the current sub objective and the overall project. The selected factors regarding social ads, video ads and native ads which are going to be analyzed are: "*Information*", "*Interactivity*", "*Entertainment*", "*Customization*", "*Product attraction*", "*Use of platforms*" and "*Trust on the product*".

Graph 13. Image of online publicity (Informative) – Proportions



Source: Own elaboration

Concerning the first factor, image of publicity regarding "*Information*", social ads lead the rank with an average mean of 2,87 points and can be considered the most informative type of publicity for survey participants. They are followed by video ads (2,75) and native ads (2,53). Graph 13 shows the different survey answers proportions, being quite skewed in the middle and slight difference regarding each kind of publicity.

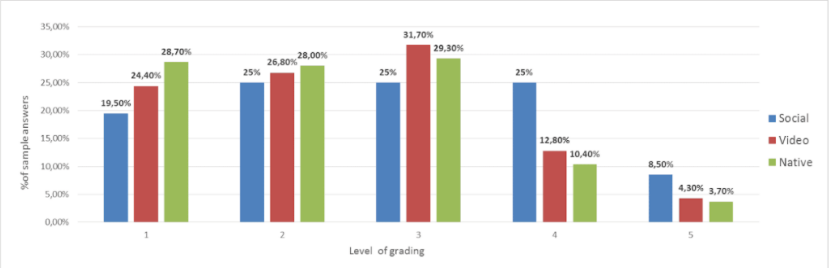
Graph 14. Image of social ads (Informative) – Proportions

Source: Own elaboration

By segregating each type of advertisement by age answers, we can find the different proportions for each age strata. In the case of social ads, at a 5% level of significance, the Chi-Square coefficient is 0,024. So, we can confirm that there are significant differences in the perception of social ads being informative in respect to age. Individuals between 18 and 30 years old are the ones considering higher perception of social ads being informative with a greater proportion of answers in higher values, whereas the opposite is shown for participants between 51 and 60 years old, in which one third of the participants perceive them as non-informative at all.

For video and native ads, at a 5% level of significance, Chi-Square coefficients are 0,253 and 0,132. Then, we cannot reject H0, confirming there are no significant differences in the perception of these ads being informative with respect to age.

Graph 15. Image of online publicity (Interactive) – Proportions



Source: Own elaboration

Regarding the next factor, image of publicity regarding "*Interactivity*", social ads lead for a second time the rank with an average mean of 2,75 points and can be considered

the most interactive type of publicity according to the answers collected. Video ads trail behind with 2,46 average mean points and finally native ads (2,32). We must emphasize that values for "*Interactive*" in all kinds of ads are significantly lower compared to the "*Informative*" image participants have of them, as reflected in Graph 15, where most values are skewed to the left.

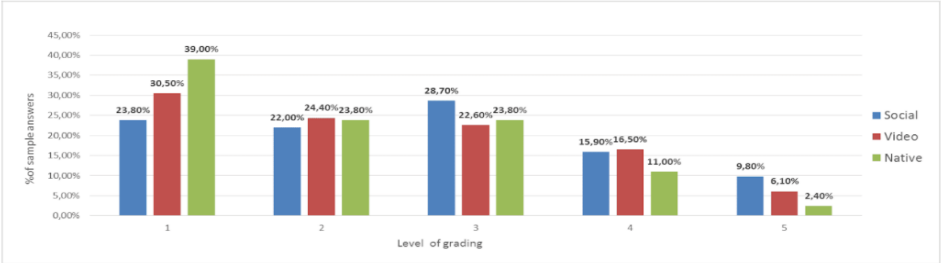
Graph 16. Image of social ads (Interactive) – Proportions

Source: Own elaboration

Again, we can segregate each type of advertisement by age answers. For social ads, at a 5% level of significance, the Chi-Square coefficient is 0,005, then, we can reject H0 and confirm there are significant differences in the perception of social ads being interactive in respect to age. We can check that the two lower age groups are the ones perceiving social ads more interactive (Graph 16). A highlighted distinction is that answers between participants from 18 to 30 years old are very homogeneous in the middle values, whereas participants from 31 to 40 years old are more dispersed in the extremes of the scale.

As in the previous case, at a 5% level of significance, the Chi-Square coefficients for video ads and for native ads are bigger than 0,05, then, we confirm there are not significant differences in the perception of video and native ads being interactive in respect to age.

Graph 17. Image of Online Publicity (Entertainment) - Proportions

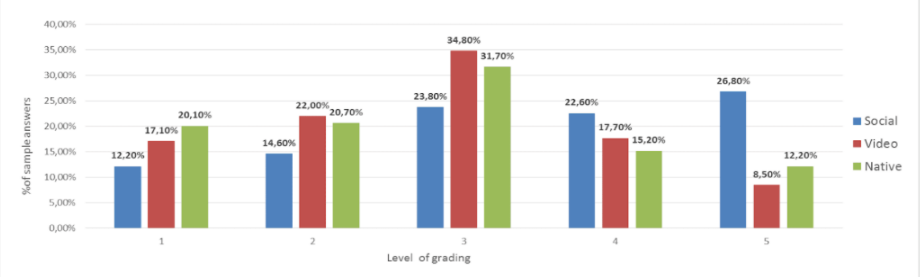


Source: Own elaboration

The following factor analysis whereas the different types of ads are perceived as enjoyable. Again, social ads lead the rank with an average mean of 2,66 points and can be considered the type of publicity which grants greater entertainment to survey individuals. Followed by video (2,43) and native ads (2,14). In this case, the gap between the two first and native ads is more noticeable, as 39,00% of the respondents perceive them as not at all enjoyable. Graph 17 shows the proportions, having a notable decreasing tendency for most ads' categories.

Preliminarily, we must check whether the perception of these ads being enjoyable is influenced or not by age, by looking at its significance through the Chi-Square coefficient. Our null hypothesis (H0) is that there are no significant differences in perception regarding age; conversely our alternative hypothesis (H1) is that there are significant differences in perception regarding age. In this case, at a 5% level of significance, Chi-Square coefficients for social (0,069), video (0,601) and native (0,423), are bigger than 0,05. Consequently, we can confirm that there are no significant differences in the perception of this publicity being enjoyable with respect to age[1].

Graph 18. Image of online publicity (Customization) – Proportions



Source: Own elaboration

Concerning the following factor which is "*Customization*" or, in other words, to which degree participants considered online publicity match their personal preferences. In Graph 18, we can perceive that social ads have an incremental score from point 1 to 5 in this characteristic, whereas responses on video and native ads are more concentrated on middle scores. Social ads have an average mean of 3,37 points and according to respondents have a great scope for customization. On the other hand, both video and native ads' average mean is 2,79 points.

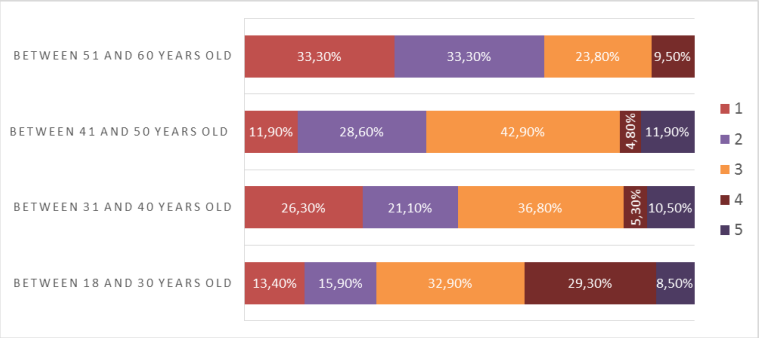
[1] Similar analysis can be made regarding other variables (gender, occupation...), but are not address in the current study

Graph 19. Image of social ads (Customization) – Proportions

Source: Own elaboration

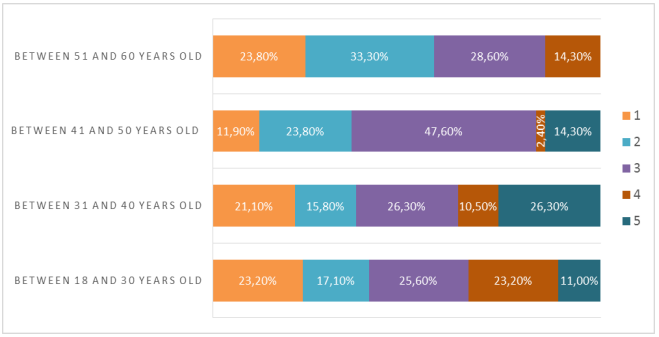
Looking at differences on each type of advertisement and age answers, we can find that for social ads, at a 5% level of significance, the Chi-Square coefficient is <0,001. Subsequently, we can reject the null hypothesis and accept the alternative, confirming there are significant differences in the perception of social ads being customizable in respect to age. Graph 19 reveals the percentage of answers on this kind of publicity, where individuals between 18 and 30 years old are to a greater extent the ones considering higher perception of social ads being in accordance with their preferences. Their answers are highly collected in the top scores with 40,20% of the age group considering social ads are very customizable. The opposite is shown for participants between 51 and 60 years old, in which almost the same proportion (38,10%), consider they are not customizable at all. These differences reflect the different degree of utilization of social platforms by each age group.

Graph 20. Image of video ads (Customization) -- Proportions



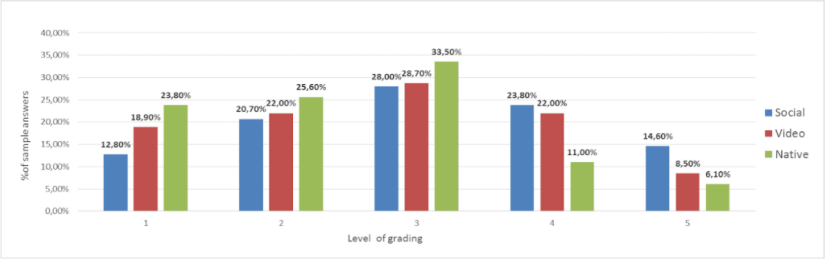
Then, on behalf of video ads, at a 5% level of significance, the Chi-Square coefficient is 0,012. So, we can confirm there are significant differences in the perception of video ads being customizable in respect to age. Looking at Graph 20, we can check that differences are not extremely accentuated except for a better perception of the younger strata on "*Customization*".

Graph 21. Image of native ads (Customization) -- Proportions



The "*Customization*" attribute reflects, for the first time, significant differences in all kinds of ads with respect to age, in these lines, at a 5% level of significance, the Chi-Square coefficient for native ads is 0,026. Then, we can reject H0 and accept H1, confirming there are significant differences in the perception of native ads being customizable in respect to age. Graph 21 reflects that age groups from 31 to 40 years old and from 18 to 30 years old show greater insights towards this characteristic of this type of advertisement, although the values are quite dispersed among the scale points.

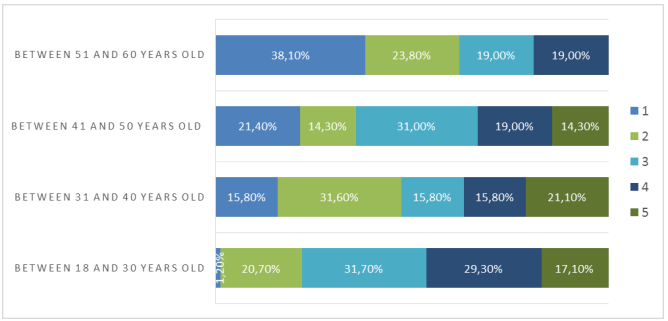
Graph 22. Image of online publicity (Attraction) – Proportions



Source: Own elaboration

With respect to the next factor, image of publicity regarding "*Attraction*", all kinds of ads are concentrated on low-middle values of the scale except for social ads where the values are slightly more distributed on a bell-shape (Graph 22). Social ads are ahead with an average mean of 3,07 points and can be considered the most attractive type of publicity according to the answers collected. They are followed by video ads with 2,70 average mean points and lastly native ads (2,50 average mean points).

Graph 23. Image of social ads (Attraction) -- Proportions

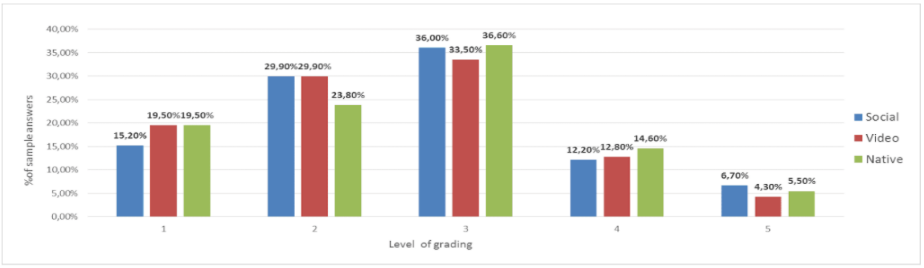


In the case of social ads, at a 5% level of significance, the Chi-Square coefficient is 0,001. Then, we can reject the null hypothesis and accept the

alternative hypothesis, confirming there are significant differences in the perception of social ads towards product attraction in respect to age. Looking at Graph 23, social ads enjoy a great attractiveness image on the younger groups of the sample, which is reduced proportionally the older is the sample strata.

Conversely, at a 5% level of significance, the Chi-Square coefficient for video and native ads is 0,312 and 0,206, respectively. So, we cannot reject H0, confirming there are no significant differences in the perception of both ads towards product attraction in respect to age.

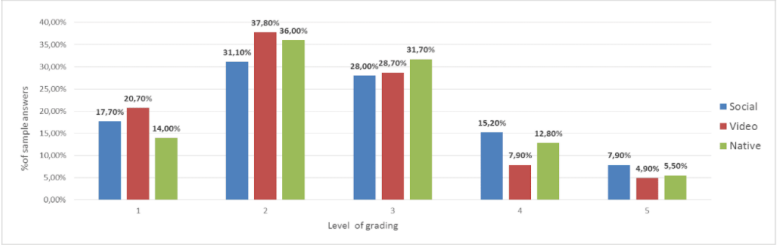
Graph 24. Image of online publicity (Use) – Proportions



Source: Own elaboration

The following factor analysis whereas the different types of ads allow a correct use of the platforms they appear to the internet user. As we can see in Graph 24, all the values are between low-middle scores, indicating a relatively negative perception toward advertisement in this aspect. On the other hand, we must emphasize that, in this case, native ads have an average score of 2,63 points, very close to the mean of social ads (2,65 points). This means that, according to respondents, native ads allow for a better use of internet platforms compared to video ads, which have an average mean of 2,52 points.

For this attribute, at a 5% level of significance, Chi-Square coefficients for every publicity contemplated are bigger than 0,05; social (0,233), video (0,833) and native ads (0,575). Subsequently, we cannot reject H0, confirming there are no significant differences in the perception of publicity permitting good use of the platform with respect to age.



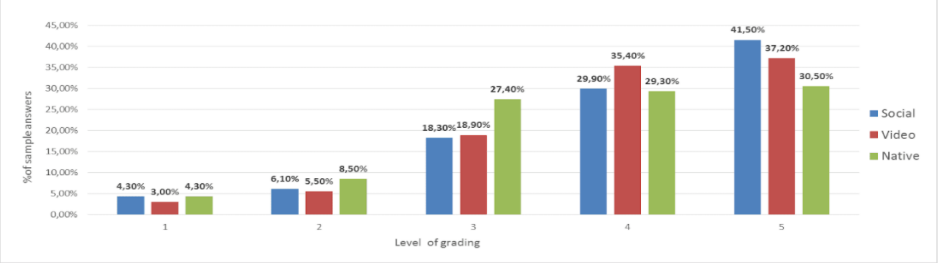
Graph 25. Image of online publicity (Trust) – Proportions

Source: Own elaboration

Next factor explores the image of publicity regarding how trustful participants consider different types of ads. In this case, video ads average mean score is 2,38 which is under 2,5 reflecting a general negative perception on how secure or accurate such advertisements are. Social ads lead the rank with an average mean of 2,65 points and can be considered the most reliable type of publicity according to the answers collected. Finally, native ads have an average mean of 2,60 points, both are over 2,5 but still reflect quite low ratings (Graph 25).

To check whether the perception of advertisement providing trust on the product is influenced or not by age, we must look at its significance through the Chi-Square coefficient. As in the previous case, at a 5% level of significance, coefficients for all three kinds of publicity are bigger than 0,05; Social (0,172), Video (0,132) and Native ads (0,513). Consequently, we cannot reject the null hypothesis, confirming there are not significant differences in the perception of publicity providing trust on the product in respect to age.

Graph 26. Image of online publicity (Excessivity) – Proportions

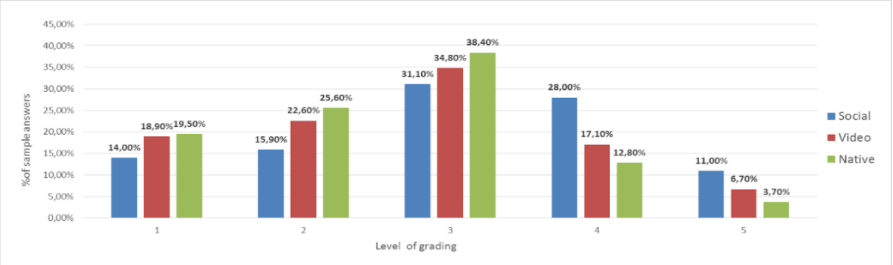


Source: Own elaboration

Finally, the last factor analyzed for this information need presents a common negative characteristic of publicity which is "*Excessivity*". In this graph (Graph 26), it can be checked that even if social and video ads possess the highest scores regarding the positive factor previously analyzed, they are also considered the ones more immoderate among internet platforms. Both have an average mean of 3,98 points, whereas native ads have a mean of 3,73 which is smaller but also reflects a strong opinion on "*Excessivity*".

Once again, for this attribute, differences by age in all three categories of ads results being non-significative as their Chi-Square coefficients are higher than 0,05; being 0,119 for Social, 0,360 for Video and 0,162 for Native ads. This makes us not be able to reject H0, confirming there are no significant differences in the perception of advertisement being excessive in respect to age.

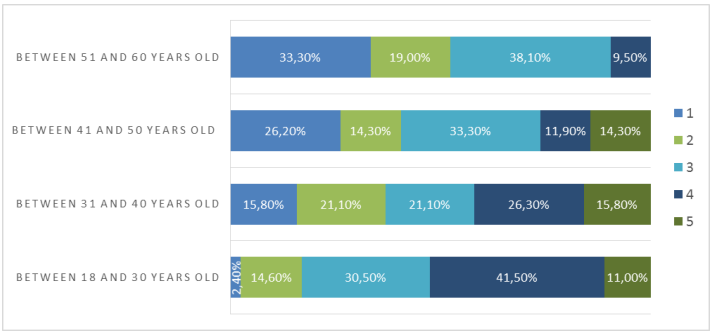
Graph 27. Image of online publicity (Utility) – Proportions



Source: Own elaboration

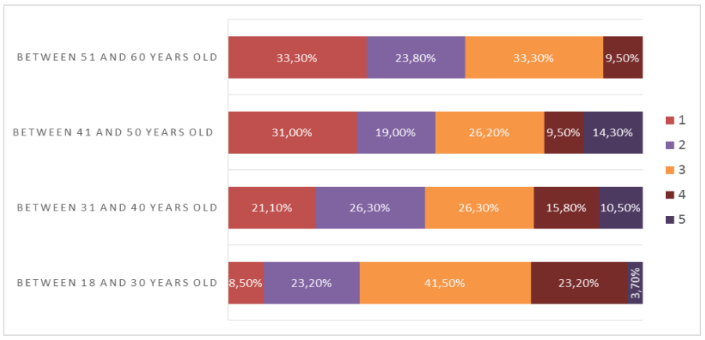
The last information needed regarding the first sub objective "*Consumers' perception of online publicity*" is "*e) Utility of ads by platform"*. This factor comprises the overall opinion about how useful different categories of ads are for survey participants. Graph 27 shows different proportions of participants' answers, their average mean scores being 3.06 for social ads, 2,70 for video ads and 2,55 native ads. Each one of them is above 2,5 reflecting positive opinions towards the utility of these advertisements, being social adds the most effectiveness.

Graph 28. Image of social ads (Utility) -- Proportions



Regarding utility perceived by respondents, at a 5% level of significance, the Chi-Square coefficient for social ads (< 0,001) and Video ads (0,024) are less than 0,05. Then, we can reject the null hypothesis and accept the alternative, confirming that there are significant differences in the perception of Social and Video ads being useful in respect to age.

Graph 29. Image of video ads (Utility) – Proportions



Source: Own elaboration

In the case of video ads (Graph 29), it can be distinguished a clear pattern where the perception of utility is greater the younger the participant, subsequently, the older groups of the sample declare having a bigger proportion of lower values of the scale (33,3% of participants from 51 to 60

years old perceive them as non-useful at all). Conversely, it can be emphasized that a great proportion of the age group from 41 to 50 (14,30%) consider them extremely useful, but the majority of responses still lie on lower values. In the case of social ads (Graph 28), we can find the same structure but with proportionate higher positive values, especially in the juvenile group.

On the other hand, for Native ads, at a 5% level of significance, the Chi-Square coefficient is 0,445. Then, we cannot reject H0, confirming there are no significant differences in the perception of native ads being useful in respect to age.

5.2.3 Summary of results

Throughout this section, subjects have been designed in order to gather information about the first sub objective "*Consumers perception of online publicity*". The first two questions contextualize **participants' frequency and purpose of internet use**. We have found several differences among age groups, which can justify upcoming contrasting opinions about online advertisement. Then, it has been also revealed the heavy use of social platforms by the age group between 18 to 30 years old (51,20%), compared to a more heterogeneous use of audiovisual or online commerce platforms where the use is more evenly distributed. This will also have implications for the image participants have on the different kinds of ads displayed on each online website. Likewise, many of them perceive social platforms are the ones with more publicity displayed, 68,90% of respondents.

Next, before introducing the main debate of this sub objective, participants were asked to grade several **advertisement characteristics by importance**, being "*Content of the product*" and "*Price*" the most significant ones with 7,16 and 7,05 means scores, whereas other attributes are left in a second place.

The last part of this section comprises several questions regarding **different features or aspects of social, video and native ads**, in order to search for participants' positive or negative image towards different kinds of publicity. The most revealing result is that, even if participants perceive social ads as being widely displayed in internet platforms, they are widely perceived as the ones complying greatly with all the positive features asked. Social ads are perceived as the most "*Informative*", "*Interactive*", "*Entertaining*" "*Customizable*", "*Providing product attraction*", "*Permitting correct use of the platform*", "*Trustful*" and "*Useful*", with mean values above 2,5 for all of the

characteristics. Also, in most of these aspects, participants between 18 to 30 years old have ranked social ads with more positive significance, this is related to the massive use of social media platforms by this age group. Whereas on video and native ads, the perception of the different clusters was more spread, being commonly higher for participants between 41 to 50 years old.

In addition, some features were considered more certain, for example all kinds of advertisements were considered with more positive mean values on being "*Informative"*, "*Customizable*" or "*Providing product attraction*" rather than "*Interactive*" or "*Entertaining*". Moreover, its peculiarities can be emphasized, like a very general negative perception towards video ads on "*Permitting correct use of the platform*" or "*Trustful*", in all age groups. Finally, all the three varieties of ads are above the mean in how "*Useful*" they are to participants, which is an important feature on their image on online publicity.

5.3. Sub Objective 2: Consumers' behavior after receiving online publicity

5.3.1. Sub Objective and information needs

Sub Objective: Analysis consumers' behavior after receiving online publicity, according to age, with respect to effects on purchasing and platform usage habits, also differentiating by category of advertisement (social, video and native ads).

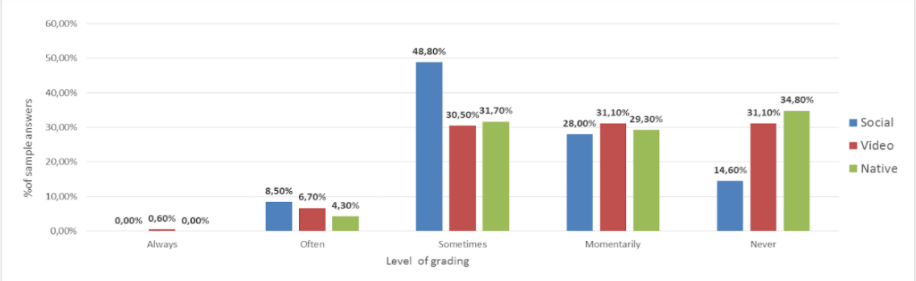
The former information needs are included in Table 2 and correspond to the questions 12 / 13 / 14 / 15 / 16 & 17 of the questionnaire (*Appendix II)*.

5.3.2. Results from the analysis

The first information need of sub objective two is "*a) Whether users purchase/think about purchasing the product after seeing such ads by platform"*. On Graph 30, we can confirm that social ads are in the best position regarding **participants intention about purchasing the product** they advertise, being "*Sometimes*" the reply for almost half of survey respondents (48,80%) but considering relative very low answers to recurring purchase ("*Always*" - 0,0% & "*Often*" - 8,50%) and comparable high rates for not repeat purchase ("*Momentarily*" - 28,0% & "*Never*" - 14,60%). On the other hand, both video and native ads perform very similarly, with parallel rates for medium product request ("*Sometimes*" 30,50% for video and 31,70% for native ads) and for low purchasing

intentions. Moreover, similarly to social ads, both have significantly low rates for recurrent or usual product purchase.

Graph 30. Purchase/think about purchasing the product after seeing ads – Proportions



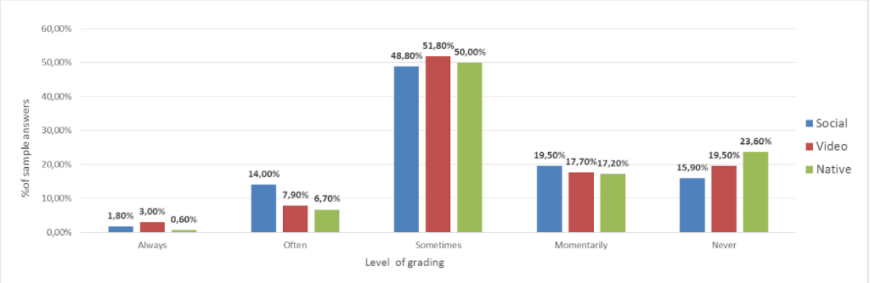
Source: Own elaboration

Furthermore, we can look for similarities or differences between age groups for each advertisement category. Firstly, for the analysis, the answers have been considered the following way: (Never = 0; Often = 1; Sometimes = 2; Momentarily = 3 and Always = 4). In order to check whether participants purchase or think about purchasing a product after having watched publicity is influenced or not by age, we must look at its significance through the Chi-Square coefficients. Our null hypothesis (H0) is that there are no significant differences in behavior regarding age; conversely our alternative hypothesis (H1) is that there are significant differences in behavior regarding age.

In this case, at a 5% level of significance, the Chi-Square coefficient is 0,795 for social ads and 0,227 for video ads and 0,293 for native ads, all are bigger than 0,05. So, we can confirm there are no significant differences in the participants' purchasing intentions in respect to age.

Next, the following information needs to be considered in this sub objective is "*b) Whether the advert changes users' perception of the product or the perception of the online platform"*. In reference to Graph 31, we can examine the different answers for each kind of social publicity. The first overview shows us quite similar perceptions for each of the three advertisements considered. There is a generalized neutral change of viewpoint, considering half of the participants answering "*Sometimes*" as their frequency of **alteration of the product or the online platform after having received publicity**. There are also comparable higher rates for indifferent change in attitude ("*Momentarily*" or "*Never*") compared to significant view alteration. In addition, although there are not great differences, social ads have a higher impact on participants and native advertising is the least remarkable one.

Graph 31. Change in the perception of the product or the online platform – Proportions



Source: Own elaboration

Moreover, for each of the three different types of publicity (Social, video and native ads), we are going to check whether change in perception triggers negative, positive or no change in feelings or opinions. "*No change*" responses are considered to not affect participants' perception at all if they answered "*Never*" or, on the other hand, if they answered any other response confirming a variation in their perception, "*No change*" answers are considered that publicity provides both positive and negative stimuli in different situations.

Table 6. Change perception through social ads – Sampling units

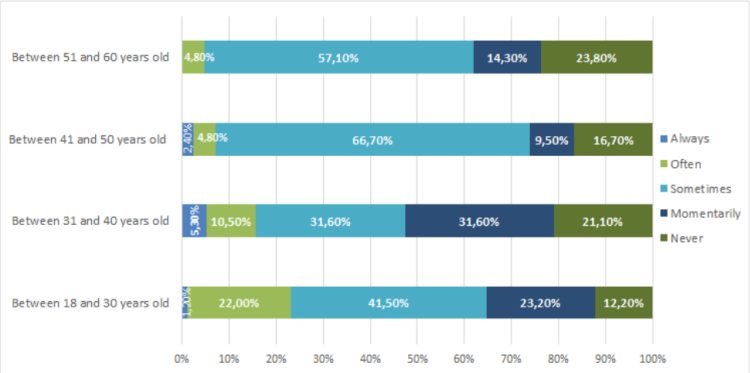
Social	Negative	No change	Positive	TOTAL
Always	2 (5,71%)	1 (1,54%)	0 (0%)	3 (1,83%)
Often	4 (11,43%)	1 (1,54%)	18 (28,13%)	23 (14,02%)
Sometimes	22 (62,86%)	24 (36,92%)	34 (53,13%)	80 (48,78%)
Momentarily	7 (20%)	13 (20%)	12 (18,75%)	32 (19,51%)
Never	0 (0%)	26 (40%)	0 (0%)	26 (15,85%)
TOTAL	35	65	64	164

Source: Own elaboration

Table 6 shows participants changes in perception towards social ads, by sampling units. The chart combines **different levels in perception variation with the stimuli they provide**. We can check that from the minimal number of participants answering "*Always*", two of them provide negative inducement, meaning a very unfavorable judgment towards social ads, but this represents a quite insignificant number of sampling units. On the other hand, participants considering publicity change their perception "*Often*", have a favorable positive judgment (almost 80% of them). The broadest category are respondents having a moderate perception feeling they "*Sometimes*" change their behavior. From this group answers are more heterogeneous, having participants with negative perspective or neutral attitude depending on the displayed advert, but being the positive attitude the most highlighted of them all. Lastly,

26 out of the complete sample composed by 164 individuals have declared they are never influenced by social ads in their perception towards the product or platform.

Graph 32. Change perception through social ads by age – Proportions



Source: Own elaboration

In addition, on Graph 32, we can compare individuals' behavior towards social ads according to age groups. In this case, at a 5% level of significance, the Chi-Square coefficient is 0,051, which is slightly bigger than 0,05. So, we cannot reject H0, confirming there are no significant differences in the participants' advertisement perception in respect to age. Nonetheless, participants between 31 to 40 years old have very heterogeneous responses, having both the greatest amount in the lower and highest perception of any age cluster. At the same time, users in the youngest group also provide higher rates in a significant change of behavior.

The following table, (Table 7), shows participants changes in perception towards video ads, by sampling units. In this case, answers in one of the extremes, "*Always*", provide almost equally negative, neutral or positive perception of change, but as in the case of social ads, the proportion of individuals is not really significant. Participants providing "*Often*" variation in viewpoint, have a remarkably negative image of this shift caused by video ads, although they are not the most representative group. On the other hand, the "*Sometimes*" and "*Momentarily*" levels do provide a higher number of responses, being the first one the most representative. In both, participants show relatively positive attitudes towards the image of video ads. Finally, 32 out of 164 participants state that this kind of advertisement has never changed their perception towards the product or platform.

Table 7. Change perception through video ads – Sampling units

Video	Negative	No change	Positive	TOTAL
Always	1 (2,86%)	2 (3,08%)	2 (3,13%)	5 (3,05%)
Often	8 (22,86%)	1 (1,54%)	4 (6,25%)	13 (7,93%)
Sometimes	21 (60%)	19 (29,23%)	45 (70,31%)	85 (51,83%)
Momentarily	4 (11,43%)	12 (18,46%)	13 (20,31%)	29 (17,68%)
Never	0 (0%)	32 (49,23%)	0 (0%)	32 (19,51%)
TOTAL	34	66	64	164

Source: Own elaboration

Furthermore, for Video ads, at a 5% level of significance, the Chi-Square coefficient is 0,235, Consequently, we cannot reject H0, confirming there are no significant differences in the participants advertisement perception in respect to age.

Lastly, Table 8 shows changes in perception of participants towards native ads, disaggregated by sampling units. In this case, just one individual stated the level of "*Always*" change in perception with negative connotation, which is an insignificant portion of the sample. In the case of "*Often*", as it happens with the other categories of ads, there is not a relatively relevant number of answers and the attitude is split slightly to a negative one. "*Sometimes*" is reiteratively the most common answer, but although the responses are inclined towards positive perception, the answers are more spread compared to social or video ads. Considering answers on "*Momentarily*", in this case are mostly neutral, having positive or negative perception depending on the situation. Here, we can emphasize a greater number of respondents stating that native ads do not change their perception, (42 out of 164 responses).

Table 8. Change perception through native ads – Sampling units

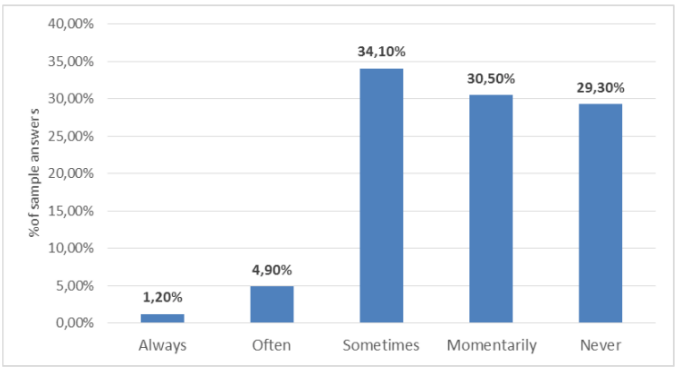
Native	Negative	No change	Positive	TOTAL
Always	1 (2,94%)	0 (0%)	0 (0%)	1 (0,61%)
Often	6 (17,65%)	1 (1,16%)	4 (9,09%)	11 (6,71%)
Sometimes	22 (64,71%)	27 (31,40%)	33 (75%)	82 (50%)
Momentarily	5 (14,71%)	16 (18,60%)	7 (15,91%)	28 (17,07%)
Never	0 (0%)	42 (48,84%)	0 (0%)	42 (25,61%)
TOTAL	34	86	44	164

Source: Own elaboration

Finally, regarding Native ads, at a 5% level of significance, the Chi-Square coefficient is 0,070. Then, we cannot reject H0, confirming there are no significant differences in the participants' advertisement perception in respect to age.

Next information need, "*c) Whether users stopped using an online platform due to advertisements*", relates to the **possible negative impact advertisement can have not only to the advertised product or company but to the web or platform** where it is displayed.

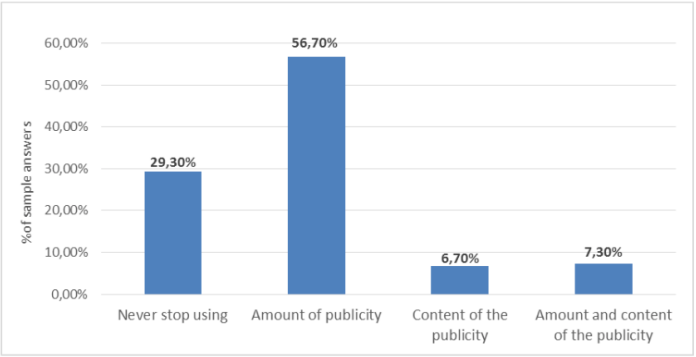
Graph 33. Stop using an online platform due to advertisement



Source: Own elaboration

Graph 33 reveals that the outcomes are not that unfavorable or pessimistic, instead, just eight participants declare quitting from a website in a regular or "*Often*" way and in an exceptional but not significant feature due to the sample size, two of them declare doing it "*Always*". On the other hand, the greatest number of answers (34,10%) lies inside the parameter "*Sometimes"*, which reveals that an excess of publicity can have rebound effects and make internet users abandon such platform and replace it with another similar one. Also, we can check that another great number of participants express doing it in sporadic moments ("*Momentarily*" - 30,50%) or even not doing it "*Never*" (29,30%).

Graph 34. Motives to stop using a platform due to advertisement

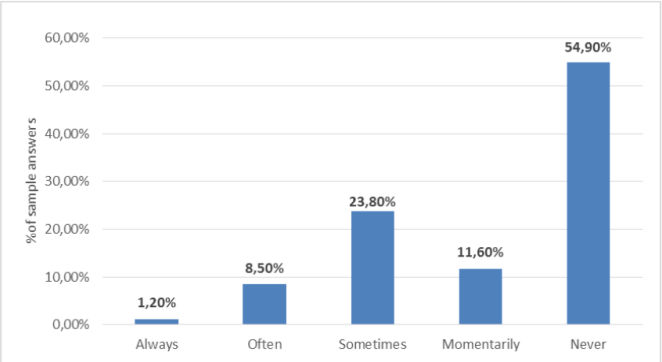


Source: Own elaboration

Consequently, it must be recorded the participants' triggers or motives for stopping using such platforms, whether it was provoked by the number or quantity of publicity or, on the other hand, it was caused by the content of such publicity. Graph 34 contains the set of survey answers. First, participants declaring in the previous question that they "*Never*" stop using an online platform, are contained again in the first column of the graph. Then, the rest of the columns reflect the two proposed motives and the answers considering both triggers were important at the time of considering exit a platform. This

verifies that a sizeable majority of participants (56,70%) considers the "*Amount of publicity*" as the principal negative reason, followed by the combination of both and lastly, a reduced number of answers (6,70%) reasoning the "*Content of publicity*" is the main cause.

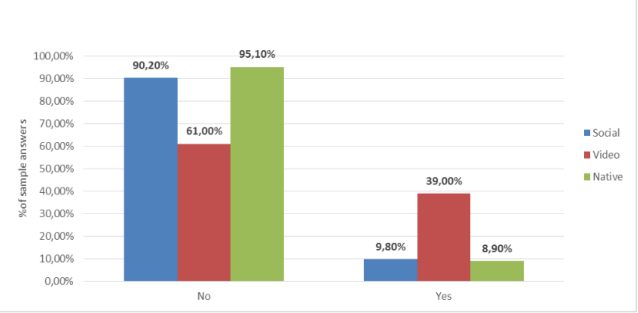
Graph 35. Pay for not having publicity in online platforms



Source: Own elaboration

Nowadays, plenty of social media, audiovisual platforms or generally, any kind of webpage, offers users the opportunity to **avoid all the publicity they display by paying a premium price** in order to have a more exclusive experience. For this reason, the following information need, "*d) Know if users had paid for not having publicity in online platforms*", explores the propensity of participants to decide to pay extra money to skip any advertisement. Graph 35 reflects that almost half of respondents (54,90%) do not consider paying, the reasons behind can be various (not considering advertisements disturb the experience, cost-benefit analysis between paying an extra premium…). On the contrary, the rest of the sample has performed payments for this end goal, most of them in an occasional way - "*Momentarily*" (11,60%) or "*Sometimes*" (23,80%) - which is commonly determined on the value users put to the corresponding platform and whether the benefit from not having publicity overcomes the cost of the additional price. Lastly, 8,50% of participants state they perform this practice "*Often*" and just 1,20% in an incessantly way, people contained in these categories provide great significance to an experience without publicity stimuli.

Graph 36. Pay for not having publicity by platform



Source: Own elaboration

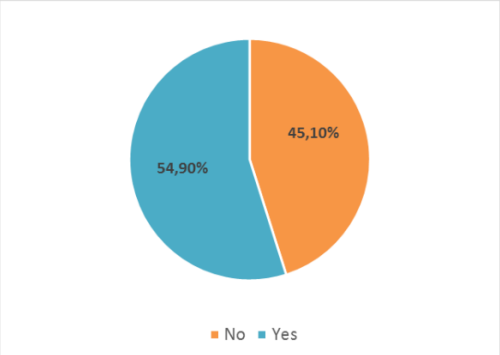
Following, we must get insights on which kind of platforms users consider worthier of paying for in order to avoid publicity. Graph 36 shows the answers participants declare for each kind of platform

and its corresponding publicity (social media platforms - social ads / audiovisual platforms - video ads / online commerce platforms - native ads). An average of almost 10% of participants reflect doing it to avoid both social and native ads, which does not resemble a relatively significant number of the sample. Whereas video ads expose an average of virtually 40% of the answers, which represents a profound interest of users in paying for avoiding this kind of publicity on audiovisual platforms.

Again, as in previous subjects, we can compare the different answers by age groups in order to find divergences between them. For that we must look at its significance through the Chi-Square coefficient. Our null hypothesis (H0) is that there are no significant differences in behavior regarding age; conversely our alternative hypothesis (H1) is that there are significant differences in behavior regarding age. At a 5% level of significance, the Chi-Square coefficient is 0,117. So, we cannot reject H0, confirming there are no significant differences in the participants' advertising avoidance intentions in respect to age.

Finally, the last information needs for this sub objective: "*e) Perception of general influence of advertising on users purchasing decisions*", relates to a personal reflection on how much individuals consider their **purchasing behavior is related by their visualization or image towards publicity**. First, participants were asked whether the inclusion of a link to the purchasing platform in the advertisement helps or incentivizes in performing such acquisition (Graph 37). Remarkably, more than half of the sample (54,90%) answered positively to this assumption, confirming that this is a generally positive feature to stimulate shopping.

Graph 37. The purchase is more feasible if there is a link to the product

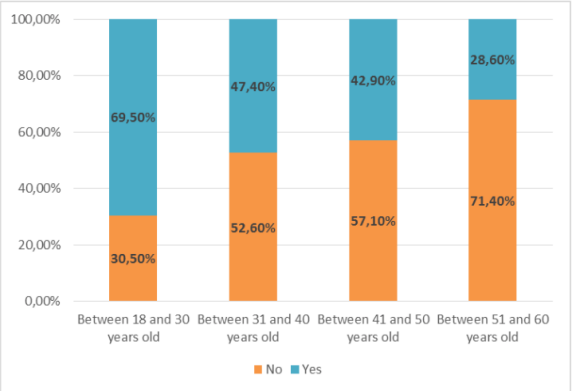


Source: Own elaboration

Comparing by age, at a 5% level of significance, the Chi-Square coefficient is 0,001. Subsequently, we can reject H0 and confirm that there are significant differences in the participants' link utility perception in respect to age. It can be distinguished that this trend is more common between the younger group of the population with almost 70% of them positively, whereas just 28,60% of

participants between 51 to 60 confirm this premise. Graph 38 shows a precise curve where the proportion of "*Yes*" answers declines incrementally with age. Subsequently, in middle clusters the proportion of answers is more diversified, but participants on the top and down age extremes do have more homogeneous responses towards a determined answer.

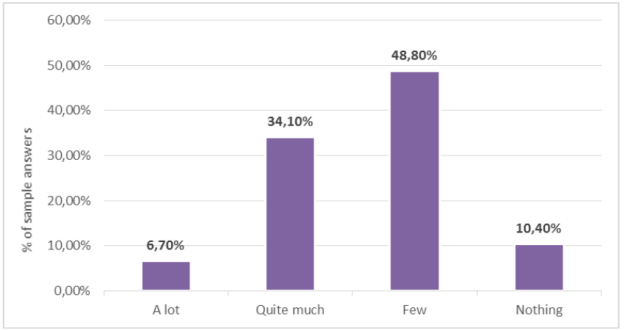
Graph 38. Purchase is more feasible if there is a Link to the product (by age) – Proportions



Source: Own elaboration

Finally, a conclusion question was posed in the survey regarding **users' general influence on advertisement or purchasing decisions**. Graph 39 collects every answer ranging from no impact at all to a large and significant influence. Almost half of the survey participants assert being affected by advertisement just in a slight manner (48,80%), although they approach being conditioned by publicity, it does not do it in an incremental way. On the opposite point, a significant 34,10% express being considerably conditioned by online ads, which reflects that they are consciously persuaded and affected by this publicity communication. Lastly, on the extremes, 10,40% of respondents state they are not affected by publicity at all and 6,70% confirm online advertisement controls hugely their purchasing behavior.

Graph 39. Perception of general influence of advertising on purchasing decisions

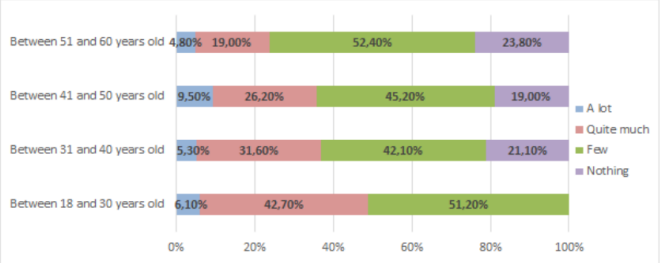


Source: Own elaboration

Ultimately, this publicity influence can be compared by different age groups and gender. In the case of age, at a 5% level of significance, the Chi-Square coefficient is 0,008. Then, we can confirm that there are significant differences in the participants' influence perception in

respect to age. The most highlighted deviation is that the younger group is the only one without any participant declaring it is not influenced at all by publicity, whereas in the rest of age groups there is more or less a 20% proportion of participants considering advertisements affects them "*Nothing*" (Graph 40).

Graph 40. Perception of general influence of advertising on purchasing decisions by age



Source: Own elaboration

5.3.3. Summary of results

By means of the questions posed in this sub objective, we have gathered information relative to **consumers behavior after receiving online publicity**. First of all, results on whether users purchase or think about purchasing the product after seeing publicity have been again beneficial in favor of social ads, where 48,80% of the sample participants consider doing it "*Sometimes"*. On the other hand, answers for video or native ads have been more dispersed with almost one third of the answers distributed between "*Sometimes*", "*Momentarily*" and "*Never*". On this point there has not been significant differences by age.

Then, regarding whether the advert changes participants' perception of the product or the perception of the online platform, around 50% of participants state all three kinds of ads (Social, video and native), do modify their viewpoint "*Sometimes*", with a slightly higher impact of social ads. In addition, for social and video ads, this change in perception is commonly "*Neutral*" or "*Positive*", whereas for native ads the variation is usually "*Neutral*", depending on the platform or advertisement. In all of them, participants between 18 to 30 years old show more pronounced influence.

Next issue relates to whether users **stopped using an online platform due to advertisements**, in which data outcomes have provided surprising positive results. Proportions of 30% to 35% of participants stated doing it just "*Sometimes*", "*Momentarily*" or even "*Never*" for all types of the proposed advertisements. Moreover,

the main reason for 56,7% of respondents stopping using or quitting a platform is the amount of publicity.

The following question gathers information on knowing if participants had **paid for not having publicity** in online platforms. Results show that half of them have not considered paying for these arguments and 23,80% have stated doing it "*Sometimes*". Regarding the different kinds of ads, there is a great conviction of respondents paying on audiovisual platforms in order to avoid video ads (40% of them). Moreover, the younger the participant, the more they decide to pay to avoid publicity.

Finally, regarding their perception of the general influence of advertising on their purchasing decisions, 54,90% of participants consider a **link to the product will help them actively in making a purchase**, this effect is more common in young people. Also, the majority of sample units affirms being affected "*Few*" by publicity (48,80%) followed by being affected "*Quite much*" (34,10% of respondents).

5.4. Sub Objective 3: Differences on consumers' perception and behavior towards online publicity according to demographic profile - Regression analysis

In order to comply with the third and final sub objective of study "*Differences on consumers' perception and behavior towards online publicity according to demographic profile*", it has been performed a regression model with the following characteristics.

Dependent variable

- General utility of Social/Video/Native ads (*Final question from the questionnaire*) The dependent variable has been treated as an average between the three scores (general utility perceived for social ads, general utility perceived for video ads and general utility perceived for native ads), giving an overall perception of utility toward online advertising.

Independent variables (Variables taken initially into account)

- Age / Gender / Job Occupation / Education level
- Frequency of internet use / Reasons for use (Entertainment / Work / Educative / Social / Informative / Buy and Sell goods)
- Frequency use in each platform (Social, Audiovisual & Online commerce)

Table 9. Treatment of variables for regression analysis

Age	0 if participants from 18 to 30 years old 1 if participants from 31 to 40 years old 2 if participants from 41 to 50 years old 3 if participants from 51 to 60 years old
Gender	0 if Male 1 if Female
Job	0 if Working (Private / Public / Self) 1 if Not working (Student / Retired / Unemployed)
Study Levels	0 if University degree/ Superior degree in professional training 1 if Not university degree or lower levels
Frequency use of platforms	0 if Less than 1 hour 1 if Between 1 and 2 hours 2 if Between 3 and 4 hours 3 if Between 5 and 6 hours 4 if More than 6 hours
Reasons (for each of the six possible reasons)	0 if no 1 if yes

FINAL MODEL SELECTED

Having performed several regressions with the combination of above variables, finally this is the model selected to be most appropriate for the analysis, including five different independent variables to explain the general utility of ads.

$$Yi = \beta 0 + \beta 1 Agei + \beta 2 Internet\_Use\_Worki + \beta 3 Internet\_Use\_Goodsi + \beta 4 Freq\_SocialPlatformsi + \beta 5 Freq\_OnComPlatformsi + ui$$

CORRELATIONS							
		Total Utility	Age	Internet use for work	Internet use for buy or sell goods	Frequency use of social platforms	Frequency use of online commerce platforms
Total Utility	Pear. Correl.	1	-0.266	0.068	-0.03	0.376	0.176
	P-value		< 0.001	0.385	0.707	< 0.001	0.024
Age	Pear. Correl.	-0.266	1	0.207	-0.119	-0.369	0.066
	P-value	< 0.001		0.008	0.130	< 0.001	0.404
Internet use for work	Pear. Correl.	0.068	0.207	1	0.144	-0.107	0.036
	P-value	0.385	0.008		0.066	0.171	0.644
Use for buy or sell goods	Pear. Correl.	-0.030	-0.119	0.144	1	0.084	0.332
	P-value	0.707	0.130	0.066		0.287	< 0.001
Use of social platforms	Pear. Correl.	0.376	-0.369	-0.107	0.084	1	0.267
	P-value	< 0.001	< 0.001	0.171	0.287		< 0.001
Use of online commerce platforms	Pear. Correl.	0.176	0.066	0.036	0.332	0.267	1
	P-value	0.024	0.404	0.644	< 0.001	< 0.001	

1- First, check the correlation between all variables

Table 10. Correlation between variables (*Source: Own elaboration*)

We can check that the perceived utility of advertisements with respect to all the selected explanatory variables is correlated with all of them. In the case of "*Age*" and "*Use of the internet for buying and selling goods purposes*" both variables are negatively correlated

with the utility perceived (-0,266 and -0,030 respectively), which means that the higher the age or use for selling purposes, the lower is the utility perceived in social ads.

On the other hand, "*Use of the internet for working purposes*", "*Frequency use of social platforms*" and "*Frequency use of online commerce platforms*" are positively correlated with utility of publicity perceived, which means that the higher the values for these variables, the lower is the utility perceived in ads.

We must also highlight that the independent variables might also have some level of correlation, which is something that can cause us problems of multicollinearity. For example "*Age*" and "*Use of Social platforms*" have 0.376 correlation value, although we keep them in the model because it is expected to have some degree of interdependence. Those independent variables which presented a high degree of correlation between them, have been excluded from the model.

2- Perform the regression and check

In our model it must be checked the following hypothesis:

H0 = No evidence that there is relation between variables (not appropriate model)

H1 = There can be linear relation between variables (Appropriate model)

If P-value for the estimated coefficients is lower than 0,05, we can reject H0 and accept H1.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.457	0.209	0.184	0.878

Table 11. Results from regression model (*Source: Own elaboration*)

The R Square coefficient is 0,209, which means that 20,9% of the variation in the utility perceived in advertisement can be explained by the five explanatory variables selected.

Coefficients				
	Coefficients	Std. Error	T-value	P-value
Constant	1.952	0.332	5.878	< 0.001
Age	-0.193	0.069	-2.805	0.006
Internet use for work	0.315	0.143	2.199	0.029
Use for buy or sell goods	-0.304	0.150	-2.028	0.044
Use of social platforms	0.230	0.066	3.489	< 0.001
Use of online commerce platforms	0.150	0.074	2.029	0.044

Table 12. Coefficients from regression model (*Source: Own elaboration*)

Results show that estimations for the constant coefficient (*β0*), independent variable coefficient for "*Age*" (*β1*), independent variable coefficient for "*Use of the internet for working purpose*" (*β2*), independent variable coefficient for "*Use of the internet for buying & selling goods purpose"* (*β3*), independent variable coefficient for "*Frequency use of social platforms"* (*β4*) and independent variable coefficient for "*Frequency use of online commerce platforms*" (*β5*) are statistically significant in the regression model (p-values < 0,05).

The value for *β0* is 1,952, for *β1* is -0,193, for *β2* is 0,315, for *β3* is - 0,304, for *β4* is 0,230 and for *β5* is 0,150.

The interpretation of these values is that, for example taking the first explanatory variable, a one-point increase in "*Age*" (in this case from one participant age group to another), decreases the utility perceived in ads for 0,193 points. On the other hand, a one-point increase in "*Frequency use of online commerce platforms*", increases utility perceived in 0,150 points.

$$Yi = 1{,}952 - 0{,}193X1i + 0{,}315X2i - 0{,}304X3i + 0{,}230X4i + 0{,}150X5i + ui$$

Following these lines, the interpretation in the managerial context implies that the greater the age of the participant, the less utility is perceived towards online publicity. Then, focusing on younger age groups would usually have better responses regarding this kind of advertisement.

In addition, results for internet use purposes state two opposite directions. Users employing the web for working reasons see positively the utility of ads, whereas people looking for buying and selling goods perceive negatively the usefulness of online advertisement. This can have important implications at the time of choosing the kind of platforms to display the ads, depending on the platform's main objectives.

Finally, results for the frequency use of users of both, social and online commerce platforms, are correlated in a positive way to the utility perceived. Then, it would be optimal to select this subdivision of webs in order to have better feedback to publicity.

6. CONCLUSIONS AND IMPLICATIONS

6.1 Conclusions

This study presents an exploratory investigation regarding the impact of online publicity on users, together with the stimulated perceptions and the final results on their behavior. In order to carry out the research, three objectives have been established: 1) Consumers' use and perception of online publicity, 2) Consumers' behavior after receiving online publicity and 3) Differences in consumers' perception and behavior towards online publicity according to demographic profile (gender, age, occupation…).

The primary information source of the investigation has been an online survey, which has permitted to easily analyze data according to every information need. After the correct dissection of results, some conclusions can be formulated.

Regarding the first objective "*Consumers perception of online publicity*", several differences have been found among age groups, in respect to their **frequency and purpose of internet use,** which will justify upcoming contrasting opinions about online advertisement. In these lines, the age group between 18 to 30 years old revealed to perform a broad use of social platforms (51,20%), compared to a more heterogeneous use of audiovisual or online commerce platforms where the utilization is more evenly distributed. Next, participants were asked to grade several **advertisement characteristics by importance**, being "*Content of the product*" and "*Price*" the most significant ones with 7,16 and 7,05 means scores.

Closing the first objective, several questions regarding **different features or aspects of social, video and native ads** were displayed, in order to search for participants' positive or negative image towards different kinds of publicity. Participants perceive social ads as being widely presented in internet platforms, but on the other hand, they are recognized as the ones complying greatly with all the positive features asked. Social ads are perceived as the most "*Informative*", "*Interactive*", "*Entertaining*" "*Customizable*", "*Providing product attraction*", "*Permitting correct use of the platform*", "*Trustful*" and "*Useful*", with mean values above 2,5 for all of the characteristics.

In addition, all kinds of advertisements were considered with more positive mean values on being "*Informative"*, "*Customizable*" or "*Providing product attraction*" rather than "*Interactive*" or "*Entertaining*". Other peculiarities can be emphasized, like a very general negative perception towards video ads on "*Permitting correct use of the*

platform" or "*Trustful*", in all age groups. Finally, all varieties of ads are above the mean in how "*Useful*" they are to participants, which is an important feature on their image on online publicity.

Following, by means of the questions posed in the second objective, information has been gathered relative to "*Consumers behavior after receiving online publicity".* Results on whether **users purchase or think about purchasing the product after seeing publicity** have been again beneficial in favor of social ads, where 48,80% of the sample participants consider doing it "*Sometimes".* Whereas answers for video or native ads have been more dispersed with almost one third of the answers distributed between "*Sometimes*", "*Momentarily*" and "*Never*". No significant differences by age have been detected.

Then, around 50% of participants state all three kinds of ads (Social, video and native), do modify their viewpoint "*Sometimes*", in respect to whether the **advert changes their perception of the product or the perception of the online platform**, having social ads a slightly higher impact. In addition, for social and video ads, this change in participants' perception is commonly "*Neutral*" or "*Positive*", whereas for native ads the variation is usually "*Neutral*", depending on the platform or advertisement. In all of them, there is a more pronounced influence on participants between 18 to 30 years old.

A highlighted issue in the study is to know whether users **stopped using an online platform due to advertisements**, in which data outcomes have provided surprising positive results. Approximately 30% to 35% of participants stated doing it just "*Sometimes*", "*Momentarily*" or even "*Never*" for the three types of advertisements. Moreover, the main reason for 56,7% of respondents stopping using or quitting a platform is the amount of publicity.

Another question gathers information on whether participants had **paid for not having publicity** in online platforms. Results show that half of them have not considered paying for this reason and 23,80% have stated doing it "*Sometimes*". Regarding the different kinds of ads, 40% of participants have a broad opinion in paying on audiovisual platforms in order to avoid video ads. In this case, it has been found that the younger the participant, the more easily they decide to pay to avoid publicity.

The second objective is concluded obtaining data regarding participants' perception of the **general influence of advertising on their purchasing decisions**, where 54,90% of

participants consider a **link to the product will help them actively in making a purchase**, this effect is more common in young people. Also, the majority of sample units (48,80%) confirms being affected "*Few*" by publicity, followed by being affected "*Quite much*" (34,10% of respondents).

Finally, in order to comply with the last objective "*Differences in consumers' perception and behavior towards online publicity according to demographic profile*", a **regression model** has being validated. The dependent variable selected for the model has been the "G*eneral utility of Social, Video and Native ads*". Results show that the estimation for the independent variables coefficients for "*Age*", "*Use of the internet for working purpose*", "*Use of the internet for buying and selling goods purpose", "Frequency use of social platforms"* and for "*Frequency use of online commerce platforms*" are statistically significant in the regression model. This implies that all these variables meaningfully affect the perception of participants' general utility of advertisements.

6.2 Implications

After having drawn all the conclusions obtained from data results, some implications can be made. These will provide insights on which factors can be changed in order to improve the performance of ads, which kind of advertisement influences or is more approved by each age group or know who users behaviors can be used in benefit of enhancing publicity.

First of all, participants in the age group between 18 to 30 years old are the ones performing a bigger use of social platforms (51,20%). This has implications for the image they have on the different kinds of ads displayed on each online website, as many of them perceive social platforms as the ones with more publicity. This would be a key signal to use this means in order to target such part of the population, whose utilization rate is highlighted compared to a more heterogeneous use of audiovisual or online commerce platforms where the use is more evenly distributed.

Then, regarding the classification of advertisement characteristics, results have not been surprising but still it is important to highlight that both, the "*Content of the product*" and "*Price*" are the two factors participants considered more important to get information from publicity. Then, it is key to focus and pay attention to these characteristics in the creation process of advertisements.

Regarding the perception of the three kinds of ads, social ads have succeeded in all the positive features, being significantly higher compared to video and native ads. This provides that **social ads are currently being the most accurate to perform a great image among users**, specially among participants between 18 to 30 years old, which have ranked them with more positive significance, which is also related to the massive use of social media platforms by this age group. Concerning the other two types of ads, the perception of the different clusters was more spread, being commonly higher for participants between 41 to 50 years old. It must be taken also into consideration the relative negative perception towards video ads, which can indirectly cause a negative image.

Regarding participants' behavior, results have again been beneficial for **social ads**, being the ones with **higher rates on contributing to the purchase of the product after their visualization**, together with a general positive change on product perception. On the other hand, no category of publicity is highlighted on making participants stop using an online platform. Then, all of them seem to have the same effect on this unfavorable behavior.

Although an important discovery must be emphasized, almost 40% of participants have a broad opinion in paying on audiovisual platforms in order to avoid video ads. This is clearly in line with the relative negative image of them not permitting correct use of the platform or being perceived as untrustful. **Improving video ads reputation of these factors will subsequently lead to stop the ad avoidance behavior.**

The last implication regarding participants' behavior states that a **link to the product is highly beneficial** in leading to the final purchase, then it is recommended to provide it.

Finally, the performance of the regression model also provides implications of interest. Having found several variables affecting in a significant way the perception of ads utility, the interpretation implies that the **greater the age of the participant, the less utility is perceived towards online publicity.** Then, as we have also proved previously, focusing on younger age groups would usually have better responses regarding online advertisement.

In addition, there are important implications at the time of choosing the kind of platforms to display the ads, depending on the platform's main objectives. For example,

users employing the web for working reasons see positively the utility of ads, whereas people looking for buying and selling goods perceive them negatively.

Lastly, the frequency use of users of both, social and online commerce platforms, are correlated in a positive way to the utility perceived. Then, these categories of webs would be optimal in order to achieve greater results on publicity perception.

The overall final conclusion of this study is that online publicity can have a great positive impact on internet users, by applying techniques that enhance consumer image and proactive behavior towards them. Also, by correctly targeting the correct kind of advertisement and population, negative consequences can be avoided.

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8. APPENDIX I (Advantages/Disadvantages of digital marketing + Tables and Graphs)

Advantages of digital marketing

Company Perspective

Digital marketing has brought a lot of advantages for businesses and to their process of publicity transfer and creation. The online nature enables companies to **respond more quickly to user needs,** since this channel is more flexible towards change, compared to traditional publicity. In addition, these fast returns can be accomplished because **marketing results and data are easily measured and obtained.**

This makes it possible for companies to analyze consumer behavior and create personalized profiles. In the case of traditional marketing, it is much more challenging to obtain data in real time. At the same time, this factor **facilitates the tracking and analysis of competitors.**

Another competitive advantage for companies is that digital marketing acts straightforward in **overcoming geographical barriers,** it enables companies to successfully communicate with their customers all around the world, facilitates the commercialization of their products and services and provides new ways to find new business partners.

It also **facilitates customer segmentation and targeting** through the acquisition of quick and accurate data, in order to perform better targeting and achieve effectiveness in marketing activities. As a consequence, it **promotes marketing research** by shortening the time needed in preparation and the subsequent conduct of the study.

Digital marketing requires **less investment than** traditional channels and this increases digital marketing profitability. Furthermore, it allows **high control and correction** in the processes of creation and implementation of marketing activities and **creates opportunities for developing new business models and strategies.**

Disadvantages of digital marketing

Company Perspective

After looking at the several advantages technology provides, we must also gather various disadvantages that are important to consider and to control in order to succeed in digital marketing. One important technological threat is that everyone can look at

what a company has published so **digital marketing makes companies be exposed and transparent for competitors.** This is one of the most serious disadvantages of digital marketing, online campaigns can be quickly and easily copied by competitors. In addition, inaccurate information about products, services or brands, which can seriously damage the image of a company, can easily manipulate consumers.

Furthermore, **digital marketing is highly dependent on technology.** Companies require serious knowledge in the field, and this can lead to a number of technical errors as the information and communication tools offered by digital marketing are not 100% completely accurate. Examples include broken links, slow loading or unloading promotional messages, statistical analysis tools that do not process information correctly… Also, in some cases it is **difficult to keep up-to-date information.** Online information gets old very quickly and has to be replaced frequently, this is caused by the dynamism of the world of digital technologies. This becomes a serious challenge for the companies that do not have the necessary resources.

Another important aspect when targeting product audiences and selecting the type of advertisement, is that **online marketing is not suitable for all types of products and companies.** There are some target audiences that cannot be reached and influenced by the tools offered by digital marketing. Indeed, this can derive to a common mistake where **digital marketing campaigns are developed without aligning to the marketing strategy of the company.** This usually results in failure to achieve the intended results, lower efficiency and improper use of funds. Following these lines, sometimes companies **lack clear judgment for choosing digital tools in marketing campaigns** and subsequently make **use of inappropriate digital tools and applications.** Wide variety of new instruments are emerging every day. Then it is complicated to choose which will be most effective for specific marketing products, or which meet the company's needs and goals in the best possible way.

A final negative aspect is that sometimes companies put **too much emphasis on technical solutions, but not on the content.** In the desire to be attractive and fashionable to their clients' companies magnify the technical appearance of advertising, but incorrectly leaving the content in a second level, which will lead to not good and unstable results.

TABLES

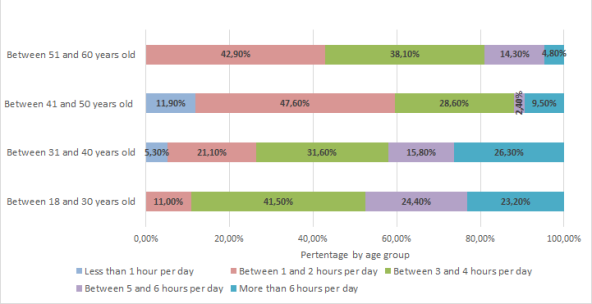
Table 13. Sampling units according to region of residence

	Nº of Sampling Units	Percentages %
Álava	1	0,6%
Barcelona	7	4,3%
Guipúzcoa	2	1,2%
La Rioja	97	59,1%
Madrid	5	3,0%
Navarra	30	18,3%
Santa Cruz de Tenerife	1	0,6%
Segovia	2	1,2%
Soria	2	1,2%
Tarragona	1	0,6%
Valencia	1	0,6%
Valladolid	7	4,3%
Zaragoza	8	4,9%
TOTAL	164	100

Source: Own elaboration

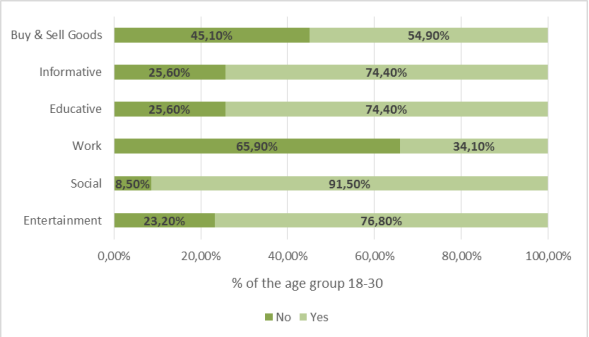
GRAPHS

Graph 41. Internet frequency use by age – Proportions



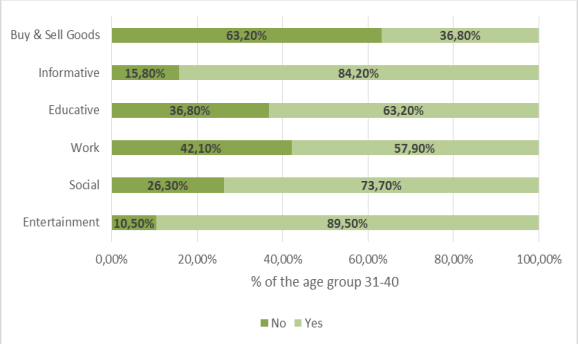
Source: Own elaboration

Graph 42. Internet Use Purpose Age 18-30 -- Proportions



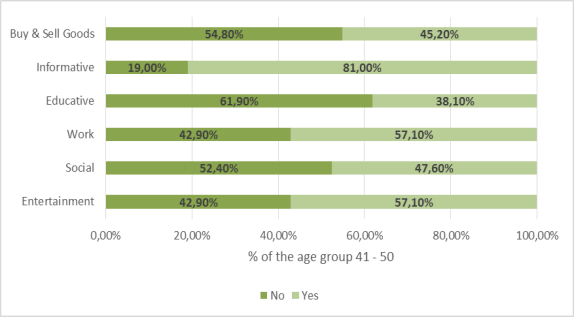
Source: Own elaboration

Graph 43. Internet Use Purpose Age 31-40 -- Proportions



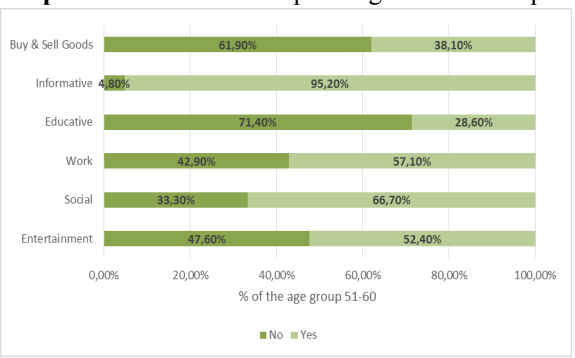
Source: Own elaboration

Graph 44. Internet Use Purpose Age 41-50 -- Proportions



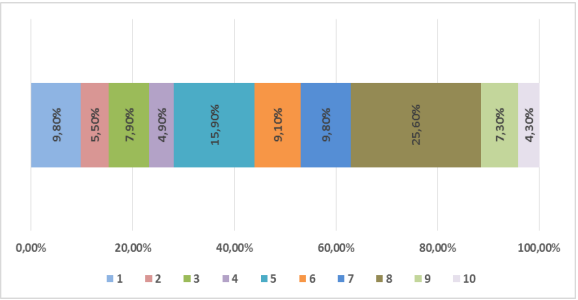
Source: Own elaboration

Graph 45. Internet Use Purpose Age 51-60 -- Proportions



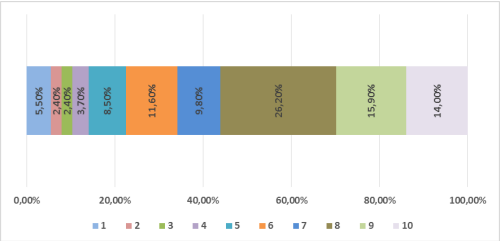
Source: Own elaboration

Graph 46. Importance of the message in advertisement – Proportions



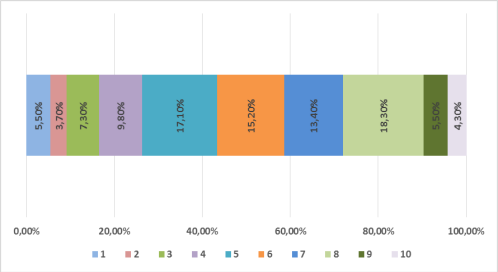
Source: Own elaboration

Graph 47. Importance of price in advertisement – Proportions



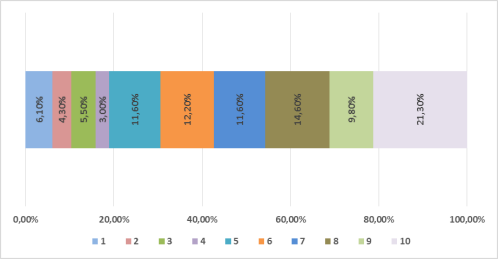
Source: Own elaboration

Graph 48. Importance of content (Who transmit it) in advertisement – Proportions



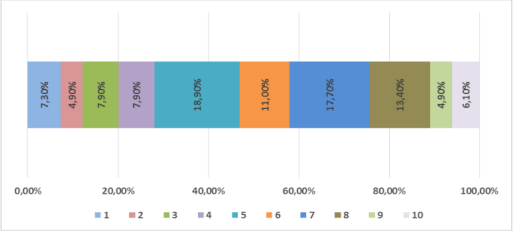
Source: Own elaboration

Graph 49. Importance of duration in advertisement – Proportions



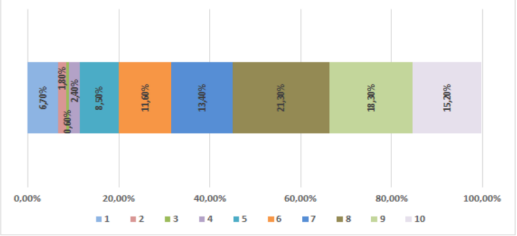
Source: Own elaboration

Graph 50. Importance of "*Music*" in advertisement – Proportions



Source: Own elaboration

Graph 51. Importance of content (Product) in advertisement – Proportions



Source: Own elaboration

9. APPENDIX II (Questionnaire)

Personal Profile

- Question 1- Age

What is your age?
◯ *Less than 18 (end of the questionnaire)*
◯ *From 18 to 30*
◯ *From 31 to 40*
◯ *From 41 to 50*
◯ *From 51 to 60*
◯ *More than 60 (end of the questionnaire)*

- Question 2 – Genre

Which is your genre?
◯ *Male*
◯ *Female*

- Question 3 – Education level

What is your maximum study level?
◯ *Primary education*
◯ *Secondary education*
◯ *High School degree / Middle formation degree*
◯ *University degree / Superior formation degree*
◯ *Master studies or Doctorate*

- Question 4 – Working situation

Which is your working situation?
◯ *Unemployed*
◯ *Student*
◯ *Public sector worker*
◯ *Private sector worker*
◯ *Self-employed*
◯ *Domestic employee*
◯ *Another situation:* _____

- Question 5 – Region of residence

In which region do you reside? _____

- Question 6 – Internet frequency use

Which is the frequency you use the internet or platforms that require internet connection? (Without working reasons)
◯ *More than 6 hours per day*
◯ *Between 5 and 6 hours per day*
◯ *Between 3 and 4 hours per day*
◯ *Between 1 and 2 hours per day*
◯ *Less than 1 hour per day*

- Question 7 – Internet usage reasons

Which are the reasons for internet usage?? (Multiple selection)
▢ *Recreational*
▢ *Social*
▢ *Labour*
▢ *Educative*
▢ *Informative*
▢ *Buy and sell goods online*

Image and users´ perception towards the category of online publicity

- Question 8 – Use of different platforms

On a scale from 1 to 5, Which is the frequency you use these platforms?

- *Social platforms (For example Facebook, Instagram, Twitter, WhatsApp…)*

Nothing ◯ ◯ ◯ ◯ ◯ *Much*

- *Audiovisual platforms (For example Youtube, Netflix, Vimeo…)*

Nothing ◯ ◯ ◯ ◯ ◯ *Much*

- *Online commerce platforms (For example AliExpress, Amazon, eBay…)*

Nothing ◯ ◯ ◯ ◯ ◯ *Much*

- Question 9 – Platform which contains more publicity

Which is the platform from which you receive more publicity?

▫ *Social networks or platforms*
▫ *Audiovisual platforms*
▫ *Onlinne commerce platforms*

- Question 10 – Factors about advertisement (message, music, price, content…)

When you watch an advert, rate from 1 to 10 the importance of the following factors, being 1 very irrelevant and 10 very relevant *

▫ Message
▫ Music
▫ Price
▫ Content (Product)
▫ Content (Who transmits the message)
▫ Duration

- Question 11 - Perception of different types of advertisements

In a scale from 1 to 5, In which amount do you consider this type of publicity ….?

A. ***Results informative***

Social network advertisement (social ads)

No informative ◯ ◯ ◯ ◯ ◯ *Very informative*

Video advertisement

No informative ◯ ◯ ◯ ◯ ◯ *Very informative*

Native advertisement

No informative ◯ ◯ ◯ ◯ ◯ *Very informative*

A. ***Results interactive***

Social network advertisement (social ads)

No interactive ◯ ◯ ◯ ◯ ◯ *Muy interactive*

Video advertisement

N interactive ◯ ◯ ◯ ◯ ◯ *Muy interactive*

Native advertisement

No interactive ◯ ◯ ◯ ◯ ◯ *Muy interactive*

B. Results entertained

Social network advertisement (social ads)

No entertained ◯ ◯ ◯ ◯ ◯ *Very entertained*

Video advertisement

No entertained ◯ ◯ ◯ ◯ ◯ *Very entertained*

Native advertisement

No entertained ◯ ◯ ◯ ◯ ◯ *Very entertained*

C. ***Result personalized / customized***

Social network advertisement (social ads)

No personalized ◯ ◯ ◯ ◯ ◯ *Very personalized*

Video advertisement

No personalized ◯ ◯ ◯ ◯ ◯ *Very personalized*

Native advertisement

No personalized ◯ ◯ ◯ ◯ ◯ *Very personalized*

D. ***Increases the attractiveness of the product***

Social network advertisement (social ads)

None ◯ ◯ ◯ ◯ ◯ *Much*

Video advertisement

None ◯ ◯ ◯ ◯ ◯ *Much*

Native advertisement

None ◯ ◯ ◯ ◯ ◯ *Much*

E. Allows a correct/incorrect use of the online platform

Social network advertisement (social ads)

Bad use ◯ ◯ ◯ ◯ ◯ *Good use*

Video advertisement

Bad use ◯ ◯ ◯ ◯ ◯ *Good use*

Native advertisement

Bad use ◯ ◯ ◯ ◯ ◯ *Good use*

F. Induces uncertainty about the product / advertised company

Social network advertisement (social ads)

None ◯ ◯ ◯ ◯ ◯ *Much*

Video advertisement

None ◯ ◯ ◯ ◯ ◯ *Much*

Native advertisement

None ◯ ◯ ◯ ◯ ◯ *Much*

G. Results excessive

Social network advertisement (social ads)

No excessive ◯ ◯ ◯ ◯ ◯ *Very excessive*

Video advertisement

No excessive ◯ ◯ ◯ ◯ ◯ *Very excessive*

Native advertisement

No excessive ◯ ◯ ◯ ◯ ◯ *Very excessive*

Behavior of users at the time of receiving online advertisement

- Question 12 – Consideration of buying the product after watching the advert

Have you bought / considered buying the product after receiving the advert in social networks?

◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

Have you bought / considered buying the product after receiving the advert in video ad format?

◯ *Always*
◯ *Usually*
◯ *Sometimes*

◯ *Momentarily*
◯ *Never*
Have you bought / considered buying the product after receiving the advert in native ad format?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

- Question 13 - Change in perception of the product / online platform

Has the advert (social ads), changed your perception of the product or online platform?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

Generally in a positive or negative way?
◯ *Positive*
◯ *Negative*
◯ *Does not change my perception*

Has the advert (video ads), changed your perception of the product or online platform?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

Generally in a positive or negative way?
◯ *Positive*
◯ *Negative*
◯ *Does not change my perception*

Has the advert (native ads), changed your perception of the product or online platform?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

Generally in a positive or negative way?
◯ *Positive*
◯ *Negative*
◯ *Does not change my perception*

- Question 14 – Stop using a platform after receiving online publicity

Have you stopped using an online platform after seeing online publicity?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

For what reasons?
▫ *Amount of ads*
▫ *Content of the ads*
▫ *Others*_____

❖ Question 15 – Know whether users have pay/considered paying to avoid publicity

Have you pay / considered paying to avoid online publicity?
◯ *Always*
◯ *Usually*
◯ *Sometimes*
◯ *Momentarily*
◯ *Never*

If it is the case, what type of digital platforms?
▫ *Social platforms or networks*
▫ *Audiovisual platforms*
▫ *Online commerce platforms*

❖ Question 16 – If the advert includes a link to the selling platform

If the advert includes a link to the selling platform, do you consider buying it more easily?
◯ *Yes*
◯ *No*

❖ Question 17 – Influence in decision making

How much does publicity influence your decisions?
◯ *Much*
◯ *Quite a lot*
◯ *Few*
◯ *Nothing*

❖ Question 18 – Rate advertisement utility

In a scale from 1 to 5, rate general utility of:
Social ads publicity
Not useful ◯ ◯ ◯ ◯ ◯ *Very useful*
Video ads publicity
Not useful ◯ ◯ ◯ ◯ ◯ *Very useful*
Native ads publicity
Not useful ◯ ◯ ◯ ◯ ◯ *Very useful*