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ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

THE USE OF HUMOR IN PHARMACEUTICAL MARKETING

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Υποβλήθηκε ως αιτούμενο για την απόκτηση του μεταπτυχιακού διπλώματος στη Διοίκηση Υπηρεσιών Υγείας

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Abstract

This thesis is a content analysis of Direct to Consumers Advertising of Pharmaceutical and Healthcare Products and Services. It is a content analysis of advertisements using the emotional appeal of humor. The advertisements were categorized according to the type of product advertised: good or service. This study explores the use of humor and identifies the humor processes and types that are used in ads. We also examine the intentional relatedness of humor to the message and the role of other advertising elements such as the communication channel, presenter, music, and visuals in enhancing ad effectiveness. The purpose of this study is to provide insight to marketers in the pharmaceutical industry and shed light on a topic that has not been argued thoroughly yet. We used SPSS analysis to identify whether the use of the various creative strategies is associated with the type of product (good or service). We try to justify these results and the prevalence of our advertising elements according to previous research.

Keywords: Humor, Pharmaceutical Marketing, Advertising, Content Analysis

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1. Introduction

Advertising is a key ingredient of marketing and refers to the strategic and creative communication process that businesses and organizations use to connect with their target audience. Through this connection they provide information about their products to consumers, they promote their brand and products, and ultimately drive customer action. Marketers use various media channels to address customers with intent to influence their attitudes towards the brand and their purchase intention (Renault 2015).

The pharmaceutical industry stands at the intersection of science, commerce, and public health, playing the leading role in the development, production, and distribution of life-saving medications. Pharmaceutical marketing has been evolving since the early 19th century and over the past two decades has faced numerous changes. The rapid rise of pharmaceutical activities has undergone a transition. Pharmaceutical companies use as a marketing plan advertising medications through both physicians and patients. In the past years physicians were the main target of marketers since in most countries, drugs require a prescription, and they have the power to influence the market. Yet nowadays the industry focuses more on direct-to-consumer advertising to affect behavior change and purchase intention of patients (Sinkinson and Starc 2019; Mackey, Cuomo, and Liang 2015).

The pharmaceutical industry has a wide range of scope right, from prescription medication and over the counter (OTC) products, to medical equipment and health care services. In contrast to marketing general products, pharmaceutical marketing presents some complexities due to its nature: it pertains to essential and necessary items rather than desired ones. Individuals do not typically intend to purchase medications unless advised under medical care. This aspect poses a massive challenge in the realm of pharmaceutical marketing (Kalyani Rajput and Dr. Rajesh Kumar Pandey 2022; Mackey and Liang 2012; Tâm et al. 2016; Min Ding, Jehoshua Eliashberg 2014).

As a result, the exploration of new strategies becomes imperative in the fast-evolving landscape of pharmaceutical marketing. Pharmaceuticals and healthcare are a serious matter characterized

by gravity and professionalism, where the discourse often revolves around life-threatening conditions and health. Here, an unexpected element has emerged as an unconventional yet powerful tool: humor. As the healthcare sector continues to evolve and adapt to consumers' behavior and expectations, the application of humor is of particular interest to marketers (Ashesh Mukherjee 2012).

Humor, as a communication tool, has been extensively studied in various industries due to its ability to capture attention and foster memorable connections between brands and consumers. Being utilized in all media vehicles, humor proved to be a dynamic and influential component in the marketing toolkit, challenging preconceived notions about the appropriate tone for health-related messaging. Incorporating humor into advertising poses many challenges, but it also presents opportunities for creativity and innovation (Tâm et al. 2016).

Research in the health sector has shown that the use of humor can engage audiences, foster positive brand perceptions, and enhance recollection. It also increases effective persuasion, allows the target audience to view negative situations in a more positive light, lowers the arousal associated with stressful events and reduces embarrassment in seeking health advice. Thus, the use of humor has become common practice in advertising over the past years (Yoon 2015; Yoon 2018).

The pharmaceutical sector is not without its challenges when it comes to advertising. Stringent regulatory frameworks, ethical considerations, and the need for maintaining credibility in disseminating health-related information pose unique hurdles. Drug advertising could increase misuse and abusive consumption. Any pharmaceutical drug may induce side effects or have contraindications and should be taken cautiously. Thus, marketers should take great care in implementing a strategy in advertising medication and health issues (Tâm et al. 2016; Min Ding, Jehoshua Eliashberg 2014).

Though many studies have been made about the use of humor as a marketing tool in general, there is yet much field to be examined in the health sector and the pharmaceutical industry.

Research shows mainly the interaction between humor and other appeals, such as fear or shame. Studies must be done about the conditions under which humor can have the major impact on consumers and their behavioral attitudes (Yoon 2015; Yoon, Kim, and Choi 2023).

This thesis aims to delve into the dynamic landscape of pharmaceutical and healthcare marketing, specifically examining humor in its various forms. This thesis is a content analysis of direct-to-consumers-advertising (rather than healthcare professionals) that is humorous in content. For this reason, advertisements were used in the areas of health services and the promotion of over the counter and non-prescription drugs. In this analysis, television commercials, web banners, print ads in magazines and brochures of multiple countries will be commented. The purpose is to shed light on the humor processes and types incorporated in the advertisements discussed and provide information about the communication strategy used in pharmaceutical marketing.

1.2. Objectives of the Study

This thesis attempts to achieve a comprehensive understanding of the use of humor in pharmaceutical and healthcare advertising by addressing the following objectives:

- 1. Analyze the various forms of humor employed in pharmaceutical and healthcare advertising.
- 2. Explore the humor processes used in health-related messaging.
- 3. Successfully identify the intentional relatedness for the humorous, verbal, or visual content of ads.
- 4. Compare the content of the messages in terms of use of protagonists, and frequency of visuals and music.
- 5. Provide insights and recommendations for marketers seeking to incorporate humor into their campaigns while maintaining sensitivity to the subject matter.

The first chapter begins with a literature overview of pharmaceutical marketing, the role of advertisements in marketing and the items and services of interest in pharmaceutical marketing. The purpose of the use of humor in advertising is discussed through case studies and empirical analyses of multi-country campaigns. Subsequently humor processes and types through which humor is achieved are analyzed and explained. Furthermore, we identify important factors that impact the success of advertisements and summarize their benefits. The next chapter describes the method as well as the explanation of the chosen technique to conduct this research. Chapter 3 is a presentation and interpretation of the research results and its statistical analysis, followed by the conclusions. In the final chapters current research limitations and suggestions for future research are included.

By navigating this multidimensional subject, we aim to contribute to a better understanding in the intersection of humor, healthcare, and marketing.

2. Literature Review

In this chapter, we analyze what Pharmaceutical Marketing is and what are the objectives of the pharmaceutical industry in the field of advertisement. We find out what humor is and how marketers use it as a creative tool in advertising. Furthermore, we present studies that examine the use of humor in the healthcare sector and its benefits. Additionally, humor is discussed in terms of means through which it is pursued. We end this chapter by mentioning other factors that influence the impact of advertising that are used in this research.

2.1. Pharmaceutical Marketing

According to the American Marketing Association, Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (Approved 2017).

Pharmaceutical Marketing is the term used to describe all the tactics and initiatives used by pharmaceutical industries to promote and sell their medical products. Few examples of these products include medications (prescribed or self-administered), cosmetics, health services, and so on. Pharmaceutical marketing mostly entails interacting with physicians and with patients - the consumers of their products. The aim is to raise awareness, enhance public health, educate about the use and side-effects of the medications, and of course increase their purchasing (Kalyani Rajput and Dr. Rajesh Kumar Pandey 2022; Radlińska et al. 2022).

The Marketing Mix generally consists of the four Ps which are designed to develop an effective marketing strategy. The four Ps were initially presented in 1960 by marketing professor and author E. Jerome McCarthy. Depending on the industry and the objective of the marketing plan, marketing managers may take various approaches to each of the four Ps-Product, Price, Place, and Promotion. Each element can be examined independently, but in practice, they often are interconnected and influence each other (Mourtzikou et al. 2015). It is important to examine the four Ps in order to understand the characteristics of Pharmaceutical Marketing.

Product: This represents a physical product or service designed to meet customer requirements and desires. Within the Pharmaceutical sector, the main product is medication. Medication is

not just a product; it is considered a special good. When administered, the medication aims to cure, relieve, prevent, and diagnose diseases or to improve physiological functions. The drug is not an ordinary consumer product, it is a social product aimed at treating symptoms, improving health outcomes and quality of life. Its users are not simple consumers, but patients in whom the use of medicine is often imposed, not chosen. The decision is often made by a healthcare provider (physician or pharmacist).

Price: The sale price of the product reflects what consumers must exchange for it. Marketing professionals must take into consideration costs associated with research and development, manufacturing, marketing, distribution, and advertisement expenses. In the pharmaceutical sector price is a variable and takes many different shapes depending on who pays. Pharmaceutical companies determine the cost of a medication for a range of vendors, including hospitals, retail pharmacies, and wholesalers. Governments have the authority to limit the profits of pharmaceutical companies and impose severe regulations on the pricing of drugs in many ways. The user or patient may also be charged differently, depending on social security systems, tax, coinsurance or private insurance companies, or a non-insurance-based cash price. This also applies to health care services.

Place: It encompasses any activity intended to provide value and utility by enabling the customers to purchase the product directly from the producer and service provider. In the pharmaceutical sector, the supply chain is a path that a manufacturer takes to produce, market, and ships his goods to a wholesaler who then stores and distributes these products to community and hospital pharmacies.

Promotion: a promotional mix is a combination of coordinated marketing campaigns. Advertising, personal selling, sales promotion, exhibitions, selection and compensation of salespeople, and public relations are a few examples of possible activities. Promotion still uses conventional, but it also takes many new forms in the age of media and mobile technology today. In order to promote their products or services, companies nowadays use a variety of mass media platforms, including social media, radio, television, newspapers, magazines, billboards. The promotion and advertising of medicine is controlled by WHO and their limits

are institutionalized on national level by many countries (Brent L. Rollins, 2014; Singh 2012; Mourtzikou et al. 2015; Tâm et al. 2016; Min Ding, Jehoshua Eliashberg 2014).

In this thesis we will review the branch of Promotion in Pharmaceutical Marketing and more specifically, the activity of advertising. For this reason, advertisements were found about medications, health services, other pharmaceutical products, and disease awareness campaigns.

2.2. Advertising

While Marketing encompasses all the activities for promoting a brand, including creating the product, setting a price, placing it for purchase and promoting it (the 4Ps analyzed above), Advertising is a subcategory of marketing and is associated with the fourth "P"-Promotion. Other means of promotion involve public relations, sales promotion, and personal selling (*Advertising Theory* 2019).

Advertising is a challenging form of marketing communication. Its goal is to sell or promote a good, service or idea. Certainly, there are many ways to endorse these concepts or products, but advertising primarily consists of professionally made commercials and advertisements. So, advertising entails creating and delivering compelling messages via a variety of media platforms to reach and influence a target audience. What defines a communication effort as advertising is the aim, the form, and the reception environment (*Advertising Theory* 2019).

The main objectives of advertising are to inform, capture attention, grab interest, generate desire, and eventually drive action, such as changing behavior or making a purchase. Capturing the audience's attention leads to enhanced involvement and spending more time viewing the advertisement. By stimulating consumers' engagement, advertising can have a big impact on how consumers feel and perceive the products advertised, which in turn, determines the ad's effectiveness. As a result, the audience gain positive attitudes towards the advertisement and the brand and purchase intention is enhanced. When we talk about changing behaviors, we mean that the advertising messages lead consumers directly to adopt new habits like losing

weight or quitting smoking. When we talk about attitude, we mean orientation towards a brand or product that is linked perceptions about them and emotional response. Everyday people are exposed to many ads along with information. This imposes a major challenge, called "Information Congestion". Advertisers know that effective advertising lies in the usage of creative strategies and techniques to convey a compelling message and engage consumers (Blanc and Brigaud 2014; Yoon 2015; Renault 2015; Bhutada, Rollins, and Perri 2017; *Advertising Theory* 2019).

Advertising messages can have a wide range of characteristics and forms. Firstly, they are differentiated as to their sensory dimensions whether they are printed, include images or are in video format. Additionally, they differ in terms of their appeal -we have emotional appeal, rational appeal, sex, taste. The variation further extends to what is being sold: issues, brands, attitudes, politicians. They are variable in terms of length, frequency of recurrence, and media content (*Advertising Theory* 2019).

Advertising strategies vary based on the audience of the message. Audiences represent the anticipated and the real receivers of advertising communications. The receivers differ in terms of demographics (age, race, social position, and lifestyle), group affiliation, the media, and devices they utilize among many others. Advertising effectiveness depends on the target audience (Viera Valencia and Garcia Giraldo 2019; *Advertising Theory* 2019).

Marketers use various media channels to address customers with intent to influence their attitudes towards the brand and their purchase intention. Advertising can take many forms, including print, broadcast, digital, outdoor, and social media, and it differs depending on the medium and platforms that distribute it. Every media platform's advertisement is unique and engages viewers in a distinctive way. The selection of the media through which a product will be advertised depends on the target audience. The use of digital media is getting increasingly widespread. Nowadays, the Internet has great potential for capturing a larger share of the advertising market, because of the wide reach it offers but also the amount of information it allows to be shared (Renault 2015; Sama 2019; *Advertising Theory* 2019).

Advertising health issues involves the strategic communication of information to promote public health and encourage positive health behaviors. It aims to raise awareness, educate, and motivate individuals to take action for their well-being and promotes public health. Health issue advertising can cover a wide range of topics, including disease prevention, mental health awareness, sexual health, substance abuse, and healthy lifestyle choices. It also includes health services, such as flu vaccination or health insurance, and of course medications. Effective health issue advertising often utilizes various media channels, such as television, social media, print, and digital platforms, to reach diverse audiences and deliver impactful messages. It may incorporate persuasive techniques, storytelling, and visual elements to engage and inform the public about important health concerns. Pharmaceutical marketers should choose and reach target groups based on various audience parameters. For instance, younger consumers exposed to medication advertisements had a more information-seeking behavior. So, it's more probable for them to use a range of sources, including the Internet and friends and family, to obtain additional information, whereas older customers could merely contact their doctors. Pharmaceutical marketers should therefore consider the range of sites that various target groups use when searching for drug information when organizing their media campaigns. Of course, it is important to take into consideration the characteristics of the target audience. Age, gender, education, and income are only some of them (Yoon 2015; Lee, King, and Reid 2015).

Pharmaceutical Marketing has been increasingly evolving over the past decades. The main subject of pharmaceutical marketing is drugs, and pharmaceutical companies are known for aggressively advertising their medications to two channels: physicians and patients-consumers. Billions of dollars are spent annually by the two primary pharmaceutical industries which are over-the-counter (OTC) and prescription medications (Rx). As opposed to marketing of general products, Pharma Marketing has the particularity of advertising products that are essential, needed, prescribed and also under observation of healthcare providers. These factors make the pharmaceutical sector particularly challenging for marketers. So, we find two types of "consumers". The first is a physician or a group of physicians who guide patients and prescribe the medication. Many companies' marketing strategies concentrate on persuading doctors about their products. The second is the final consumer or patient. Consumer behavior and patient demand play a major role, affecting the market. Pharma advertising is "any form of door-to-door information, canvassing activity or inducement designed to promote the

prescription, supply, sale or consumption of medicinal products" as defined by the EU Medicines Directive (Article 86(1)). Activities under the purview of advertising are:

- promoting pharmaceuticals to the general public and medical professionals
- sales medical representatives that pay visits to medical professionals
- the provision of free drug samples
- the offering, giving, or promising of any reward or bonus to physicians, whether monetary or in kind, in order to prescribe specific medicinal products
- the sponsorship of meetings intended to raise awareness among healthcare professionals and the funding of scientific congresses.

In the last years marketing efforts have been focusing on the first of the mentioned activities above. More specifically on Direct-to-consumer advertising (DTCA) and its power to influence behavior change and purchase intention of patients. This is also the field where this thesis is focusing, on DTCA (Mackey and Liang 2012; Kalyani Rajput and Dr. Rajesh Kumar Pandey 2022).

2.3. Products of interest in Pharmaceutical Advertisements

In this chapter, we discuss the products advertised and their characteristics. The pharmaceutical industry has a wide range of scope right, from prescription medication and over the counter (OTC) products, to medical equipment and health care services. We will determine and categorize the products in medications and services, and we will set examples for better understanding this field.

Medications on the market are divided into three categories according to the bibliography: (a) In prescription drugs, (b) in over-the-counter drugs or OTC, which are non-prescription drugs and (c) in lifestyle drugs. This categorization of drugs is necessary because each of the specific categories presents some particular features (Mourtzikou et al. 2015).

- a) Prescription drugs (Rx) or prescription-only medicine is the one that people never desire or can never buy unless prescribed. They require the prescription and supervision of a health care provider.
- b) OTC medications are available without a prescription, are considered safe for self-medication and the patient-customer can choose one according to their symptoms. OTC medications are categorized into the following groups based on the therapeutical relevance and corresponding pathology:
- Cold and flu products that treat symptoms such as cough, sore throat, and nose congestion. Examples include syrups, nose and throat sprays, lozenges.
- Gastrointestinal medicines that concern a wide range of disorders such as constipation, reflux, gas, diarrhea, nausea. So, we found a variety of laxative, antacids, antidiarrheal, and antiemetic drugs, and anti-hemorrhoids creams.
- Analgesics/ anti-inflammatories, which treat symptoms like pain, fever, migraines, menstrual pain, and involve pills, patches, creams, syrups.
- Allergy- relief medications to provide relief for sneezing and itching. These are called antihistamines.
- Dermatological drugs designed for medication of skin conditions. Examples of these conditions are mycosis, dermatitis, eczema, acne, infections, burnings, herpes, and the medication is always in the form of a cream.

Factors that influence the buying decision of an OTC by the patient-consumer according to research are the suggestion of a physician, advice of a pharmacist, previous own experience, or a familiar's personal experience. However, people can buy an OTC without the participation of a third party. This is where advertising comes in with the advertising message providing an appealing solution to a problem that seems to involve minimal risks (Cîrstea, Moldovan-Teselios, and Iancu 2017; *Advertising Theory* 2019).

c) Unlike the traditional drugs, those in the third lifestyle drugs include medications which address age-related or modern lifestyle problems rather than serious or life-threatening disorders. It is used to fulfill a desire or non-health-related objective. Some examples are weight-loss medication, treatment of baldness and alopecia, erectile dysfunction pill (most famous drug, Viagra), contraception pills, quitting smoking gums and inhalers. They are one of the most growing and profitable markets in the industry of the pharmaceutical industry (Mourtzikou et al. 2015; Ramu and Mounika 2018).

Other pharmaceutical products intended for human use are dietary supplements, cosmetic/dermocosmetic products, anatomical and orthopedic items. Dietary supplements may also be considered according to bibliography as lifestyle medication. Dietary supplements consist of substances that are consumed in addition to a normal diet. They usually include vitamins, minerals, herbs, enzymes, amino acids and various materials extracted from plants and animals. The most prominent examples of this category include Vitamin C, fish oils, and Vitamin D. The use of this kind of product depends on information about them that is distributed by pharmacists, people who already took them and advertising but generally supporting evidence of their use, is weak. There are numerous obstacles in the way of regulating the supplement business and shielding consumers from deceptive and false promises in the field of marketing and advertising. Cosmetic products contain a variety of substances derived from plants, animals, and mineral sources and are primarily utilized for cleansing purposes or to preserve the skin's moisture, promoting attractiveness and achieving a beautiful appearance. Examples of cosmetic products are cleansing foams, soaps, anti-wrinkle creams, sunscreen, masks, scrubs, toothpaste (Temple 2013; Misic 2016; Ramu and Mounika 2018).

The provision of health services is also a product of the health sector, which has the same characteristics as medicine with the difference that the patient has the freedom of choice. Newspapers and television networks dominated the advertising landscape for years. Since 2000 the amount of electronic advertising has grown. There has also been an increase in outdoor advertising, such as billboards, transit banners, and transit posters. Examples of services are taking the flu shot, a surgery, a stay in a nursing home, choosing an insurance company. Hospitals' medical services and health care programs are the most advertised health services. Other topics depicted are dental care, mental health, and addiction services. The aim of marketing in health services promotion is to influence behavior for the greater public good (Schwartz LM 2019).

Marketing efforts related to public health initiatives often involve creating awareness, educating the public, and encouraging behaviors that contribute to the well-being of individuals and communities. Messages of creating awareness focus on informing and persuading individuals to adopt specific healthy behaviors or even prevent behaviors, such as exercising

regularly, eating a balanced diet, avoiding smoking, and reducing alcohol consumption. Preventive messages can also address the importance of regular health screenings and vaccinations to prevent diseases. These messages often belong to social marketing campaigns. From a creative standpoint, anti-consumption messages present difficulties for several reasons. Messages must persuade consumers that refraining from unhealthy behavior is in their best interest since making unhealthy decisions exposes them to significant risks. It is important that these messages avoid being judgmental, lecturing, or restricting someone's freedom. Failing to do so, they may have a boomerang effect, increasing the likelihood that customers will indulge in the mentioned unhealthy behavior (Schwartz LM 2019; Blanc and Brigaud 2014; *Advertising Theory* 2019).

Disease awareness campaigns can be beneficial if they help diagnose and treat serious or incapacitating conditions more often, or if they help destignatize diseases (like HIV, STDs). These commercials also address public health concerns (quit smoking, hepatitis C), symptom diagnoses (migraine, sleeplessness), and mental health conditions (attention-deficit-hyperactivity-disorder, depression). The marketing of raising awareness has been a significant focus for pharmaceutical companies, with unbranded disease awareness campaigns being particularly engaging on social media platforms. Unbranded means without mentioning (even indirectly) any drug/particular product or groups of products or indication, but instead providing information about human health or diseases to the public. These campaigns are discovered to be more prevalent and popular than branded ones; firms collaborate with television scriptwriters to create disease-related storylines and fund patient advocacy organizations to influence public perceptions of diseases (Schwartz LM 2019). (AMA American Marketing Association 2017) (Robin Blaney 2023)

Advertisements pertaining to pharmaceuticals are subject to stringent legal restrictions. As mentioned above, advertising of medicines can be addressed only to doctors and consumers. Legal limits on the content of ads directed towards professionals are less severe than those imposed on advertisements directed towards the general audience. The reason for this condition is that medical professionals, such as doctors and pharmacists, possess far more knowledge of the subject, rather than the average patient. Essential details in line with the product description

and supply classification of the specific medication should be included in any advertisement for a prescription-drug. One fundamental feature that sets American legislation apart from those in many other nations, is the ability to regulate patient advertising of prescription-only drugs. Studies on the effects of prescription drug advertising on patients in the United States clearly show that these kinds of activities have a positive effect on patients. However, advertising prescription drugs to patients is viewed as unethical in the European Union, and so it is prohibited. The only exception is advertising vaccination campaigns. The United States has laws requiring all information pertaining to pharmaceuticals to be accurate and consistent with what is written on the product's label and the advertisement must be examined by professionals with knowledge of evaluating the efficacy and safety of pharmaceuticals. It must contain both the benefits and the risks of the product, but it must not include the brand name of the product. The FDA as well as Nation members of the EU allow the advertising of OTC. However, in some countries there are also implications in the advertisement. A medical advertisement must not be deceptive and must provide information on the logical use of the product. The offered medicinal product must also be portrayed objectively. Offers and discounts must not be advertised. The drug cannot be presented by famous people or doctors. Within the European Union, the promotion of pharmaceuticals is governed by regulations at both national and EU levels as well as industry self-regulation guidelines. (Czerw and Religioni 2012; Radlińska et al. 2022; Advertising Theory 2019) (Robin Blaney 2023)

As we can see, Pharmaceutical Marketing has challenges and obstacles to overcome. Advertising of pharmaceuticals is a fast-growing field that uses many means to reach its target audience. In the countries allowed, we find in pharma advertising many innovative and creative ideas. One of them is the use of appeals in advertising. In this thesis we delve into the use of humor in pharmaceutical products and health services advertisements.

2.4. Humor in advertising

2.4.1. Definition of Humor

The Latin word for humor, "humorem" originally meant "liquid" or "fluid." The word "humor" in physiology refers to body fluids or liquids, such as the aqueous and vitreous humors of the

eye. The Greek physician Hippocrates, regarded as the founding father of medicine, was the first to mention these body "humors". However, the Oxford English Dictionary states that it originated in the 17th century as a result of scientific psycho-physiological conjecture regarding the potential effects of different humors on an individual's temperament. Ultimately the word "humorist" and "man of humor" came to refer to whoever is the subject laughter (Studies, International, and Centre 2015) (Aaron Smuts n.d.).

Humor is a complex and multifaceted concept that involves the ability to perceive and appreciate the amusing or comical aspects of situations, events, or communication. Things that intend to make people laugh and feel amused are considered as *comedy*, while comedy that is successful in entertaining its audience, is referred to as *humorous*. So, humor is supposed to induce laughter and put the individual in an optimistic mood. Laughter is the behavioral aspect of appreciating humor, while amusement is the emotional response to perceiving humor. It is a globally recognized vocal pattern that sounds like "hahaha", and it is almost the same in every language. People laugh in many different contexts and across all cultural boundaries. Humor encompasses a wide range of expressions, including jokes, wit, satire, irony, puns, and comedic elements, and can be conveyed through various mediums such as language, visuals, and actions. (Eisend 2009; Hatzithomas, Zotos, and Boutsouki 2011; Ashesh Mukherjee 2012; Warren, Barsky, and McGraw 2021)

Humor is a topic that has stirred the interest of many philosophers, writers and great minds like Aristotle, Plato, Kant, Freud, Moliere. Throughout the years there have been many attempts to define humor such as the definition of Montogomery: "Humor is a perceptual and a cognitive process involving an ability to recognize and appreciate the absurd and incongruous aspects of a situation" (1997). It was also defined by Langston Hughes as "laughing at what you haven't got when you ought to have it" (As cited in Walker, 1988; Studies, International, and Centre 2015). In the Cambridge dictionary humor is defined as "the ability to be amused by something seen, heard, or thought about, sometimes causing you to smile or laugh, or the quality in something that causes such amusement" (Studies, International, and Centre 2015; Kramer 2021).

Humor serves multiple functions and possible benefits that are psychological, physiological, social, and economic. Engaging with humor increases positive emotions while reducing the severity of negative life events. Other advantages include entertainment, social bonding, and communication of ideas. It aids individuals in stress and anxiety coping and enhances mental health and creativity. Those who enjoy humor seem to be better able to manage loss, struggles, and other life obstacles. This is because of its many beneficial physiological benefits, one of which is the reduction of stress hormones like cortisol and adrenaline as well as the enhancement of the mesolimbic dopaminergic reward system. Humor also helps people leave a positive impression on others, gain respect, make friends, and start romantic affairs. Through humor they can manage a conflict at work and social interactions like negotiations are facilitated. On the other hand, unsuccessful humor tends to arouse repulse, irritation, and disagreement, whereas individuals that fail to be humorous can be considered inadequate and inconsiderate (Warren, Barsky, and McGraw 2021; Savage et al. 2017).

Humor is found everywhere: in our everyday conversations, in newspapers and magazines, on the radio, in books, on television and is an essential component in personal communication. It is a social phenomenon that must include at least two people. The first shall be the transmitter that creates mirth and the other(s) the receiver(s) of the humorous message. The message can be intentional or unintentional-when it induces laughter by accident. Not every comedy inspires laughter and humor may not be perceived or appreciated under certain circumstances. That being said, humor consists of two independent elements: intention and perception. Recognition of humorous messages may be challenging since people have distinctive characteristics and may hold very different understandings of what is humorous. For instance, some people tend to laugh generally more than others, or professional comedians are superior to entertaining their audience. An individual's inclination to express laughter, understand and value comedy, or amuse others is called sense of humor. In this context, the ramifications for advertisers are significant. An advertisement intended to be humorous may not be appreciated as such. Unsuccessful humor attempts are perceived as unoriginal, uninteresting, and irritating and ultimately have a negative effect on the brand. Humor is often invariably embedded in a larger context. Factors influencing the perception of humor involve linguistic, social context, and cultural norms. Knowledge of these factors is helpful for producing humorous messages. The truth is that being viewed as more humorous overall does not guarantee a successful advertisement—rather, it merely raises the chances of one. Research suggests that the capacity

to make others laugh may also provide a reliable indicator of intelligence (Yang et al. 2015; Warren, Barsky, and McGraw 2021; Weinberger and Gulas 2019).

There are numerous theories that attempt to describe humor and the circumstances behind it that explain what makes something funny. First, we argue the Superiority Theory of humor, also called Disparagement. The superiority theory has been argued by Aristotle, Plato, and Hobbes. The essential component is a sense of victory overcoming an opponent. Humor arises because of feeling superior to another individual or a past version of ourselves. Imagine laughing at someone who slips on a banana peel. We may find that funny because we think we are better than them. However, the feeling of superiority does not always result in laughter (Kramer 2021; Warren, Barsky, and McGraw 2021).

The Relief Theory of humor is also called Arousal-Safety. This theory is commonly linked to Sigmund Freud and Herbert Spencer, who believed that humor was essentially a means of preserving or releasing energy produced by repression. This theory proposes that a sense of safety can transform potentially menacing stimuli into humor. In this theory, humor (and therefore, laughter) serves as a sort of protective mechanism to reduce tension and allows us to let go of unwanted thoughts and emotions. The humorous context can provide a safe environment to discuss about issues like death or sex that otherwise would be challenging or pressured to repress (Kramer 2021; Warren, Barsky, and McGraw 2021).

The Incongruity Theory of Humor was first introduced by Aristotle and was developed by Kant and Schopenhauer. This theory was supported by philosophers who argued that humor and laughter occur when the element of surprise or shock are present. In essence, humor emerges when we abruptly realize a clash or inconsistency, deviating from our anticipated anticipations. The momentary uncertainty transforms into humor as we reevaluate the initial context and its connection to the punchline. Rather than confusion, there is a sense of resolution, and our comprehension is rewarded with humor. The element of surprise must be funny to ensure this response but is not always enough. There is research that suggests that it must be combined with a resolution to this incongruity. The Incongruity Theory best works when humor is explicitly verbal, where there is ambiguity. However, it is important to note that not all humor

is verbal, and thus this theory cannot find many applications. (Studies, International, and Centre 2015; Tâm et al. 2016; Kramer 2021; Studies, International, and Centre 2015).

As we close this chapter, in which we try to identify and define humor, we move on to the next where we discuss its implications in advertising.

2.4.2. Why is humor seen in advertising?

In general, there are several ways to present marketing messages. Marketing appeals are the fundamental component of creative advertising approach. Advertisers employ them to shape consumers' perceptions of products and influence their buying intentions. We recognize rationally framed and emotionally framed messages. Rational appeals are also called informative or logical and advertisers use them to provide information that persuades the target audience through their rational motives. Advertisements with rational appeals show the characteristics of products, their benefits or show how to use them. Emotional appeals aim to influence the audience by referring to emotions, so they are trying to induce positive or negative feelings. They can be further differentiated into positive (humor, happiness) and negative (fear, shame, guilt) appeals (Jovanovic, Vlastelica, and Cicvaric Kostic 2016). Empirical studies demonstrate that both rational and emotional appeals can affect the advertisement's impact but have conflicting results whether the positive or the negative have a bigger influence in the ads' effectiveness. The choice of an appropriate appeal is a strategic decision in advertising. Humor is one of the most often utilized emotional appeals in international advertising and is a widely used tactic in product advertising (Eisend 2009; McKay-Nesbitt et al. 2011).

In the context of advertising, humor is a creative execution that motivates consumers to devote cognitive resources to an advertisement. Increased motivation leads to engagement and entertainment of the audience and creates a positive association with the brand or product. Perceived humor has been found to foster positive sentiments regarding the product, decrease counterarguing, leading to greater message acceptance. Its use in advertising is influenced by cultural, social, and individual dimensions and values. Humor in advertising has different effects on audiences around the world; distinct cultural backgrounds utilize humor in different ways, use different types of humor and respond to it in different ways. Marketers are extremely

interested in the use of humor as an executional strategy, as the application of humor can create memorable messages that ultimately capture attention and message retention, increase persuasiveness, and purchase intention. Eisend (2018) suggests that humor works well in advertising because it offers several evolutionary advantages that encompass emotional cognitive and social aspects (Eisend 2009; Hatzithomas, Zotos, and Boutsouki 2011; Iles and Nan 2017; Sternthal and Craig 1973; Weinberger and Gulas 2019; Tâm et al. 2016; Blanc and Brigaud 2014; Ashesh Mukherjee 2012; Yoon 2015).

Humor is perceived with diffidence in some cases. It is generally used to amuse, but sometimes it can be employed for less ethical ends. In fact, we find humorous advertisements that contain deceptive marketing statements and humor is the means that conceals these statements. Other research shows that many TV commercials combine humor with offensive material. In these cases, humor can have negative results on brands. This also happens when there are unsuccessful attempts to induce humor and amusement (Weinberger and Gulas 2019).

In reference to how humor should be integrated in commercials, there are some suggestions that guarantee its effectiveness. Research points out that when the ultimate result of an ad is to increase buying, the entertainment element should appear after the brand. Nevertheless, if the advertisement's goal is to raise awareness and capture attention, humor should be presented before the brand. This research highlights the complexity of the application of humor in advertising (Weinberger and Gulas 2019).

Humor can be found in every advertising form, including print, broadcast, digital, outdoor, and social media. However, Television commercials tend to be more dominated by humor in general than print advertisements. Employing humor in print advertisements can be challenging due to various limitations. According to Gulas and Weinberger (2006), there are fewer tools available for conveying humor in print ads compared to broadcast media, like television. Humor in print media does not address the whole sensory spectrum of the audience and therefore it can be considered inferior in terms of funniness. As a result, individuals might process and interpret humor in print ads differently than in broadcast media. Undeniably, the biggest applications of humor are in TV and outdoor advertising. For the purposes of this thesis,

humorous advertisements were categorized as TV commercials and Print commercials which included digital, social media, and outdoor ads (Eisend 2009).

Humor was not always considered an accepted advertising approach and was initially used with great caution. Nevertheless, after the 1920s, it increased rapidly and evolved as an effective tactic in outdoor posters, radio, and later, in the 1950s, on television. In recent years, much of the expansion in humor studies, particularly since 2000, is characterized by a shift towards incorporating humor into serious subjects such as health and safety, as well as exploring new digital formats in advertising (Weinberger and Gulas 2019).

2.4.3. Humor in pharma advertising and health issues

The use of humor in serious topics is among the most remarkable things in the advertising field. It was once believed that consumers would not take humorous advertisements seriously. Thus, the least probable appeal in serious advertisements would be humor. However, studies indicate that can be effective when dealing with serious problems. Under certain circumstances serious subjects can be seen as "high involvement products". Examples of these products include financial, health or insurance. Nowadays this taboo has been broken thanks to companies employing humor in their marketing strategies (Weinberger and Gulas 2019).

Amidst negativity and discomfort, humor serves as a cognitive and emotional shield. By overshadowing negativity with its positivity, humor has the potential to reframe messages in a more positive perspective. The positive emotions of joy and mirth triggered by humor play a role in counteracting negative emotions. In fact, research indicates that humor aids in managing stress and anxiety while boosting self-efficacy and the inclination to confront intimidating subjects. Thus, since getting health care and advice was shown to be significantly hampered by shame, fear, humiliation, and stigma, the use of humor helps overcome these barriers. So, it seems that humor can be a suitable choice to communicate threatening or scary information. The intent behind its use is to evoke a behavioral change in the audience. Even though, according to Gulas and Weinberger (2006), humor is not suitable for the "high-risk functional products, such as prescription drugs or life insurance, humor is found at a remarkable percentage in pharmaceutical advertising (Iles and Nan 2017; Weinberger and Gulas 2019;

Yoon, Kim, and Choi 2023; Fortenberry et al. 2002; Huhmann and Limbu 2020).

A common technique in advertising is mixing appeals. Health topics may often evoke fear when it comes to health threatening conditions, such as skin cancer, smoking-related diseases, and the consequences of driving drunk. Fear can be used in advertising to prompt behavior change. Humor is used in health advertising to reduce fear and increase the effectiveness of the message. Research has shown that humor can help individuals cope with stressful situations and reduce defensive responses, ultimately improving the persuasiveness of fear advertising. Additionally, humor can provide a safe context for individuals to acknowledge their vulnerability to health threats, leading to an increased likelihood of adopting the proposed solution. However, the type of humor in health advertising as well as its relevance and the frequency of its usage, can influence the message effectiveness in reducing fear (Ashesh Mukherjee 2012).

Research suggests that humor interacts significantly with fear of negative evaluation (FNE). Indeed, it is found to affect attention, behavior, and purchase intentions. The use of humor can be an extremely useful technique when it comes to advertising health issues like mental illnesses and sexually transmitted diseases, which are considered to induce shame and embarrassment to the audience. Studies have shown that humor can lessen the detrimental impacts of guilt and increase message persuasion since it allows people to confront uncomfortable situations. Therefore, humor is used as a means of reducing shame and increasing approach coping in shame-inducing health matters. Humor allows individuals to view the positive side of things and the laughter induced by it leads to physiological tension relief. Positive feelings of pleasure, and amusement caused by a humorous ad can lower the heightened arousal associated with stressful events. When it comes to health conditions that can cause shame, humor may be a comfort in stressful circumstances and can be an effective strategy for reducing embarrassment and increasing responsiveness, especially for individuals with high levels of fear of negative evaluation (FNE) (Yoon 2015).

Humor can also decrease defensive responses to negative health consequences and promote a positive attitude toward the health messages. Additionally, humor has been studied as a

potential tool in health issue advertising, particularly for addressing shame-inducing health issues and increasing message persuasion. However, the effectiveness of the humor used in ads depends on factors such as product type, audience characteristics, cultural dimensions, frame of reference and the intensity of the humor used (Eisend 2009; Hatzithomas, Zotos, and Boutsouki 2011; Iles and Nan 2017; Sternthal and Craig 1973; Weinberger and Gulas 2019; Tâm et al. 2016; Blanc and Brigaud 2014; Ashesh Mukherjee 2012; Yoon 2015).

Humor also finds use in advertising preventive messages. These are communications aimed at promoting healthy behaviors and reducing risky behaviors to prevent negative health outcomes. Studies have shown that presenting serious health consequences in a humorous context can decrease counterarguing and defensive responses of the audience. Additionally, the affective responses triggered by humor, such as happiness and pleasure, can also reduce individuals' motivation to counterargue the persuasive message, leading to a more positive attitude towards the health ads (Blanc and Brigaud 2014). Moreover, humor is found beneficial in the communication of preventive campaigns (prevent unwanted pregnancy or drive when drunk) since it is found to broaden the campaign's audience by engaging more actively in social conversations (Weinberger and Gulas 2019).

Of course, there are a few moderator factors that affect how humorous an advertising can be. These include the qualities of the audience and the funny stimuli, the product kind, and the degree to which the product and humor are associated. Referring to the audience characteristics, age and education can significantly impact the success of a humorous advertisement. Research suggests that humor in advertising may be more well-received by younger and well-educated consumers, particularly males. Age is negative correlation with humor comprehension, whereas education has a favorable correlation with it. This correlation in turn affects how much the advertisement is liked. Therefore, higher appreciation and bigger effects of humor on brand perceptions are anticipated when the sample consists of younger and better-educated individuals. As seen above, fear of negative evaluation (FNE) has been identified as a significant moderator of the interaction between shame and humor in advertising, with socially anxious individuals (high FNEs) showing the strongest benefits from humor in high-shame ads. Humor and its perception by the audience can be affected by the presence of other appeals, such as fear or shame. The product itself may affect the marketing strategy as it seems that

people respond differently to new product advertising than they do to advertising for already-existing products. Then the relatedness of humor to the product, whether humor is thematically connected to the advertiser's message about the product or not, can influence the efficacy of humor in advertising. These variables can affect the success of humor in advertising and impact the attitude of the target audience towards the brand or health issue. (Yoon 2015; Tâm et al. 2016; Eisend 2009)

Applying humor to serious topics should be done cautiously. It may attract attention, boost a variety of responses, including recollection, persuasion, trustworthiness, and ad sharing, for some audiences, but it may also make some audiences less likely to remember, recognize, or estimate an issue.

In the preceding chapter, we determined the concept of humor, we presented the dynamic role of humor in advertising, and we explained the benefits of its use in health issues and medications ads. Below we aim to unravel how humor is achieved by examining humor processes and their humor types. We will find out how marketers employ them to capture attention, evoke emotions and drive consumer intentions. This examination will illuminate the benefits of each and every one of them in creating effective advertising practices.

2.4.4. Humor processes

Speck claims that there are five combinational humor kinds and three underlying humor processes. A unique set of consequences are promoted by each humor process, and consequently, by each type of humor. Moreover, the impact of humor on communication is probably contingent upon the typical characteristics of the advertisement as well as the particular arrangement of comedy components in relation to message components in that processing environment. The three humor processes - Incongruity resolution, Arousal-safety, and Disparagement are further analyzed below. (Speck 1991)

The humor process of incongruity resolution is a cognitive process that involves the perception of surprise or unexpectedness, leading to the appreciation of humor. The incongruity resolution

process is thought to be the simplest among humor processes and is ideal for elucidating a brand's positioning (Shelley, 2003; Meyer, 2000). It is associated with creating comic wit, which is a mid-game that results in a humorous interpretation of a situation or statement. The person who perceives humor "engages in a form of problem-solving to find a cognitive rule which makes the punch line follow from the main part of the joke and reconciles the incongruous parts" (Suls, 1972). The incongruity resolution process aids learning and cognitive and emotional growth in humans, as it involves the perception of incongruity or novelty, leading to surprise and the resolution of incongruity, which can result in humor. The element of surprise is vital for assessing creativity and is quite important in TV commercials. This process is considered a culture-free, all-pervasive technique for generating humor and is recognized in various cultural environments and writings. Incongruity resolution aids learning and cognitive and emotional growth in humans and is recognized as a culture-free, all-pervasive technique for generating humor (Hatzithomas, Zotos, and Boutsouki 2011; Speck 1991; Weinberger and Gulas 2019).

The humor process of arousal-safety involves the perception of heightened arousal or tension followed by the evaluation of the stimulus as harmless or insignificant. As a result, laughter occurs to the person exposed to the message. Strong negative emotional reactions like annoyance, fear, and rage are linked to this process and might impede sound judgment and the ability to appreciate humor. In the context of advertising, the arousal-safety process is used to create humor that is emotionally safe and does not cause discomfort or offense to the audience (Speck 1991).

The humor process of disparagement is a method for generating humorous expressions in interpersonal interactions. Disparagement refers to the act of belittling or speaking negatively about someone or something, and humor functions as a prize for the joke-teller. In the context of advertising, it involves using humor that mocks or ridicules a person, group, or product. This type of humor is often used to create a sense of superiority or to undermine the estimation of a product or service's worth. The use of disparagement in advertising is considered the riskiest form of humor as consumers may become agitated and annoyed by it, especially when it goes too far in the direction of offensiveness. The humor process of disparagement can be influenced

by cultural values and risk-avoidance strategies in advertising (Hatzithomas, Zotos, and Boutsouki 2011; Speck 1991).

2.4.5. Humor Types

The three processes of humor described above -arousal-safety, incongruity resolution and humorous disparagement, contribute to the creation of five diverse types of humor: comic wit, sentimental humor, satire, sentimental comedy, and full comedy. Each type of humor involves a combination of these processes and has its own cognitive and affective effects on the audience (Hatzithomas, Zotos, and Boutsouki 2011).

Comic wit refers to a type of humor that involves clever and amusing verbal or written expressions, often characterized by quick and intelligent remarks, puns, or wordplay -a common advertising tool for a long time. It is a form of humor that relies on clever and witty language to create amusement and entertainment. In the context of advertising, comic wit can be used to engage the audience and create a positive association with the brand or product through clever and humorous messaging. Comic wit involves the incongruity resolution process alone and seems to be the most popular among humor types (Kavoura, A., Halkias, G., & Katsikea 2012; Weinberger and Gulas 2019).

Sentimental humor requires only one humor process: that of arousal-safety. It refers to a type of humor that aims to elicit emotions of empathy, nostalgia, or affection, often through the portrayal of relatable and touching scenarios. Frequently, it entails incorporating scenarios that evoke emotions of tenderness or warmth to create a sense of sentimentality and emotional connection with the audience. In advertising, sentimental humor can be used to create a positive emotional association with a brand or product, as well as to engage and resonate with the audience on an emotional level (Speck 1991).

Satire is a literary or creative genre that uses humor, irony, exaggeration, or mockery to make fun of and criticize individuals, organizations, or society. It is often employed to highlight the flaws or absurdities of its target in order to subtly make the audience laugh at the victim (McGhee, 1974). Satire is an aggressive form of humor. Incongruity-resolution and humor disparagement are the two humor processes that must be combined for this type of humor (Speck 1991; Weinberger and Gulas 2019).

Sentimental comedy is a genre of dramatic comedy that emerged in the 18th century. It typically features characters who display genuine emotions, often focusing on themes of love, family, and morality. The genre aims to evoke sentimental feelings in the audience, often through the portrayal of heartwarming and touching situations. Sentimental comedy contrasts with the more satirical and farcical elements found in other comedic genres, and it emphasizes the portrayal of sincere emotions and moral lessons. It is found to be a comparatively wide, comparatively intricate, and yet typically non-aggressive humor type. Sentimental comedy is the result of combining the humor processes of arousal-safety and incongruity-resolution. Hence, akin to sentimental humor, it provides emotive pleasure, as well as cognitive pleasure like comic wit (Hatzithomas, Zotos, and Boutsouki 2011).

Full comedy is a type of humor that combines all three humor processes and is distinguished by its high level of humor appreciation. This humor type is associated with creating humorous expressions that are emotionally safe and do not cause discomfort or offense to the audience. Full comedy is considered to be the most successful creative device for satisfying consumers' need for entertainment, as it has a relieving purpose. It is the riskiest communication strategy since it is the most complicated type of humor (Hatzithomas, Zotos, and Boutsouki 2011).

2.4.6. Intentional relatedness

Another topic underlined in this study is the intentional relatedness of humor and message of the collected commercials. Intentional relatedness refers to the deliberate connection or alignment between the content of humorous advertisements and the intended communication outcomes. In the context of advertising, intentional relatedness involves the strategic use of humor to effectively deliver the desirable message or to affect the target audience. This intentional alignment ensures that the humor used in the advertisement is directly linked to the advertising message, brand image, or product attributes. Intentional relatedness is an important strategic decision in marketing since it can enhance overall communication effectiveness. It

involves a conscious effort to ensure that the humor employed in the ad is intentionally related to the core message or objective of the advertisement (Hatzithomas, Zotos, and Boutsouki 2011).

In advertising we find three categories of intentional relatedness of humor: humor-dominant, information-dominant, and image-dominant humorous ads.

- Humor-dominant advertisements emphasize the use of humor as the primary element
 to convey the message. They aim to entertain the audience through humorous and
 amusing stories. The essence of the message lies in humor and without humor there is
 no message.
- Information-dominant humorous ads prioritize the delivery of information about the brand or product claims. These ads concentrate on the more tangible features of the product with humor being used as a secondary element to capture attention. In information-dominant ads marketers need to blend creative components with informational cues to form an effective message. Information-dominant humorous illustrations appear to be capable of delivering information in an indirect way.
- Image-dominant ads focus on the visual aspects and aesthetics, with humor playing a supporting role in the advertisement. The concept of image-dominant humor in advertising is influenced by cultural dimensions and the use of humor in print ads. It emphasizes the visual elements and creative imagery as the primary means of conveying humor and engaging the audience. This approach is particularly used to create a positive emotional response to the target audience and build brand visual identity. The purpose of its use is to enrich the advertising experience.

These categories of intentional relatedness are important in understanding how humor is strategically employed in advertising to achieve specific communication objectives and resonate with the target audience, particularly in culturally diverse environments. Studies suggest that the cultural values of a country influence the preference of consumers towards one of the above categories. Thus, choosing the intentional relatedness of humor and message is a

strategic choice and has a serious impact on the effectiveness of the message (Hatzithomas, Zotos, and Boutsouki 2011; Kavoura, A., Halkias, G., & Katsikea 2012).

In this chapter, we explored how humor shapes advertising messages. Now we transition to a discussion of other components of advertising. The final aim is to unravel the interplay between all these elements. Presenters, music, and visuals contribute significantly to the efficacy of the advertisements. By examining these factors in the next chapters, we gain a comprehensive understanding of the impact they have on consumers behavior and purchase intentions.

2.5. Other key factors in advertising

Creating an effective advertisement requires careful consideration of several factors to ensure that the message resonates with the target audience and achieves its intended effect. In this thesis only specific factors will be taken into consideration. The first factor is the communication channel, which of course plays a pivotal role in the success of an advertisement. Whether it's traditional media like television, radio, and print or digital channels such as social media, websites, and mobile apps, the medium should align with the intention of the marketers. The choice of the presenter is another critical factor that influences attitudes and consumers' behaviors. Marketers make a tactical decision about whether to use a presenter or not, who the presenter will be and moreover, other characteristics of the presenter such as his age. The use of music in advertising is yet another powerful element that can increase audience attention and brand recollection. Finally, visuals are a crucial aspect that directly influence how a brand or product is perceived by the audience. Visuals and music make part of the so-called "sensory marketing" and impact the advertisements effectiveness (Kim, Choi, and Wakslak 2019; Krishna, Cian, and Sokolova 2016; Rossiter and Smidts 2012).

2.5.1. Presenter

A major strategic decision in advertising is the choice of using a presenter or not. Generally, presented products receive higher ratings than non-resented products. The presenter, also called in bibliography as protagonist, spokesperson, or endorser, is the person who demonstrates,

provides information, or uses the product advertised. Marketers through the choice of the presenter intend to influence the target audience, enhance positive evaluations of the brand and drive purchase intention (Rossiter and Smidts 2012; Munnukka, Uusitalo, and Toivonen 2016).

2.5.1.1. Type of presenter

From an execution perspective, the decision evolves into what qualities the presenter should possess in order to persuade the audience as much as possible. For the intended audience to be able to relate to a protagonist, their characteristics must align with the brand. In advertising "real people" presenters like celebrities or normal customers, can be seen alongside animated characters or cartoons. Real-people presenter. Typically, the presenter functions as the central figure in the commercial. The spokespersons employed in the commercials have the ability to grab the attention of the audience and affect their purchase intention, depending on characteristics like expertise, popularity, and trustworthiness. Animated characters, cartoons of people or animals, and puppets are depicted in advertisements having humanlike characteristics, behavior, feelings, and goals. This technique is called anthropomorphism. People are exposed daily to human-like images in advertisements. Some of the examples found are an advertisement where mosquitos are depicted as having a fancy dinner on a person's arm and a gorilla having a romantic flair for a traveler. Human-like images in advertising are lasting and powerful because are implanted in every human being's consciousness as anthropomorphism and therefore, are easier for people to understand. This ease and familiarity turn into a pleasant and enjoyable experience which leads to increased preference for the product. Customers love the distinctive style of human-like characters, which creates stronger product-liking (Laksmidewi, Susianto, and Afiff 2017; Rossiter and Smidts 2012; Bhutada, Rollins, and Perri 2017).

The types of presenters found in advertisements are: Ordinary person, Celebrity, Authority, Child, Puppet or Animal.

Ordinary person: In consumer advertising "ordinary person" is the most popular type of spokesperson. Studies suggest that enhances commercial credibility and trustworthiness of the advertisements. Also using peer endorsers has a huge advantage over using celebrities or

professionals; audiences tend to compare themselves and identify themselves in this type of presenter. Thus, using ordinary people amplifies the impact of the message which is influenced by the similarity of consumers to presenters in terms of appearance, cultural background, qualities, and demographics. We find ordinary people presenting mainly over-the-counter medication (Munnukka, Uusitalo, and Toivonen 2016).

Celebrity: In some cases, celebrities or influencers are chosen as presenters to leverage their existing fan base and influence. The use of a well-known personality such as an actor, athlete, or entertainer, can bring attention to the advertisement and enhance brand recognition and recall. However, in some cases the choice of the celebrity can harm the corporate's image when he/she is associated with negative incidents or scandals. Moreover, famous people do not have the authority or knowledge of the product advertised and so they are not found very reliable. We mostly find celebrities in advertisements for dietary supplements, cosmetics, health services, and disease awareness campaigns (Rossiter and Smidts 2012; Bhutada, Rollins, and Perri 2017; Munnukka, Uusitalo, and Toivonen 2016).

Authority: The presenter's credibility and expertise in the relevant field also play a crucial role. Typically, an expert is used in advertising when the consumer needs to be secure of the use of this product or the product is technically complicated. If the presenter is perceived as knowledgeable and trustworthy, it can enhance the perceived value of the product or service. Examples of authority presenters in pharma advertising are a doctor and a pharmacist. Expertise is considered reliable, and the communicator is a source of valid statements. Therefore, we primarily find authority in advertisements of health services (Munnukka, Uusitalo, and Toivonen 2016).

Puppets are characters frequently seen in media addressed to children. They help the procedure of learning while adding the element of fun. Since they have been employed long enough in advertising, mascots and puppets have become an essential part of hundreds of globally famous, image-conscious businesses. They usually say catchy slogans and they have the potential to be a crucial component of a commercial marketing strategy. Puppetry is a low cost and a frequently convincing option instead of Computer-Generated Images. (PPC n.d.)

Animals: Sometimes marketers can make the choice of a non-human protagonist. Thousands of advertisements have incorporated animals as a means of communication. They appear both in TV commercials and print ads and they do lots of things- they walk, they talk, they are the protagonist or interact with them or they just appear in the background. In Television ads they are used mainly due to their ability to delight people and motivate the audience to engage with the brand. This means that the brand becomes very recognizable (Braunwart 2015. Rossiter and Smidts 2012; Huhmann and Limbu 2020).

2.5.1.2. Age of presenter

Another characteristic influencing the effectiveness of an advertisement is the age of the used presenter. The protagonists having the same demographic characteristics as that of the target audience, such as age, race, social position, and lifestyle, are seen as considerably more persuasive and believable. The endorser selected is typically the same age as the target audience to guarantee connections to similar generations (Viera Valencia and Garcia Giraldo 2019; Comiati et al. 2010).

For this research, we divided presenters according to their age into the following categories: Children, Young or early adulthood, Middle adulthood, Young old and Old old.

Children (under the age of 18) are widely used in advertising as an effective tool for creating both rational and emotional appeals that address different groups of consumers. First of all, their innocence makes them generally trustworthy. Secondly, due to social and cultural standards, they are a good vehicle for targeting mothers, for messages concerning health issues, good housekeeping etc. of course they are vastly used to promote products to other kids, but they can also be seen in commercials that want to influence consumers behavior or transmit values (Covid-19 campaigns; Kinsey 1987).

Young or early adulthood presenters are the ones aged 18-39. Young people in advertising are the most frequently depicted age group. This may be happening because the industry of marketing and advertising is dominated by young people under the age of 45. These practitioners seem to select endorsers they can relate to, whether on purpose or not (Eisend 2022).

Middle adulthood are people of age 40-59. Given that experience and knowledge are typically associated with age- "older is wiser"- it is reasonable that a senior adult has greater experience than a young adult. That makes them more credible to the audience of the advertisements, especially when the target market is of bigger age (Bristol 1996).

Older people are subcategorized into Young old (60-75) and Old old (>75). Older people are rarely depicted in advertisements, despite their purchase power and their growing market size. While advertisers believe older people should be more prominent in ads, they also neglect them. According to studies, this phenomenon can be explained by the stereotypes that some advertisers still have against aging and older individuals. Studies reveal that older people are viewed as more credible than younger ones and thus their use in advertising may increase its effectiveness. Usually in advertising older people play a supporting role, they are mostly portrayed with others, at home or outdoors, the most popular stereotype is grandparents and health, and medical products are the most frequently seen product categories. Advertising featuring olds and young olds, can target older consumers directly or promote items for older consumers, but it can also play with the idea of age, for example, by defying age norms to highlight a product's youthfulness. An example of this is a TV commercial where we see two pairs of legs doing synchronized swimming in a pool and finding out the "youthful legs" belonged to two elder women. This was an advertisement about a drug for varicose veins, which mostly old people have (Eisend 2022).

We thoroughly examined the field of presenters in advertising and how they contribute to the message effectively. Now we move on to analyze the importance of visuals in marketing and advertising.

2.5.2. Visuals

Visual imagery has been a longstanding focus in advertising and marketing research. Visuals can affect the audience attitude towards the ad and the product. Additionally influences consumers' engagement to the ad and their purchase intention. Realistic images are those that represent how an object appears to an observer in real life, reflecting the way a person actually perceives it. For instance, photographs are generally realistic (unless they are modified). In unrealistic images there is deviation from an exact representation of reality. There are many ways to present products as unrealistic in images. Hand drawings and illustrations, caricatures, digital illustrations, such as vector graphics and animations (usually in a motion film) (Kim, Choi, and Wakslak 2019; Krishna, Cian, and Sokolova 2016).

Unrealistic product images are widely used in print and digital advertising. Research has shown that using unrealistic product images in advertisements attenuates consumers' judgments of the product's benefits and drawbacks and has consequences on consumption behavior. Decisions about whether to use realistic or unrealistic images may depend on the communication goal (Kim, Choi, and Wakslak 2019).

Fantasy and surreal visuals are innovative executions in advertising. Surrealism is an excellent method to communicate the essence of the brand. It assists in developing a value proposition, a point of distinction and connects the products to the brand's objectives. Most importantly, fantasy and surreal visuals are used by advertisers mainly to attractively portray the products to capture audience's attention and drive purchase intentions rather than provide information (Huhmann and Limbu 2020; Othman 2022).

Animation as an advertising form is a clever strategy used by marketers with great benefits to the advertised products. It is an effective means to capture the attention and interest of consumers, enhance brand recognition. It also has a lasting impact on brand recall and fosters positive attitudes towards the brand. It used to be limited to children advertising -with significant impact on the effects of the ad, but nowadays is well received in many ways. Animated images are widely used in television commercials but also in printed web banners.

Consumers enjoy animation but marketers love this technique since it enables them to depict any idea no matter how creative or crazy it can be. One example of an advertisement used for our research is a cheetah with a cold that sneezes and loses its spots. In contrast to using visual effects, cartoons offer the possibility to create amazing special effects and magical surroundings, without worrying about logistics and possibilities (Goel and Upadhyay 2017).

Scenic beauty is another visual means of affecting audience's perceptions. People find scenery important, and a beautiful landscape has the power to arouse intense emotions. There is reason to believe that exposure to beautiful scenery can help people overcome stressful or difficult circumstances. In this context, scenic beauty may be used in advertising to attenuate negative feelings and create positive emotions instead (Tveit, Ode Sang, and Hagerhall 2018).

A final way to convey a message in advertising is using graphic display of points. Examples of this graphic display of points are dashboards, such as pie charts and bar charts. They are designed and used to facilitate data-driven decision making. Dashboards are realized to support the effective visualization of data. Creating and sharing graphic points in Disease awareness campaigns was a strategy by most governments during the Covid-19 pandemic. However, it is not a quite common means in advertising (Dixit et al. 2020).

As we move on to the final subject, we are looking into in this literature review, we will talk about the role music plays in advertising and how it impacts its effectiveness.

2.5.3. Music

The use of music in advertising is quite popular; companies pay millions of dollars to license music for use in radio and television advertisements, in marketing initiatives, and social media. The music chosen by advertisers can have a significant impact on brand communications and is influenced by various factors. Professionals need to take into consideration: 1) the music and its type/ form/ rhythm, 2) the audience and their musical preferences and demographic

characteristics, 3) the listening environment and, 4) the way in which the listener processes advertisements.

Music is a prominent feature in advertising which has many commercial benefits. There is a reason almost every television commercial includes music. Studies suggest that the use of music in advertising has the ability to affect ad persuasion by changing the mood and engagement and guide attention. Additionally, to create positive feelings, music enhances brand remembrance and recognition. The rhythm of the music itself can generate different results of the message. For example, faster tempo elicits more positive feelings, whereas beats provoke more energy. Other characteristics of music that influence the impact of the ad are timbre, harmony, and textual elements together. According to research the positive influence of music in advertising is shown only when it aligns or is consistent with the characteristic of the advertisement and the brand advertised. Thus, there needs to be a congruency between the product and the type of music. Moreover, there is an association between the choice of the music and the target audience of the advertisement, so it is a powerful tool to target specific markets (Krishna, Cian, and Sokolova 2016; Craton and Lantos 2011).

In this study we examine the presence or absence of music and whether it is the major element of the ad or is put in the background as a complementary element. There are four ways in which music can be used in advertising.

- Music is the major element. Examples of types of music in commercials are
 instrumental music without vocals, popular pre-existing songs, and original music. Preexisting songs are rented or purchased authentically, or they can be modified to adapt
 to the ad and the brand. Original music is also called 'jingles" and these jingles are short
 compositions specifically produced for the commercial (Anglada-Tort et al. 2021;
 Graakjær 2015).
- Music is used in the background (not as the major element). It complements the commercial experience playing a supportive role. Studies suggest that background music attracts attention and stimulates memory (Graakjær 2015).

- Music is absent. Music can be present only in television or radio commercials.
 However, is not commendatory that these advertisements include music (Graakjær 2015).
- Music is combined with dance. We found examples of music combined with dance in TV commercials where there were included jingles and popular music. Research suggests that observing dancing can increase people's engagement and emotional response (Vecchiato et al. 2014; Graakjær 2015).

Though research has been made about the effects of music on consumers' responses in advertising in general, we didn't find studies about the choice of music in healthcare advertising, nor its effects on patients.

Here we close the literature review in which we mentioned every aspect of the landscape of our research area. Theories and empirical findings helped us shape an overall perspective of the field of healthcare and pharmaceutical advertising and the use of humor in pharma ads. Now our attention turns towards the method analysis. The aim is to contribute an important examination of the use of humor in the pharmaceutical marketing domain.

3. Research Hypotheses

The content analysis of this study seeks to investigate how the advertisement affects the choice of the presenter, their age, the visuals, the music, the humor process, humor types and intentional relatedness, if it involves a product or a service.

H1: The use of a Celebrity as a presenter in advertisements is associated with the type of product (good vs. service).

H2: The use of an Authority in advertisements is associated with the type of product (good vs. service).

H3: The use of an Ordinary person as a presenter in advertisements is associated with the type of product (good vs. service).

H4: The use of a Child as a presenter in advertisements is associated with the type of product (good vs. service).

H5: The use of a Puppet as a presenter in advertisements is associated with the type of product (good vs. service).

H6: The use of an Animal as a presenter in advertisements is associated with the type of product (good vs. service).

H7: The use of a presenter of Young or Early adulthood in advertisements is associated with the type of product (good vs. service), such that products categorized as goods will be more likely to feature a presenter of Young or Early adulthood, while services will be more likely to feature a presenter of different age.

H8: The use of Realistic visuals in advertisements is associated with the type of product (good vs. service).

H9: The use of Fantasy or surreal visuals is associated with the type of product (good vs. service).

H10: The use of Scenic beauty as visual advertisements is associated with the type of product (good vs. service).

H11: The use of Graphic display of points in advertisements is associated with the type of product (good vs. service).

H12: The use of Cartoons or Animation in advertisements is associated with the type of product (good vs. service).

H13: The use of music as the Major element in advertisements is associated with the type of product (good vs. service).

H14: The use of music as a Complementary element in advertisements is associated with the type of product (good vs. service).

H15: The absence of Music in advertisements is associated with the type of product (good vs. service).

H16: The used of Music combined with Dance in advertisements is associated with the type of product (good vs. service).

H17: The use of Incongruity Resolution as humor type in advertisements is associated with the type of product (good vs. service).

H18: The use of Arousal Safety as humor type in advertisements is associated with the type of product (good vs. service).

H19: The use of Disparagement as humor type in advertisements is associated with the type of product (good vs. service).

H20: The use of Comic wit in advertisements is associated with the type of product (good vs. service).

H21: The use of Sentimental Humor in advertisements is associated with the type of product (good vs. service).

H22: The use of Satire in advertisements is associated with the type of product (good vs. service).

H23: The use of Sentimental Comedy in advertisements is associated with the type of product (good vs. service).

H24: The use of Full Comedy in advertisements is associated with the type of product (good vs. service).

H25: The use of an animal in advertisements is associated with the type of product (good vs. service).

H26: The use of Humor-dominant messages in advertisements is associated with the type of product (good vs. service).

H27: The use of Information-dominant messages in advertisements is associated with the type of product (good vs. service).

H28: The use of Image-dominant messages in advertisements is associated with the type of product (good vs. service).

4. Methodology

In this chapter, we will outline our research design, data collection and analytical frameworks.

4.1.1. Research procedure

This research was built as a humor taxonomy, based on the one created by Speck. The typology used to examine executional formats was created by extending the Marketing Science Institute's typology (as cited in Schmalensee, 1983) to include the humor categories found in the Weinberger and Spott (1989b) research study. It is a theoretically based taxonomy of humorous message types. The typology for this study contains these major variables: presenter, age of the presenter, visuals, music, humor processes, humor types and intentional relatedness. Each of these variables includes three or more sub-variables. In this taxonomy, we have incorporated the three humor processes, the five humor types and the three categories of intentional relatedness. Speck's humorous message taxonomy integrates cognitive, affective, and interpersonal mechanisms with advertisers' communication intentions. The three humor processes are:

- 1. Incongruity resolution, a cognitive mechanism, involves the perception of surprise or unexpectedness, leading to the appreciation of humor.
- 2. Arousal safety, an affective mechanism where laughter occurs when heightened arousal is followed by the consideration of the stimulus as safe or inconsequential.
- 3. Humorous disparagement, an interpersonal mechanism, uses humor to disguise aggressive behavior and to reward the person who tells the joke.

Five humor types are fabricated by the humor processes and their combination:

- 1. Comic wit, a mind-game that produces humorous interpretations.
- 2. Sentimental Humor is a method of creating humor through eliciting positive emotions.
- 3. Satire creates humorous interpretation through making fun and criticizing an individual.

- 4. Sentimental Comedy provides both affective and cognitive pleasure.
- 5. Full Comedy combines all three humor processes and is distinguished by its prominent level of humor appreciation.

Additionally, Speck integrated into his taxonomy the relationship between humor and message. Intentional relatedness refers to the deliberate connection or alignment between the content of humorous advertisements and the intended communication outcomes. In advertising we find three categories of intentional relatedness of humor:

- 1. humor-dominant messages, emphasize the use of humor as the primary element to convey the message,
- 2. information-dominant messages, prioritize the delivery of information and
- 3. image-dominant humorous ads focus on the visual aspects and aesthetics, with humor playing a supporting role in the advertisement. (Hatzithomas, Zotos, and Boutsouki 2011)

For our research we extended the typology of the humorous taxonomy and integrated into it, other creative strategies in advertising. These involve the decision-making of advertisers about the type of presenter, their age, the presence of music and the use of visuals.

The presenter is the spokesperson of the advertisement. The presenter can be a Celebrity, an Authority, an Ordinary person, a Child, a Puppet, or an Animal. Presenters are also divided into categories according to their age: Children (<18), Young or early adulthood (18-39), Middle adulthood (40-59), Young old (60-75) and Old old (>75).

The use of Visuals is subcategorized into 5 variables: Realistic images, Fantasy or surreal visuals, Scenic beauty, Graphic display of points, Cartoon or animation.

Music is a prominent feature in advertising with many commercial benefits. In this taxonomy music is categorized into 4 variables: 1. Music is the major element, 2. Music is present but not the major element, 3. Music is not used in the advertisement and 4. Music is combined with dance.

4.1.2. Sample

The primary focus of the current study is Direct-to-consumers (DTC) advertisements for prescription drugs, OTC, cosmetics/dermocosmetics, health services, disease awareness campaigns and some products also being sold in pharmacies or online. For this purpose, various advertisements were collected including TV, print, outdoor, online, and ambient, from around the world. The main source for this research was Ads of the World, one of the largest advertising archives and community. Another source was iSpot.tv, a tool for measuring the performance of television ads. The time range of the advertisements used expands from 2008 to 2023.

The 200 commercials were examined using content analysis as a technique of measurement. All advertisements were first divided into two categories according to the type of product: Good or Service. Goods were further categorized in OTC, Cosmetics/Dermocosmetics, Dietary Supplements, Prescription Drugs, Lifestyle Medication, Homeopathic Medication and Other Products, whereas Services were subcategorized into Disease Awareness Campaigns, and Health Services. Each type of product was further categorized, depending on the disease they treat or refer to. OTC categories include Cold and flu products, Gastrointestinal medicines, Analgesics/ anti-inflammatories, Allergy- relief medication, and Dermatological medication. In the Cosmetics/Dermocosmetics category we find hand sanitizers, oral care products, sunscreen, skincare products, mosquito repellents, lubricants, and varicose veins products. Dietary Supplements help with Sleep disorders, Brain Function, Mental Health, Prostate Health, Hair-loss, Joint pain, Obesity or are adult/children's multivitamins that enhance general health. As to Prescription drugs we found those who treat Sleep disorders, Mental health, Cold and Flu, Acne and also Vaccines. In the category of Lifestyle medication, we found advertisements about Hair-loss and Erectile disfunction. There was only one advertisement about Homeopathic medication and six about other products (diapers, pregnancy tests etc.).

Regarding the category of Services, we have Disease Awareness Campaigns, which raise awareness about health conditions like Covid-19, Skin Cancer, HIV, STDs, Child Obesity, Mental health, but also inform about Vaccinations, the use of Anti-biotics, the benefits of having a "Personal Doctor", and also Anti-smoking campaigns. In the sector of Health services, advertisements found argued about Health Insurance, services that provide Mental health support, Clinics' services, Dental care services, Organ donations agency, Hearing devices' agency.

Out of the 200 advertisements used, 158 were advertisements of pharmaceutical Goods and 42 of Services. As to the type of product advertised, we found commercials of 109 OTC, 25 Disease Awareness Campaigns, 18 Health Services, 16 Cosmetics/Dermocosmetics, 16 Dietary Supplements, 6 Parapharmaceuticals, 6 Prescription Drugs, 3 Lifestyle Medication and, 1 Homeopathic Medication. The most depicted category among humorous ads of OTC is the one of "cold and flu". Among the Disease Awareness Campaigns, Covid-19 is the most frequent.

4.1.3. Statistical tools

The statistical tools used for the analysis of this research were the spreadsheet software Microsoft Excel and the statistical software platform IBM SPSS Statistics 29. The IBM SPSS is a user-friendly platform that provides the ability to obtain reliable high-precision information.

Initially all the advertisements found were collected and transferred to an Excel spreadsheet. In the spreadsheet we noted every variable used to make the taxonomy: Presenter, Age of Presenter, Visuals, Music, Humor Processes, Humor Types, Intentional Relatedness and their subvariables. For every advertisement was noted as 0 the absence and as 1 the presence of each variable. The data was then entered into the SPSS software.

Based on the data analysis of the SPSS software we composed our hypothesis. A hypothesis represents the researcher's anticipated or predicted correlation among the variables under investigation. The research process starts and finishes with the hypothesis, serving as the core

element throughout the entire procedure and is considered as the essence of the research. Without a hypothesis, research cannot effectively serve its purpose. When the researcher poses a question, identifies study concepts, and explores how these concepts are interrelated, the hypothesis provides the anticipated response. Three fundamental elements that are significant to the hypothesis are: the distinction we are attempting to determine, the relationship and the interactions between them. Concerning the relationship, the aim is to comprehend a statistically significant association, indicating that the observed difference in results is not random but rather due to statistical factors. This implies that the findings have statistical significance, whereas if the difference is caused by random variation, the results are not statistically significant (K Dayanand 2020).

In order to find the relationship between our variables we used the Chi-square test. A Chisquare test is a statistical test used when someone wants to determine whether there is a significant association between two categorical variables. The chi-square test is applied to discrete frequency data. This independence test is used to determine the likelihood of certain non-random factors influencing the observed correlation. It is based on the comparison of the observed frequencies in a contingency table with the frequencies that would be expected if the variables were independent. The chi-square test assesses whether the observed distribution of data significantly differs from the expected distribution. The chi-square test was developed by Karl Pearson and is one of his most significant contributions to modern statistics theory. Statisticians have the flexibility to employ statistical techniques that are not contingent on a normal distribution for result interpretation. The Chi-square test's significance is evaluated by considering the appropriate degrees of freedom and significance levels, referring to a Chisquare table. The Chi-square test serves two primary objectives: firstly, to examine the hypothesis suggesting no correlation among two or more groups, populations, or criteria, and secondly, to assess the extent to which the observed data distribution aligns with the anticipated distribution. The Chi-square test is employed to assess potential correlations among nonnumeric variables commonly utilized in statistical investigations. It is denoted as χ^2 outlined the prerequisites that need to be satisfied prior to conducting the test (Nihan 2020):

- i. Observed and expected observations must be gathered randomly.
- ii. All members (or items) within the sample must be independent.

- iii. No group should have an insufficient number of items (fewer than 10).
- iv. The total number of items should be sufficiently large (at least 50).

5. Data analysis and Interpretation

In this chapter, we will first analyze the data collected in the Excel spreadsheet and afterwards we will examine the hypothesis made and the data collected by the SPSS.

The total counts for 'Good' and 'Service' are 158 and 42 respectively, out of a grand total of 200. For the type of product "Good" 1.9% of advertisements were on Billboards, 35.4% were Media Assets, and 62.7% were TV commercials. When we refer to Media Assets we mean web banners, social media campaigns, and all types of print advertising. For the "Service" type of product 2.4% of advertisements were on Billboards, 28.6% were Media Assets, and 69.0% were TV commercials. So, we have a lot more advertisements about Goods, and the main channel of distribution for both types is the Television.

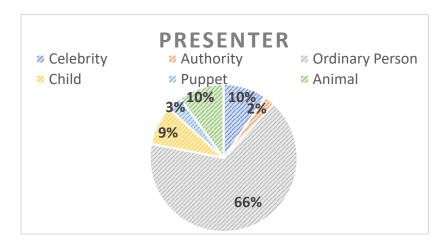
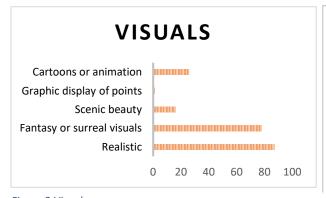


Figure 1 Presenters

The most commonly used Presenter, in 139 out of 200 advertisements, was the "Ordinary person". This represents 66% of the advertisements, out of which, 83% regard Goods and 17% concern Services. "Animal" follows with 21 participations, 20 times advertisers used a Celebrity, 18 times the presenter was a Child, in 7 advertisements marketers used or created a Puppet and 5 advertisements' spokesperson was an Authority. The highest count of the number of protagonists was found to be "2". Two presenters were seen in 55 out of 200 advertisements portraying 27,5% of cases. In reference to the age of presenter, Young or early adulthood was the most common choice, 113 times alone and in other cases these presenters were used with presenters of other groups of age (Children, Middle adulthood, Young old). The groups of Children and Young old are rarely used alone, counting 3 and 5 advertisements respectively. Old olds were never the only spokesperson.

Moving on to the visuals used in pharmaceutical advertising. Realistic visuals were seen in 87 advertisements out of a total of 200. 78 times marketers used Fantasy or surreal visuals to convey the message and 26 advertisements were Cartoon or Animation. Scenic beauty is found to coexist with other visuals, realistic or unrealistic in our sample. Only one graphic display of points was used as a visual in our analysis.

In reference to Music in our sample of advertisements, music was absent in 98 advertisements. That represents 48% of the sample. In 84 advertisements music was used but as a complementary element or in the background and only 18 times music was the major element.



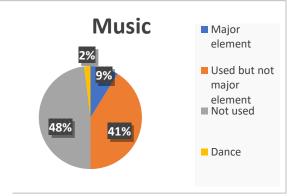


Figure 2 Visuals

Figure 3 Music

As explained above, 128 advertisements were TV commercials whereas 72 were Media Assets. It is safe to say that not in all TV ads was music used, and it is obvious that music is not seen in print media. Dance was combined with music in the cases where music was the major element and was observed in only 4 out of 200 ads.

The two tables below provide insight into the prevalence and emphasis of the different types of humor in the advertisements used. As to humor processes, Incongruity resolution is the one that was most applied, followed by Disparagement and Arousal Safety. In reference to humor types, Comic wit was the dominant one, followed by Satire and Full Comedy. The two tables complete each other, and the result is explained by the literature review: Incongruity Resolution

is the process used in 4 out of the 5 types of humor, and Comic Wit is pure Incongruity Resolution.

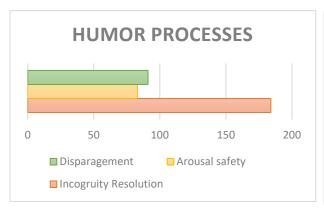




Figure 5 Humor Processes

Figure 4 Humor Types

Finally, we examine the intentional relatedness of humor and message of the collected commercials. In the humorous advertisements collected,111-55% were Humor dominant, and 76 were Image dominant. Only 13 out of 200 were Information dominant.

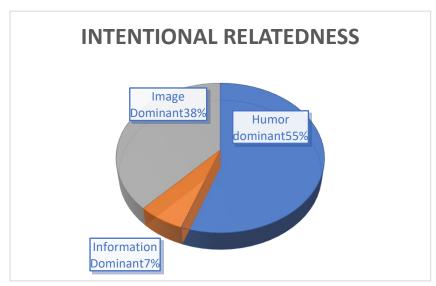


Figure 6 Intentional Relatedness

Moving on, we will demonstrate the results of the SPSS analysis and examine which hypotheses are supported.

H1: This hypothesis is not supported. In this analysis, the Likelihood Ratio test yielded a p-value of 0.650, suggesting no significant association. The Fisher's Exact Test yielded a p-value of 0.577 which is much bigger than the level significance Sig 0.05, indicating no significant association. Overall, the analysis of the Chi-Square tests suggests that there is no significant association between the variables being examined. So, I accept my Null Hypothesis, there is no correlation between the use of Celebrity and the Type of product.

Celebrity * ServiceProduct

Crosstab

-			ServiceProduct		
			Good	Service	
	0	Count	143	37	180
Calab vite	,0	% within ServiceProduct	90,5%	88,1%	90,0%
Celebrity	4.0	Count	15	5	20
	1,0	% within ServiceProduct	9,5%	11,9%	10,0%
Tatal		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,214ª	1	,643		
Continuity Correction ^b	,030	1	,862		
Likelihood Ratio	,206	1	,650		
Fisher's Exact Test				,577	,414
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 4,20.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	,033	,643
Nominal by Nominal	Cramer's V	,033	,643
N of Valid Cases		200	

H2: This hypothesis is not supported. The likelihood ratio statistic in this case is 3.696, with an associated asymptotic significance (2-sided) value of 0.055, which is bigger than the standard level of 0.050. The result is not significant, and we accept the Null Hypothesis which means that there is no association between the Type of product and the use of Authority as a presenter in pharmaceutical advertisements.

Authority * ServiceProduct

Crosstab

			Service	Total	
			Good	Service	
	0	Count	156	39	195
A uthority	,0	% within ServiceProduct	98,7%	92,9%	97,5%
Authority	4.0	Count	2	3	5
	1,0	% within ServiceProduct	1,3%	7,1%	2,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	4,702ª	1	,030		
Continuity Correction ^b	2,600	1	,107		
Likelihood Ratio	3,696	1	,055		
Fisher's Exact Test				,063	,063
N of Valid Cases	200				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 1,05.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,153	,030
Nominal by Nominal	Cramer's V	,153	,030
N of Valid Cases		200	

H3: This hypothesis is supported. The value of the Pearson chi-square statistic is 3.830 when there is one degree of freedom. A p-value of 0.050 is related to this. Given that this is precisely on the threshold of the standard alpha level of 0.05, it is reasonable to conclude that the result is only marginally significant. The p-values of the Fisher's Exact Test for the two-sided and one-sided Fisher's exact tests are 0.060 and 0.040, respectively. Both tests are considered to be identical. In this case, the p-value for the one-sided test is lower than 0.05, which indicates that there is a significant correlation between the two variables in one direction. The Cramer's V value here is 0.138 with a p-value of 0.050. This suggests a weak association that is marginally significant.

OrdinaryPerson * ServiceProduct

Crosstab

b. Computed only for a 2x2 table

			Service	Product	Total
			Good	Service	
	0	Count	43	18	61
OrdinaryParaan	,0	% within ServiceProduct	27,2%	42,9%	30,5%
OrdinaryPerson		Count	115	24	139
1,0	1,0	% within ServiceProduct	72,8%	57,1%	69,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	3,830ª	1	,050		
Continuity Correction ^b	3,127	1	,077		
Likelihood Ratio	3,670	1	,055		
Fisher's Exact Test				,060	,040
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,81.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,138	,050
	Cramer's V	,138	,050
N of Valid Cases		200	

H4: This hypothesis is not supported. The likelihood ratio chi-square value is 1.332 with 1 degree of freedom. The associated p-value is 0.249. This is above the common alpha level of

b. Computed only for a 2x2 table

0.050, suggesting that there is not a significant association between the two variables based on the likelihood ratio. So, I accept my Null Hypothesis, the choice of Child as a presenter is not correlated to the Type of product.

Chlid * ServiceProduct

Crosstab

			Service	Total	
			Good	Service	
	0	Count	142	40	182
Oly II al	,0	% within ServiceProduct	89,9%	95,2%	91,0%
Chlid	4.0	Count	16	2	18
	1,0	% within ServiceProduct	10,1%	4,8%	9,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1,166ª	1	,280		
Continuity Correction ^b	,603	1	,437		
Likelihood Ratio	1,332	1	,249		
Fisher's Exact Test				,374	,226
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,78.

Symmetric Measures

b. Computed only for a 2x2 table

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,076	,280
Nominal by Nominal	Cramer's V	,076	,280
N of Valid Cases		200	

H5: This Hypothesis is not supported. The Likelihood Ratio value is 0.215 with 1 degree of freedom, and the associated p-value is 0.643. This is above the level significance (0.050) which suggests no significant association. So, I accept my Null Hypothesis, the choice of Puppet as a presenter is not associated with the Type of product.

Puppet * ServiceProduct

Crosstab

				ServiceProduct		
			Good	Service		
	0	Count	152	41	193	
Dunnat	,0	% within ServiceProduct	96,2%	97,6%	96,5%	
Puppet	1.0	Count	6	1	7	
	1,0	% within ServiceProduct	3,8%	2,4%	3,5%	
Total		Count	158	42	200	
iolai		% within ServiceProduct	100,0%	100,0%	100,0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,197ª	1	,657		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,215	1	,643		

Fisher's Exact Test			1,000	,548
N of Valid Cases	200			

- a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 1,47.
- b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,031	,657
Nominal by Nominal	Cramer's V	,031	,657
N of Valid Cases		200	

H6: This Hypothesis is not supported. The value of the Likelihood Ratio is 1.184 with 2 degrees of freedom. The p-value is 0.553, which is also greater than the common alpha level of 0.050. This supports the conclusion that there is no significant association between the variables. I accept my Null hypothesis.

Animal * ServiceProduct

Crosstab

			ServiceProduct		Total
			Good	Service	
	0	Count	139	39	178
	,0	% within ServiceProduct	88,0%	92,9%	89,0%
Animal	1.0	Count	18	3	21
Animal	1,0	% within ServiceProduct	11,4%	7,1%	10,5%
	2.0	Count	1	0	1
2,0		% within ServiceProduct	0,6%	0,0%	0,5%
Total		Count	158	42	200

% within ServiceProdu

100,0%

100,0%

100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,925ª	2	,630
Likelihood Ratio	1,184	2	,553
N of Valid Cases	200		

a. 3 cells (50,0%) have expected count less than 5. The minimum expected count is ,21.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,068	,630
Nominal by Nominal	Cramer's V	,068	,630
N of Valid Cases		200	

H7: This hypothesis is not supported. The Pearson Chi-Square value is 30.940 with 19 degrees of freedom. The associated p-value is 0.041. The Likelihood Ratio is 30.261 with 19 degrees of freedom. The associated p-value is 0.049. Since both p-values are less than 0.05, we would reject the null hypothesis, suggesting that there is a significant association between the variables assessed. Phi and Cramer's V are both 0.393. These are measures of the strength of association between the two nominal variables, which suggest a moderate association between the variables Age of Presenter and Type of product.

Ageofpresenters * ServiceProduct

Crosstab

ServiceProduct	Total

			Good	Service	
	0	Count	27	10	37
	U	% within ServiceProduct	17,1%	23,8%	18,5%
	6	Count	0	1	1
	O	% within ServiceProduct	0,0%	2,4%	0,5%
	Childern and Young or	Count	1	0	1
	early adulthood	% within ServiceProduct	0,6%	0,0%	0,5%
	Children	Count	2	1	3
	Cimuren	% within ServiceProduct	1,3%	2,4%	1,5%
	Children & young or Early adulthood & Young old	Count	1	0	1
		% within ServiceProduct	0,6%	0,0%	0,5%
	Children and Young old	Count	0	1	1
		% within ServiceProduct	0,0%	2,4%	0,5%
Ageofpresenters	Children and Young or earlly adulthood	Count	1	0	1
		% within ServiceProduct	0,6%	0,0%	0,5%
	Children and Young or early adulthood	Count	9	0	9
		% within ServiceProduct	5,7%	0,0%	4,5%
	Children and Young or	Count	2	0	2
	early adulthood and Young old	% within ServiceProduct	1,3%	0,0%	1,0%
		Count	8	1	9
	Middle adulthood	% within ServiceProduct	5,1%	2,4%	4,5%
	Middle adulthood and	Count	0	1	1
	Young old	% within ServiceProduct	0,0%	2,4%	0,5%
		Count	0	1	1
	Unknown	% within ServiceProduct	0,0%	2,4%	0,5%
		Count	1	0	1

	Young adulthood and young old	% within ServiceProduct	0,6%	0,0%	0,5%
	Varia and	Count	4	1	5
	Young old	% within ServiceProduct	2,5%	2,4%	2,5%
	Young or early adulthood	Count	0	1	1
	Young or early adulthood	% within ServiceProduct	0,0%	2,4%	0,5%
	Young or early adlthood	Count	3	2	5
	roung or early authored	% within ServiceProduct	1,9%	4,8%	2,5%
	Young or early adulthood	Count	89	18	107
	.cag c. ca, aaacca	% within ServiceProduct	56,3%	42,9%	53,5%
	Young or early adulthood	Count	1	2	3
	and middle adulthood	% within ServiceProduct	0,6%	4,8%	1,5%
	Young or early adulthood	Count	2	0	2
	and Middle adulthood	% within ServiceProduct	1,3%	0,0%	1,0%
	Young or early adulthood	Count	7	2	9
	and Young old	% within ServiceProduct	4,4%	4,8%	4,5%
Total		Count	158	42	200
		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,940 ^a	19	,041
Likelihood Ratio	30,261	19	,049
N of Valid Cases	200		

a. 33 cells (82,5%) have expected count less than 5. The minimum expected count is ,21.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,393	,041
	Cramer's V	,393	,041
N of Valid Cases		200	

H8: This hypothesis is supported. The Pearson Chi-Square value is 0.198 with 1 degree of freedom. The p-value associated with this statistic is 0.657. A p-value greater than the significance level (0.050) suggests that there is not enough evidence to reject the null hypothesis of independence between the two categorical variables (good/service). The observed association is likely due to random chance, and there is no statistically significant evidence of a relationship between the variables. The use of Realistic visuals in advertisements is associated with the type of product.

Realistic * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
	0	Count	88	25	113
Dealistic	,0	% within ServiceProduct	55,7%	59,5%	56,5%
Realistic	Realistic 1,0	Count	70	17	87
		% within ServiceProduct	44,3%	40,5%	43,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,198ª	1	,657		
Continuity Correction ^b	,073	1	,787		
Likelihood Ratio	,199	1	,656		
Fisher's Exact Test				,728	,395
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 18,27.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,031	,657
	Cramer's V	,031	,657
N of Valid Cases		200	

H9: This hypothesis is supported. The Pearson Chi-Square value is 0.332 with 1 degree of freedom. The p-value associated with this statistic is 0.564. A p-value greater than the significance level (0.050) suggests that there is not enough evidence to reject the null hypothesis of independence between the two categorical variables (good/service). The observed association is likely due to random chance. There is no statistically significant evidence of a relationship between the choice of Fantasy or Surreal Visuals and the Type of product advertised.

Fantasyorsurrealvisuals * ServiceProduct

Crosstab

Service	Product	Total
Good	Service	

b. Computed only for a 2x2 table

	,0	Count	98	24	122
		% within ServiceProduct	62,0%	57,1%	61,0%
Fantasyorsurrealvisuals	4.0	Count	60	18	78
	1,0	% within ServiceProduct	38,0%	42,9%	39,0%
Tatal		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,332ª	1	,564		
Continuity Correction ^b	,159	1	,690		
Likelihood Ratio	,330	1	,566		
Fisher's Exact Test				,596	,343
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 16,38.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,041	,564
	Cramer's V	,041	,564
N of Valid Cases		200	

H10: This hypothesis is not supported. The Likelihood Ratio value is 0.846 with 1 degree of freedom, and the associated p-value is 0.358. This is above the level significance (0.050) which suggests no significant association. So, I accept my Null Hypothesis, the choice of Scenic Beauty in Visuals is not associated with the Type of product.

b. Computed only for a 2x2 table

Scenicbeauty * ServiceProduct

Crosstab

			Service	ServiceProduct		
			Good	Service		
	,0 Scenicbeauty 1,0	Count	144	40	184	
Casnishasutu		% within ServiceProduct	91,1%	95,2%	92,0%	
Scenicbeauty		Count	14	2	16	
		% within ServiceProduct	8,9%	4,8%	8,0%	
Total		Count	158	42	200	
TOTAL		% within ServiceProduct	100,0%	100,0%	100,0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,757ª	1	,384		
Continuity Correction ^b	,303	1	,582		
Likelihood Ratio	,846	1	,358		
Fisher's Exact Test				,531	,306
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,36.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,062	,384
	Cramer's V	,062	,384
N of Valid Cases		200	

b. Computed only for a 2x2 table

H11: This hypothesis is not supported. The Pearson Chi-Square statistic is 0.267, with an asymptotic significance (2-sided) of 0.605. This p-value is greater than the typical alpha level of 0.05, indicating that we fail to reject the null hypothesis of no association between the variables. The values of Continuity Correction and Fisher's Exact Test, are both non-significant (1.000 and 0.790, respectively), reinforcing the conclusion of no significant association. The low Chi-Square statistic (0.267) suggests that the observed distribution of frequencies in data is remarkably similar to what would be expected if there were no real association between the variables (Graphic display of points and Type of product).

Graphicdisplayofpoints * ServiceProduct

Crosstab

			Service	ServiceProduct	
			Good	Service	
,0 Graphicdisplayofpoints	,0	Count	157	42	199
		% within ServiceProduct	99,4%	100,0%	99,5%
	4.0	Count	1	0	1
	1,0	% within ServiceProduct	0,6%	0,0%	0,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,267ª	1	,605		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,473	1	,492		
Fisher's Exact Test				1,000	,790
N of Valid Cases	200				

- a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is ,21.
- b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,037	,605
Nominal by Nominal	Cramer's V	,037	,605
N of Valid Cases		200	

H12: This hypothesis is supported. The Pearson Chi-square value is 0.078 and its associated p-value is 0.78, which is bigger than the typical significance level of 0.050. This result suggests that the variables are independent. So, I accept my Null hypothesis, there is no significant association between the use of Cartoon or animation in advertising depending on the Type of product.

Cartoonsoranimation * ServiceProduct

Crosstab

			ServiceProduct		Total
			Good	Service	
	0	Count	138	36	174
Contagnos vanimos tiga	,0	% within ServiceProduct	87,3%	85,7%	87,0%
Cartoonsoranimation 1,	4.0	Count	20	6	26
	1,0	% within ServiceProduct	12,7%	14,3%	13,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,078ª	1	,780		
Continuity Correction ^b	,000	1	,984		
Likelihood Ratio	,076	1	,783		
Fisher's Exact Test				,798	,477
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,46.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,020	,780
	Cramer's V	,020	,780
N of Valid Cases		200	

H13: This Hypothesis is not supported. The Likelihood ratio statistic is 1.332, with an associated asymptomatic significance (2-sided) value of 0.249. This is much bigger than the standard level of 0.050. The result is not significant, I accept my Null hypothesis. The variables of Music being the major element and Type of product are independent.

Majorelement * ServiceProduct

Crosstab

				Service	Total	
				Good	Service	
Majorelement ,0		Count	142	40	182	
	1	% within ServiceProduct	89,9%	95,2%	91,0%	

b. Computed only for a 2x2 table

	4.0	Count	16	2	18
	1,0	% within ServiceProduct	10,1%	4,8%	9,0%
Takal		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1,166ª	1	,280		
Continuity Correction ^b	,603	1	,437		
Likelihood Ratio	1,332	1	,249		
Fisher's Exact Test				,374	,226
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,78.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,076	,280
	Cramer's V	,076	,280
N of Valid Cases		200	

H14: This hypothesis is supported. The Pearson Chi-Square Test is 2.352 with 1 degree of freedom. The p-value (Asymp. Sig. (2-sided)) is 0.125, which is greater than 0.050, indicating that the result is not statistically significant. I accept my Null hypothesis, there is no association between the variables of Music used but not the major element and the Type of product.

Usedbutnotmajorelement * ServiceProduct

b. Computed only for a 2x2 table

Crosstab

			Service	Product	Total
			Good	Service	
	0	Count	96	20	116
	,0	% within ServiceProduct	60,8%	47,6%	58,0%
Usedbutnotmajorelement	1,0	Count	62	22	84
		% within ServiceProduct	39,2%	52,4%	42,0%
T		Count	158	42	200
Total	% within ServiceProduct		100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	2,352ª	1	,125		
Continuity Correction ^b	1,843	1	,175		
Likelihood Ratio	2,327	1	,127		
Fisher's Exact Test				,159	,088
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 17,64.

Symmetric Measures

		Value	Approx. Sig.
Name at her Name at	Phi	,108	,125
Nominal by Nominal	Cramer's V	,108	,125
N of Valid Cases		200	

b. Computed only for a 2x2 table

H15: This hypothesis is supported. The Pearson Chi-Square value is 0.803 with 1 degree of freedom. The p-value associated with this statistic is 0.370. A p-value greater than the significance level (0.050) suggests that there is not enough evidence to reject the null hypothesis of independence between the two categorical variables (good/service). The observed association is likely due to random chance, and there is no statistically significant evidence of a relationship between the variables. The Absence of Music in advertisements is associated with the Type of product.

Notused * ServiceProduct

Crosstab

			Service	Total	
			Good	Service	
	0	Count	78	24	102
Notused	,0	% within ServiceProduct	49,4%	57,1%	51,0%
Notusea	1.0	Count	80	18	98
	1,0	% within ServiceProduct	50,6%	42,9%	49,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,803ª	1	,370		
Continuity Correction ^b	,522	1	,470		
Likelihood Ratio	,805	1	,369		
Fisher's Exact Test				,391	,235
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 20,58.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,063	,370
Nominal by Nominal	Cramer's V	,063	,370
N of Valid Cases		200	

H16: This hypothesis is not supported. The value of the Likelihood Ratio is 0.038 with 1 degree of freedom. The p-value is 0.846, which is greater than the common alpha level of 0.050. This supports the conclusion that there is no significant association between the variables. I accept my Null hypothesis. There is no correlation between Dance and Type of product.

Dance * ServiceProduct

Crosstab

				Product	Total
			Good	Service	
	-	Count	155	41	196
D	,0	% within ServiceProduct	98,1%	97,6%	98,0%
Dance	4.0	Count	3	1	4
	1,0	% within ServiceProduct	1,9%	2,4%	2,0%
T-4-1		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,039ª	1	,843		

Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,038	1	,846		
Fisher's Exact Test				1,000	,614
N of Valid Cases	200				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is ,84.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,014	,843
Nominal by Nominal	Cramer's V	,014	,843
N of Valid Cases		200	

H17: This hypothesis is not supported. The Likelihood Ratio test produced a value of 0.054 with an asymptotic significance of 0.816. The values indicate that there is no statistically significant association between the humor process of Incongruity resolution and the type of product (good or service). I accept my Null hypothesis.

IncogruityResolution * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
	0	Count	13	3	16
,0	% within ServiceProduct	8,2%	7,1%	8,0%	
IncogruityResolution	1.0	Count	145	39	184
	1,0	% within ServiceProduct	91,8%	92,9%	92,0%
Total		Count	158	42	200

b. Computed only for a 2x2 table

% within	ServiceProduct
/0 WILIIII	I Servicer roduct

100,0%

100,0%

100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,053ª	1	,818,		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,054	1	,816		
Fisher's Exact Test				1,000	,557
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,36.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,016	,818,
Nominal by Nominal	Cramer's V	,016	,818,
N of Valid Cases		200	

H18: This hypothesis is supported. The value of the Pearson chi-square statistic is 1.582 when there is one degree of freedom. A p-value of 0.208 is related to this. This is greater than the level significance 0.050, which means that there is no statistically significant association between the two nominal variables: Arousal safety and Type of product.

Arousalsafety * ServiceProduct

ServiceProduct	Total

b. Computed only for a 2x2 table

			Good	Service	
0	0	Count	96	21	117
Arousalsafety	,0	,0 % within ServiceProduct		50,0%	58,5%
Alousalsalety	1.0	Count		21	83
	1,0	% within ServiceProduct	39,2%	50,0%	41,5%
Total		Count	158	42	200
		% within ServiceProduct	100,0%	100,0%	100,0%

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1,582ª	1	,208		
Continuity Correction ^b	1,170	1	,279		
Likelihood Ratio	1,566	1	,211		
Fisher's Exact Test				,222	,140
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 17,43.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,089	,208
	Cramer's V	,089	,208
N of Valid Cases		200	

H19: This hypothesis is supported. The Pearson Chi-Square statistic is 0.434 and the asymptotic two-sided p-value is 0.510, which is greater than 0.050. This suggests that there is not enough evidence to reject the null hypothesis at a 5% significance level. The Likelihood

b. Computed only for a 2x2 table

Ratio Test yields a two-sided exact p-value of 0.511, which is greater than 0.050 and does not support statistical significance. I accept my Null hypothesis; there is no statistically significant correlation between the variables Disparagement and Type of product.

Disparagement * ServiceProduct

Crosstab

			Service	Total	
			Good	Service	
	0	Count	88	21	109
Dianamanana	,0	% within ServiceProduct	55,7%	50,0%	54,5%
Disparagement	4.0	Count	70	21	91
	1,0	% within ServiceProduct	44,3%	50,0%	45,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,434ª	1	,510		
Continuity Correction ^b	,235	1	,628		
Likelihood Ratio	,433	1	,511		
Fisher's Exact Test				,602	,313
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 19,11.

Symmetric Measures

b. Computed only for a 2x2 table

		Value	Approx. Sig.
Nominal by Nominal	Phi	,047	,510
	Cramer's V	,047	,510
N of Valid Cases		200	

H20: This hypothesis is supported. Likelihood Ratio: The "Asymp. Sig." value here is 3.973 (2-sided, 0.046), which borders on the conventional threshold for statistical significance. Fisher's Exact Test: It provides an "Exact Sig. (2-sided)" value of 0.067 and an "Exact Sig. (1-sided)" value of 0.037. The two-sided test, which assesses for any association without directionality, is not statistically significant if we adhere strictly to the <0.05 criterion. However, the one-sided test, which assesses for an association in a specific direction, shows statistical significance. Based on conventional criteria (<0.05), only the one-sided Fisher's Exact Test shows statistical significance with a p-value of 0.037. Both Phi and Cramer's V are reported as 0.137, indicating a weak but potentially meaningful association between the variables Comic wit and Type of product, so that the humor type of Comic wit is used more in advertisements about Goods.

Comicwit * ServiceProduct

			ServiceProduct		Total	
			Good	Service		
	0	Count	99	33	132	
Compientit	,0	% within ServiceProduct		62,7%	78,6%	66,0%
Comicwit	vit 1,0	Count	59	9	68	
		% within ServiceProduct	37,3%	21,4%	34,0%	
Total		Count	158	42	200	
		% within ServiceProduct	100,0%	100,0%	100,0%	

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	3,744ª	1	,053		
Continuity Correction ^b	3,069	1	,080,		
Likelihood Ratio	3,973	1	,046		
Fisher's Exact Test				,067	,037
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,28.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-,137	,053
	Cramer's V	,137	,053
N of Valid Cases		200	

H21: This hypothesis is not supported. The value of the Likelihood Ratio is 0.283 with 1 degree of freedom. The p-value associated with it is 0.595, which is much bigger than the common alpha level of 0.050. This result indicates that there is no significant association between the variables. I accept my Null hypothesis. There is no correlation between Sentimental humor and Type of product.

SentimentalHumor * ServiceProduct

ServiceProduct		Total
Good	Service	

b. Computed only for a 2x2 table

	,0	Count	147	40	187
		% within ServiceProduct	93,0%	95,2%	93,5%
SentimentalHumor	4.0	Count	11	2	13
	1,0	% within ServiceProduct	7,0%	4,8%	6,5%
Tatal		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,264ª	1	,607		
Continuity Correction ^b	,026	1	,871		
Likelihood Ratio	,283	1	,595		
Fisher's Exact Test				1,000	,460
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,73.

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,036	,607
Nominal by Nominal	Cramer's V	,036	,607
N of Valid Cases		200	

H22: This hypothesis is supported. The Pearson Chi-Square value is 0.476 with 1 degree of freedom. The p-value associated with this statistic is 0.490. A p-value greater than the significance level (0.050) suggests that there is not enough evidence to reject the null hypothesis of independence between the two categorical variables (good/service). The

b. Computed only for a 2x2 table

observed association is likely due to random chance. There is no statistically significant evidence of a relationship between the choice of Satire and the Type of product advertised.

Satire * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
	0	Count	121	30	151
Catina	,0	% within ServiceProduct	76,6%	71,4%	75,5%
Satire	Satire 1,0	Count	37	12	49
		% within ServiceProduct	23,4%	28,6%	24,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,476ª	1	,490		
Continuity Correction ^b	,239	1	,625		
Likelihood Ratio	,465	1	,495		
Fisher's Exact Test				,546	,307
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 10,29.

b. Computed only for a 2x2 table

Symmetric Measures

	Value	Approx. Sig.
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Nominal by Nominal	Phi	,049	,490
	Cramer's V	,049	,490
N of Valid Cases		200	

H23: This hypothesis is supported. Pearson Chi-Square: The p-value is .025 (2-sided). A p-value of .025 indicates that there is a statistically significant association between these variables at the conventional alpha level of 0.05. I accept my H23 hypothesis, there is a significant relationship between Sentimental comedy and Type of product. The Nominal Phi value and Cramer's V value are both 0.159, indicating a weak association.

Sentimentalcomedy * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
	0	Count	136	30	166
Cantina antala ana adu	,0 Sentimentalcomedy	% within ServiceProduct	86,1%	71,4%	83,0%
Sentimentalcomedy		Count	22	12	34
1,0	1,0	% within ServiceProduct	13,9%	28,6%	17,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	5,045ª	1	,025		
Continuity Correction ^b	4,060	1	,044		
Likelihood Ratio	4,568	1	,033		

Fisher's Exact Test			,036	,026
N of Valid Cases	200			

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,14.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,159	,025
	Cramer's V	,159	,025
N of Valid Cases		200	

H24: This hypothesis is supported. The value of the Pearson chi-square statistic is 0.064 when there is one degree of freedom. A p-value of 0.800 is related to this. This is greater than the level significance 0.050, which means that there is no statistically significant association between the two nominal variables: Full comedy and Type of product. I accept my Null hypothesis.

Fullcomedy * ServiceProduct

			Service	Product	Total
			Good	Service	
	0	Count	129	35	164
Full consolete	,0	% within ServiceProduct	81,6%	83,3%	82,0%
Fullcomedy	ullcomedy	Count	29	7	36
		% within ServiceProduct	18,4%	16,7%	18,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

b. Computed only for a 2x2 table

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,064ª	1	,800		
Continuity Correction ^b	,001	1	,978		
Likelihood Ratio	,065	1	,799		
Fisher's Exact Test				1,000	,501
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,56.

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,018	,800
Nominal by Nominal	Cramer's V	,018	,800
N of Valid Cases		200	

H25: This hypothesis is supported. For Pearson Chi-Square, Continuity Correction, and Likelihood Ratio tests, all have an asymptotic significance (p-value) of 1 degree, which is much higher than 0.05. All these values indicate that there is no statistically significant association between the variables Humor dominant and Type of product.

Humordominant * ServiceProduct

			Service	Product	Total
			Good	Service	
Humordominant	,0	Count	72	17	89

b. Computed only for a 2x2 table

	-	% within ServiceProduct	45,6%	40,5%	44,5%
	1,0	Count	86	25	111
		% within ServiceProduct	54,4%	59,5%	55,5%
Takal		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,349ª	1	,555		
Continuity Correction ^b	,173	1	,678		
Likelihood Ratio	,350	1	,554		
Fisher's Exact Test				,603	,340
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 18,69.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,042	,555
Norminal by Norminal	Cramer's V	,042	,555
N of Valid Cases		200	

H26: This hypothesis is not supported. The Likelihood ratio is 1.823 with an "Asymp. Sig (2-sided) of 0.177. This value is significantly higher than the level significance 0.050. I accept my Null hypothesis. There is no statistically significant association between the variables Information dominant and Type of product.

b. Computed only for a 2x2 table

InformationDominant * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
,0 InformationDominant	0	Count	146	41	187
	,0	% within ServiceProduct	92,4%	97,6%	93,5%
	4.0	Count	12	1	13
	1,0	% within ServiceProduct	7,6%	2,4%	6,5%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1,484ª	1	,223		
Continuity Correction ^b	,750	1	,386		
Likelihood Ratio	1,823	1	,177		
Fisher's Exact Test				,308	,198
N of Valid Cases	200				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,73.

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	-,086	,223
Nominal by Nominal	Cramer's V	,086	,223
N of Valid Cases		200	

b. Computed only for a 2x2 table

H27: This hypothesis is supported. The Pearson Chi-Square, Continuity Correction, and Likelihood Ratio all show a value of .000 for "Valued". A p-value of 1 (of the Continuity Correction) indicates no evidence against the null hypothesis, suggesting no significant association between the variables tested (Image dominant and Type of product).

ImageDominant * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
		Count	98	26	124
ImagaDaminant		% within ServiceProduct	62,0%	61,9%	62,0%
ImageDominant		Count	60	16	76
	1,0	% within ServiceProduct	38,0%	38,1%	38,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,000ª	1	,989		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,000	1	,989		
Fisher's Exact Test				1,000	,562
N of Valid Cases	200				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 15,96.

Symmetric Measures

b. Computed only for a 2x2 table

		Value	Approx. Sig.
Naminal by Naminal	Phi	,001	,989
Nominal by Nominal	Cramer's V	,001	,989,
N of Valid Cases		200	

6. Conclusions

This thesis explored the emotional appeal of humor in pharmaceutical advertisements. This research examined the comparison of advertisements involving a good or a service and the strategic choices for their effectiveness. These insights are considered crucial for better understanding of the selection of appropriate means to transmit health messages and the condition under which they combine best with humor. This study evaluates the comparison between the two types of products and the elements that constitute the advertisements.

Marketers are extremely interested in the use of humor as an executional strategy, as the application of humor can create memorable messages that ultimately capture attention and message retention, increase persuasiveness, and purchase intention. In the field of pharmaceutical industry was used to grab attention, inform in a more lightened way, engage, and entertain the audience, increase brand recognition and memory, drive buying intentions, decrease fear, stigma, shame, and defensive responses that come along with serious health issues.

Humor, as discussed in the literature review is an effective tool in advertisements concerning serious diseases and treatments. It is used in health advertising to reduce fear and increase the effectiveness of the message. It helps individuals cope with stressful situations and reduce defensive responses and leads to an increased likelihood of adopting the proposed solution (Ashesh Mukherjee 2012). Humor is also used as a means of reducing shame and increasing approach coping in shame-inducing health matters. It allows individuals to view the positive side of things and the laughter induced by it leads to physiological tension relief. When it comes to health conditions that can cause shame, humor may be a comfort in stressful circumstances and can be an effective strategy for reducing embarrassment and increasing responsiveness, especially for individuals with high levels of fear of negative evaluation (FNE) (Yoon 2015). Additionally, humor can decrease defensive responses to negative health consequences and promote a positive attitude toward the health messages. (Eisend 2009; Iles and Nan 2017; Sternthal and Craig 1973; Weinberger and Gulas 2019; Tâm et al. 2016; Blanc and Brigaud 2014). Humor also finds use in advertising preventive messages. These are communications aimed at promoting healthy behaviors and reducing risky behaviors to prevent negative health

outcomes. Studies have shown that presenting serious health consequences in a humorous context can decrease counterarguing and defensive responses of the audience. The affective responses triggered by humor, such as happiness and pleasure, can also reduce individuals' motivation to counterargue the persuasive message, leading to a more positive attitude towards the health ads (Blanc and Brigaud 2014). Moreover, humor is found beneficial in the communication of preventive campaigns (prevent unwanted pregnancy or drive when drunk) since it is found to broaden the campaign's audience by engaging more actively in social conversations (Weinberger and Gulas 2019). In conclusion, all the above explain why humor is an effective tool on preventive medicine and encourages people take proactive measures for their health. Humor was found in advertising topics like Child obesity, Anti-smoking drugs or campaigns, the service of the "Personal doctor". Humor can help address health problems associated with social stigma or life-threatening health issues and is found in Disease awareness campaigns and also Health services advertisements like seeking help for mental health or treating an STD. Applying humor to serious topics should be done cautiously. It may attract attention, boost a variety of responses, including recollection, persuasion, trustworthiness, and ad sharing, for some audiences, but it may also make some audiences less likely to remember, recognize, or estimate an issue.

Among the different types of advertisements, the OTC category is the one where humor is mostly used in matters of health rather than every other category. This is a reasonable finding when taking into consideration that OTC products are generally safe for self-medication and the diseases, they address are often less severe than those requiring prescription-mediation or are talked about in disease awareness campaigns. Even though, according to Gulas and Weinberger (2006), humor is not suitable for the "high-risk functional products, such as prescription drugs or life insurance, humor is found to be integrated into less important matters, such as over-the-counter drugs. Additionally, since humor is used to engage the target audience, and OTC are drugs that concern very often a wide range of people, it is a more suitable combination for marketers to use humor in advertising OTC that have a huge target audience (Cîrstea, Moldovan-Teselios, and Iancu 2017; Weinberger and Gulas 2019).

It's important to note that the use of humor in health-related advertisements requires careful consideration to ensure that it is appropriate and does not trivialize serious health conditions.

The effectiveness of humor in advertising can vary based on cultural factors, target audience preferences, and the specific health issue being addressed. Its use in advertising is influenced by cultural, social, and individual dimensions and values. Humor in advertising has different effects on audiences around the world; different cultural backgrounds utilize humor in different ways, use different types of humor and respond to it in different ways. Thus, marketers should take notice of all these factors and align their creative strategies to convey their message with the cultural characteristics of their audience (Hatzithomas, Zotos, and Boutsouki 2011a).

To begin with the results of this analysis, we found that for the choice of presenter, "Ordinary person" is the best solution in pharmaceutical advertising. According to the literature this is accurate since compared to celebrities or professionals, peer endorsers are more relatable to the audience increasing identification and engagement. This is why they increase the credibility and trustworthiness of the message. Also, this approach is more prevalent in OTC advertising according to research (Munnukka, Uusitalo, and Toivonen 2016). So, it makes sense that they are the main presenter since our sample consists mostly of OTC advertisements. In conclusion, Ordinary people endorsers are a safe solution to convey serious matters of health and are more relatable when they are portrayed with humor.

In relation to the group of age of the presenter, we found that the group of "Young or early adulthood" was the prevalent one. We already discussed in the literature review how protagonists having the same demographic characteristics as that of the target audience, such as age, race, social position, and lifestyle, are seen as considerably more persuasive and believable. The endorser selected is typically the same age as the target audience to guarantee connections to similar generations (Comiati et al. 2010). As a result, since the bigger part of the advertisements selected concern OTC products, that are mainly used by this exact group of age (young and early adulthood), this is a logical finding. Generally, advertisers should use presenters of the same group of age as the target audience to ensure persuasion and drive purchase intention.

Music was used in 51% of the humorous advertisements but was the major element only in 9% of the cases. It was also found that not in every TV commercial marketers used humor. This

may be due to the seriousness of health issues displayed. There are many studies that discuss the benefits of the use of music in the background: it attracts attentions, stimulates memory, creates positive attitudes towards the brand and generally affects the way consumers perceive the product (Graakjær 2015; Krishna, Cian, and Sokolova 2016). So, music has many benefits and should be integrated in humor advertising of pharmaceutical products because it increases the whole audiovisual experience of the audience and can affect the persuasiveness of the message that can result in raised awareness and enhanced public health.

As to the visuals chosen, Realistic visuals were the main strategic decision (43.5%) of pharmaceutical advertisements. As we explored in the literature review other visuals like unrealistic and cartoons or animation, show great effectiveness and have a major impact on the target audience. However, it seems that advertisers of the pharmaceutical industry find these visuals disorienting the audience from the subject of the advertisement and they were not used. However, Unrealistic images and Animation combine better with humor leading to a more creative result. Moreover, using unrealistic visuals in ads attracts attention, enhances recall, and diminishes consumers' assessments of benefits and drawbacks of the product, influencing their consumption behavior (Kim, Choi, and Wakslak 2019; Goel and Upadhyay 2017). Thus, we suggest that Fantasy and Surreal visuals and Cartoon and Animation are safe to be integrated into future pharmaceutical advertising, but also taking into consideration the communication goal.

In reference to the Humor processes used As to humor processes, Incongruity resolution is the one that was most applied, followed by Disparagement and Arousal Safety. This result is justified by the literature: Incongruity resolution involves the element of surprise, which is vital for assessing creativity and is quite important in TV commercials. Since our sample consists mostly of TV commercials this was an expected result. Moreover, this process is considered a culture-free, all-pervasive technique for generating humor and is recognized in various cultural environments and writings. Incongruity resolution aids learning and cognitive and emotional growth in humans and is recognized as a culture-free, all-pervasive technique for generating humor (Hatzithomas, Zotos, and Boutsouki 2011b; Speck 1991; Weinberger and Gulas 2019). Our sample is also considered multicultural and international. So, it is safely employed regardless of the target audience. In conclusion, Incongruity resolution can be used in

humorous commercials of pharmaceutical products and health services, and it is an effective and promising technique.

With regard to the humor types employed Comic wit was the most frequently used, followed by Satire and Full Comedy. As was mentioned before, Incongruity resolution is the humor process involved in 4 out of 5 humor types. These three humor types all include Incongruity resolution. Since it was the Humor process mostly applied in our sample of advertisements, this finding is justifiable and also expected. Sentimental comedy and Sentimental humor follow concluding the results. As proposed by research, Comic wit engages the audience and creates positive association with the brand or product through clever and humorous messaging (Hatzithomas, Zotos, and Boutsouki 2011b). Advertisers can easily apply it in print and TV advertisements that address health issues.

Concerning the Intentional Relatedness of the message, Humor-dominant messages dominated our sample of advertisements (55%), followed by Image-dominant. So, the emphasis of advertisers was put into the entertainment of the audience and the brand (Hatzithomas, Zotos, and Boutsouki 2011a). The last category was Information-dominant messages, only 7% of our advertisements. This is, again, a justifiable result since we examined humorous advertisements of pharmaceutical products and health services. There are information-dominant ads in the pharmaceutical industry, but these are not humorous.

As to the SPSS analysis, the following variables were found to be affected by whether the advertisements were about goods or services:

- Age of presenters
- Comic Wit
- Sentimental Comedy

There is a significant association between these variables and the Type of product. Apparently the type of humor used depends on the type of product, so that Comic wit and Sentimental comedy are mostly seen in advertisements involving Goods rather than Services. Also, the Age of the presenter employed to convey the message is dependent on the Type of product

advertised, so that, Young and early adults are more likely to appear in advertisements of Goods. In conclusion, we suggest advertisers take notice of these insights in the field of pharmaceutical advertising.

7. Limitations

The conclusions of this study, as with most, are subject to some limitations that provide opportunities for further investigation in future research. Firstly, for the current study were found only humorous advertisements of the various pharmaceutical products and services. Future studies could find and compare humorous and non-humorous ads of the same products/services, evaluating the attention gained, the persuasiveness and purchase intention. In terms of Disease Awareness Campaigns, the comparison could be used to measure the decrease of counterarguing, or the influence of behavior to seek for treatment.

Another notable limitation of this research is that several brands were used more than once. Apparently, there is a pattern, certain topics (e.g. allergy) are more likely to induce laughter than others (cosmetic skin care). Also, certain brands have the tendency to use humor as their marketing strategy more than others- Zyrtec and Mucinex have many funny commercials, not all included in this study. This limitation of course affects the findings of this content analysis. Future research could compare advertisements of the same medication using questionnaires to find the impact and effectiveness of these advertisements among different groups of audience.

Moreover, another limitation is the use of different types of advertisements, including TV commercials, web banners, social media campaigns, billboards and generally print media. There could be research that estimates and compares advertisements only of the same media channel.

Additionally, there is a limitation concerning the exclusive examination of the emotional appeal of humor. There are in this study advertisements, where humor is combined with other emotional appeals, such as fear, shame, stigma, or warmth. Future research could examine the coexistence of appeals in advertisements of this research and explore the frequency of the strategy of mixing appeals in commercials of good and services.

The last limitation is about the "multinationalism" of this research. For this study we collected advertisements from different countries around the world. As discussed in the literature review, humor, amusement, and laughter are encountered globally. However, the perception and appreciation of humor is influenced by cultural values. The expression of humor is affected by linguistic context, social context, and cultural norms. Humor in advertising has different effects on audiences around the world; different cultural backgrounds utilize humor in different means, use different types of humor and respond to it in different ways. Since the cultural dimensions of the advertisements used in this study were not discussed at all, that brings an opportunity for further investigation.

A major challenge in future studies is to directly investigate the power of humor in pharmaceutical advertising on the decision process. Even though content analyses of advertisements have identified various types of humor (e.g., slapstick humor, puns, irony, satire, sarcasm) (Buijzen & Valkenburg, 2009), studies investigating the persuasive power of humor and determining the humor types having the greatest impact have yet to be made (Iles and Nan, 2017).

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9. Appendix

Crosstabs

Notes

Output Created		07-FEB-2024 11:47:10
Comments		
	Active Dataset	DataSet1
	Filter	<none></none>
Input	Weight	<none></none>
1.5	Split File	<none></none>
	N of Rows in Working Data File	200
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.

		CROSSTABS	
		/TABLES=TypeofAdvertisement	
		Celebrity Authority OrdinaryPerson	
		Chlid Puppet Animal	
		NumberofProtagonists	
		Ageofpresenters Realistic	
		Fantasyorsurrealvisuals Scenicbeauty	
		Graphicdisplayofpoints	
		Cartoonsoranimation Majorelement	
		Usedbutnotmajorelement Notused	
Syntax		Dance IncogruityResolution	
		Arousalsafety Disparagement Comicwit	
		SentimentalHumor Satire	
		Sentimentalcomedy Fullcomedy	
		Humordominant InformationDominant	
		ImageDominant BY ServiceProduct	
		/FORMAT=AVALUE TABLES	
		/STATISTICS=CHISQ PHI	
		/CELLS=COUNT COLUMN	
		/COUNT ROUND CELL.	
	Processor Time	00:00:00,05	
Resources	Elapsed Time	00:00:00,09	
	Dimensions Requested	2	
	Cells Available	131029	

Case Processing Summary

	Cases						
	Va	llid	Mis	sing	То	tal	
	N	Percent	N	Percent	Ν	Percent	
TypeofAdvertisement * ServiceProduct	200	100,0%	0	0,0%	200	100,0%	
Celebrity * ServiceProduct	200	100,0%	0	0,0%	200	100,0%	
Authority * ServiceProduct	200	100,0%	0	0,0%	200	100,0%	

OrdinaryPerson * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Chlid * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Puppet * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Animal * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
NumberofProtagonists * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Ageofpresenters * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Realistic * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Fantasyorsurrealvisuals * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Scenicbeauty * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Graphicdisplayofpoints * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Cartoonsoranimation * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Majorelement * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Usedbutnotmajorelement * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Notused * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Dance * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
IncogruityResolution * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Arousalsafety * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Disparagement * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Comicwit * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
SentimentalHumor * ServiceProduct	200	100,0%	0	0,0%	200	100,0%

Satire * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Sentimentalcomedy * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Fullcomedy * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
Humordominant * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
InformationDominant * ServiceProduct	200	100,0%	0	0,0%	200	100,0%
ImageDominant * ServiceProduct	200	100,0%	0	0,0%	200	100,0%

TypeofAdvertisement * ServiceProduct

Crosstab

			Service	Product	Total
			Good	Service	
	Rilboard	Count	3	1	4
	Bilboard	% within ServiceProduct	1,9%	2,4%	2,0%
Toronto de carino con esta de la Accesa	Count	56	12	68	
TypeofAdvertisement	Media Asset	% within ServiceProduct	35,4%	28,6%	34,0%
	TV commercial	Count	99	29	128
		% within ServiceProduct	62,7%	69,0%	64,0%
Total		Count	158	42	200
Total	Total		100,0%	100,0%	100,0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,711ª	2	,701
Likelihood Ratio	,725	2	,696

N of Valid Cases 200	
----------------------	--

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is ,84.

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	,060	,701
Nominal by Nominal	Cramer's V	,060	,701
N of Valid Cases		200	

Number of Protagonists * Service Product

			Service	Product	Total
			Good	Service	
	0	Count	17	8	25
	U	% within ServiceProduct	10,8%	19,0%	12,5%
	1	Count	38	10	48
	'	% within ServiceProduct	24,1%	23,8%	24,0%
	1 to 2	Count	1	0	1
	1 10 2	% within ServiceProduct	0,6%	0,0%	0,5%
NumberofProtagonists	10	Count	1	0	1
Numberon Totagonists	10	% within ServiceProduct	0,6%	0,0%	0,5%
	40	Count	4	4	8
	10+	% within ServiceProduct	2,5%	9,5%	4,0%
	2	Count	49	6	55
		% within ServiceProduct	31,0%	14,3%	27,5%
	3	Count	23	6	29
	S	% within ServiceProduct	14,6%	14,3%	14,5%

	_				_
	4	Count	11	4	15
	7	% within ServiceProduct	7,0%	9,5%	7,5%
	5	Count	5	2	7
		% within ServiceProduct	3,2%	4,8%	3,5%
		Count	5	0	5
	6	% within ServiceProduct	3,2%	0,0%	2,5%
	7	Count	2	0	2
		% within ServiceProduct	1,3%	0,0%	1,0%
		Count	1	1	2
	8	% within ServiceProduct	0,6%	2,4%	1,0%
	0	Count	1	1	2
	9	% within ServiceProduct	0,6%	2,4%	1,0%
Total		Count	158	42	200
Total		% within ServiceProduct	100,0%	100,0%	100,0%

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,209ª	12	,288
Likelihood Ratio	15,227	12	,229
N of Valid Cases	200		

a. 15 cells (57,7%) have expected count less than 5. The minimum expected count is ,21.

Symmetric Measures

		Value	Approx. Sig.
Naminal by Naminal	Phi	,267	,288
Nominal by Nominal	Cramer's V	,267	,288
N of Valid Cases		200	