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Energy drinks in online newspapers: sources, frames and fallacious arguments for building a lenient discourse

Bebidas energéticas en los cibermedios: fuentes, encuadres y falacias en la construcción de un discurso indulgente

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Abstract

Media interest in food and its consequences is a major present-day issue. However, there has been little research into the presence of energy drinks. The current study shows how this subject was tackled in the online newspapers *elpais.com* and *elmundo.es* from 2012 to 2019. In addition, the sources, frames and interaction with the readers were analysed. There is substantial scientific literature detailing the negative consequences of the consumption of energy drinks. Despite this, journalistic discourse remains lenient with this product. The information provided is based on fallacious arguments showing hedonistic or sporting values that emphasise the positive aspects of these drinks. However, in recent years the trend has been toward a more attentive journalism with greater predominance accorded to health concerns. Feedback analysis shows that critical information about this type of consumption receives more comments from readers.

Keywords

Online newspapers; frames; sources, fallacies, energy drinks, feedback

Resumen

*Frente al interés manifiesto de los medios por la alimentación y sus consecuencias, la presencia de las bebidas energéticas no ha sido apenas analizada. En esta investigación se aborda su tratamiento en los ciberdiarios *elpais.com* y *el mundo.es*, entre 2012 y 2019, mediante el estudio de las fuentes, los marcos y la interacción con los lectores. Existe una amplia literatura científica que alerta de las consecuencias negativas que tiene el consumo de las energy drinks, sin embargo, este trabajo muestra que el discurso periodístico es indulgente con este producto, a partir de informaciones en las que se recurre a argumentos falaces y con enfoques de consecuencias hedonistas o deportivas que subrayan aspectos positivos de estas bebidas. No obstante, la tendencia en los últimos años se inclina hacia un periodismo más vigilante y con un mayor predominio de los marcos de consecuencias sanitarias. El análisis del feedback con el lector demuestra que las informaciones críticas con este tipo de consumo obtienen un mayor número de comentarios.*

Palabras clave

Ciberdiario; encuadres noticiosos; fuentes; falacias; bebidas energéticas, interacción

1. Introduction

The first record of energy or energizing drinks goes back to 1906. For the first time, a world famous cola soft drink presented its product as an energy drink. It is noteworthy that the effects of its consumption are due to a high concentration of caffeine (Del Coso *et al.*, 2012).

During the 1970s and 80s, the cola drink industry began to sell products with high concentrations of caffeine, sugar and even guarana-based mixtures that led to the dawn of the best known energising drink, Red Bull, which was first made in Austria in 1987. These drinks reached the United States in 1997. They have been available in Spain since August 2003 (Sánchez *et al.*, 2015: 82).

Initially, caffeine was associated with positive nutritional values. However, as consumption volumes grew, a growing rumble of voices also began to complain that it was harmful. It can be summarised that "There are no conclusive studies to demonstrate the beneficial effects of energizing drinks but there is sufficient evidence of the adverse effects of some of their most common components" (Sánchez *et al.*, 2015).

Energy drinks were associated with psychosocial risk situations, such as consumption of addictive substances and alcohol, that multiply dangers. This is because the former, with high doses of caffeine, are stimulants while alcohol is a depressive. The stimulating effects can cover up intoxication and affect an individual's capability to realise how much alcohol they have consumed (Sánchez *et al.*, 2015: 87).

Their popularity, particularly among teenagers and young people, has raised concerns among health authorities, despite being classified by the European Food Safety Agency ^[1] (EFSA) as soft drinks (Pérez de Ciriza, Pinillos and Aldaz, 2013).

The largest survey performed to collect data on this consumption goes back to 2013. The data collected by EFSA shows that 36% of teenagers (aged 10 to 18 years old) mix energy drinks and alcohol relatively frequently. The survey took place in 16 EU countries, including Spain, and 52,000 people took part. This percentage was 18% among older people. The proportion of people that drink energy drinks, also sporadically, without mixing them, is much greater: 30% of adults, 68% of teenagers and 18% of children (De Benito, 2014).

Martha Melgarejo defines them as non-alcoholic drinks, generally fizzy, basically made up of caffeine and carbohydrates, sugars which are absorbed at different rates, plus other ingredients such as amino acids (particularly taurine), vitamins or minerals (Melgarejo, 2004). This food chemistry and technology distinguishes energy drinks from isotonic drinks. The composition of the latter is specifically devised to recharge the body with water and mineral salts.

Caffeine is another of the ingredients that tarnishes the prestige of energy drinks. In an extensive project, the Organisation of Consumers and Users (OCU) calculates that they contain from 217 milligrams of caffeine per half litre in the Zen Republic brand, to 24 milligrams in the same quantity of Extreme 02. The high sugar content is a further aspect that casts a shadow over these drinks. Sugar as a health hazard is sufficiently certified and documented by the media (2019). In some cases, this is explored from the perspective of obesity (Royo-Bordonada, 2016; Islam and Fitzgerald, 2016).

Habitual consumption (one or two cans a day) can cause dental hypersensitivity (Palomo, 2019), heart problems, arrhythmias, chronic arterial hypertension, episodes of tachycardia and palpitations (Basulto, 2017). Scientists from the university of Southern Illinois (USA) demonstrated that the acid compounds cause irreversible damage to tooth enamel. This was corroborated by the president of the General Council of Dentists in Seville, Luis Cáceres (Palomo, 2019).

Other consequences are sleep disturbance, irritability, low self-esteem and even cases of psychosis and aggressive behaviour. It is not true that they improve concentration or help study performance. It has not been demonstrated that they help cognitive performance even though this is a commonly held belief, particularly among young people (Mejía *et al.*, 2008; Attila and Cakir, 2011).

However, as Manuel Romero, from the Spanish Digestive Pathology Society, explains, small doses of caffeine, just like taurine, has a stimulating effect and might occasionally improve sporting performance (Casabona, 2016; Pereira *et al.*, 2015).

Another conflictive characteristic of these drinks revolves around poor transparency regarding its ingredients, and the companies choose to dodge this information. There are cases of an "energy blend", with undetermined ingredients (Sánchez *et al.*, 2015: 82). Energy drinks are covered by food legislation in each country and not the rules that regulate medicines (Melgarejo, 2004), and this holds true at the time of writing.

2. Methodology

The study has been tackled from a quadrangular methodology that uses both content analysis, understanding this to be "a valid research technique that allows for reproducible and valid inferences that can be applied to its context" (Krippendorff, 1990: 28) and contributions from *agenda setting* (McCombs and Evatt, 1995), with a view to quantifying the presence and relevance of energy drinks in the selected information; thirdly, Framing Theory will be used (Tuchman, 1983; Reese, 2001; Goffman, 2006), and finally, discourse analysis (Van Dijk, 2016) to identify fallacious arguments (Santamaría and Casals, 2000; Carrascal, 2014; Vega, 2016).

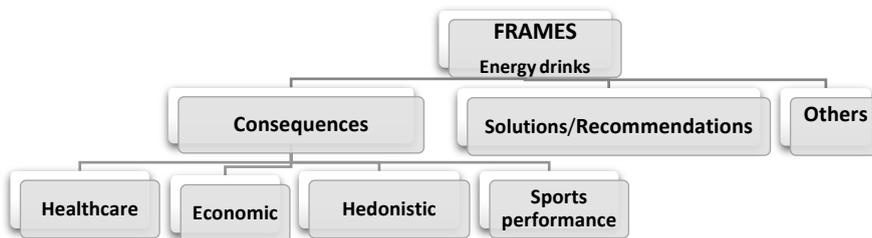
The sample uses two online newspapers, chosen for having the largest number of single users in Spain, *elpais.com* and *el mundo.es* ^[2], and the period to be analysed runs over eight years, from 2012 to 2019.

Regarding the framing, out of the two possible methods for defining frames, inductive or deductive (De Vreese, 2005), the former was chosen as it offers specific results providing an exact snapshot of how the media treats a topic by detecting the most prominent focus points for the study object. These frames were induced from indicators proposed by Entman (1993) and Tankard (2001).

The selected frames are: Consequences - subdivided into healthcare, hedonistic, economic and sports performance (Valkenburg, Semetko and De Vreese, 1999); Solutions/Recommendations (Entman, 1993); and others, for any texts that were impossible to classify into one of the above.

Healthcare refers to possible consequences of drinking energy drinks on health. Hedonistic covers the leisure-related pleasure effect. Economic refers to production and selling of this product. Sporting performance refers to consuming these drinks to improve results in sport or another type of activity that requires physical resilience. And solutions and/or recommendations are texts where the reader is advised on appropriate or dangerous mindsets concerning this consumption.

Figure 1. Types of news frames



Source: Compiled by author.

Each news item will be assigned an evaluative perception (Igartua, Muñiz, and De la Fuente, 2007: 100). It will be decided whether the information is positive, negative or neutral (or ambiguous), from the perspective of energy drinks.

When the topic and evaluative perception have been identified, then the qualification and identification will be added for the information sources used by the journalists to construct the discourse on energy drinks. The aim is to compare them against the frames and the evaluative perceptions that have already been determined. It will also be specified whether the information includes a celebrity, recognised by the general public.

The methodology is completed by analysing the discourse, in this case pinpointing fallacious arguments. A fallacy is "an argument that, whilst not valid, is presented as such, so it might lead to deceit. Its effectiveness is based more on psychological and emotional matters than on logic," (Santamaría and Casals, 2000:170) and that has the "aim of making people embrace an erroneous opinion or encourage a harmful line of action to be committed or continued" (Carrascal, 2014: 80).

This intends to go into greater depth on the argumentative dimension, more appropriate for journalistic genres such as interpretative or opinion, but this research will also include news items, as all these genres form part of the act of communication, whose key element is discourse as an argumentation process (Carrascal, 2014: 113). It works from the idea that all journalistic texts are an act of interpretation. In some cases, this will be a "subtle fallacy" and it will be necessary to "explain the implicit" (Vega, 2016: 7-10).

An analysis sheet will be drawn up to code the variables: identification of the online newspaper, date, title of the information, link, section, genre, authorship, sources, evaluation, presence of celebrities and number of readers' comments. These are the pre-set items.

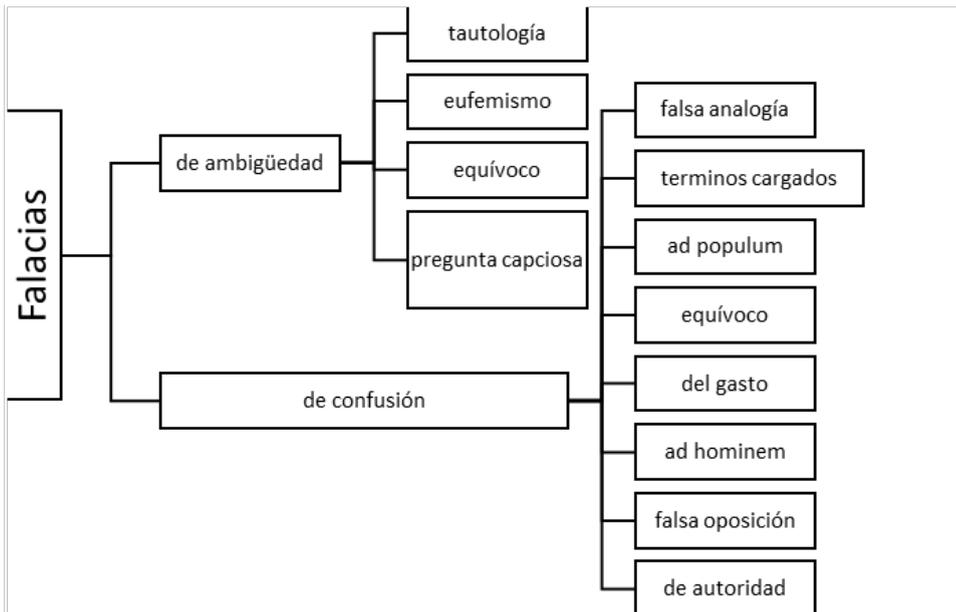
The main aims are:

1. Study the evolution of contents on energy drinks and their topic field and relevance in the online press.
2. Figure out the most prominent sources and frames and the evaluative perception of the information by identifying fallacious arguments.
3. Calculate and order the readers' responses by means of their comments and compare them with the previously analysed frames.

And the following hypotheses are made:

1. Energy drinks are constantly present in the topics on the agenda and even get stronger over time.
2. The healthcare frame is the most usual, but the hedonistic and sports performance approaches are gaining ground.
3. Fallacious arguments are more usual in hedonistic focus information and feature well-known faces for the general public.
4. Feedback in the form of comments is multiplied in texts that cover health more directly and with a negative evaluative perception.

Figure 2. Types of fallacies for this research



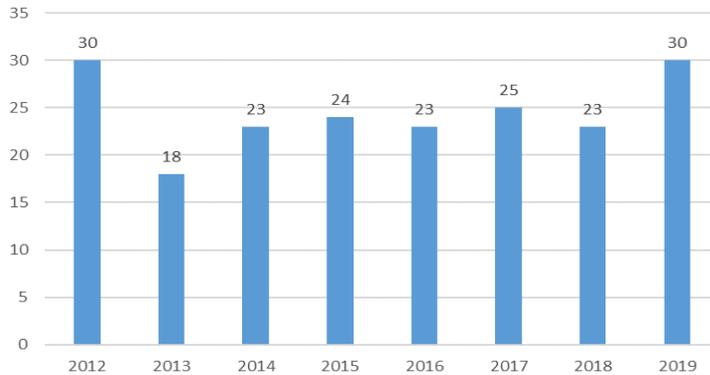
Falacias	Ambiguity Confusion	Tautology Euphemism Mistake False question	False analogy Loaded terms Ad populum Mistake Cost Ad hominem False opposition Authority
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Source: Santamaría and Casals, 2000.

3. Results

3.1. The study of content presence and relevance

Figure 3. Evolution of the number of news items on energy drinks



Source: Compiled by author.

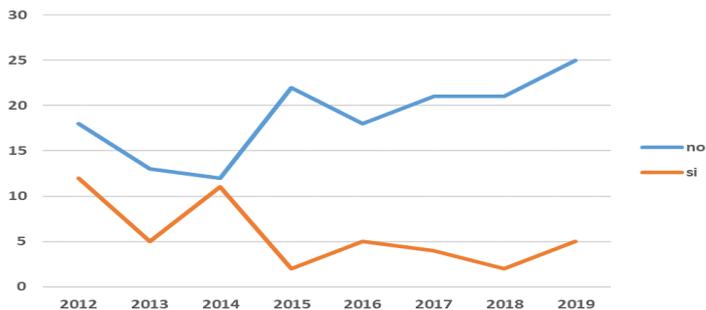
Over the eight years being analysed (2012 - 2019), the newspapers being studied published 196 news items featuring energy drinks [3]. It is *elpais.com*, with 115 items, that takes first place, considerably ahead of *elmundo.es*, that published 81 items

As a whole, it is seen that the number of news items is relatively stable, except in the second year of the series, when there was a considerable drop. It is curious that the same number of items appear in the first and the last year. Therefore, it might be said that media interest in this type of drink remained constant over time, and even grew slightly in the second half of the period being studied.

The general trend is reproduced when studying the two study newspapers separately and we look at *elpais.com*: a higher number of items on energy drinks is repeated at the start and end of the study period. However, *elmundo.com* takes a more irregular line, with constant fluctuations from one year to another.

To understand the presence of energy drinks in journalistic content, it should be noted that, in as many as 76%, this product is not the main focus of the piece. Energy drinks appear in texts talking about fast food: "Vivir cerca de un 'fast food' puede afectar seriamente a su peso" (Living close to a fast food outlet can seriously affect your weight) (*elpais.com*, 28/12/2019); associated with sugar consumption: "¿Azúcar o edulcorante? Una difícil decisión para las embarazadas" (Sugar or sweetener? A hard choice for pregnant women). (*elpais.com*, 26/9/2019); in information on sport and physical resilience: "La dieta perfecta para amantes de la bicicleta" (The perfect diet for cycling fans) (*elmundo.es*, 27/6/2015); on leisure: "Maná inaugura una nueva edición del Festival de la Canción de Viña del Mar" (Maná opens a new edition of the Viña del Mar Song Festival) (*elmundo.es*, 25/5/2013); or related to taxation: "Entra en vigor este lunes el impuesto catalán de bebidas azucaradas" (The Catalan fizzy drinks tax comes into force this Monday). (*elpais.com*, 30/5/2017).

Figure 4. Evolution of news where energy drinks are/are not the main focus of the information



no; yes

Source: Compiled by author.

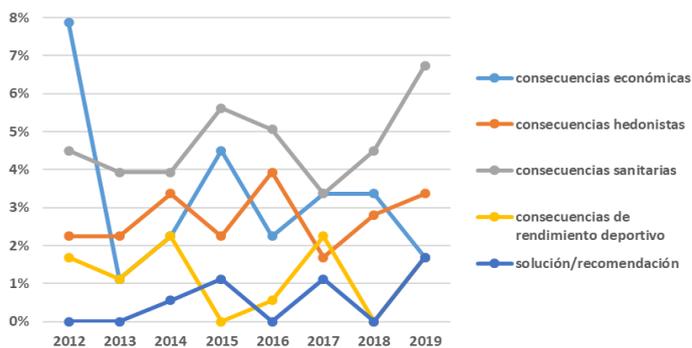
The extensive number of sections reflects the varied questions covered in the news items featuring energy drinks. As many as 49 sections were recorded. The most prolific is the economy (27), followed by sport (16), health (12) and society (11). There are also highly recognisable, fixed sections, such as international (7) and Spain (6), and other soft, varied topics such as Yodonna, Vida Sana, Tentaciones, Loc or Estilo.

In relation to the journalistic genres, news (116) is in the majority, way ahead of report-chronicle (60), opinion (6) and interviews (5). The rest of the genres are symbolic: critical (3), photo-gallery (3), obituary (1), video (1) and letters to the editor (1). In this section, there are barely any differences between the two cybermedia being analysed.

There is a high number of authors for the selected items: 140 names have been coded. This figure works out as an average of 1.3 texts per author. It means that the vast majority have written just one item. This conglomerate includes generic writers from efe (12) – with the largest number of articles, agencies (3), *El Mundo* (9) or *El País* (4). Aside from these four sections, Sandro Pozzi, with 7 texts, is the most usual. Only three other specific authors appear with three signed pieces: Carolina García, Julio Basulto and Victor Parkas. These figures demonstrate journalists' lack of specialisation and the general nature of the items in which energy drinks appear. The most popular field (60%) is international, in both online newspapers.

3.2. Topic, frames and relevance of the protagonist

Figure 5. Evolution of the frames in years as percentages.



economic consequences; hedonistic consequences; health consequences, sports performance consequences; solution/recommendation

Source: Compiled by author.

Society is the most usual topic. It remains dominant over the eight years in the study, although it is level with economics at the start of the series. However, the distance between the two widened to its maximum point in 2019. Sports and culture show lower numbers and a trend in the opposite direction: while sporting matters become less relevant over these eight years, news from the cultural field increased slightly.

If the data is compared between the two newspapers, a *elpais.com* leans towards economic and cultural topics while *elmundo.es* is more inclined to provide social and sporting information. Politics is residual.

In relation to the focuses, the most usual refer to consequences and, among them, the most noticeable are health (34%), ahead of the economic consequences (24%) and hedonistic (20%). In fourth place, there is the focus on sports performance (8.6%) and fifth position is for the solutions/recommendations frame (4%). Without forgetting that 9% of the information has been coded as Others. The high percentage in which energy drinks are not the main focus of the piece make it difficult to match it with the specific frames.

The pre-eminence of the health consequences focus is due to the media attention on matters concerning sugary drinks such as: "¿Azúcar o edulcorante? Una difícil decisión para las embarazadas" (Sugar or sweetener? A hard choice for pregnant women).(*elpais.com*, 30/9/2019).; "El azúcar, la droga de los exadictos" (Sugar, the ex-addict's drug of choice) (*elpais.com*, 2/10/2014); to topics on caffeine: "Café, té o refresco con cafeína. ¿Qué es peor (y mejor)?" (Coffee, tea or caffeinated soft drink. Which is the worst (or best)?) (*elpais.com*, 25/11/2014). Although there are also items where energy drinks are the main topic, with a health focus: "Las bebidas energéticas pueden causar problemas de corazón" (Energy drinks can cause heart problems) (*elmundo.es*, 4/8/2016).

Economic consequences (24%) are the second most recurring frame, but this weakens over time. Its importance at the beginning of the study period obeys the coercive approach to these soft drinks that

governments began to take in 2012: "Nueva York investiga a los grandes fabricantes de bebidas energéticas" (New York investigates major energy drinks manufacturers) (*elpais.com*, 29/8/2012); and also due to the skydive from 39,000 metres by the Austrian parachutist Felix Baumgartner, sponsored by Red Bull for which the media repercussion was reflected in the following headline: "No es un anuncio, es una publicidad impagable" (It's not an advert, it's priceless publicity) (*elpais.com*, 17/10/2012).

The focus on hedonistic consequences (20%) emphasises the recreational side of consuming energy drinks from a positive viewpoint: "Viva el vino... y las bebidas energéticas" (Long live wine...and energy drinks) (*elpais.com*, 23/10/2019). And it feeds off items featuring celebrities, usually from the world of music or film: "Björk, la diva tecnológica" (Björk, the technological diva) (*elpais.com*, 3/12/2016). In fact, half the information presenting hedonistic consequences features people who are familiar faces to the general public. This data is way above average for the sample as a whole (27.5%).

In items where the focus highlights economic consequences, the percentage of relevant well-known people (33%) is also above average, but in this case, it mainly refers to people holding public office, such as the Minister of the Economy or managers of food companies that act as information sources. On the other hand, for the hedonistic consequences frame, the protagonist is a figure with media appeal who is likely to be copied by the audience. Regarding this aspect, texts where health consequences are emphasised feature the lowest numbers of celebrity stars.

The sports performance frame can be found in: "¿Afectan los tatuajes al rendimiento deportivo?" (Do tattoos affect sports performance?) (*elmundo.es*, 18/5/2015). In other cases, the topic concerns the ability to concentrate over periods of time (in front of a screen for example) or to work competitively: "Más de 86 horas con Los Simpson en televisión" (More than 86 hours of The Simpsons on TV) (*elmundo.es*, 12/2/2012); "La vida disciplinada y solitaria del jefe de Apple, Tim Cook" (The disciplined, solitary life of Apple boss, Tom Cook) (*elmundo.es*, 31/10/2014). Despite the latter two examples, the sports focus does not particularly rely on famous people.

Finally, solutions/recommendations (4%) in fifth place, appears in items that can be included in service journalism. "Café, té o refresco con cafeína. ¿Qué es peor (y mejor)?" (Coffee, tea or caffeinated soft drink. Which is the worst (or best)?) (*elpais.com*, 25/11/2014). This service aspect means that celebrities do not appear in any texts.

3.3. Information sources

Table I. Information sources

Scientific/academic	42
Food Industry	33
Governmental/administrative	32
Media	26
No source	26
National organisations	16
International organisations	10
Nutritionists	7
Healthcare	4

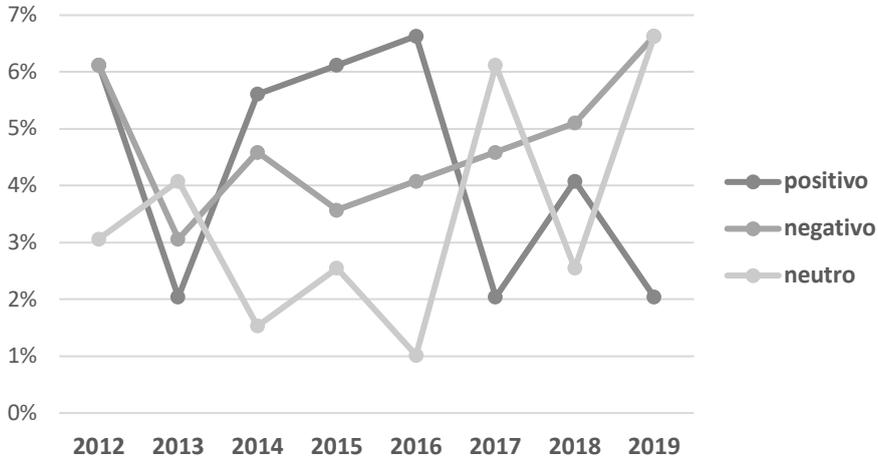
Source: Compiled by author.

Scientific/academic sources gain ground in the second part of the analysed period, in line with the increase of the health consequence focus. This also occurs with nutritionists although to a lesser extent. On the other hand, the governmental/administrative focus has more presence in the initial 2012-2013 cycle, with topics related to investigating energy drink companies in the international field. The remaining sources have a more uniform presence throughout the period.

One aspect that shows the nature of the scientific/academic sources is that they raise topics where celebrity stars are no longer present. This also happens with news items with information sources in national organisations - such as the Spanish Food Safety and Nutrition Agency or the Catalan Food Safety Agency - and international organisations such as the European Food Safety Authority, the WHO or the FAO, but it should be understood that in these latter two cases, the number of news items is substantially less.

3.4. Assessment

Figure 6. Evolution of assessment in years as percentages



Source: Compiled by author.

The data reflects that 37.7% of items refer to negative events from the perspective of energy drinks; 34.6% give positive news and 27.5% state facts or events that are neutral or ambiguous. If the *online* newspapers are analysed separately, it is seen that in *elmundo.es* the relationship between positive and negative texts (33.3% - 40.7%) leans more towards the latter than in *elpais.com* (35.6% - 35.6%).

The evolution in the cycle being studied shows that the negative texts grow steadily from 2013, while the positive information regarding energy drinks fluctuates radically, with greater presence in the central years and a steep drop in 2017 and 2019.

Sources have considerable influence. The good-hearted image of energy drinks emerges from information where the source is the food industry, as in this case 64% have a positive tone, 32% are neutral and only 4% are negative. On the other hand, the prestige of these drinks is clearly damaged when the sources are scientific or academic, governmental or from nutritionists. It is also significant that in more than half the pieces with no source, energy drinks are evaluated positively. In some of these items, an aspect of publicity can be sensed: "Los ciclistas salen en primavera: tiendas de bicis en Madrid" (Cyclists emerge in the spring: bike shops in Madrid) (*elmundo.es*, 11/5/2018).

However, the variable with the greatest influence on the reputation of energy drinks is the focus. Two blocks can be clearly identified: if the frame refers to the health consequences or solutions and/or recommendations, the negative evaluation is clearly imposed; but if the focus is hedonistic or economic consequences or concerning sports performance, energy drinks are presented in a kinder way.

3.5. Fallacies

In total, 42 fallacies have been counted and most of them are found in hedonistic frames, even though this is a minority focus in absolute numbers: "Barcelona se coloca en la feria del cannabis" (Barcelona hits up the cannabis fair) (*elpais.com*, 14/3/2016). Something similar happens with the sports performance framework: "Leche de cucaracha, el polémico superalimento del futuro" (Beetle milk, the controversial superfood of the future) (*elmundo.es*, 31/12/2017). On the other hand, the pre-eminence of fallacies drops in the economic performance frames: "El as de la bebida con alas" (The champion of drinks that give you wings) (*elpais.com*, 3/10/2014); and it is at the lowest level when the text highlights the health consequences of consuming energy drinks: "De España a China, descubre qué comen los militares en la guerra" (From Spain to China, find out what soldiers at war are eating) (*elmundo.es*, 6/5/2016). Within the solutions/recommendations framework, only one fallacy has been detected, therefore it is not representative.

One factor that makes the fallacious argument blossom is the presence of celebrities starring in the news items, and these circumstances are favourable when the focus is hedonistic or on sports performance. Out

of the total fallacies, 44% contain important characters for the general public, far above the absolute percentage (27.5%): "Breakdance a ritmo de Bach: ¿la manera de acercar la música clásica?" (Breakdancing to Bach, is this how to get into classical music?) (*elpais.com*, 18/8/2016); "James Rodríguez, energizante y solidario" (James Rodríguez, energizing and caring) (*elpais.com*, 30/7/2014).

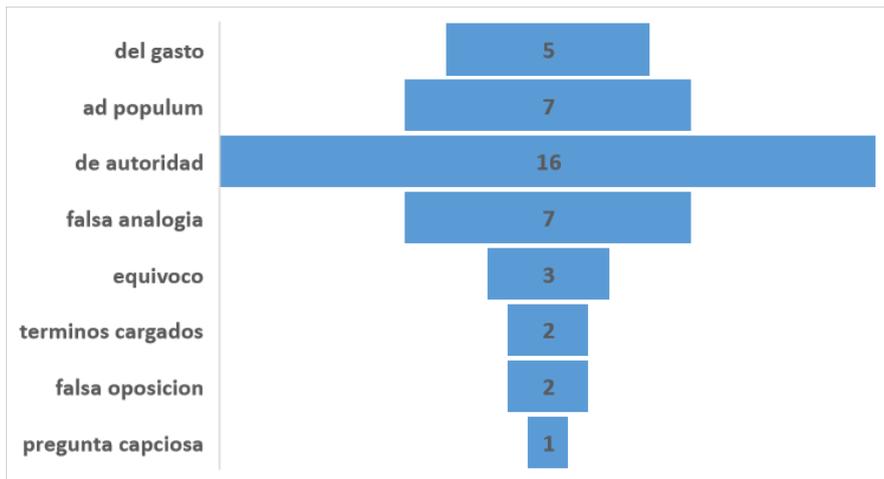
In the first text on breakdancing, there are two false questions: "Do you believe that there is a relationship between energy drinks and the syncopated rhythms of breakdancing? Might a can of Red Bull help to stimulate these dancers?" The second item features the Colombian football player from Real Madrid, James Rodríguez, with a headline including the loaded term "energizing", as a play on words between the player's fitness and the properties of energy drinks.

Authority fallacies are also fed by outstanding celebrities, such as the footballer Cristiano Ronaldo or the actor Mario Casas, stars of the report "Músculos, selfies y porno: por qué el hombre de hoy es spornosexual" (Muscles, selfies and porn: why the man of today is spornosexual), which includes "Warning: if you are more worried about your photos' Likes, you take all your selfies at the gym or in front of the mirror showing off your body, and energy drinks and proteins are your secret weapon to be on top form."

On the other hand, *ad populum* fallacies appeal to the masses (all, everyone, etc.). In the report "Estamos ansiosos perdidos" (We are desperately anxious) (*elpais.com*, 4/2/2013) you can read "We all know someone who draws on anxiety to give their best performance. These are the people that have to drink four coffees or Coca-Colas or those energy drinks like Red Bull to get in shape").

One last example of these phony arguments appears in this text with sources from the food industry: "Coca-Cola Iberian negocia fusionarse con otras embotelladoras europeas" (Iberian Coca-Cola in negotiations to merge with other European bottling plants) (*elpais.com*, 31/7/2015), where it upholds a false analogy between energy drinks and water.

Figure 7. Fallacies.



Source: Compiled by author.

On the cost; Ad populum, On authority, False analogy; Mistaken; Loaded terms; False opposition; False question

3.6. Reader participation

In total, 91 news items received feedback, compared to 105 without any type of interaction. Seven get more than one hundred comments. The *elpais.com* newspaper beats *elmundo.es* in this section. Out of these seven items with 100 comments, five are found in the Prisa-owned paper. Of them, four fall within the health consequences frame.

The record, with 322 comments, was achieved by *elpais.com* with "Las latas de refresco cuestan un 7% más desde hoy en Cataluña" (A can of soft drink will cost 7% more from today in Catalonia) (2/5/ 2017). There is another news item that comes close with 320 comments, although a different style: "Flores, pizzas, jamones y bebidas energéticas para la Policía en Barcelona: `No estáis solos'" (Flowers, pizzas, ham and energy drinks for the Police in Barcelona: you're not alone), published in *elmundo.es* (19/10/2019) after the incidents in the Catalan capital between protesters and police.

A large proportion of reader participation in these items with the most feedback is due to comments related to the political situation in Catalonia and has nothing to do with the drinks. On the other hand, the report "El zumo de fruta no es 'fruta', ni siquiera si es casero" (Fruit juice isn't 'fruit' and it's not even homemade) (*elpais.com*, 2/4/2017), signed by the dietician-nutritionist Julio Basulto, elicits comments around the main question that the author raises in the headline. In fact, any pieces by this author get a large amount of feedback.

On the whole, the geographic field which is more likely to cause interaction is international. The amount of participation increases from 2014 and, in general, readers are more active when the information has a negative tone, meaning it is critical of energy drinks.

4. Discussion

Press interest in energy drinks has not only been maintained over the last decade but it increased slightly in the second half of the ten-year period, although the way in which this product appears is superimposed over information featuring other agents such as sugar, caffeine or adjacent topics such as sports or music.

In fact, no academic articles have been found that refer explicitly to media coverage of energy drinks. However, in related research, particularly in the field of medicine, this product does arouse preferential interest (Attila and Cakir, 2011; Del Coso et al., 2012)

The lenient attitude regarding energy drinks in the online press, as seen in this research, is not repeated for sugar. Scientific literature insulting the consumption of products with excessive caffeine (Del Coso et al., 2012) or sugar is extensive (Lustig, Schmidt and Brindis, 2012). Censure particularly appears around the relationship between consuming sugary products and weight gain, including among minors (De Ruyter et al., 2012). This trend influences how journalistic texts are drafted with a critical tone concerning the presence of sugar in foods. Sugar is even branded a green poison (Marín et al., 2019).

The media debate on the benefit of imposing new taxes on sugary drinks is present in several pieces of research (Hilton et al., 2017). As in this research, these studies take two opposing sides: on the one hand, they present positions in favour of implanting new taxes but on the other hand, led by the food industry, discourse is drawn up against more tax on consumption. The latter is launched more belligerently and focuses both on the negative consequences of the new tax and on the governmental intrusion that this measure represents, in their opinion, all within a debate to promote public policies on obesity (Barry, Niederdeppe and Gollust, 2013; Niederdeppe et al., 2013).

Dispersion of the texts on energy drinks in the various sections of the Spanish online newspapers is repeated in research on sugar or palm oil and the absence of benchmark authors, that reveals a lack of journalistic specialisation (Armentia et al. 2018). This deficit in the newspapers results in greater dependency on sources, that can be seen in the pre-eminence of the economic consequences frame relating to implanting taxes on sugary drinks, a measure that came up against strong resistance in discourse with high doses of persuasion (Barry et al., 2013; Niederdeppe et al., 2013).

In addition, scientific literature on energy drinks is clearer than with sugar, because, although it is clear that there has been research that emphasises their toxicity (Seifert et al., 2013), other articles compile the believe of this product's benefits in terms of providing more energy, keeping you awake or improving sports performance (Attila and Cakir, 2011). This is discourse that generates hedonistic frames, as shown in this research.

The result that we reflect here on activation of reader participation when the journalistic discourse is critical has been repeated in other research, particularly regarding stories that highlight the focus of losses brought about by consumption of sugary drinks (Marín et al., 2019).

5. Conclusions

Despite abundant scientific literature that certifies the harm of consuming energy drinks, the press takes a reasonably lenient stance regarding this product. Although the main focus centres on negative health consequences, the importance of the hedonistic or sports performance frames are sufficient to reprimand the media's lenient stance, as it is usual in these latter two frames to highlight the supposed good qualities of consuming these drinks as a form of fun or to try and improve physical stamina.

The economic consequences, with a merely commercial point of view, supported by sources from the food industry, are another way that the media present positive attributes for energy drinks.

Another conflictive element is the presence of celebrities in the texts, that brings about the increase of positive pieces. Important actors are more usual when the focus is hedonistic and are presented as celebrities to be emulated by the readers regarding their relationship with energy drinks. In this type of journalistic item, it is not unusual to come across fallacious arguments, to build a discourse which conceals the harm of consuming this type of products.

It is appropriate to recall Agenda-setting Theory (McCombs and Evatt, 1995), specifically its second level, and approach the existing correlation here between emphasising certain attributes in the press and the readers' perception of them to warn that the positive coverage of energy drinks can lead to the audience assuming the supposed benefits of these products.

It has also been demonstrated that the type of frame also affects citizen response. Hedonistic and sports performance focus points can cause a flippant outlook regarding energy drinks and encourage a lack of responsibility regarding its consumption. The information is offered episodically, working from specific cases, media figures and without the necessary context, compared to less usual topic-based texts that offer context and analysis.

In any case, this diachronic study shows a tendency over the last few years in favour of critical information with energy drinks, working from the health consequences focus that gains pre-eminence, above all compared to the economic consequences frame, while the hedonistic and sports perspectives remain steady.

Citizen participation, more active when the texts are critical, tends to highlight the trend favouring stricter journalism against energy drinks.

It would be advisable to go into greater depth on content analysis to quantify the information with branded content characteristics and complement it with a field study to check relationships between the newspapers and the energy drink brands as event organisers.

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6. NOTES:

1. <http://www.efsa.europa.eu>

2. elpais.com: 18,081 and 20,009 unique users. elmundo.es: 17,867 y 18,588. (In thousands In February 2018 and 2019, respectively). According to the Comscore digital newspaper ranking.

3. Items have been eliminated where energy drinks appear exclusively as a sponsorship brand.

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